

**Disease, Medicine and the Urban
Poor in Newcastle-upon-Tyne,
c. 1750-1850**

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For my parents,

Leonard A. Butler & Helen M. Butler

Abstract

This thesis is the first full-length quantitative and qualitative analysis of the institutional and medical responses to sickness and disease in Newcastle-upon-Tyne, between 1750 and 1850 – the period conventionally ascribed to England’s first ‘industrial revolution’. Using a wide range of largely unexplored archival material it assesses the healthcare options available to the poor population of Newcastle. It proceeds to uncover the poor’s individual experiences, how sickness and disease impacted on their lives and the ways in which healthcare options and strategies developed across the century between 1750 and 1850.

The thesis begins with a comprehensive examination of Newcastle’s demographic history. This involves an evaluation of the city’s published Bills of Mortality. Using this largely neglected demographic source, chapter one reveals new and crucial information about the changing size of the population in all of the city’s parishes and describes how the city grew between 1736 and 1850. Newcastle did not share in the rapid population expansion experienced by the country as a whole in the second half of the eighteenth-century. After reconstructing Newcastle’s demographic record, a second chapter analyses the living conditions in the city in order to contextualise its population history. This chapter provides evidence to show that Newcastle had many of the epidemiological characteristics of the pre-industrial city which enabled it to act as a reservoir of diseases and infections.

The second section of the thesis examines the institutional responses to sickness and disease in the city. This section of the thesis is divided into two chapters: the first looks at the role of the Newcastle Infirmary founded in 1751 for the poor of Newcastle, Durham and Northumberland and the second analyses the Newcastle Dispensary founded in 1778. Both of these institutions played important but different roles in the city’s medical landscape – collectively admitting over half a million patients during the century under study. An examination of the characteristics of these individuals reveals that both institutions provided healthcare to different elements of the population. The analysis also provides key information on the types of diseases and ailments which were commonly experienced by the working poor in the city. Both studies reveal an intertwining relationship between the role of the Infirmary and the Dispensary. While both provided care to the ‘deserving’ poor, the former

treated mainly accidents and surgical cases and the latter catered specifically for chronic, infectious and sometimes lethal maladies.

After having analysed those who turned to the city's voluntary hospitals, the last section examines the experience of the pauper population, focusing on the healthcare delivered to the sick poor under the Old Poor Law. Attention here is paid to both outdoor medical relief and also to that provided in parish workhouses. This chapter shows that medical services were an important part of the 'relief culture' in the city and that the workhouse system in Newcastle played an integral part in what has been described as the pauper 'economy of makeshift and mend'. High levels of sickness and disease amongst the city's inhabitants meant that overseers of the poor were constantly dealing with relief applications which were sickness related. The chapter provides abundant evidence that even with the growth of alternative healthcare institutions in the city, Poor Law medical services developed rather than declined in the period. It is concluded that Poor Law medicine played a very significant part in the lives of Newcastle's poor.

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Newcastle-upon-Tyne

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Abbreviations used in the text

TWAM: Tyne and Wear Archives and Museums Service

RLSC: Newcastle University Robinson Library Special Collections

WIHM: Wellcome Institute for the History of Medicine, London

NCLib: Newcastle City Library

Introduction

0.1 *The Groke family*

On 30 November 1839, John Groke, a labourer, came to Newcastle with his wife and young family in search of work. Groke had been resident in Stockton in county Durham for twelve years where he had lived with his wife Ellen and three children; Catherine, Bridget and Ellen junior. When they first arrived in Newcastle they apparently had little money. They went to the Mendicity-office in the Castle Garth where they slept for two nights. On their third day in the city the family received 6d from the office and used this to take up lodgings in Wood's entry – a narrow alley-way in the eastern suburb of Sandgate. The family's stay there was short lived on account of Groke's youngest daughter Bridget who had begun to show symptoms of 'whooping cough' – a highly infectious disease and 'one of the great killers of nineteenth-century England'.¹ Groke turned to Mr William Wilson the relieving officer of All Saints parish and told him of his situation and that his 'little girl had the whooping cough'.² Wilson gave Groke a shilling to find shelter for him and his family that night, but stipulated that he and his family were to go to 'the house in Manors (the workhouse)' the next day to present his case to the All Saints parish vestry. Groke presented his family's case to the vestrymen and overseers the next day who ordered that he be relieved with 5s but that he was to take his family and leave the city immediately.³ Groke and his family didn't leave. Using the money given to him by the vestry, Groke rented a room in 'McNamara's lodging house' in Sandgate. By then Groke's two other daughters, Catherine and Ellen junior, had also fallen ill. Once again the family were forced to vacate their lodgings on account of the girl's sickness. Groke and his family then took up residence in a ground floor room near Pothouse Entry, also in Sandgate. Groke commented later that:

There was no furniture in it; nor had we any to put in. My wife bought a pot a kettle and plate or so. We had no beds, nor any covering; my wife got some shavings upon which we all slept. All the family slept upon them, with my wife's

¹ A. Hardy. *The Epidemic Streets: Infectious Disease and the Rise of Preventative Medicine, 1856-1900* (Oxford, 1993), 9.

² 'Coroner's Inquest on Bridget Groke, 1840', Newcastle Courant, Friday, January 3, 1840 (Newcastle, 1840).

³ Throughout this thesis, Newcastle as an urban centre shall be referred to as a City unit. This is essentially because during most of the discussions the borough of Gateshead will be included into the analysis especially in Chapter 1. Newcastle even in the seventeenth-century can be seen as a 'typical', large populous urban port-city, for discussion of the city in that period see: K. Wrightson. *Ralph Taylor's Summer: A Scrivener, His City and the Plague* (New Haven, 2011), 1.43. This has also been similarly employed by E.A. Wrigley in his recent pioneering study of the English industrial revolution, see: E.A. Wrigley. *Energy and the English Industrial Revolution* (Cambridge, 2010), 62-63, 55-90.

old cloak as a covering, and a blanket not worth sixpence. It [was] a brick floor and was damp ... I took unwell that night [and] Catherine and Ellen were ill before that.⁴

Concerned for the health of her husband and her children, Groke's wife Ellen appealed to the Mayor to get her husband into the Infirmary and she also 'got a Dispensary letter for the infant'. The family received medicines from the Dispensary and were attended to by Mr Humble, one of the visiting surgeons. After two or three days in Pothouse Entry, Catherine's condition worsened. Mr Wilson of the parish tried unsuccessfully to get the three girls into All Saints's parish workhouse, but was prevented by the nature of Bridget's infectious condition. Bridget's older sister Ellen was eventually sent into the workhouse suffering from a mild cough. Mr Humble of the Dispensary frequently visited Catherine and Bridget at their temporary lodgings in Sandgate. On one of his later visits he noted that:

I was there twice a day; in the morning the husband (John) was always groaning in bed, and in the evening he was always sitting up ... Catherine was getting worse ... I said she ought to have a little wine and water and told the mother to give it to the child ... she replied that it was of no use and that she would not torture her anymore.⁵

Humble gave the mixture to the child himself against her mother's protests. On the following Sunday he ordered that she (Groke's wife, Ellen) should come to the Dispensary for a blister for the child, but once again she refused. Humble attempted to reassure Catherine's mother that he 'would do all he could to save the child's life'.⁶ Unfortunately in reality there was little that Humble could do and the next day Catherine died from consumption. Groke's youngest daughter Bridget, who had been the first member of the family to fall ill upon arrival in the city, was getting worse and she died from whooping cough the following day.⁷

The case of John Groke and his family serves to introduce the principle aims and objectives of this thesis. His case-history touches upon issues regarding the urban poor which have fascinated medical, welfare and demographic historians for the past forty years.⁸ How much sickness and disease was there in late Georgian and early Victorian Newcastle? What types of sickness and disease assailed the urban poor in this period? What impact did sickness and

⁴ 'Coroner's Inquest on Bridget Groke, 1840'.

⁵ *Ibid.*

⁶ *Ibid.*

⁷ *Ibid.*

⁸ For a recent discussion of the literature around this subject see: R. Floud, R.W. Fogel, B. Harris & S.C. Hong. *The Changing Body: Health, Nutrition and Human Development in the Western World since 1700* (Cambridge, 2011), 1-15, 134-95, 364-74.

disease have upon the lives of poor? How did healthcare options and strategies develop to combat the types of sickness which were experienced by people like the Grokes?

The sad story of the Groke family also raises a number of key questions about their individual experience. There is the issue of settlement law in Newcastle. Why were the Grokes not relieved in the parish workhouse? Why did they receive an extraordinary payment? And why were they ordered to leave the city? It also raises questions about institutional policy. Why did Ellen appeal to get her husband into the Infirmary and not her infant daughter who was the first member of the family to have fallen ill? Why was Bridget visited by a surgeon from the Dispensary when she had been refused (unlike her sister Ellen) admission into the workhouse? And how typical, anyway, was the experience of the Groke family? Through a process of asking and answering questions such as these, this thesis will analyse a peculiar phase and important aspect in the history of Newcastle which has not previously been systematically investigated namely: the medical and institutional responses to sickness and disease.

0.3 *The local perspective?*

Over the past thirty years the social history of medicine as a historical discipline has developed into something described recently by one historian as a landscape of ‘the most dramatic terrain [and] steepest mountains’.⁹ In the 1970s and 1980s the discipline was concerned primarily with the history of ‘technical achievement ... of progress ... and of the medical or allied professions ... in a vacuum’.¹⁰ During the later 1980s historians of medicine began to move away from these limited areas of study and began to focus on Roy Porter’s insistence on the ‘patients’ perspective’.¹¹ At the same time, economic and social historians began to acknowledge the importance of detailed local studies which focussed upon particular communities and neighbourhoods in both rural and urban settings.¹² Medical historians took up this challenge. Most notable were Pickstone’s study of hospital

⁹ I. Mortimer. *The Dying and the Doctors: The Medical Revolution in Seventeenth-Century England* (Woodbridge, 2009), 1.

¹⁰ H. Marland. *Medicine and Society in Wakefield and Huddersfield, 1780-1870* (Cambridge, 1987), 1

¹¹ For some example of Porter’s pioneering work, see: R. Porter & D. Porter. *Patients Progress: Doctors and Doctoring in Eighteenth-Century England* (Cambridge, 1989); R. Porter ed, *Patients and Practitioners: Lay Conceptions of Medicine in Pre-Industrial Society* (Cambridge, 1985); R. Porter. *Disease, Medicine and Society in England, 1550-1860* (Cambridge, 1993); R. Porter. *The Popularisation of Medicine, 1650-1850* (London, 1992); R. Porter & D. Porter ed. *In Sickness and in Health: The British Experience, 1650-1850* (London, 1988).

¹² For some pioneering studies see: K. Wrightson and D. Levine. *Poverty and Piety in an English Village: Terling, 1525-1700* (Oxford, 1995); J. Boulton. *Neighbourhood and Society: A London Suburb in the Seventeenth-Century* (Cambridge, 1987); D. Levine & K. Wrightson. *The Making of an Industrial Society: Whickham, 1560-1765* (Oxford, 1991).

development in Manchester, Marland's study of medicine and society in Wakefield and Huddersfield and Fissell's examination of medicine and the poor in eighteenth-century Bristol.¹³ Such work began to address what Marland termed 'the most serious defect of ... medical history', namely the lack of research into 'medical services in the context of the community'.¹⁴

The problems caused by severe illness, disability and death have led to some of the most profound social developments which impact most aspects of life which are important to historians. In James Riley's words: 'sickness is too important to allow us to shy away from it in our interpretations of the past'.¹⁵ Local studies of sickness and healthcare add much to our understanding of the agencies which responded to such episodes.¹⁶ The local investigation not only enables one to focus specifically on an individual community over a long period, but also allows one to examine more sources in greater depth than national surveys allow for. Indeed, such comprehensive analysis is essential when we consider Rosen's definition of what the discipline should actually be:

The social history of health and disease ... is more than a study of medical problems ... it requires as well an understanding of the factors – economic conditions, occupation, income, housing, nutrition, family structure and others – which create or influence health problems, and the ways in which they operate.¹⁷

The existing scholarly literature on this subject is now pretty comprehensive. However, even in the 1990s 'medical history remained too detached from mainstream social history'.¹⁸ Since then, some pioneering studies have been undertaken which have stressed the importance of local and micro-historical methodological approaches which are the only way in which the historian can attempt to 'return the patient ... to the context from which they came'.¹⁹ Kevin Siena's detailed examination of venereal disease and the London hospitals is of particular

¹³ J.V. Pickstone. *Medicine and Industrial Society: A History of Hospital Development in Manchester and its Region, 1725-1946* (Manchester 1985); Marland. *Medicine and Society in Wakefield and Huddersfield*; M. Fissell. *Patients, Power and the Poor in Eighteenth-Century Bristol* (Cambridge, 1991).

¹⁴ Marland. *Medicine and Society in Wakefield and Huddersfield*, 2.

¹⁵ J.C. Riley. *Sick, Not Dead: The Health of British Working Men during the Mortality Decline* (Baltimore, 1997), 2.

¹⁶ Mortimer. *The Dying and the Doctors*, 1.

¹⁷ G. Rosen. 'Social Variables and Health in an Urban Environment: the case of the Victorian City', *Clio Medico*, 8 (1973), 1.

¹⁸ J. Andrews. 'Research and Resources: The Social History of Medicine in the 1990s', *Social History of Medicine*, 3 (1990), 515, 515-18.

¹⁹ For two examples see: A. Levene. *Childcare, Health and Mortality at the London Foundling Hospital: 'Left to the Mercy of the World'* (Manchester, 2007), 1-15; K. Siena. *Venereal Disease, Hospitals and the Urban Poor: London's 'Foul Wards', 1600-1800* (Rochester, 2004), 1-29.

relevance to this thesis in terms of his methodological approach which lay emphasis on the need to examine a ‘cross-section of institutional medicine’.²⁰ And Mary Fissell’s emphasis on the importance of local medical and institutional developments in a provincial context provides a further rationale for this present study, since she stressed that ‘viewed from the perspective of the provinces developments in London (where the majority of attention has been made) seem less significant’.²¹ More recently it has also been emphasized that previous historiographical emphasis on the providers of hospitals, rather than the users means that ‘we still lack surveys of certain kinds of institutions, such as eighteenth-century infirmaries and dispensaries’.²² But rather than simply survey these institutions we need to know ‘how they functioned on the ground’ and how they interacted in the everyday lives of the poor and how this changed over time.

0.4 The period 1750-1850

Another particular lacunae in the current literature relating to healthcare, medicine and disease is that there is relatively little of it relating to the period c. 1750 to 1850. To date there are two main periods covered by historians. Studies which look at the period up to around 1720 and those which study the period after 1850 when national death statistics become more readily available.²³ The relative neglect of the period in between is unfortunate because this was a crucial period in English population history. The period saw a rise in life expectancy and witnessed a transformation of the urban mortality regime.²⁴ Some authors have also seen developing class differences in mortality - leading to the modern mortality regime in which

²⁰ Siena. *Venereal Disease, Hospitals and the Urban Poor*, 5.

²¹ Fissell. *Patients, Power and the Poor in Eighteenth-Century*, 200.

²² Andrews. ‘History of Medicine: Health and Disease’, 508. Also for discussion see: A. Borsay & P. Shapely. ‘Introduction’, in A. Borsay & P. Shapely eds., *Medicine, Charity and Mutual Aid: The Consumption of Health and Welfare in Britain, c. 1550-1950* (Aldershot, 2007), 7. Moreover, Joanthan Barry and Colin Jones have argued that we need to move ‘attention from providers of charity to its recipients’, see for reference: J. Barry & C. Jones. ‘Introduction’, in J. Barry & C. Jones eds., *Medicine and Charity before the Welfare State* (London, 1991), 1, 1-7.

²³ Many of these early modern historians were greatly influenced by the work of Andrew Appleby, see for example: J. Walter and R. Schofield ed. *Famine, Disease and Social Order in Early Modern Society* (Cambridge, 1989), 1-74. For some examples of work which have looked at the period after 1850, see: R. Woods and J. Woodward eds. *Urban Disease and Mortality in Nineteenth-Century England* (London, 1984). J.C. Riley. *Sick, Not Dead: The Health of British Working Men During the Mortality Decline* (Baltimore, 1997); J.C. Riley. *Sickness, Recovery and Death: A History and Forecast of Ill Health* (Iowa City, 1989); A. Hardy. ‘Urban Famine or Urban Crisis? Typhus in the Victorian City’, *Medical History*, 32 (1988), 401-25; A. Hardy. ‘Death is the Cure to All Diseases’: Using the General Register Office Cause of Death Statistics for 1837-1920’, *Social History of Medicine*, 7 (1994), 472-92; B. Harris. ‘Public Health, Nutrition and the Decline of Mortality: The McKeown Thesis Revisited’, *Social History of Medicine*, 17 (2004), 379-407; E. Higgs. *Life, Death and Statistics: Civil Registration, Censuses and the Work of the General Register Office, 1836-1952* (Hertfordshire, 2004).

²⁴ For discussion see: R. Davenport, L. Schwarz & J. Boulton. ‘The Decline of Adult Smallpox in Eighteenth-Century London’, *Economic History Review*, 64 (2011), 1289, 1289-1314.

different socio-economic groups enjoyed different survival chances from their rural/poorer peers.²⁵ This was also the period in which Thomas McKeown saw a rise in population, caused by a fall in deaths from infectious diseases which he ascribed to better nutrition.²⁶ Simon Szreter has also stressed that in this period, social intervention rather than nutrition was the vital determinant of the mortality decline.²⁷ While we know much about the period after the introduction of civil registration, we still ‘know little more than the bare outline of events’ for the period before 1840, now famously known as a ‘dark age’ for the subject.²⁸ This void was accentuated by Anne Hardy who laid emphasis on the fact that the ‘investigation of the particular circumstances of death and disease in the cities, towns and countryside of ... England has largely been neglected’.²⁹ While this is true of research into mortality and disease, it is also true of healthcare and its impact on the former. Jonathan Andrews has recently highlighted this gap in the historiography, stressing that ‘the eighteenth-century remains underrepresented ... and is too frequently sidelined in ... studies that all too often leap from pre-1700 to [the] post industrial’ period.³⁰

The overarching aim of this thesis is to examine a hitherto uncharted aspect of the history of early industrialising Newcastle, namely the development of healthcare and the responses to sickness and disease. Such an understanding will not only fill in a *blank space* on the city’s historic map, but will allow Newcastle’s experience to be placed in a wider comparative stance with what we know of other large urban centres. Moreover, by providing a more ‘holistic’ approach to the study of health and disease control, this thesis aims to provide a more ‘human face’ to this important aspect of urban life and in doing so shed new light on ‘our understanding of the ways in which disease affected the lives of ordinary people’.³¹

²⁵ Davenport et al. ‘The Decline of Adult Smallpox’, 1289-1314.

²⁶ T. McKeown. *The Modern Rise of Population* (London, 1976). Also see: R.I. Rotberg & T.K. Rabb ed. *Hunger and History: The Impact of Changing Food Production and Consumption on Society* (Cambridge, 1985).

²⁷ S. Szreter. ‘The Importance of Social Intervention in Britain’s Mortality Decline, c. 1850-1914: a Reinterpretation of the Role of Public Health’, *Social History of Medicine*, 1 (1988), 1-37.

²⁸ Davenport et al. ‘The Decline of Adult Smallpox’, 1289; McKeown’s thesis was based on evidence gathered from national English registration data for the period 1837-1914 and Szreter employed evidence from 1850-1914. S. Szreter & G. Mooney. ‘Urbanization, Mortality and the Standard of Living Debate: New Estimates of the Expectation of Life in Nineteenth Century British Cities’, *Economic History Review*, 51 (1998), 84

²⁹ Hardy. *The Epidemic Streets: Infectious Disease and the Rise of Preventative*, 2.

³⁰ J. Andrews. ‘History of Medicine: Health, Medicine and Disease in the Eighteenth Century’, *Journal of Eighteenth-Century Studies*, 34 (2011), 515, 503-15.

³¹ Hardy. *The Epidemic Streets: Infectious Disease and the Rise of Preventative*, 8

0.5 Documental Sources

In addition to the archival records held in The Tyne and Wear Archives and Museums (TWAM) and the Newcastle City Libraries Local Studies Section (NCL/LS) and the Newcastle University Robinson Library Special Collections, databases were constructed from the following primary sources.

0.6 Anglican Parish Registers.³²

The records of burials and baptisms in the city's Anglican parishes of St Nicholas, St John's, St Andrew's and All Saints have been referred to throughout the body of this thesis. These sources have several benefits as well as some problems. They are useful because they provide the only available consistent information on the occupational profile of male inhabitants whose occupational ascription was often recorded in the burial registers. Burial registers are also a useful source for understanding the seasonality of death in the city over time. The biggest defect in the city's parish registers is that they provide little information on age at death and baptism during the eighteenth-century which makes it virtually impossible for any form of family reconstitution to be carried out.³³ Using parish registers to reconstruct absolute population totals for each parish and the city as a whole is also fraught with difficulties because of increasing levels of under registration and the rising incidence of religious dissent in the second half of the eighteenth-century.³⁴

0.7 Newcastle and Gateshead Bills of Mortality.

The Newcastle Bills of Mortality are an under-used source for understanding the population history of Tyneside.³⁵ These annual statistics of burials and baptisms survive in a virtually

³² Newcastle City Libraries, Local History Section L929.3/N536. All of the city parishes registers are available on microfilm in TWAM although the copies are in many years extremely poor. TWAM Parish Records (Microfilm).

³³ For discussion of the method of family reconstitution see: E.A. Wrigley, R.S. Davies, J.E. Oeppen & R.S. Schofield. *English Population History from Family Reconstitution, 1580-1837* (Cambridge, 1997), 3-17, 73-117.

³⁴ See for discussion: S. Basten. 'Registration Practices in Anglican Parishes and Dissenting Groups in Northern England, 1770-1840' (Unpublished PhD Thesis, Cambridge University, 2008); M. Drake. 'Introduction' in M. Drake ed., *Population Studies from Parish Registers* (Matlock, 1982), v-xxxvi; M. Barke. 'Pre-Civil Registration Population of Newcastle: Estimating Vital Events', *Northumbria University, Division of Geography and Environmental Management, Occasional Papers*, 37 (2000), 7-11.

³⁵ For some of the most pioneering work on eighteenth-century Bills of Mortality see: D. Powel. 'William Cowper and the Northampton Bills of Mortality', *Northampton Past and Present*, 5 (1973), 19-32; J. Landers. *Death and the Metropolis: Studies in the Demographic History of London, 1680-1830* (Cambridge, 1993); R.

unbroken series (except for 1815) from 1736 until 1848. The Newcastle Bills are remarkably complete. They record the number of baptisms and burials which occurred in all of the city's parish registers in the period relating to well over a quarter of million people. The most remarkable feature of the Newcastle Bills is that they allow us to count the number of burials which were taking place in the notorious Ballast Hills burial ground, which became an increasingly popular final resting place for novocastrians.

0.8 *Infirmary annual reports and admission registers.*³⁶

The Newcastle Infirmery annual reports and admission register have been used extensively in Chapter 4. These provide detailed quantitative and qualitative data on the part played by the institution in the medical landscape of both Newcastle and its hinterland. The admission register lists a number of key characteristics of patients admitted between 1778 and 1787. There is information on parish of origin, medical complaints and how long patients had suffered from their ailment before they admitted. They also supply information on the age of patients at admission and on the reported length of time that they spent inside the hospital. The annual reports provide information on the overall number of patients who were admitted between 1751 and 1851 on how the Infirmery was financed and how the institution spent its income.³⁷

0.9 *Dispensary annual reports and disease tables.*³⁸

These medical reports and tables provide valuable information on the day-to-day running of the Newcastle Dispensary (founded in 1778). They provide information on the type of diseases treated over a period of more than seven decades relating to over a third of a million patients. The Reports and Tables also provide much information about the outcome of patients' treatment and on the types of afflictions which commonly assailed the patients and which often killed them. There are also several publications by the staff who worked at the

Woods. 'Mortality in Eighteenth-Century London: A Look at the Bills', *Local Population Studies*, 77 (2006), 483-503; J. Boulton & L. Schwarz. 'Yet Another Inquiry in the Trustworthiness of London's Eighteenth-Century Bills of Mortality', *Local Population Studies*, 85 (2010), 28-45.

³⁶ The Infirmery archive is held in TWAM, for reference see: TWAM HO.RVI.

³⁷ For a discussion of records of this type, see: A. Borsay. *Medicine and Charity in Georgian Bath: A Social History of the General Infirmery, c. 1739-1830* (Aldershot, 1999), 3-20.

³⁸ The Newcastle Dispensary annual reports and disease tables used in this thesis were extracted from the copies held in the Newcastle University Robinson Library Special Collections, for reference, see: RLSC/Hosp/Arch 73. For a detailed discussion of the records collected by Dispensaries in the eighteenth-century see: I Loudon. *Medical Care and the General Practitioner, 1750-1850* (Oxford, 1986), 55-57.

Dispensary which give important qualitative information on the patients who were turning to this institution when they were sick and ill.

0.10 *Workhouse accounts, admissions registers, Vestry minutes and settlement examinations.*³⁹

The Poor Law material deployed in this study comes from All Saints parish archive held in TWAM. This material has been much neglected by historians. The workhouse accounts provide detailed information on the weekly spending on the relief of paupers held in the parish workhouse (located in Manors in the east-end of the city). The workhouse admission register allows us to count the number of paupers who were admitted and discharged from the workhouse in the closing years of the eighteenth-century. The vestry minutes of the committee which ran the workhouse reveals much about the daily life in the institution, the types of employment undertaken by inmates and their living conditions. Parish settlement examinations also provide valuable information on some of the reasons why paupers went on parish relief, they also provide valuable insight into the reason why some were granted settlements and others were not. The settlement examinations also provide key information about the seasonality of poverty and relief in the city.

0.11 *Methodology and plan: an intensive study of an urban provincial city*

The thesis is divided into five chapters. Chapter One will provide a full scale analysis of Newcastle and Gateshead's demographic record using the city's Bills of Mortality and parish registers. This analysis provides new information about the size of the city in the period before the first census in 1801. The chapter also explores some of the various problems associated with estimating Newcastle's population size in the period. The importance of Newcastle as the region's metropolis and the impact that its size had upon the demography of its hinterland is also considered. Having done this the chapter provides an exhaustive analysis of the city's Bills of Mortality. This includes a detailed examination of the number of burials

³⁹ All Saints Parish poor law material is held in TWAS, for reference see: TWAM 465/14; TWAM 465/1; TWAM 465/16; TWAM MF349; TWAM MF352; TWAM465/31; TWAM 465/32; TWAM 466/10; TWAM 183/1-187; TWAM 465/38; TWAM 465/37; TWAM 465/38; TWAM 466/11; TWAM MF388-92; TWAM 183/234; TWAM MF371; TWAM MF382-85; TWAM E.NC36, TWAM T241; TWAM DX1008/1. For detailed discussion of what can be yielded from Poor Law records in urban parishes see Jeremy Boulton and Leonard Schwarz's discussion of the London Westminster parish of St Martin-in-the-Fields : J. Boulton and L. Schwarz. 'The Lives of the Poor in the West End of London, 1724-1867: Full Research Report', *ESRC End of Reward Report* (2007), 1-14; J. Boulton & L. Schwarz. "The Comforts of a Private Fireside"? The Workhouse, the Elderly and the Poor Law in Georgian Westminster: St Martin's-in-the-Fields, 1725-1824' in J. McEwan & P. Sharpe ed., *Accommodating Poverty: The Households of the Poor in England c. 1650-1850* (Basingstoke, 2011), 221-45.

which occurred at the Ballast Hills burial ground and ends by setting out some newly constructed population estimates for the city.

Chapter Two begins by discussing the reasons for the city's population growth. Newcastle owed much of its growth to inward migration from the surrounding countryside. The chapter also examines the standards of living in the city by looking at real wage movements over time and food prices. Housing standards, population density, poverty and the city's water supply are also addressed.

Chapter Three examines the role of the Newcastle Infirmary (founded in 1751 for the sick and lame of Newcastle, Northumberland and Durham). It looks at the extent to which the Infirmary provided medical care to the region and the city. An analysis of the demographic characteristics of the patients is provided and of the origin of patients. The types of diseases and conditions which assailed the patients and the levels of mortality are also examined at great length.

Chapter Four looks at the part played by the Dispensary (founded in 1777 for the sick and diseased poor in the city).⁴⁰ This chapter looks at the scale at which the Dispensary operated, how patients could be treated and how this changed over the century. The chapter also analyses the types of medical complaints which were commonly treated. The characteristics of patients are analysed. The chapter also examines the causes of death of Dispensary patients and compares these to the diseases which carried off the wider population of the city.

In the closing chapter, the medical care experienced by those that had neither the financial means to turn to the city's private sector and who were normally prohibited from admission into the new voluntary hospitals is examined. This chapter looks to the medical services provided by the All Saints parish poor law authorities. It begins by looking at the actual size of All Saints parish and its share of the population of the city. After having done this, the chapter provides an account of the extent to which sickness and disability pushed the poor onto parish relief. The chapter goes on to examine the demographic characteristics of the pauper population in the parish and those who were incarcerated in All Saints workhouse.

⁴⁰ L.D. Schwarz. *London in the Age of Industrialisation: Entrepreneurs, Labour Force and Living Conditions, 1700-1850* (Cambridge, 1992), 125-55; Landers, *Death and the Metropolis: Studies in the Demographic History*, 7-89; J. Landers. 'Mortality, Weather and Prices in London, 1675-1825: A Study of Short Term Fluctuations', *Journal of Historical Geography*, 12 (1986), 347-64; J. Landers. 'Age Patterns of Mortality in London during the Long Eighteenth Century: A Test to the High Potential Model of Metropolitan Mortality', *Social History of Medicine*, 3 (1990), 27-60; J. Landers. 'Historical Epidemiology and the Structural Analyses of Mortality', *Health Transition Review*, 2 (1992), 47-75.

The chapter also looks at the types of diseases which assailed the pauper population and the extent to which the parish provided medical services to the sick, the disabled and the mentally ill.

Chapter 1. The Population history of Newcastle-upon-Tyne, 1750-1850: a reconstruction

It is much to be wished that accurate and comprehensive Bills of Mortality were established in Newcastle; such an institution would be honourable to the town and answer many medical and political purposes.

(Anon. Newcastle, 1779, un-paginated)

1.1 Introduction

The demographic record forms an important background to the study of health and disease in any urban environment in the past.⁴¹ Such an analysis enables one to examine environmental factors which affect the health experience of a population. These often include elements such as population density and the impact that movements in population have upon a local economy. Such information forms an essential back drop to a holistic study of health and disease control in eighteenth and nineteenth-century England. In-fact, the important part played by demographic movements on the health of a population is not a modern concern.⁴² ‘The search for associations between disease, death and atmospheric, environmental and geographical influences has fascinated ... physicians and their patients for ... thousands of years’.⁴³ Boudin writing in the late 1840s commented that:

Man is not born, does not live, suffer, die in the same way in all parts of the world. Birth, life sickness and death, all change with climate and the soil ... with race and nationality. These varied manifestations of life and death, of health and sickness, these incessant changes in space and according to the origins of man, constitute the special object of medical geography. Its domain embraces meteorology and physical geography, statistical population laws ... [and] the geographical distribution and migration of diseases.⁴⁴

In a study concerned with the medical and institutional responses to sickness and death, the impact which movements in population must have played in the ‘changing face’ of both morbidity and mortality in Newcastle cannot be simply overlooked. Furthermore, even a

⁴¹ For a detailed collection of essays on this subject see: R. Woods & J. Woodward eds. *Urban Disease and Mortality in Nineteenth-Century England* (London, 1984).

⁴² For very detailed study of the collection of health statistics in early modern England and France see: A.A. Rusnock. *Vital Accounts: Quantifying Health and Population in Eighteenth-Century England and France* (Cambridge, 2002). Also see: U. Trohler. ‘Quantification in British Medicine and Surgery, 1750-1830, with Special Reference to the Introduction of Therapeutics’ (Unpublished PhD, University College London, 1978) and U. Trohler. ‘To Improve the Evidence of Medicine: The Eighteenth-Century British Origins of a Critical Approach’, *Royal College of Physicians*, 1 (2000), 59-68.

⁴³ M.J. Dobson. *Contours of Death and Disease in Early Modern England* (Cambridge, 1997), 1.

⁴⁴ Boudin, 1848, vol. 1, xxxv, cited in: Dobson. *Contours of Death and Disease*, 1.

basic understanding of the rhythms of burials and baptisms in Newcastle should throw valuable light on the ‘annual tempo of life’ in early industrialising Tyneside and act as a good starting point for this thesis.⁴⁵

It is now well known that England’s population grew rapidly in the period that this thesis is concerned. Prior to the mid-eighteenth-century the population of the country as a whole was recovering at growth rates which had not been experienced since around the middle of the seventeenth-century.⁴⁶ Then from about the middle of the eighteenth-century England’s population began to grow rapidly, the unique take off enabled the population of the country to reach an unparalleled size as shown in Table 1.1.

Table 1.1 *Population of England, 1550-1850*

	England’s population
1550	3,011,000
1600	4,110,000
1650	5,229,000
1700	5,058,000
1750	5,772,000
1800	8,665,000
1810	9,762,413
1820	11,300,024
1830	13,105,539
1840	14,797,488
1850	16,515,615

Source: Wrigley & Schofield, *The Population History of England*, 531-35

However, it is also common knowledge that England as a whole grew at different rates in different regions.⁴⁷ We cannot therefore assume that Newcastle’s demographic record reflected England’s in this period. Indeed, it has been suggested by some historians that the population of Newcastle actually declined in the later years of the eighteenth and first decade of the nineteenth-century in the very same period when the national population was

⁴⁵ J. Boulton. *Neighbourhood and Society: A London Suburb in the Seventeenth Century* (Cambridge, 1987), 13

⁴⁶ Wrigley & Schofield. *The Population History of England*, 531-35.

⁴⁷ For England population growth see the pioneering work of Wrigley and Schofield: E.A. Wrigley & R.S. Schofield. *The Population History of England, 1541-1871: A Reconstruction* (Cambridge, 1981). The growth of London in this period was remarkable see: E.A. Wrigley. ‘A Simple Model of London’s Importance in Changing English Society and Economy, 1650-1750’, *Past and Present*, 37 (1967), 44-70. Schwarz provides a concise discussion of the population growth of London during the eighteenth-century, see: L.D. Schwarz. *London in the Age of Industrialisation: Entrepreneurs, Labour Force and Living Conditions, 1700-1850* (Cambridge, 1992), 125-55. For more recent work concerning the growth in population in English counties in the early modern period see: E.A. Wrigley. ‘English County Populations in the Later Eighteenth Century’, *Economic History Review*, 60 (2007), 35-69; E.A. Wrigley. ‘Rickman Revisited: The Population Growth Rates of English Counties in the Early Modern Period’, *Economic History Review*, 62 (2009), 711-35.

booming.⁴⁸ If Newcastle's population was stagnating in these years, such stagnation might have been a result of slowing immigration to the city, or it might have been a result of particularly high mortality rates amongst the novocastrian population. Newcastle's demographic record must therefore be investigated directly.⁴⁹

This chapter is divided into five parts. The first part looks at demographic history of Northumberland and then looks at the significance of Newcastle in the county's demographic landscape. Section two introduces a 'new' source for understanding the population history of Newcastle – the Newcastle and Gateshead Bills of Mortality. The third section discusses the accuracy of those Bills of Mortality. Section four reconstructs the population history of Newcastle through an exhaustive analysis of the Bills. Lastly, analysis of the Bills allows new population estimates for the city to be made.

1.2 *The growth of Britain's metropolis of the north*

One of the most striking features of Northumberland's demographic history is the rapidity with which the population of the county grew over the course of the eighteenth and nineteenth centuries. Figure 1.2 plots Northumberland's census population totals along with those presented by Rowe in 1977 as well as the more recent work of produced by Wrigley for the early modern period. As the graph suggests, Northumberland's population literally doubled from the beginning of the eighteenth-century with a population of around 150-160,000 increasing to over 300,000 in 1851. Northumberland's impressive growth was closely related to the nation's capital as Wrigley has already observed.

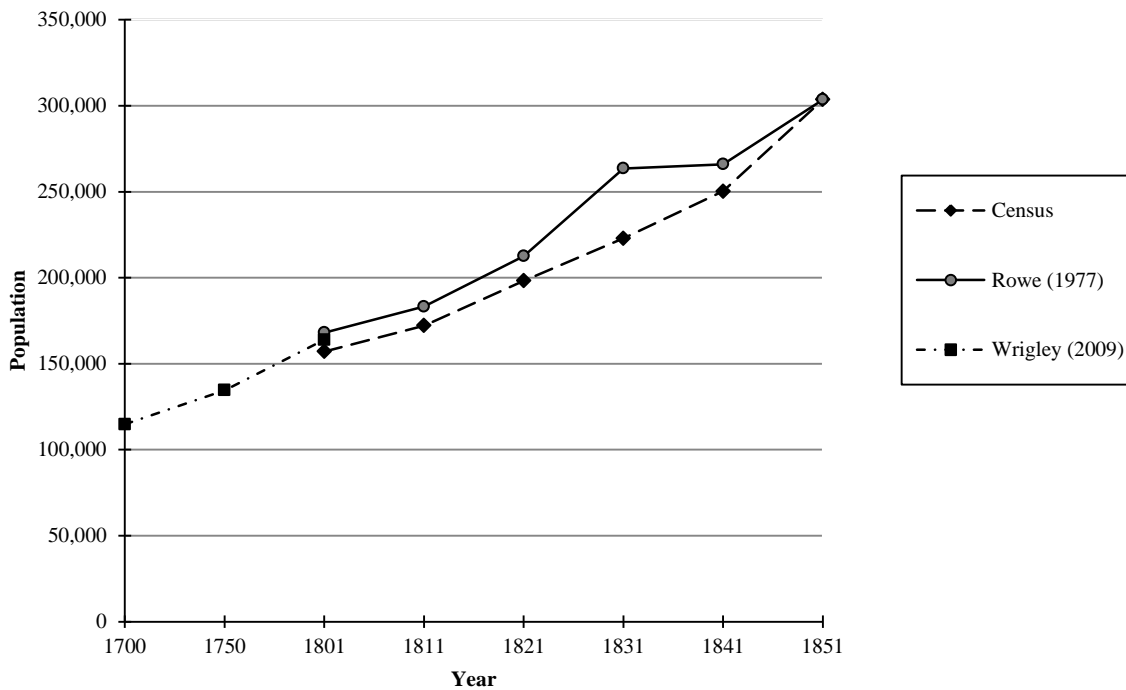
Northumberland [s] ... growth and that of London were closely linked, since the coal trade to London grew to the point where the colliers formed half the tonnage of the whole merchant fleet. Output of coal on the north-east coal fields expanded ... from 90,000 to 1,250,000 tons per annum between 1560 and 1700.⁵⁰

⁴⁸ M. Barke. 'The People of Newcastle: A Demographic History', in R. Colls & B. Lancaster ed., *Newcastle-upon-Tyne: A Modern History* (Chichester, 2001), 133-66.

⁴⁹ For a discussion of these issue with regard to the population history of London in the eighteenth-century, see: J. Landers. *Death and the Metropolis: Studies in the Demographic History of London, 1670-1830* (Cambridge, 1993), 7-89. Also see: J. Soderberg, U. Jonsson & C. Persson. *A Stagnating Metropolis: The Economy and Demography of Stockholm, 1750-1850* (Cambridge, 1991).

⁵⁰ Wrigley. 'Rickman Revisited: The Population Growth Rates of English Counties', 722. For a detailed examination of the dominance of the coal trade on Tyneside in the seventeenth and early eighteenth centuries see Levine's and Wrightson's important study: D. Levine & K. Wrightson. *The Making of an Industrial Society: Whickham, 1560-1765* (Oxford, 1991), 1-10, 92-105, 205-230.

Figure 1.1 Population growth of Northumberland, 1700-1851



Sources: Northumberland Census population, 1801-1851; D.J. Rowe. 'Population of 19th Century Tyneside', in N. McCord ed., *Essays in Tyneside Labour History* (Newcastle, 1977), 20; Wrigley. 'Rickman Revisited: The Population Growth Rates of English Counties', 721.

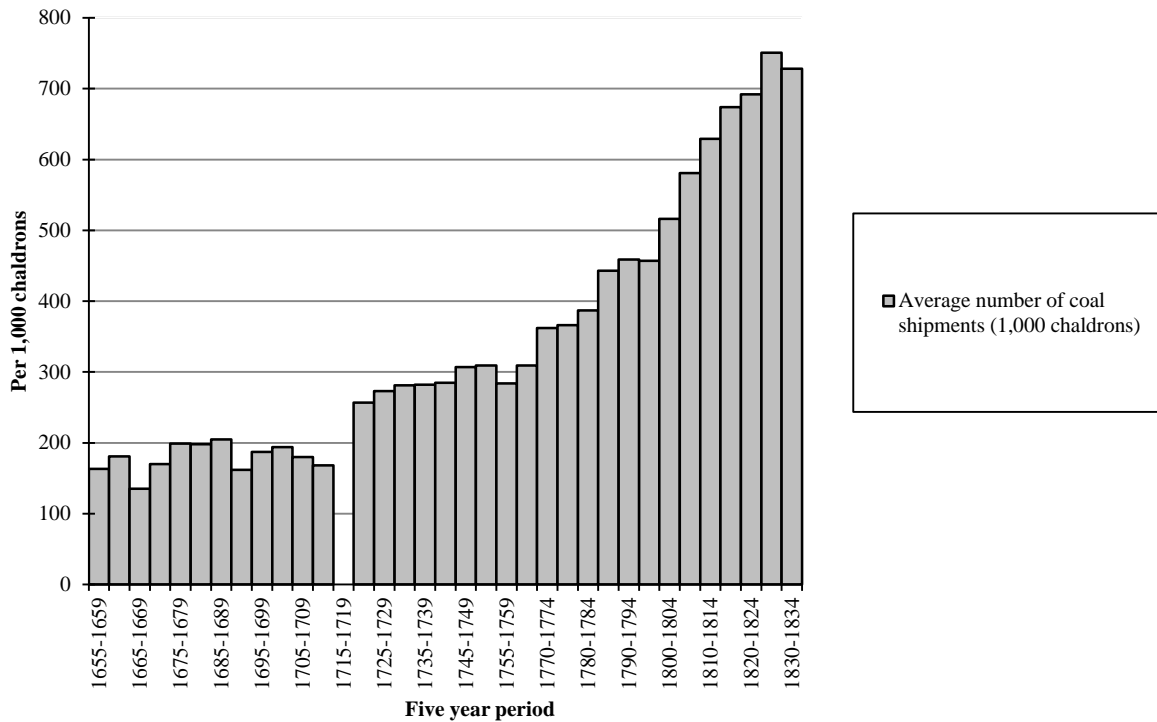
Coal was key to both Northumberland's and Newcastle's growth, and vital to what Wrigley called England's 'transition from a 'advanced organic economy' to a 'mineral based energy economy'.⁵¹ Tyneside's coal trade played an integral part in the demographic expansion of Georgian Northumberland – as coal became even more 'vital ... in the development of industrial society in Britain'.⁵² Coal exports from the port of Newcastle have been presented graphically in Figure 1.2 based on five yearly averages.⁵³ It is demonstrably the case that the growth in coal exports from the port broadly followed the growth of the county.

⁵¹ Wrigley. *Continuity, Chance and Change*, cited in Levine et al. *The Making of an Industrial Society*, viii-ix

⁵² Levine & Wrightson. *The Making of an Industrial Society*, ix.

⁵³ For a recent pioneering discussion of the importance of Newcastle coal trade in the growth of London and the Industrial Revolution generally see: R. Allen. *The British Industrial Revolution in Global Perspective* (Cambridge, 2009), 80-105.

Figure 1.2 Growth of coal exports from port of Newcastle, 1655-1830



Source: Mitchell et al. *An Abstract of British Historical Statistics*, 109-11

This latter point has been recently discussed by Kitson in an examination of the occupational structure of Northumberland in the period under question. He shows that the majority of population growth which occurred in Northumberland in the nineteenth-century took place around the registration districts of Newcastle and the Tynemouth.⁵⁴ The former being dominated by the secondary sector and the latter by the coal trade.⁵⁵ Clearly, Northumberland’s population boomed, but what about the region’s metropolis?⁵⁶

⁵⁴ P. Kitson. ‘The Male Occupational Structure of Northumberland, 1762-1871: A Preliminary Report’, Part of the ESRC-funded project: *Male Occupational Change and Economic Growth in England 1750-1850* – led by Dr L. Shaw-Taylor and Prof E.A. Wrigley. The paper is available on the Cambridge Groups website: <http://www.geog.cam.ac.uk/research/projects/occupations/abstracts/paper6.pdf> [Accessed 27/05/2010]. I would like to acknowledge my gratitude to Dr Kitson for allowing me to reference this report.

⁵⁵ Kitson. ‘The Male Occupational Structure of Northumberland, 1762-1871’, 2.

⁵⁶ For some examples of previous studies see: E.A. Wrigley. ‘Urban Growth and Agricultural Change: England and the Continent in Early Modern England’, *Journal of Interdisciplinary History*, 15 (1985), 683-728; E.A. Wrigley. ‘English County Populations in the Later Eighteenth-Century’, *Economic History Review*, 60 (2007), 35-69; Wrigley. ‘Rickman Revisited: The Population Growth Rates of English Counties’, 711-35; Reid. ‘Population of 19th Century Tyneside’, 1-24; Rowe. ‘The North East’, 415-70; N. McCord ed. *Essays in Tyneside Labour History* (Newcastle, 1977); N. McCord. *North East England: The Region’s Development, 1760-1960* (London, 1979); N. McCord. ‘The Making of Modern Newcastle’, *Archaeologia Aeliana*, (1983), 333-46; M. Barke. ‘The Pre-Civil Registration Population of Newcastle-upon-Tyne: Estimating Vital Events’, *Division of Geography and Environmental Management, Occasional Papers, University of Northumbria*, 35 (2000), un-paginated; M. Barke. ‘The People of Newcastle’, 133-66; The most pioneering study of Newcastle’s

It seems to have become customary for historians to use the figures presented by Middlebrook, Law and Chalklin as estimates of the city's population prior to the 1801 Newcastle census. These are presented in Table 1.2 along with the totals as revealed in the 1801-51 census returns. Firstly, it must be emphasized that all of the figures relating to the period before the 1801 census are in reality little more than best guesses.⁵⁷ While the evidence for the eighteenth-century is problematic, the evidence from the 1801 census totals for Newcastle have also been subject to debate from both contemporary and modern day historians. Baillie, writing just after the first census noted that it had:

Excited universal surprise ... the number of inhabitants, upwards of 40 years ago, being reckoned at 50,000; and it is well known that the town has increased in buildings, both useful and ornamental ... Newcastle has for many years past ranked as the third or fourth town of England, both for wealth and commercial importance and of course for population. Besides such has been the influx of people from the interior, in these times of pressure, that it is with the utmost difficulty dwelling houses can be obtained, even at very advanced rents.⁵⁸

Table 1.2 *Newcastle's population, 1700-1851*

	Population	Census Population
1700 (Chalkin)	14,000	—
1740 (Middlebrook)	21,000	—
1750 (Law)	29,000	—
1770 (Middlebrook)	24,000	—
1775 (Law)	33,000	—
1801	—	28,366
1811	—	27,587
1821	—	35,181
1831	—	42,760
1841	—	71,844
1851	—	89,156

Sources: Barke. 'The people of Newcastle', 136

parish registers to date is Stuart Basten's 2008 Cambridge PhD, see: Basten. 'Registration Practices in Anglican Parishes and Dissenting Groups'. Other works include: S. Middlebrook. *Newcastle-Upon-Tyne: Its Growth and Achievement* (Newcastle, 1950); C.M. Law. 'Some Notes of the Urban Populations of England and Wales in the 18th Century', *The Local Historian*, 10 (1972), 13-26; C.W. Chalklin. *The Provincial Towns of Georgian England: A Study of the Building Process, 1740-1820* (London, 1974).

⁵⁷For discussion of this issue, see: Barke. 'The People of Newcastle', 133-66.

⁵⁸J. Baillie. *An Impartial History of the Town and County of Newcastle and it's Vicinity* (Newcastle, 1801), 52.

Bailie, un-convinced by the result of 1801, estimated that the city's population was probably closer to 60,000 than the 30,000 or so produced by the census. Bailie's observation may well have been more accurate if he was basing it on the actual population of Tyneside as opposed to Newcastle alone. Ellis writing some ten years ago suggested that if one was to include the population of Gateshead in the Newcastle census population then a figure of 41,465 in 1801 would 'go some way to substantiate the estimates of 30-40,000 made by 'sensible inhabitants' in the 1770s'.⁵⁹ Using the result in 1801 one might suggest that the figure serves as an indicator of the population which resided in the 'built-up area rather than on the formal boundaries of the town's official jurisdiction'.⁶⁰ Ellis suggests that the geographical location of Newcastle could have played a significant part in limiting population growth between 1801 and 1811. She stressed that a 'great port which lay ten or twelve miles upstream could not be described as being ideally placed'. Given that the population around Newcastle was growing quicker than population within the city, may well have led to what some might call an 'urban doughnut'.⁶¹

Clearly both the pre-1801 population estimates and early censuses for Newcastle are not without interpretive problems.⁶² The safest conclusion that one can probably draw is that the figure presented in Table 1.2 for 1801 and 1811 represents a good estimate of the population that actually resided within the city's jurisdiction. This may also go some way to help explain why Barke saw the closing years of the eighteenth and opening years of the nineteenth century as a period of decline.⁶³ It is also worth pondering the distorting effects of the Napoleonic wars upon the first count, there being a large proportion of the male labour force away at war in these years.⁶⁴ This might have also been especially the case in a large port-city like Newcastle.

While the earlier estimates are problematic, the estimates presented in Table 1.1 show clearly that Newcastle experienced continuous and rapid growth between 1811 and 1851. The city's population grew by 27.5% between 1811 and 1821 and by 21.5% between 1821 and 1831. It

⁵⁹ J. Ellis. 'The Black Indies: Economic Development of Newcastle, c.1700-1840', in R. Colls and B. Lancaster ed., *Newcastle-upon-Tyne: A Modern History* (Chichester, 2001), 22-23.

⁶⁰ Ellis. 'The Black Indies: Economic Development of Newcastle', 22-23. The official jurisdiction of the city's Lord Mayor and the Newcastle Corporation.

⁶¹ *Ibid*, 15-16.

⁶² None of the authors previously mentioned made any comment about how they calculated the pre 1801 Newcastle population estimates.

⁶³ Barke. 'The People of Newcastle', 135.

⁶⁴ For discussion of this issue regarding the national labour force, see Humphries recent study: J. Humphries. *Childhood and Child Labour during the Industrial Revolution* (Cambridge, 2011), 49-84.

experienced especially rapid population growth between 1831 and the 1841 of over 68 % – growing further again by 24% by 1851.⁶⁵ McCord has noted in his pioneering study that ‘it was the region’s economy [which led to] increased population’. He stressed that economic growth had already started in about the 1760s and that the pace of economic development in the region ‘was clearly quickening’ over these years.⁶⁶ What significance was the population of Newcastle in the demographic expansion of Northumberland?

Table 1.3 *Percentage of Northumberland’s population in Newcastle from different county population figures, 1600-1851*

	Census population	Rowe (1977)	Wrigley (2009)	(1)	(2)	(3)
1600	—	—	73,754	—	—	—
1700	—	—	114,729	—	—	12.2%
1750	—	—	134,539	—	—	21.6%
1801	157,101	168,078	163,857	18.0%	16.9%	17.3%
1811	172,161	183,269	—	16.0%	15.1%	—
1821	198,195	212,589	—	17.8%	16.5%	—
1831	222,912	263,569	—	19.2%	16.2%	—
1841	250,268	266,020	—	35.6%	27.0%	—
1851	303,568	303,568	—	36.6%	36.6%	—

(1) Percentage of Northumberland’s population in Newcastle based upon the 1801-51 census returns for Northumberland.
(2) Percentage of Northumberland’s population in Newcastle based upon the Rowe’s figures.
(3) Percentage of Northumberland’s population in Newcastle based upon Wrigley’s early modern county populations estimates.

Sources: Rowe. ‘Population of 19th Century Tyneside’, 20; Wrigley. ‘Rickman Revisited: The Population Growth Rates of English Counties’, 721; Newcastle population estimates are extracted from: Barke. ‘The People of Newcastle’, 136

By having even crude estimates of Newcastle’s population prior to the 1801 census enables one to compare these figures to the more recent Early Modern county estimates for Northumberland derived by Wrigley’s recent work. These have been presented in Table 1.3 along with the census totals for Northumberland presented by Rowe in 1977. If Newcastle’s eighteenth-century estimates are taken at face value, then they suggest that during the first half of the eighteenth-century approximately 12% of Northumberland’s population resided in Newcastle. The Figure of 21.6% in 1750 may well be an over estimate, more especially because Law, who made the estimate in 1972, did not provided evidence for the figure.

⁶⁵ The figure presented Table 1.2 suggests a huge growth in Newcastle’s population in the middle of the nineteenth-century, this was probably a result of the increase in size of the registration districts which the totals were based upon, for a discussion of this see: Barke. ‘The people of Newcastle’, 135-37.

⁶⁶ McCord. *North East England: The Regions Development*, 24. For a discussion of similar movements in population of Victorian cities such as Manchester, Leeds and Birmingham, see: A. Briggs. *Victorian Cities* (Harmondsworth, 1963), 88-138, 139-83, 184-240 and 241-76.

Wrigley's population estimate for Northumberland in 1801 suggests that just over 17% of the population of Northumberland resided in Newcastle, while Rowe's figure would suggest 16% and the census totals points to something closer to 18%. It is extremely difficult to make any statement which would lend more weight to any of these three sets of figures, thus it is instructive to present all of the estimates that are available which allows one to broadly conclude that a figure of somewhere between 15% and 20% of Northumberland's total population resided in Newcastle in 1801.⁶⁷ The apparent decline in Newcastle's population also come to the fore from perusal of columns 1,2 and 3 in the Table, which again need to be read with some caution as already discussed. What is more interesting from Table 1.2 are the figures in columns 1 and 2 for the period after the 1801 census. The percentage differences between columns 1 and 2 have been tabulated in Table 1.3 below.

Table 1.4 *Percentage difference between Rowe's estimate and the census totals*

	Difference
1801	+1.1%
1811	+0.9%
1821	+1.3%
1831	+3.0%
1841	+8.6%
1851	—

Sources: Same as Table 1.2

Clearly there is some degree of variance between both the estimates presented by Rowe in 1977 and those which were produced by the census. Table 1.3 suggests that the degree of variance between Reid's grew as the population of Newcastle and Northumberland increased between 1821 and 1841. As Table 1.4 shows, Rowe's figures deflate the significance of Newcastle population in the county throughout the nineteenth-century, because the county figures presented by Rowe inflate the total population of Northumberland's when compared to the totals in census, particularly between 1821 and 1841. This seems somewhat of a paradox, as many who are familiar with Rowe's important study will be well aware that the he also based his findings on the censuses.⁶⁸

⁶⁷ Wrigley's early modern estimate are by far the most up to date, based upon marriage data collected by Rickman, see: 'English County Populations', 35-69; Wrigley. 'Rickman Revisited', 711-35.

⁶⁸ It is interesting that McCord discussed similar figures in his pioneering study of the region's economic and social development, see: McCord. *North East England: The Region's Development*, 25-69. Similar figures were

This problem may have a simple answer. Rowe's study focussed chiefly upon the population of nineteenth-century Tyneside, rather than Newcastle individually. It may therefore be the case that Rowe's figures actually included the population of Gateshead in the Tyneside total. It is unfortunate that Reid offers no explanation for this. He does note, however, at the end of his study that the census data he used 'vary from census to census in the area covered ... the population sometimes corresponding to the town figures ... but others corresponding to the registration district'.⁶⁹ The inclusion of Gateshead in the Northumberland census total is not an uncommon characteristic of the previous works on Newcastle's demography given the close relationship between Newcastle and its smaller neighbour.⁷⁰ John Marshall, with whom one never feels safe to disagree with, was well aware of this, and he commented in the middle of the nineteenth-century that 'Newcastle ... which in 1821 was returned as containing 35,181 inhabitants, while Gateshead, which is as much a part of Newcastle as the Borough of Southwark is a part of the Metropolis, contained a further population of 11,767'.⁷¹ Indeed if one looks back at Table 1.3 it appears that Rowe's figure inflates the census totals by approximately 10,000-15,000 per year – this figure being remarkably close to the population of Gateshead (Table 1.4). Whether this was actually the case can only be speculated but it does help explain the degree of variance between the two sets of statistics.

Whatever the reason for the difference between the three sets of figures presented in Table 1.3 and 1.4, all of them suggest that Newcastle played a major role in the demographic landscape of Northumberland, with around 15-18% of the total population of Northumberland residing in the city in the late seventeenth and early eighteenth century. By the end of our period the significance of the city became even more evident with nearly 40% of the total population of Northumberland living in the city. Across the century with which this thesis is concerned Newcastle's population experienced rapid growth and increased threefold – its growth broadly followed the growth of the region. The most dramatic period of growth however, was the first half of the nineteenth-century. In this sense, Newcastle's demographic experience was atypical in comparison to what we know of the country as a

also discussed in Reid and McCord's expert essay, see: N. McCord & D.J. Rowe. 'Industrialisation and Urban Growth in North East England', *International Review of Social History*, 22 (1977), 30-64.

⁶⁹ Reid. 'Population of 19th Century Tyneside', note 1, 21.

⁷⁰ For a discussion of the relationships between Newcastle and Gateshead see for example: P. Rushton. 'Gateshead 1550-1700: Independence Against All Odds?' in D. Newton & A.J. Pollard eds., *Newcastle and Gateshead before 1700* (Chichester, 2009), 295-322.

⁷¹ J. Marshall. *An Account of the Population of each Six Thousand of the Principle Towns and Parishes in England and Wales, as Returned to Parliament in Each of the Three Periods, 1801, 1811 & 1821* (London, 1831), 8-9.

whole. Perhaps the city experienced something which occurred in London in the earlier eighteenth-century, when the capital reached a saturation point due to high mortality rates and low level immigration.⁷²

Newcastle's population exploded, so did Northumberland's and so did England's – but how did the population of Newcastle grow? In which parishes did this growth take place? As population change play an all important role in the incidence and spread of disease in urban environments, we clearly need to know more about the growth of Newcastle internally.⁷³ This next section will introduce a new source for understanding Newcastle's demographic history: the Bills of Mortality.

1.4 The Newcastle Bills of Mortality: a new source for the study of Newcastle's population history

There is no need to apologise for including a chapter on population in a study concerned with the health experience of a population – but there is however, an avowed need to approach such a subject caution. This caution simply reflects the 'relative paucity and inaccessibility of reliant, relevant demographic evidence for this particular period' as argued strongly by Szreter and Mooney.⁷⁴ Admittedly Newcastle is no exception to these problems as Basten's study of the city's parish registers has recently re-emphasized.⁷⁵

Present day historians and early demographers were and are well aware of the problems of the study of parish register based demography in the late-Georgian period. 'It is widely

⁷² For example see: Schwarz. *London in the Age of Industrialisation*, 125-55.

⁷³ R. Davenport, J.P. Boulton & L.D. Schwarz. *Infant and Young Mortality in London's West End, 1750-1824*, Working Paper, <http://research.ncl.ac.uk/pauperlives/>. Thanks to Davenport, Boulton and Schwarz for allowing me to reference their paper.

⁷⁴ S. Szreter & G. Mooney. 'Urbanization, Mortality and the Standard of Living Debate: New Estimates on the Expectation of Life at Birth in Nineteenth-Century British Cities', *Economic History Review*, 51 (1998), 84-112. Szreter *et al* are not alone in their observation, see also: Razzell and Krause have also commented upon the unreliability of demographic studies based solely upon parish register in this period, see: P. Razzell. 'The Evaluation of Baptism as a Form of Birth Registration Through Cross-Matching Census and Parish Register Data', *Population Studies*, 26 (1972), 121-46 and J.T. Krause. 'The Changing Adequacy of English Registration, 1690-1837' in, D.V. Glass & D.E.C. Eversley eds., *Population in History* (London, 1965), chapter 15 in particular. This 'dark age' was re-emphasized by Basten in his Cambridge PhD thesis, though he gave more weight to the qualitative value of Newcastle's parish registers and to the mechanics behind the 'registration practices' themselves, see: Basten. 'Registration Practices in Anglican Parishes and Dissenting Groups in Northern England, 1770-1840', 30-109; S. Basten 'Measuring Infant Health in Late-Georgian Northumberland and Co. Durham', unpublished paper presented at the *Economic History Society Annual Conference*, University of Reading, 31st March, 2006.

⁷⁵ Basten. 'Registration Practices in Anglican Parishes and Dissenting Groups'.

recognised that the eighteenth-century registers of baptisms, marriages and burials, do not provide an accurate record of the births, marriages and deaths in the parishes they cover'.⁷⁶ Krause claimed that the registers were so inadequate that 'it [was] doubtful that any significant gains in research can come from parish registers in the early nineteenth-century'.⁷⁷ The reasons assigned to the defectiveness of parish register demography in this 'dark age' were set in three parts by Drake, who claimed that it was due to 'the personal failings of the eighteenth-century clergy, the inelasticity of the parochial system which did not expand to meet the rapid rise and redistribution of the population and the spread of non-conformity'.⁷⁸ While this is indeed a national problem, the problem of parish register demography in Newcastle is particularly fraught with difficulties as a result of supposedly high levels of nonconformity, and the increasing under registration in the parish registers themselves. Further-to-this, Newcastle's demography is also limited because quite simply a great number of the parish registers have not survived entirely, as Barke has already pointed out: 'the relative paucity of demographic writing on the north-east's regional capital [is] clear, but also the availability of several sources ... incomplete and variously flawed'.⁷⁹

However, Newcastle is extremely fortunate in having Bills of Mortality – a source which has never before been used extensively by historians or demographers interested in the city's history.⁸⁰ These vital statistics of baptisms and burials in Newcastle and Gateshead allow for a close study of the 'annual rhythm' of life and death of those individuals whose births and deaths were registered at the font or in the burial grounds of the Anglican parishes in Newcastle and Gateshead, as well as those which took place at the infamous Ballast Hills site, which like its metropolitan equivalent Bunhill Fields became an increasingly popular final resting place as the long eighteenth-century progressed into the nineteenth.⁸¹

Bills of Mortality are as ever a 'tantalising challenge to historical demographers'.⁸² Although once heavily criticised by nineteenth-century contemporaries, the London Bills have been re-

⁷⁶ M. Drake. 'An Elementary Exercise in Parish Register Demography', *Economic History Review*, 14 (1962), 427-45.

⁷⁷ Krause. 'The Changing Adequacy of English Registration', 379-413, 393.

⁷⁸ Drake. 'An Elementary Exercise in Parish Register Demography', 427.

⁷⁹ Barke. 'The Pre-Civil Registration Population of Newcastle', un-paginated.

⁸⁰ Basten appears to have used a very small sample of the Bills data though these were not acknowledged as Bills of Mortality, see: Basten. 'Registration Practices in Anglican Parishes and Dissenting Groups', 31-109.

⁸¹ For a discussion see: Wrigley & Schofield. *The Population History of England*, 90; Basten. 'Registration Practices in Anglican Parishes and Dissenting Groups', 31-109.

⁸² R. Woods. 'Mortality in Eighteenth-Century London: A New Look at the Bills', *Local Population Studies*, 77 (2006), 12.

examined more extensively and reappraised by modern scholars.⁸³ While we know much of the London Bills and those of Carlisle, Preston and Norwich, we know nothing of the Newcastle and Gateshead Bills. The Newcastle and Gateshead Bills of Mortality differ from those compiled in the metropolis, firstly in format. The Newcastle Bills, unlike those of London, Carlisle and Northampton were not published in any voluminous collection which makes their accessibility more complex and particularly time consuming.⁸⁴ The Newcastle Bills were published annually in the local press, namely in first editions of the *Newcastle Courant* Newspaper (founded in 1711), from 1736-1797. They stopped being published in the *Courant* in 1798 and moved to the *Newcastle Advertiser* from 1798 until 1815 when they returned to the *Courant*. Figure 1.3 shows a typical Newcastle and Gateshead Bill of Mortality for the year 1802.

⁸³ The London Bills of Mortality have been examined extensively by both contemporary and present day scholars. See for example: W. Ogle. 'An Inquiry into the Trustworthiness of the Old Bills of Mortality', *Journal of the Royal Statistical Society*, 55 (1892), 437-50; M. Buer. *Health, Wealth and Population in the Early Days of the Industrial Revolution* (Abingdon, 1926); M. Dorothy George. *London Life in the Eighteenth Century* (Harmondsworth, 1965); D. Powel. 'William Cowper and the Northampton Bills of Mortality', *Northamptonshire Past and Present*, 5 (1972), 19-32; C. Walford. 'Early Bills of Mortality', *Transactions of the Royal Historical Society*, 7 (1878), 212-48. In the 1990s two major studies emerged which examined the London Bills at great length, the first by Leonard Schwarz and the second by John Landers, see: Schwarz. *London in the Age of Industrialisation*, 125-55 and J. Landers. *Death and the Metropolis: Studies in the Demographic History of London, 1670-1830* (Cambridge, 1993); Woods. 'Mortality in Eighteenth-Century London', 12-23. Boutlon and Schwarz have also recently re-examined the 'usefulness' of the London Bills, see: J.P. Boulton & L.D. Schwarz. 'Yet Another Inquiry into the Trustworthiness of Eighteenth-Century London's Bills of Mortality', *Local Population Studies*, 85 (2010), 28-45; G.A. Butler. 'Death in Eighteenth-Century Newcastle: A Glimpse at the Bills of Mortality' *Local Population Studies*, forthcoming.

⁸⁴ This latter point probably helps explain why these sources have been virtually ignored by historians and demographers.

Figure 1.3 Newcastle and Gateshead Bill of Mortality, 1802

		St. Nicholas	All Saints	St. John	St. Andrew	Gateshead	Total
Baptisms	Males	62	231	54	51	99	1016
	Females	65	232	47	46	127	
		127	463	101	97	226	
Burials	Males	27	88	57	61	139	249
	Females	43	77	65	47	141	
		70	165	122	108	284	
Marriages		47	185	88	57	189	486

The above burials are exclusive of those at the Ballast Hills, which this year were 672. Increased in baptisms this year 74; decreased in funerals 24; increased in marriages 112.

Source: *Newcastle Advertiser* January 1802.

For the purpose of this present study, all of the surviving Bills were collected and entered into a database.⁸⁵ A simple count suggests that the Bills record the events of well over a quarter of

⁸⁵ All of the Bills data were entered into a database. Although copies of the newspaper are available online, the quality of the copies is very poor in several years, all of the bills, except for those which were published prior to the 1750s which were taken from microfilm copies of the Newcastle paper available in the Newcastle University Robinson Library. All other Bills were therefore extracted from originals of the papers held in Newcastle City Library, see for reference: HO242.000Reel01; HO242.000Reel02; HO242.000Reel03; HO242.000Reel01=4; HO242.000Reel05; HO242.000Reel06; HO242.000Reel07; HO242.000Reel08; HO242.000Reel09; HO242.000Reel010; HO242.000Reel011; HO242.000Reel012; HO242.000Reel013; HO242.000Reel014; HO242.000Reel015; HO242.000Reel016; HO242.000Reel017; HO242.000Reel018; HO242.000Reel019; HO242.000Reel020. For reference of the originals see: G118 (1754-55); G119 (1756,57); G120 (1758); G121 (1758-59); G122 (1759, 1760, 1761); MF 012 (1759-1763); G123 (1760, 1761, 1762); G124 (1762-63); G125 (1763); G126 (1763-1765); MF013 (1764, 1765, 1766,1767, 1768, 1769); G127 (1765), G128 (1766, 1767); G129 (1766, 1767, 1768, 1769); G130 (1768, 1769); G132 (1770, 1771); G133 (1770-71); MF014 (1770, 1771, 1772, 1773); G134 (1772, 1773); G135 (1774, 1775, 1776, 1777, 1778); G136 (1774, 1775, 1776, 1777, 1778, 1779, 1780, 1781); G137 (1775, 1776, 1777); G137 (1775, 1776, 1777); G138 (1776, 1777); G140 (1778, 1779), MF016 (1779, 1780, 1781, 1782, 1783); G141 (1780, 1781); G142 (1780, 1781); G143 (1782, 1783); G144 (1782, 1783); G143a (1782, 1783); G145 (1783, 1784, 1785, 1786, 1787, 1788); G146 (1784, 1785); G147 (1784, 1785), G148 (1784, 1785, 1786); MF017 (1784, 1785, 1786, 1787, 1789); G149 (1784, 1785, 1786, 1787, 1789); G150 (1786, 1787); G151 (1786, 1787); G152 (1786, 1787); G152 (1787, 1788, 1789, 1790); G154 (1788, 1789); MF018 (1789, 1790, 1791, 1792, 1793); G155 (1790, 1791); G156 (1791); G157 (1791, 1792, 1793); G158 (1792, 1793); G159 (1794, 1795); G160 (1794, 1795); G161 (1794, 1795, 1796); MF019 (1794, 1795, 1796, 1797, 1798); G162 (1795, 1796, 1797, 1798); G162 (1795, 1796, 1797); G163 (1796, 1797); G164 (1796, 1797, 1798), G165 (1797, 1799, 1800) (Feb 1797-Dec 1800); G167 (1798, 1799, 1800); G167 (1798, 1799, 1800), MF020 (1799, 1800); G168 (1799, 1800, 1801); G169 (1799, 1801); G170 (1799, 1800, 1801); G171 (1800, 1801); G172 (1800, 1801, 1802, 1803, 1804, 1805, 1806, 1807); G173 (1802, 1803); G174 (1802, 1803); G175 (1802, 1803); G176 (1802, 1803); G177 (1802, 1803, 1804); G178 (1804); G179 (1804, 1805); G180 (1805, 1806, 1807); G181 (1805, 1806, 1807); G182 (1805-1808); G183 (1803); G184 (1806, 1807); G185 (1806-1807); G186 (1807, 1808, 1809, 1810); G187 (1808, 1809); G188 (1808, 1809, 1810); G189 (1809); G190 (1810); G191 (1810, 1811); G192 (1810, 1811); G193 (1811); G196 (1811, 1812,

a million people – some 139,405 baptisms and 137,648 burials.⁸⁶ This material is worth a study in its own right, which must of course involve an analysis of their accuracy.⁸⁷

1.4 How accurate are the Newcastle and Gateshead Bills of Mortality?

One of the biggest criticisms of eighteenth-century Bills of Mortality (particularly the London Bills) is that they omitted the vital events of certain groups such as Roman Catholics, Jews, and Quakers and Protestant Dissenters. The total number of events recorded in the Bills were normally based upon the events recorded in Anglican parish registers compiled by a parish Clerk. They did not therefore, include non Anglican burial grounds, which by the late eighteenth-century were becoming particularly popular (due to over-crowding and high interment fees) which meant that a sizeable proportion of the urban population of England were ‘completely escaping all ecclesiastical registration’.⁸⁸ Wrigley and Schofield have already shown that registration neglect was more common amongst ‘urban slumdweller, a rapidly growing fraction of the population in the later eighteenth and early nineteenth centuries’.⁸⁹ Basten’s study which examined the registration practices of Anglican and Dissenting groups in northern England reconfirmed Wrigley and Schofield’s observation and stressed the relatively high levels of under registration and dissent in Newcastle in particular. One can easily imagine this in the densely populated suburb of Sandgate and the narrow chares around The Quay and The Close – all of which must have, at various points in time

1813); G195 (1812); G196 (1812, 1813); G197 (1812, 1813, 1814); G198 (1813); G199 (1814, 1815); G200 (1814-15); G201 (1814, 1815, 1816); G202 (1815); G203 (1815, 1816, 1817); G204 (1816); G205 (1816, 1817); G206 (1816, 1817); G207 (1817); G208 (1817, 1818, 1819); G209 (1817, 1820); G210 (1818); G211 (1818); G212 (1818, 1819); G213 (1818, 1819); G214 (1818, 1819, 1820); G215 (1819); G216 (1820); G217 (1820); G218 (1820, 1821); G219 (1820, 1821, 1822); G220 (1821); G221 (1821); G222 (1821, 1822, 1823); G223 (1822-23); G224 (1822, 1823); G225 (1823, 1824); G226 (1823, 1824, 1825); G227 (1824); G228 (1824, 1825); G229 (1824-25); G230 (1825, 1826); G231 (1825); G232 (1826); G233 (1826); G234 (1826-27); G235 (1826, 1827, 1828); G236 (1827, 1828); G237 (1828); G238 (1829); G239 (1829); G240 (1829, 1830, 1831); G241 (1830); G242 (1830, 1831); G243 (1831); G244 (1832); G245 (1832, 1833); G246 (1832, 1833, 1834, 1835); G247 (1833); G248 (1834); G249 (1834, 1835); G250 (1835); G251 (1836); G252 (1836, 1837); G253 (1837); G254 (1828); G255 (1839); G256 MF21 (1840); G257 (1841); G258 (1842); G289 (1843); G259 (1843); G260 (1844); G261 (1845); G262 (1846); G263 (1847); G264 (1848); G265 1849; G266 (1850). For a very useful discussion of the historical background of these newspapers, see: P. Issac ed. *Newspapers in the Northeast: ‘The Fourth Estate’ at Work in Northumberland and Durham* (Wylam, 1999), 1-14, 15-99, 112-39.

⁸⁶ The total number of vital events which are recorded in the Bills of Mortality is 277,053.

⁸⁷ For a very detailed discussion of this type of analysis, see Finlay’s expert study of the London Bills of Mortality in the seventeenth-century: R. Finlay. *Population and the Metropolis: The Demography of London, 1580-1650* (Cambridge, 1981), 20-50; J. Boulton & L. Schwarz. ‘Yet Another Inquiry into the Trustworthiness’, 28-45.

⁸⁸ For a discussion of the traffic in corpses in London and the price of burials see Boulton’s thought provoking paper: J. Boulton. ‘Traffic in Corpses: Interment, Burial Fees and Vital Registration in Georgian London’, *Working Paper*, see <http://research.ncl.ac.uk/pauperlives/> [Accessed, 02/09/2010]; Wrigley & Schofield. *The Population History of England*, 89.

⁸⁹ *Ibid*, 89.

have been inhabited by a floating population of migrant workers employed in the shipping industry and expanding coal trade.⁹⁰ In Newcastle there were at least seven Presbyterian chapels, one Roman Catholic, one Congregational, one Swedenborgian and at least one Wesleyan. These groups might have played a significant role in shaping Newcastle's demographic regime.⁹¹ But how was the population of Newcastle distributed amongst the four main parishes in the city?

Table 1.5 *Distribution of Newcastle's population by parish, 1821-31*

Parish	1821 (%)	1831 (%)
St Nicholas	4,166 (12.2%)	5,105 (12.2%)
All Saints	16,555 (48.3%)	17,063 (40.9%)
St John's	6,290 (18.4%)	8,135 (19.5%)
St Andrew's	7,231 (21.1%)	11,436 (27.3%)
Total	34,242 (100.0%)	41,739 (100.0%)

Source: GPS-CEN-1801-1841-B2 , 191-95

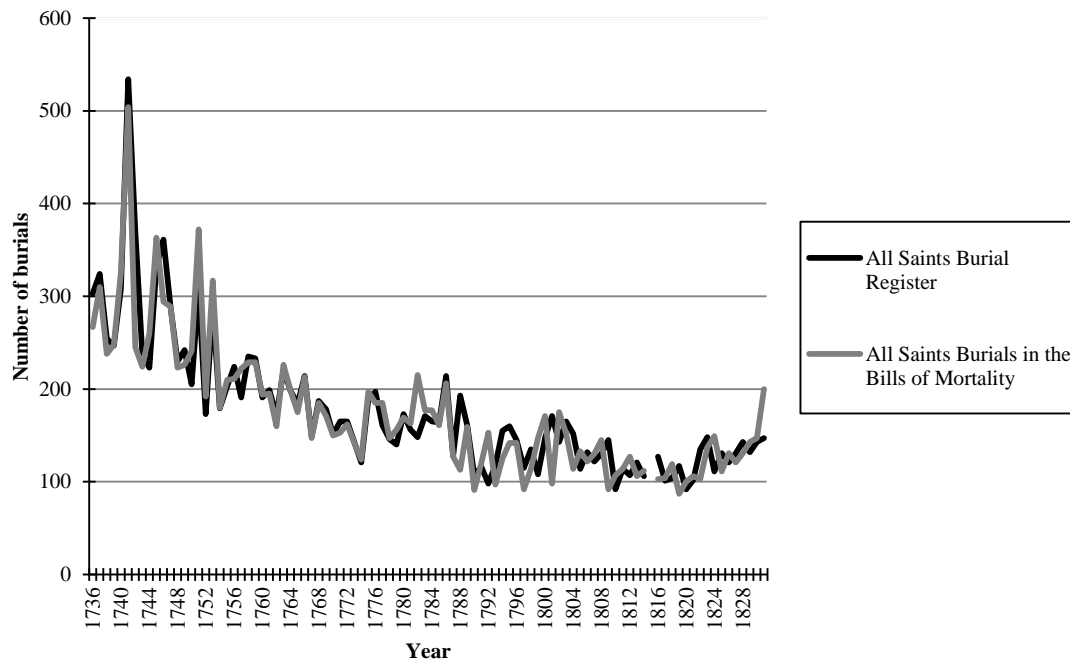
Table 1.5 shows the distribution of Newcastle census population by parish for the years 1821 and 1831. Clearly, Newcastle's population was dominated by the parish of All Saints, accounting for nearly four times the population of St Nicholas and nearly double that of St John's and St Andrew's. Given the sheer dominance of All Saints parish it seems feasible to use it as a case study to test the accuracy of the Bills of Mortality. To do this accurately the Bills data need to be compared directly with the evidence available in All Saints burial register. Figure 1.3 does precisely this for the period 1736-1831.⁹²

⁹⁰ P. Wright. 'Water Trades on the Lower River Tyne in the Seventeenth and Eighteenth Centuries' (Unpublished, PhD Thesis, Newcastle University, 2011); Fewster. 'The Keelmen of Tyneside in the Eighteenth Century', p. 28; Levine & Wrightson. *The Making of an Industrial Society*, 1-10, 76-82, 172-203.

⁹¹ For a discussion of religious dissent and its impact upon registration, see: E. Higgs. *Life, Death and Statistics: Civil Registration, Censuses and the Work of the General Register Office, 1836-1952* (Hatfield, 2004), 1-21.

⁹² All Saint Parish burial register is held in Northumberland County Archive at Woodhorn. Microfilm copies are held in TWAS, although the quality of the microfilm is poor – a more useful transcript of the burial register of All Saints in held in the Newcastle city library. The data in Figure 1.4 was extracted from the transcript held in the city library.

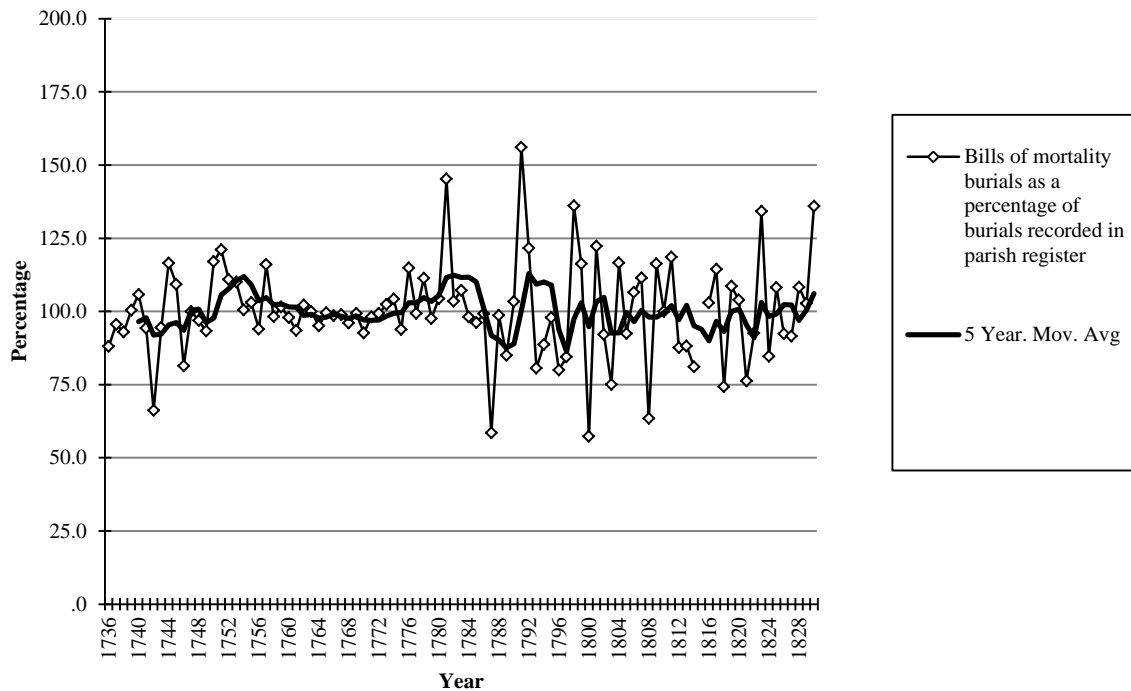
Figure 1.4 *Total number of All Saints parish burials from the parish register to those returned in the Bills of Mortality, 1736-1831*



Source: Bills of Mortality and All Saints Parish register, 1736-1830.

The most important aspect of Figure 1.4 is quite simply that it suggests that the number of burials returned in the Bills of Mortality closely reflected the actual number of burials which were recorded in the Anglican burial register by the parish clerk. It is also observable that both the number of burials which were recorded in the parish register and the Bills were subject to much annual variation, that is, that the number of burials occurring in the preceding year did not predict the number which would occur in the next. What else is interesting about Figure 1.4 is that, by and large, the overall number of burials which were occurring in for this large parish was actually declining over time – this point shall be returned to later. For something which is somewhat more systematic, Figure 1.5 plots the number of All Saints parish burials in the Bills of Mortality as a percentage of the burials which were recorded in the parish register together with a five-year moving average. Figure 1.5 is highly revealing.

Figure 1.5 *All Saints parish burials in the Bills of Mortality as a percentage of the burials recorded in All Saints parish register, 1736-1830*



Sources: Same as Figure 1.3.

Working on the notion that if the number of burials recorded in the Bills matched those recorded in the parish register, both the data line and the moving average in Figure 1.5 should run in perfect symmetry over time (flat line). Clearly this is not the case. Somewhere in the late 1770s the bills begin to over exaggerate the number of events returned in the parish register – under-representing them in the mid to late 1780s – then showing a further surplus in the 1790s of around 10-13%, levelling out thereafter. This may well have a simple explanation. Given that the Bills were published in the local press throughout the period suggests that in some years the totals might have included a monthly total of burials from the previous year depending on which month the new Bill was published in. If this was occurring, then over time, the difference between the Bills and the burial register should eventually even out. As is clearly the case here, across the period, the average difference between the number of burials returned in the Bills and in the parish register is only 3%. This certainly suggests that the Bills are reasonably representative of the annual returns made in the parish registers of All Saints. On this assessment, we can conclude that the Bills are

somewhat fairly accurate in their aggregate capacity if nothing else.⁹³ This suggest that the Bills are reliable guides to the movement of burials (and baptisms) in all four of the Anglican parishes in Newcastle and also the parishes in Gateshead. Hence, it is now to an exhaustive analysis of the Bills that we now must turn.

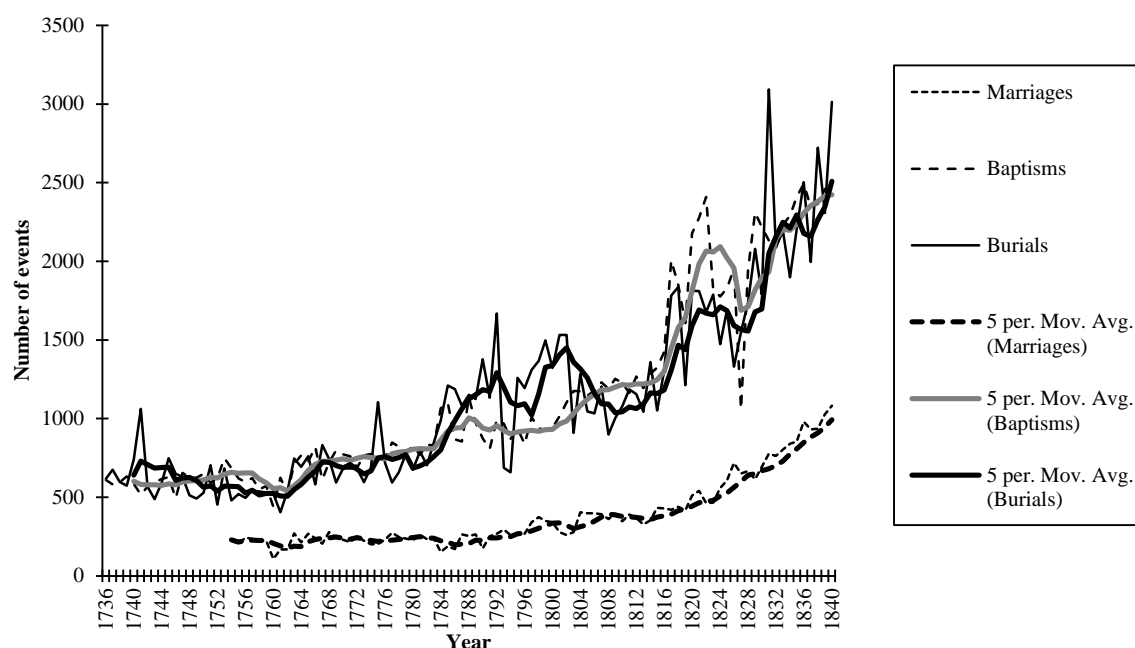
1.5 Georgian Newcastle: the demographic context.

It is extremely fortunate that the Bills of Mortality survive for well over a century (1736-1849). This enables one to examine the growth of the city in more intricate detail than has been possible in all previous works on Newcastle's population history. As the forgoing section demonstrated, the Bills of Mortality broadly emulated those deaths which were recorded in the parish registers and because of this it is possible to use the bills with confidence for the entire period for which they survive.⁹⁴ An aggregate analysis was carried out using all of the available data recorded in the Bills. The overall results have been plotted in Figure 1.6 which shows the total number of vital events recorded in the Bills of Mortality from 1736 and 1840, five-year moving averages have also been plotted to show the resulting trends in the series over time.

⁹³ The author is currently working on a separate publication which tests this theory further by using all of the available parish registers in Newcastle, see: G.A. Butler. 'An Inquiry into the accuracy of eighteenth-century Newcastle and Gateshead Bills of Mortality', *Local Population Studies (In preparation)*.

⁹⁴ It should be noted that Basten study of Newcastle's parish registers related to different periods for the various registers, for example: Ballast Hills (1780-1836), All Saints (1798-1836), St John's (1798-1836); St Nicholas (1798-1836). The parishes in Gateshead were also not included in Basten's analysis.

Figure 1.6 Newcastle and Gateshead Vital Events, 1736-1840 (and 5-year moving averages)



Source: Newcastle and Gateshead Bills of Mortality database, 1759-1849. Marriages were extracted from the census parish register abstracts, 1801, 1811, 1821, 1831, 1841.

Several aspects of Newcastle’s population history come immediately to-the-fore upon perusal of this graph. First and perhaps most obviously, are the levels of volatility from year to year in each set of figures. Particularly in the second, third and fourth decade of the nineteenth century, where peaks and troughs occur in both the baptism and burials. In particular, the burial curve shows a quite dramatic increase in 1832, the year of the first Asiatic cholera epidemic in Newcastle which carried away between 300 and 400 people in the city.⁹⁵ Similarly there was also a peak in burials in 1846 when the city experienced a particularly severe epidemic of Scarlet Fever which claimed the lives of dozens of men women and children in the city. Another interesting observation which comes out of Figure 1.6 is the surplus of burials over baptisms from the middle of the 1780s lasting until the first decade of the nineteenth century. This is particularly interesting if one considers Barke’s notion that the

⁹⁵ For the best study of Newcastle’s 1831-32 cholera epidemic and its impact upon Newcastle’s population see: G.A. Butler. ‘Cholera and Newcastle-upon-Tyne, 1831-32’ (Unpublished MA Thesis, Newcastle University, 2008), for the epidemic in Gateshead see: E. Tullo. ‘*Plague of Icy Breath. Cholera and the Gateshead Community 1831-2*’ (Unpublished MA Thesis, Newcastle University, 2006). Nationally see: M. Durey. *The Return of the Plague: British Society and Cholera 1832* (Dublin, 1979); R. Morris. *Cholera 1832: The Social Response to an Epidemic*, (London, 1976); M. Pelling. *Cholera, Fever and English Medicine 1825-1865* (Oxford, 1978). For a brief discussion of the 1846 Scarlet Fever epidemic see: J. Smith. ‘Public Health on Tyneside, 1850-80’ in N. McCord ed., *Essays in Tyneside Labour History* (Newcastle, 1977), 25-46 and R. Grace. ‘Tyneside Housing in the 19th Century’, in N. McCord ed., *Essays in Tyneside Labour History* (Newcastle, 1977), 178-96.

closing decade of the eighteenth and first decade of the nineteenth was a period of ‘sluggish growth mixed with absolute decline’.⁹⁶

The most important aspect of Figure 1.4 is that the Bills suggest that Newcastle’s population was growing, albeit at a slow pace during the first half of the eighteenth-century. More importantly however, the graph also supports the notion that it wasn’t until the second decade of the nineteenth-century when the city’s population began to increase significantly. This natural increase seems to have taken off at about 1806, thereafter showing a surplus of births over deaths. This is highly significant, as the baptismal totals are based upon those which were recorded by the parish clerk, which are certain to grossly underestimate the actual number of children being born in Newcastle. Moreover, the fact that Figure 1.6 does not only include the burials which were taking place in the Anglican parishes but also those which occurred in Ballast Hills would significantly increase the number of persons who died in Newcastle in our period, see Table 1.5. This is important because even with the significant number of interments which took place at this site – baptisms still show a surplus over burials for approximately twenty years. This supports the idea that the population of Newcastle in these years truly began to grow at a rate which is more comparable to other urban provincial centres as well the country itself.⁹⁷

⁹⁶ Barke ‘The People of Newcastle’, 135-37.

⁹⁷ Wrigley & Schofield. *The Population History of England*; also see: R.A. Houston. *The Population History of Britain and Ireland, 1500-1750* (Basingstoke, 1992).

Table 1.6 *Breakdown of burials recorded in the Newcastle and Gateshead Bills of Mortality by location of burial, 1736-1848*

Location of burials recorded in the Bills of Mortality	Period Covered	No. of Burials	% of the total number of recorded in the bills of mortality
Newcastle St Nicholas	(1736-1848)	11,061	8.6%
Newcastle All Saints	(1736-1848)	20,309	15.8%
Newcastle St John's	(1736-1848)	15,043	11.7%
Newcastle St Andrew's	(1736-1848)	15,432	12.0%
Gateshead	(1763-1826)	14,674	11.4%
Gateshead St Mary's	(1827-48)	7,421	5.7%
Gateshead St John's	(1827-48)	1,127	0.8%
Ballast Hills	(1776-1848)	36,855	28.6%
Westgate Hill	(1829-48)	5,128	3.9%
Jesmond cemetery	(1838-48)	1,298	1.0%
New cemetery	(1835-48)	177	0.1%
Total		128,525	100.0%

Source: Newcastle Gateshead Bills of Mortality, 1736-1848.

How was this growth distributed spatially? Which parishes experienced this growth? To examine this demographic expansion in more detail an aggregate analysis of the individual parishes in Newcastle is clearly needed. Totals of baptisms and burials for these parishes have therefore been presented graphically in Figure 1.7-1-1.11, and to facilitate their interpretation further quinquennial average totals of baptisms have been presented in Table 1.7 and index scores for each quinquennium have been calculated using the period 1789-93 as a base year value of 100.

Firstly, if it is broadly assumed the baptism rates only fluctuated within small limits, then the annual total of baptisms may be a fair guide to the course of population growth in the parishes in question.⁹⁸ The use of the index series in the table highlights the growth of these parishes particularly well. During the second half of the eighteenth century baptisms remained at something of plateau and in some instances even declined. The number of baptisms increased greatly after the first five years of the nineteenth century, corresponding

⁹⁸ D. Eversley, 'Exploitation of Anglican Parish Registers by Aggregate Analysis', in E.A Wrigley ed., *An Introduction to English Historical Demography* (London, 1966), 44-95. This assumption is obviously limited given the number of birth which were escaping registration. The method has been employed more extensively by seventeenth-century historians, see for example: Boulton. *Neighbourhood and Society*, 13-59; K. Wrightson & D. Levine. *Poverty and Piety in an English Village: Terling, 1725-1700* (Oxford, 1977), 43-72.

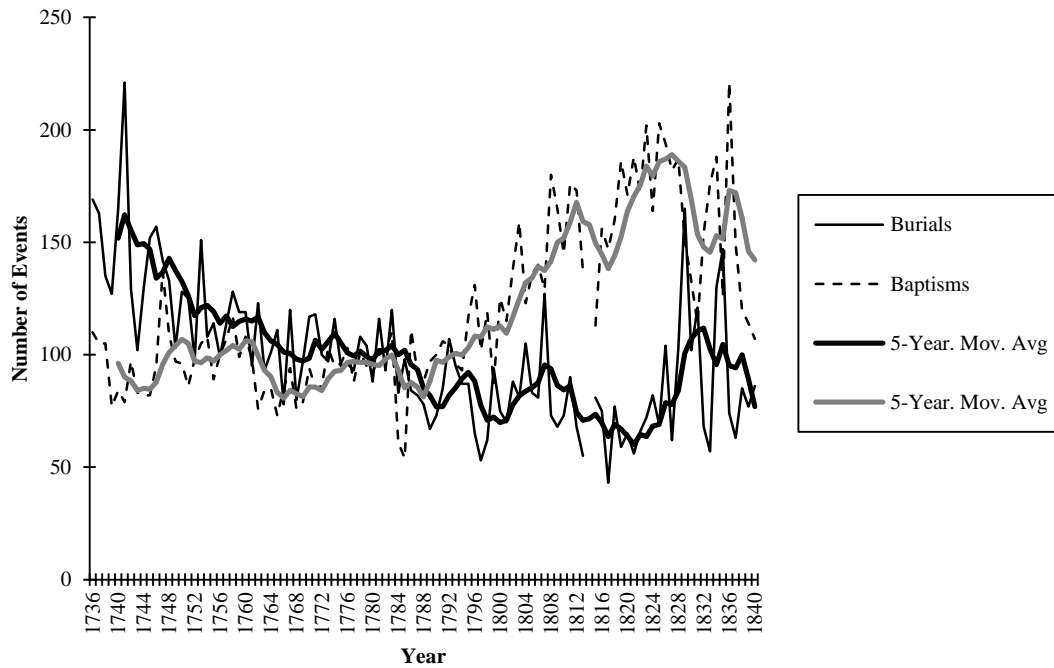
with the increase in Newcastle population based upon the census totals discussed previously. The number of baptism which occurred in the Anglican parish boomed in later years of the 1820s and 1830s. This last point also lends weight to the census totals which suggest that the population of Tyneside increased three fold during these years. The most lucid aspect of Table 1.7 is that it suggests that it was not All Saints parish which experienced the bulk of population growth in the period. Instead it was the smaller parishes of St John and in particular St Andrew's parish whose population boomed in the nineteenth-century. While quinquennial averages are instructive to facilitate general patterns – the annual figures presented in Figures 1.7-1.11 and five-year moving averages allow for a more detailed understanding of the 'tempo of life' in early industrialising Tyneside.

Table 1.7 *Quinquennial mean totals of Baptism's in the Newcastle and Gateshead Bills of Mortality, 1735-1839*

	Period	St Nicholas			All Saints			St John's			St Andrew's			Gateshead			'Tyneside'		
		Mean	N	Index	Mean	N	Index	Mean	N	Index	Mean	N	Index	Mean	N	Index	Mean	N	Index
1735-39	I	96.2	(4)	97	348.0	(4)	84	69.2	(4)	57	87.4	(4)	91	—	(—)	—	600.8	(4)	68
1740-44	II	84.6	(5)	85	341.2	(5)	82	78.4	(5)	65	80.4	(5)	84	—	(—)	—	584.6	(5)	66
1745-49	III	106.8	(5)	107	328.8	(5)	79	90.0	(5)	75	83.8	(5)	87	—	(—)	—	609.4	(5)	68
1750-54	IV	97.2	(5)	98	388.8	(5)	94	85.0	(5)	70	83.8	(5)	87	—	(—)	—	652.8	(5)	73
1755-59	V	106.2	(5)	107	335.0	(5)	81	80.0	(5)	66	78.2	(5)	81	—	(—)	—	585.0	(5)	66
1760-64	VI	99.0	(5)	100	329.0	(5)	79	71.8	(5)	59	79.8	(5)	83	—	(—)	—	580.2	(5)	65
1765-69	VII	84.2	(5)	85	318.0	(5)	76	81.0	(5)	67	80.8	(5)	84	187.6	(5)	93	751.4	(5)	85
1770-74	VIII	84.0	(5)	84	321.8	(5)	77	72.8	(5)	60	88.8	(5)	92	184.6	(5)	92	752.0	(5)	85
1775-79	IX	97.0	(5)	97	325.4	(5)	78	79.6	(5)	66	92.6	(5)	96	188.2	(5)	94	782.2	(5)	88
1780-84	X	98.0	(5)	98	331.4	(5)	80	87.4	(5)	72	90.6	(5)	94	206.0	(5)	102	814.4	(5)	92
1785-89	XI	85.6	(5)	86	368.4	(5)	89	95.4	(5)	79	94.2	(5)	98	214.0	(5)	106	852.2	(5)	96
1790-94	XII	99.0	(5)	100	413.4	(5)	100	120.0	(5)	100	95.6	(5)	100	200.2	(5)	100	883.2	(5)	100
1795-99	XIII	107.8	(5)	108	425.8	(5)	103	122.4	(5)	102	94.0	(5)	98	205.6	(5)	102	943.2	(5)	106
1800-04	XIV	116.8	(5)	117	525.2	(5)	127	112.8	(5)	94	109.0	(5)	114	198.6	(5)	99	963.0	(5)	109
1805-09	XV	137.4	(5)	138	436.8	(5)	105	137.0	(5)	114	128.6	(5)	134	258.4	(5)	129	1186.6	(5)	134
1809-14	XVI	167.8	(5)	169	567.2	(5)	137	160.0	(5)	133	153.6	(5)	160	288.2	(5)	143	1206.4	(5)	136
1815-19	XVII	138.2	(4)	139	672.8	(4)	162	209.2	(4)	174	183.7	(4)	192	226.5	(4)	113	1325.0	(4)	150
1820-24	XVIII	175.4	(5)	177	850.2	(5)	205	252.4	(5)	210	209.4	(5)	219	391.8	(5)	195	1701.8	(5)	192
1825-29	XIX	189.0	(5)	190	887.6	(5)	214	288.8	(5)	240	308.0	(5)	322	389.5	(4)	194	1948.2	(5)	220
1830-34	XX	147.8	(5)	149	887.6	(5)	214	355.6	(5)	296	317.2	(5)	331	—	(—)	—	1708.2	(5)	193
1835-39	XXI	172.0	(5)	173	940.2	(5)	227	466.6	(5)	388	396.6	(5)	414	—	(—)	—	1905.7	(5)	215

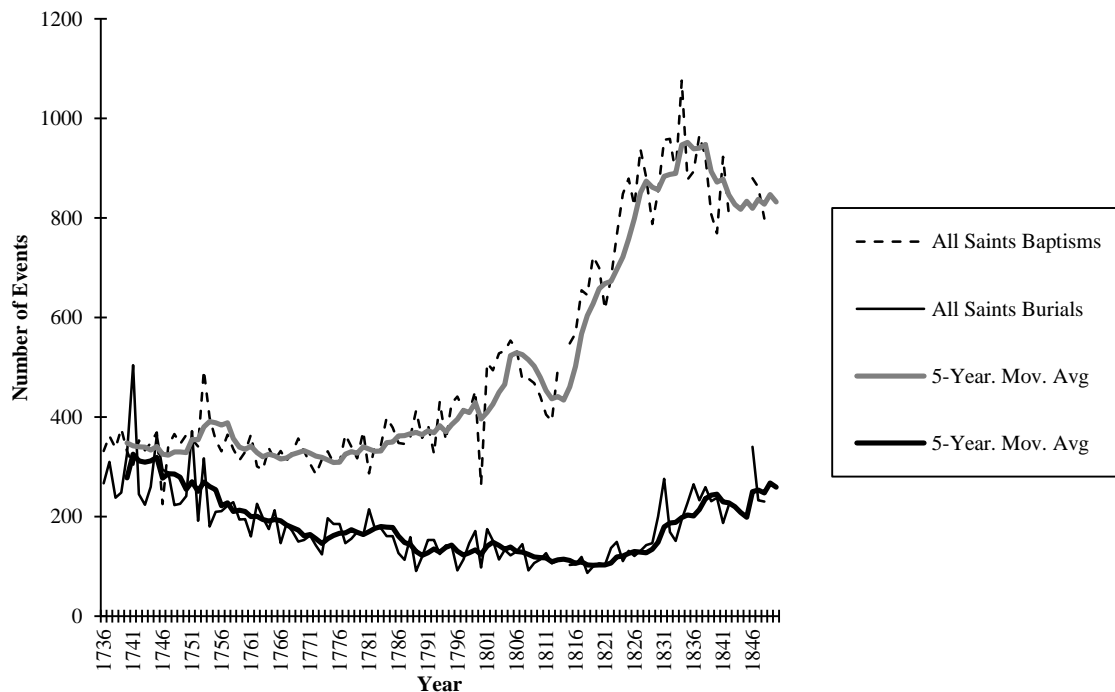
Note: N = Number of years in the series. Index: 1790-94 = 100
Source: Newcastle and Gateshead Bills of Mortality database

Figure 1.7 Annual totals of baptisms and burials in St Nicholas Parish, Newcastle and five-year moving averages, 1736-1841



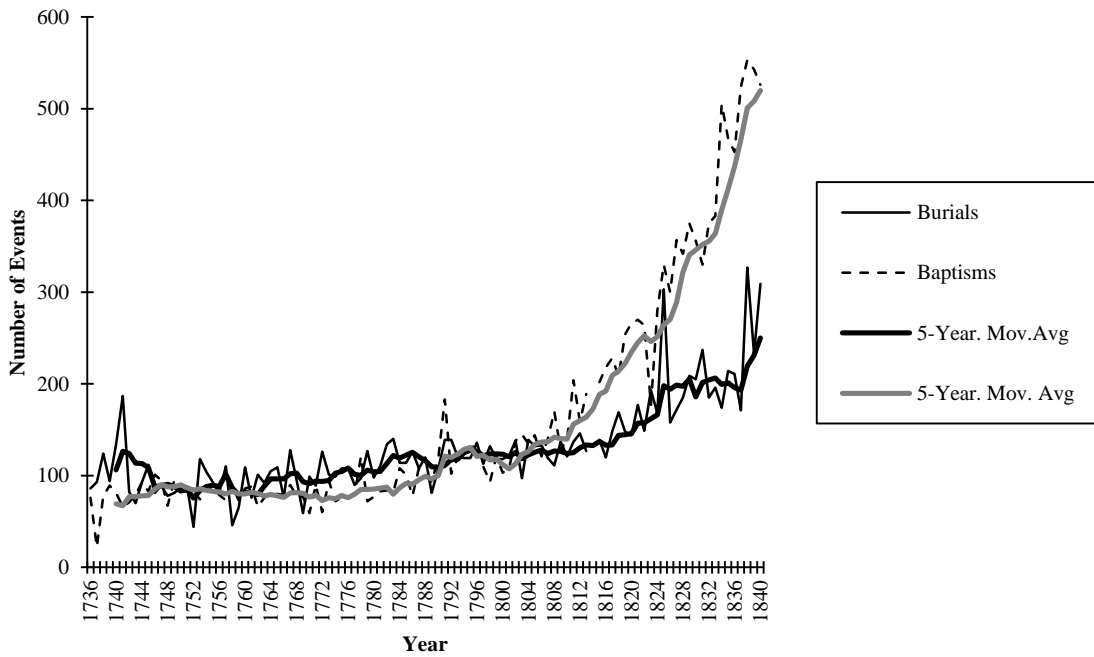
Source: Same as Table 1.7

Figure 1.8 Annual totals of baptism and burials in All Saints Parish, Newcastle and five-year moving averages, 1736-1841



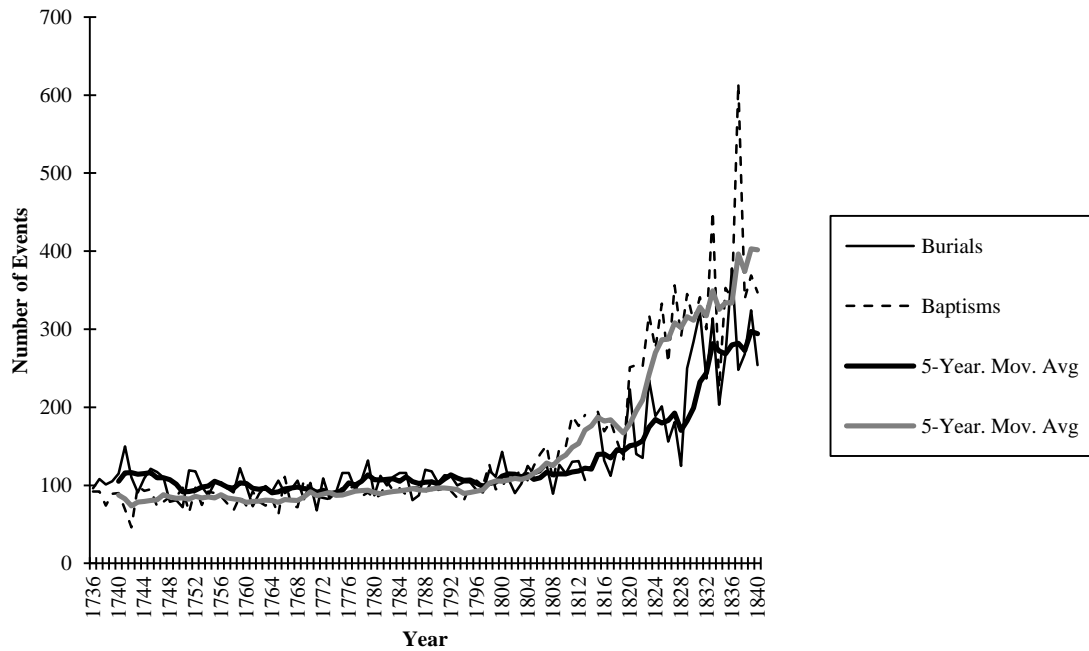
Source: Same as Table 1.7

Figure 1.9 Annual totals of baptisms and burials in Newcastle, St John's and five-year moving averages, 1736-1841



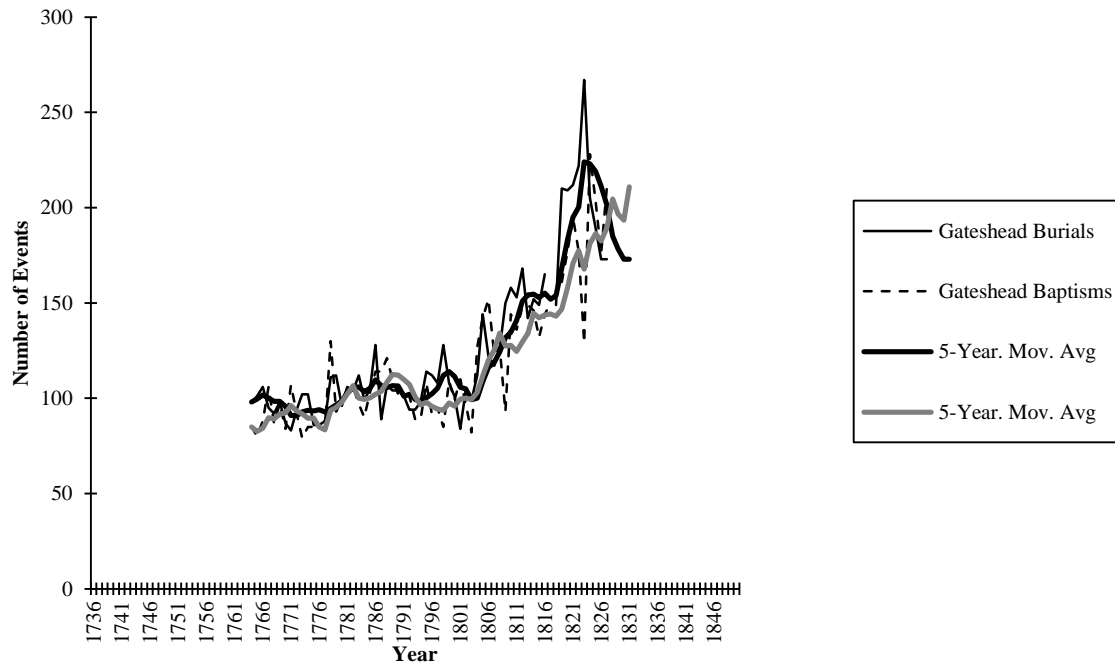
Source: Same as Table 1.7

Figure 1.10 Annual totals of baptisms and burials in St Andrew's Parish, Newcastle and five-year moving averages, 1736-1841



Source: Same as Table 1.7

Figure 1.11 Annual totals of baptisms and burials in Gateshead parish and five-year moving averages, 1736-1841



Source: Same as Table 1.7

Clearly, these figures suggest that baptisms remained at plateau until the first and second decade of the nineteenth-century. What is truly remarkable is the scale at which baptism took off in all of the parishes in question. Nowhere is this more observable than in St John’s parish – where the average number of baptisms taking place at the beginning of our study was around about 50-60 per year, by the end of our period it was closer to 400 and increase of around 600%, a pattern which may be considered to be representative of all of the parishes discussed here. Moreover, all of the baptismal data recorded in the Bills allows one to calculate a baptismal series for Tyneside as a whole (see the final column in Table 1.7). These data suggest that baptisms in the Anglican parish in the city literally quadrupled from the mid eighteenth-century at an average of about 580 per year to nearly 2000 per year by 1840. What of the number of burials?

While baptisms in Newcastle show similar patterns over time, burials on the other hand are far more complex. Figure 1.8 demonstrates that the number of people being buried in All Saints parish was never greater than the number of children being baptised especially after

the 1750s.⁹⁹ Clearly, this is problematic, as it is highly unlikely that baptisms would have been able to continuously show a surplus over burials for the entire period that this study is concerned. This is especially true when we consider that the other parishes show that in some years prior to the first decade of nineteenth-century burials exceeded the number of baptisms which occurred in the other parishes. What was going on?

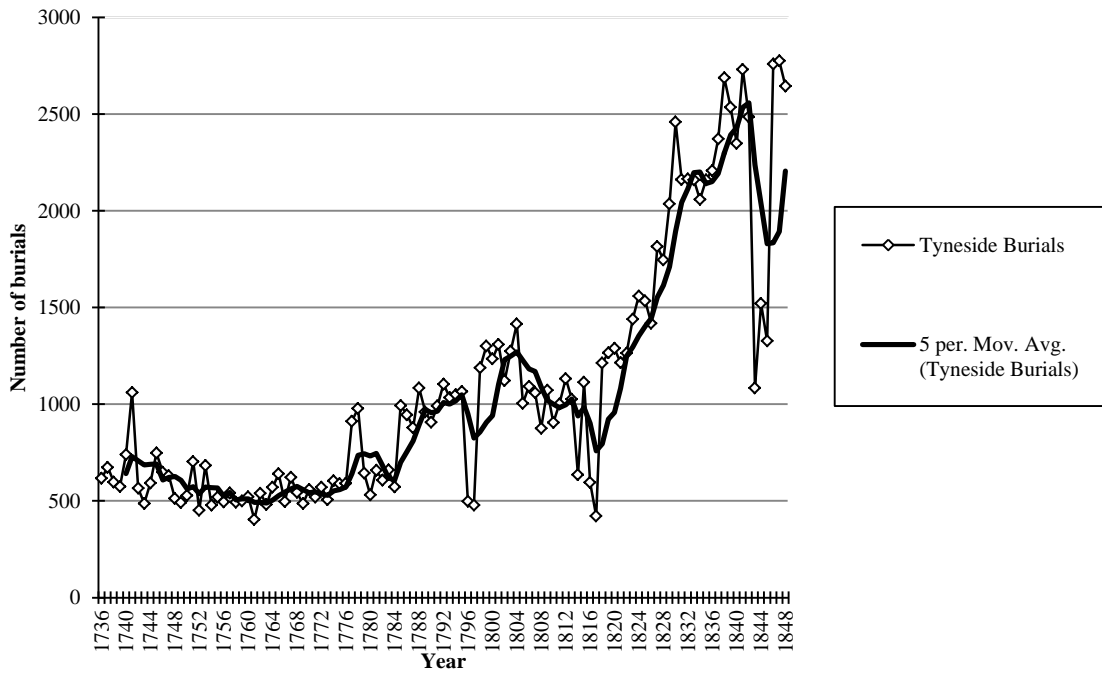
The relatively flat burial curve in Figures 1.8 simply reflects the fact that a large proportion of the population residing in All Saints parish were not being interred in their local parish burial ground. In 1802 the Reverend Emerson, Vicar and Registrar of All Saints parish became aware of the level of disparity between the number of burials and baptisms taking place in his parish to such an extent that he employed a member of his congregation to count the number of non registered burials taking place at Ballast Hills – a burial ground east of the city’s walls.¹⁰⁰ Basten’s has already estimated that approximately 50% of Newcastle’s burials took place at Ballast Hills.¹⁰¹ Until now, it has been impossible to fully document the extent to which novocastrians chose Ballast Hills as their final resting place. In order to look at this feasibly we need to know how many burials were taking place on Tyneside over time, this has been done graphically in Figure 1.12 together with a five-year moving average.

⁹⁹ The peak in burials in 1740-41 is a national mortality crisis year identified by Wrigley and Schofield, this will be discussed at more length in Chapter 2.

¹⁰⁰ A commentary was made by Emmerson in the parish register expressing his concern about the levels of under-registration in the parish. He ascribed the small number of burials taking place to a rise in non-conformism. I owe this information to Dr Peter Wright.

¹⁰¹ Basten. ‘Registration Practices in Anglican Parishes and Dissenting Groups’, 32-109.

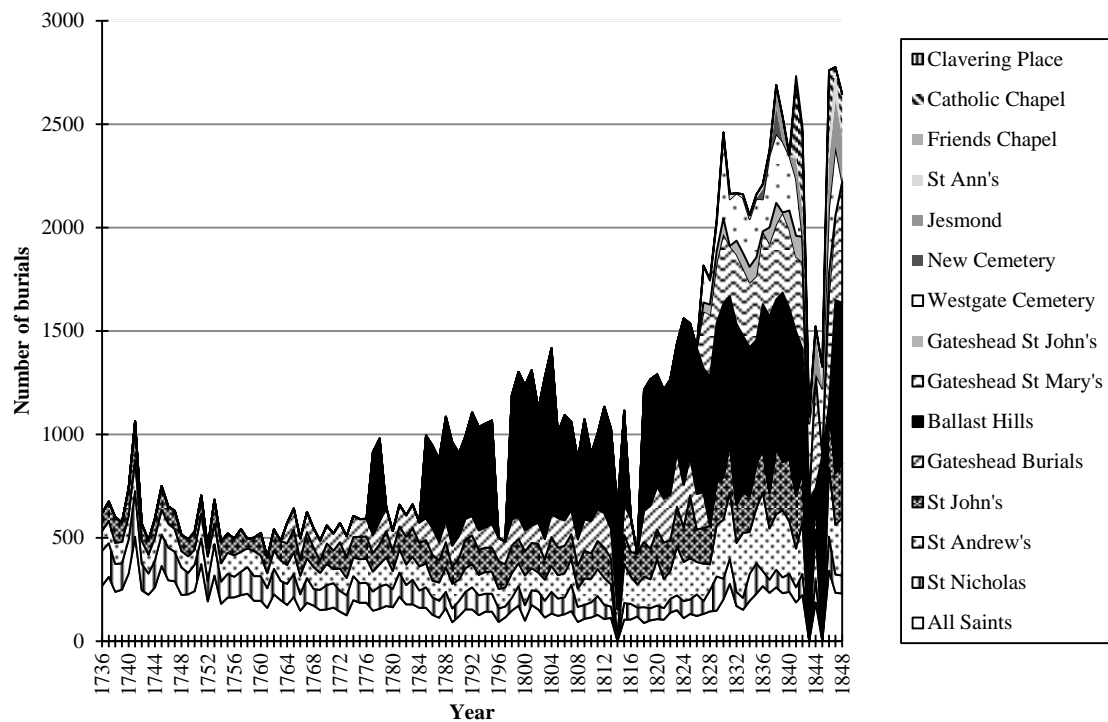
Figure 1.12 *Total burials recorded in the Newcastle Bills of Mortality and five year moving average, 1736-1848*



Source: Bills of Mortality database.

Figure 1.12 demonstrates the remarkable growth of Tyneside’s population during the nineteenth-century. In the beginning of the period there was anything between 500-700 burials taking place on Tyneside between 1736 and 1780. Between the late 1780s until approximately 1820 there were about 1000 burials taking annually. By the late 1830s and 1840s this had increased to something between 2000-2500 interments. It seems instructive to disaggregate the Figure 1.12 according to the location of burials which actually took place in the city. Figure 1.13 does precisely this.

Figure 1.13 *Burial grounds used by Newcastle's and Gateshead's population, 1736-1848*



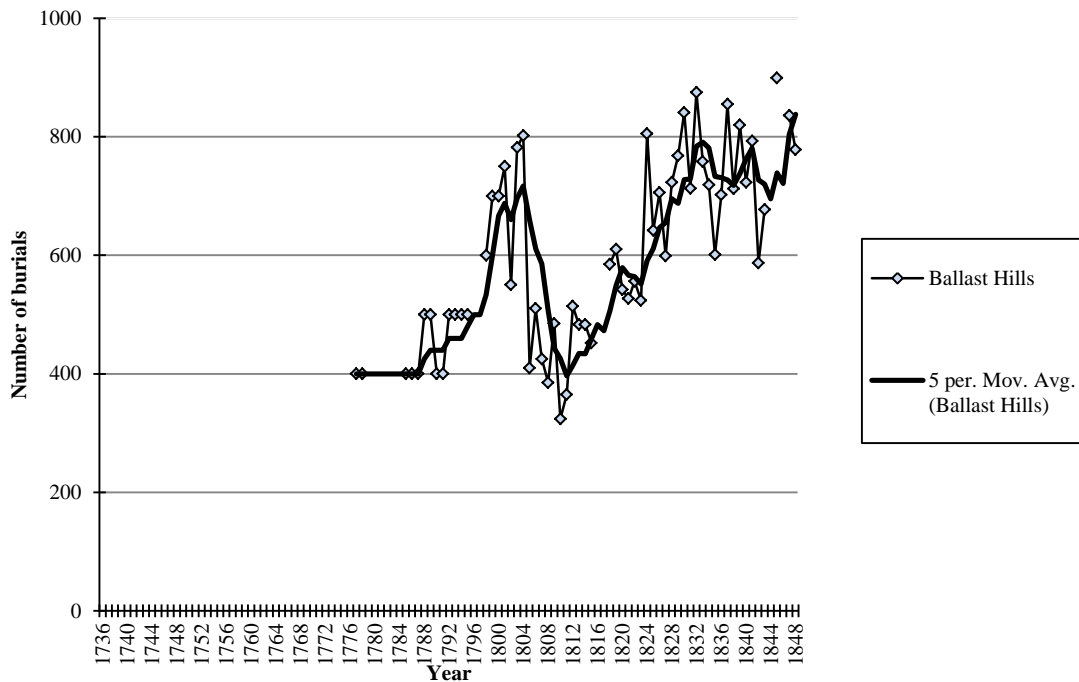
Source: Same as Figure 1.12

Figure 1.13 is particularly lucid. Firstly, it is observable that a large proportion of Newcastle's and Gateshead's population chose to be buried at Ballast Hills. On average there were over 1,306 burials taking place on Tyneside over our period. At Ballast hills alone there were on average 604 burials taking place each year. That is, that 46% of the total number of burials which were occurring on Tyneside across the period were being carried out at Ballast Hills burial ground. This new estimate lends much weight to Basten's figure of 50%. While the averages are useful, it is also true that the number of burials taking place at Ballast Hills was subject to much annual variation. Figure 1.14 examines this further.¹⁰² Burials at Ballast hills were rising for the most part of the mid to late-eighteenth-century, showing a moderate peak at the turn of the century. This coincided with a general fall in the number of burials which were taking place in the largest Anglican parishes in Newcastle, namely All Saints and St Nicholas (see Figures 1.7 and 1.8). The number of interments at Ballast Hills shows a

¹⁰² The Bills record the number of estimated burials which took place at Ballast Hills from 1778-79, 1785-95 and 1798-1802. After this last date the Bill provide a more exact Figure from 1803 to 1815 and then systematically from 1818-38. There is evidence to suggest corpses may not have been buried in deep graves at Ballast Hills, an appeal to the Common Council of Newcastle held on the 4th April 1785 noted that 'numbers of swine were daily observed working and grubbing among the graves ... near the petitioners' dwelling houses, to the great annoyance of the petitioners, and many others who pass and re-pass that way', for reference, see: Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 370-414.

decline during the first years of the nineteenth-century corresponding with the plateau in the city's population growth previously discussed. Thereafter they rose quickly during the 1810s, 1820s and 1830s when the city's population was booming.

Figure 1.14 Total Ballast Hills burials recorded in the Bills of Mortality (and five-year moving average), 1759-1838



Source: Same as Figure 1.9.

Clearly, this evidence provides a better documented understanding of the impact that Ballast Hills had upon burial registration in Newcastle.¹⁰³ Although one may argue that the data presented here might still underrepresent the overall number of interments which actually took place at Ballast Hills over the course of the century, particularly for the earlier part of our period when the evidence is somewhat more fragmentary. However, what we have been able to demonstrate is that a very large proportion of the dead population in All Saints were being interred at Ballast Hills. Table 1.5 demonstrated that All Saints had a population which was three times greater than the other parishes in the city but registered little over 14,000 burials across the entire period. This, when compared with the other Anglican parishes, works out at little over 2% more than that of St John's parish, 1% more than St Andrew's.¹⁰⁴

¹⁰³ See Table 1.6 and Figure 1.4 discussed previously.

¹⁰⁴ For discussion of this in other areas, see for example: K. Snell. 'Parish Registration and the Study of Labour Mobility', *Local Population Studies*, 33 (1984), 29-43; R. Schofield. 'Traffic in Corpses: Some Evidence from Barming, Kent (1788-1812)', *Local Population Studies*, 33 (1984), 49-53; J.P. Boulton. 'Traffic in Corpses: Interment, Burial Fees and Vital Registration in Georgian London' *Unpublished Working Paper*, 11th August 2010 available at: <http://research.ncl.ac.uk/pauperlives/> [Accessed 19/09/2010].

Clearly a great many All Saints deceased residents and floating population were being exported to Byker to be interred at Ballast Hills which was probably a result of cheaper burial fees as Basten has already suggested.¹⁰⁵

1.6 Georgian Tyneside, size of population: some new estimates

There are several interesting ways of making population estimates in the period before the first census, more commonly known as the *parish register era*.¹⁰⁶ The most pioneering of these are those methods derived by the *Cambridge Group* in the 1980s, spearheaded by the publication of Wrigley and Schofield's pioneering book: *The Population History of England, 1541-1871: a Reconstruction*. Using methods such as Back Projection and inflation ratios which take into account the rise in non-conformity and the interval between births and baptisms, their work remains the most useful for all population historians.¹⁰⁷ Another useful method of estimating population size was those methods used in Roger Finlay's important work on seventeenth-century London.¹⁰⁸ Combining the techniques of Wrigley and Schofield, as well as Finlay, Boulton and Schwarz used the method of applying notional birth rates to corrected baptisms in the large eighteenth-century London parish of St Martin-in-the-Fields.¹⁰⁹ St Martin's had population something close to the total population of Newcastle across the eighteenth-century, for this reason alone it seem feasible to try and estimate some new population total using their method.

¹⁰⁵ Basten. 'Registration Practices in Anglican Parishes and Dissenting Groups', 32-109; Boulton and Schwarz have discussed this more recently using metropolitan evidence, see: Boulton et al. 'Yet Another Enquiry into the Trustworthiness of Eighteenth-Century London Bills', 127-51; Boulton. 'Traffic in Corpses: Interment, Burial Fees and Vital Registration'.

¹⁰⁶ N. Goose & A. Hinde. 'Estimating Local Population Sizes at Fixed Points in Time: Part I- General Principles', *Local Population Studies*, 77 (2006), 1-9; N. Goose & A. Hinde. 'Estimating Local Population Sizes at Fixed Points in Time: Part II- General Principles', *Local Population Studies*, 78 (2007), 1-15; A. Hinde. 'Calculating Crude Birth and Death Rates for Local Populations during the 'Parish Register Era'', *Local Population Studies*, 79 (2007), 90-6.

¹⁰⁷ For discussion of these methods, see: Wrigley et al. *The Population History of England, 1541-1871*, 89-154; B. Midi Berry & R.S. Schofield. 'Age at Baptism in Pre-Industrial England', *Population Studies*, 25 (1971), 453-63; D. McCallum. 'Age at Baptism: Further Evidence', *Local Population Studies*, 24 (1980), 49-51; E.A. Wrigley. 'Births and Baptisms: The Use of Anglican Parish Registers as a Source of Information about the Numbers of Births in England before the beginning of Civil Registration', *Population Studies*, 31 (1977), 281-312.

¹⁰⁸ R. Finlay. *Population and the Metropolis: The Demography of London, 1580-1650* (Cambridge, 1981), 118

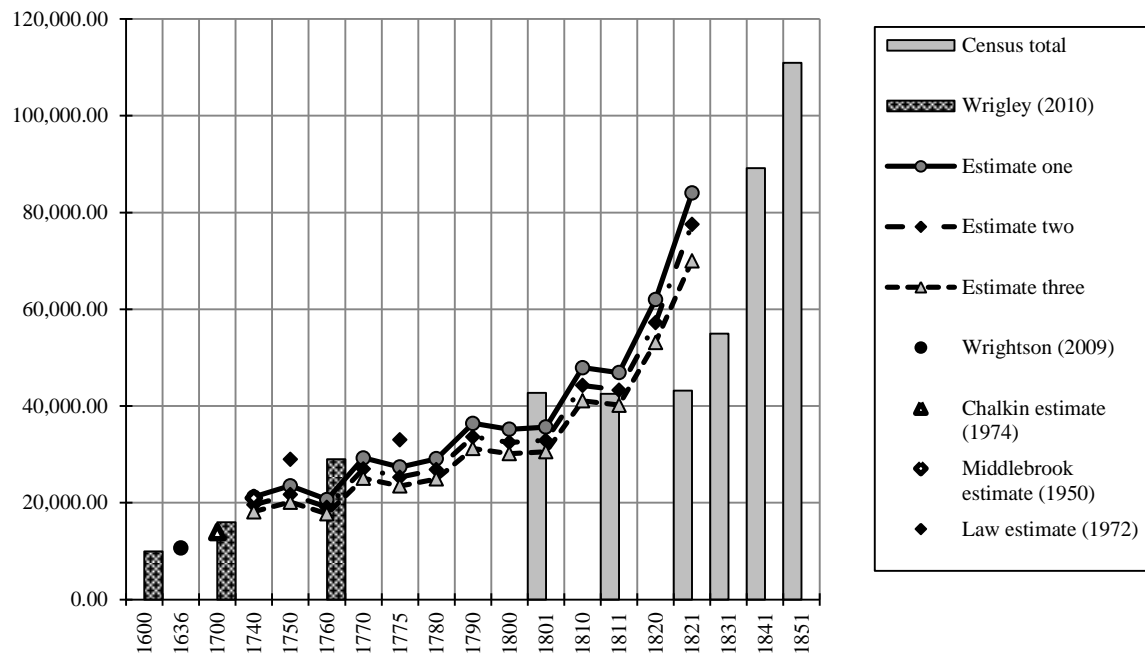
¹⁰⁹ J. Boulton & L. Schwarz. "The Comforts of a Private Fireside", *The Workhouse, the Elderly and the Poor Law in Georgian Westminster: St Martin-in-the-Fields, 1725-1825*, in J. McKeown & P. Sharpe eds., *Accommodating Poverty: The Housing and Living Arrangements of the English Poor, c. 1600-1850* (Basingstoke, 2011), 221-45; J. Boulton, & L. Schwarz. *Pauper Lives in the City: the Workhouse and the Experience of Poverty in London, 1700-1850*, (Manchester: Forthcoming).

Hvaing corrected the totals number of baptism in the Bills of Mortality, using Wrigley and Schofield's correction factors to take into account the growth of religious dissent, delayed baptism and other factors, Figures 1.15 presents three rough estimates of the population of Tyneside using notional birth rates of between 30 and 35 per 1000.¹¹⁰ 'The lower the birth rate the higher the estimated population'.¹¹¹ The overall results in Figure 1.15 have also been presented along with all of the other population estimates from previous studies along with 1801-21 census totals for Newcastle and Gateshead combined. The evidence suggests that the population of Tyneside was growing modestly from the seventeenth-century through to the middle of the eighteenth. Between 1600 and 1740 Tyneside's population was approximately 17,000-19,000, by the end of the eighteenth-century it had grown to something between 30,000 and 35,000. The new estimates from the Bills data suggest that in 1801 the population of Tyneside was between, 30,751 and 35,366. The 1801 census revealed that the population Newcastle was some 28,366 and when added to the census population of Gateshead amassed to a total of 41,465, which suggests that the lower birth rate estimates are to be preferred.

¹¹⁰ See for example: Wrigley & Schofield. *The Population History of England, 1541-1871*, 89-102. The overall annual series for each parish included in the Bills of Mortality have been presented in Appendix Two of this thesis. The annual series for Tyneside has been presented in Appendix One.

¹¹¹ Boulton *et al.* 'The Comforts of a Private Fireside', 225.

Figure 1.20 *Estimates of the population Tyneside, 1600-1821*



Sources: Bills of Mortality database; Newcastle estimates are taken from those presented in Barke. ‘The People of Newcastle’, 136; Tyneside (Newcastle and Gateshead combined figures) are extracted from Rowe. ‘The Population of Nineteenth-Century Tyneside’, 20; Wrigley’s estimate was taken from: E.A. Wrigley. *Energy and the English Industrial Revolution* (Cambridge, 2010), 62; For Wrightson’s estimate see: K. Wrightson. ‘That Lamentable Time’: Catastrophe and Community in the Great Newcastle Plague of 1636’, in D. Newton & A.J. Pollard eds., *Newcastle and Gateshead before 1700* (Chichester, 2009), 253.

Our new estimates however crude they may be, provide us with a more reliable and documented set of population estimates than those which were discussed at the very beginning of the chapter presented by Law, Middlebrook and Chalklin. But most importantly the new figures suggest that it was not until the second decade of the nineteenth-century when the population of Tyneside truly boomed.

1.8 Conclusion

In conclusion, the population history of Newcastle in the late Georgian and early Victorian period was *not* straightforward. This study had been concerned chiefly with providing a more detailed synthesis of what we already know of Newcastle’s and Gateshead’s (Tyneside’s) population in this period – an exercise now long overdue. Moreover, rather than limiting our discussion to the evidence which has already been examined by previous historians, this chapter has found and analysed a new source for understanding the population history of the

city in more detail than has been possible in previous work. This is crucial because it goes some way to address E.A. Wrigley's recent observation that; 'although much attention has been given in recent years to tracing the history of national population trends, regional or local growth rates have been ... neglected arising 'from the apparent lack of new data on which to base any revision of existing estimates'.¹¹² The Newcastle's Bills of Mortality are such a source and they surely support Robert Woods recent comment about their historical potential. While some scholars might well criticise the analysis employed here, this chapter represents a uniquely-documented view of population growth on Tyneside which should supplant our earlier estimates.

The population of late Georgian and early Victorian Tyneside experienced a very different growth pattern to the country as a whole. Unlike England, Tyneside seems to have reached a saturation point in the late eighteenth-century and stagnated in the first decade of the nineteenth not recovering to level of growth which was being experienced nationally until the 1820s. Thereafter, the port expanded as the coal trade particularly to London grew. Between 1680 and 1750 on average there were some 231,000 chaldrons of coal exported domestically via the port of Newcastle.¹¹³ Between 1751 and 1801 this had increased to some 377,000 per year, an increase of over 163%.¹¹⁴ However, this was not the most dramatic period of expansion. Demand for coal, as industrialisation pressed on meant, that between 1801 and 1832, domestic coal exports from the port increased to an average of over 652,000 chaldrons per year – equating to an increase of over 172%.¹¹⁵ Such an increase in demand, meant an increase in the population involved directly in mining, production and transportation of coal along the Tyne.¹¹⁶ Such a labour force had been migrating to Newcastle from at least the early seventeenth-century as Welford puts it:

There is in Newcastle upon Tyne, of Keelmen, waterman and other labourers ... most of them being Scottish men and Borderers which came out of Tynedale and Riddesdale ... they have wanted employment, and are thereby in great necessity, having most of them great charge of wives and children.¹¹⁷

¹¹² Wrigley. 'English County Populations', 35.

¹¹³ Mitchell *et al.* *An Abstract of British Historical*, 109-11.

¹¹⁴ *Ibid*, 109-11. For a discussion of this with regards to the growth of London, see: Schwarz. *London in the Age of Industrialisation*, 231-40; Landers. *Death and the Metropolis*, 41-43; Wrigley. *Energy and the English Industrial*, 28-47; McCord. *North East England*, 25-68; Allen. *The British Industrial Revolution*, 80-105.

¹¹⁵ *Ibid*, 109-11.

¹¹⁶ Wright. 'Water Trades and Communities on the Lower River Tyne in the Seventeenth'.

¹¹⁷ R. Welford. *History of Newcastle and Gateshead, Volume III* (London, 1887), 348.

By the second decade of the nineteenth-century the northern coal field was at its peak, other industries which had played an all important part in the city's economy in the previous century had declined most notably the salt trade.¹¹⁸ Newcastle's trading links to the nation's capital was vital to this expansion as Boulton has stressed Newcastle and London were cities 'whose economic fortunes were closely linked'; such links had developed and were even more perceptible in the late eighteenth and early nineteenth-centuries.¹¹⁹ The capital's demand for coal both domestically and commercially enabled the population of Northumberland, Durham and Newcastle to reach heights which had never been experienced previously. The city of Newcastle in 1850 was a very different city to what it had been in 1750. How did Newcastle maintain this rapid growth? What impact did population change have upon the living conditions on Tyneside? These important questions are the subject of the next chapter which examines living conditions, occupations and the water supply.

¹¹⁸ J. Ellis. 'The Decline and Fall of the Tyneside Salt Industry, 1660-1790: a Re-examination', *Economic History Review*, 33 (1980), 45-58.

¹¹⁹ J. Boulton. 'Neighbourhood Migration in Early Modern London', in P. Clark & D. Souden ed., *Migration and Society in Early Modern England* (London, 1987), 107.

Chapter 2. Determents to health, mortality and urban life in early industrialising Tyneside, 1736-1850

‘With their mercantile success and gain, and eagerness still further to enrich themselves, the people of Newcastle ... utterly neglected all provision for their health’.¹²⁰

(Anon: 1861, 94)

2.1 Introduction

So far this thesis has been concerned with the demographic experience of Tyneside and the growth of the city’s parishes. While these are important elements in a study concerned with sickness and disease in our period we need to know more about day-to-day socio-economic variables which may have played an important part in Newcastle’s epidemiological regime.¹²¹ This is more especially true, since recent work in historical demography with respect to mortality (and to some extent morbidity) has shown that a much ‘broader range of ... variables needs to be taken into account if the dimensions of an epidemiological regime are to be properly understood’.¹²²

The High Potential Model (HPM), first suggested by William McNeill,¹²³ proposed that large populous urban towns and cities could often act as ‘sinks of infections’, where indigenous populations ‘suffered from a higher level of infant mortality ... but those who survived [childhood] ... acquired a higher level of immunological resistance than those that came from the ... less infected countryside’.¹²⁴ As we shall see in Chapter 5, Newcastle was significantly affected by all the most serious and most common contemporary infectious diseases, including infamous crowd diseases and air borne afflictions such as Smallpox, Measles and infectious respiratory conditions.¹²⁵ The death rate in the city could fluctuate and it has been said to have risen throughout the period of industrialisation so much so that by the middle of

¹²⁰ J. Smith. ‘Public Health on Tyneside, 1850-80’, in N. McCord ed., *Essays in Tyneside Labour History* (Newcastle, 1977), 26, 25-46.

¹²¹ J. Landers. *Death and the Metropolis: Studies in the Demographic History of London, 1670-1830* (Cambridge, 1993), 40.

¹²² Landers. *Death and the Metropolis*, 40.

¹²³ W.H. McNeil. *Plagues and Peoples* (London, 1977), 185-216, 217-68.

¹²⁴ Schwarz. ‘Review Article: Death in the Eighteenth’, 296.

¹²⁵ For discussion of these diseases in London see: Landers. *Death in the Metropolis*, 90-91; Hardy. *The Epidemic Streets*, 9-27, 28-55, 56-79, 110-50.

the nineteenth century Newcastle is said to have had the third lowest levels of life-expectancy at birth of any provincial city in England.¹²⁶

This chapter assesses the extent to which the HPM held for Newcastle. It is therefore essential to turn to some of the broader aspects of life within the early industrialising city. An understanding of these aspects will act as an important backdrop to the study of the medical and institutional responses to sickness and death and is essential in understanding the context of urban life in the city.

In his pioneering study of eighteenth-century London, John Landers pointed out that ‘classical mortality theory saw variations in living standards as the key to differences in the level of mortality’ experienced by a population.¹²⁷ He argued that mortality was fundamentally nutritionally influenced, which determined one’s resistance to infection: ‘the most important proximate deterrent of mortality ... could be summed up under the heading of diet, its quantity and composition ... with emphasis on real wages [and] food prices’.¹²⁸ Recently it has been suggested that the levels of mortality [and disease] within populations are influenced by a much wider and more complex set of components.¹²⁹ Landers has stressed that the:

Proximate determinants’ to mortality [and disease] conduction, retention and bounding – are affected by a wide variety of factors whose relative importance may vary between populations. Some such as population density or migration patterns – fall outside the scope of living standards as the term is generally understood, whilst others – such as hygiene, sanitation and housing standards – might usefully be thought under this heading but are not easily captured in real wage calculations.¹³⁰

¹²⁶ See for discussion see: Smith. ‘Public Health on Tyneside’, 25, 25-46; Szreter *et al.* ‘Urbanization, Mortality and the Standard of Living’, 84-112; Woods *et al.* *Urban Disease and Mortality in Nineteenth Century*, 1-18; Barke. ‘The People of Newcastle’, 133-66; C. Firswell. ‘‘Did King Dirt’ and ‘Bumbledom’ Defeat the Object of the Public Health, 1848? A Case Study of the Political, Social and Cultural Attitudes to Public Health Reform in Newcastle-upon-Tyne, Gateshead and Sunderland, 1835-58’ (University of Durham, Unpublished PhD Thesis, 1999).

¹²⁷ Landers. *Death in the Metropolis*, 40.

¹²⁸ *Ibid.*, 40. For a detailed study of this phenomena see: M. Livi-Bacci. *Population and Nutrition: An Essay on European Demographic History* (Cambridge, 1990), 1-22, 23-40.

¹²⁹ Landers. *Death and the Metropolis*, 40.

¹³⁰ *Ibid.*, 40.

This chapter examines the living conditions experienced by the population of Tyneside over the century. It is divided into six parts. The first discusses migration. The second section examines the physical growth of the city and what impact this had on population density, building and housing standards. The third part discusses living standards in the period, discussing real wage movements and food prices. Section four investigates the occupational structure of the city's inhabitants. The fifth section examines poverty in the city and the seasonality of life experienced by the population. In the closing section the development of the city's water supply over the century is addressed.

2.2 Migrants in the city

As we have already discussed in chapter one, the population of Newcastle grew massively over the century or so that this study is concerned. The city's population was something close to 20,000 in 1740 by 1850 it had increased five-fold to something nearer to 100,000. However, we have already seen that the bulk of this demographic expansion did not really occur until after the second and third decade of the nineteenth-century, when industrialisation in the region began to boom.¹³¹ The evidence that we have for the eighteenth century from the Bills demonstrated that during the closing decades of the eighteenth century and first decade of the nineteenth century the city appears to have experienced what one historian has called a period of 'sluggish growth mixed with periods of absolute decline'.¹³² We need to look at this issue further. To examine this decline in more detail Figure 2.1 plots the burial-baptism ratio (burials per 100 baptisms) over time for all of the parishes and burial grounds recorded in the Bills from 1736 until 1848 (Table 2.1 below).¹³³ This chart was constructed by taking all of the vital events (burials and baptisms) recorded in the Bills of Mortality and correcting these annual figures using Wrigley and Schofield's methods to take into account the impact of under registration, the growth of religious dissent and delayed baptism. Once these factors have been allowed for in the annual totals of burials and baptism, the data can be interpreted as a rough guide to the number of births and deaths which took place over time.¹³⁴

¹³¹ For discussion of industrialisation on Tyneside in the nineteenth-century see: McCord. *North East England: The Regions Development*, 25-69.

¹³² Barke. 'The People of Newcastle', 135.

¹³³ Wrigley & Schofield. *The Population History of England*, 645-96; Dobson. *Contours of Death and Disease*, 369-72.

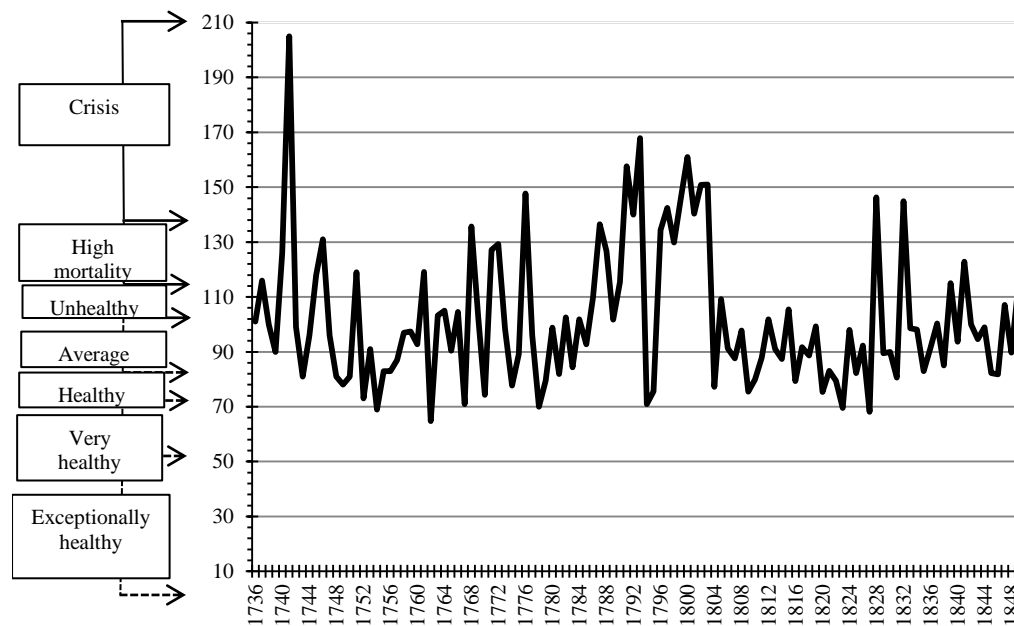
¹³⁴ *Ibid.*, 89-154.

Figure 2.1 is particularly revealing, demonstrating that mortality in the city was much more volatile in the eighteenth-century than in the first half of the nineteenth. The most striking observation upon perusal of this graph is the sharp peak in the mortality ratio in 1740-41. This was not a local phenomenon. Wrigley and Schofield have also shown that this was a year when the national population experienced a three star peak in mortality. Such a peak has also been found by Dobson in her study of south-east England, albeit of slightly less severity.¹³⁵

While this short term peak is of significance, the most striking feature of Newcastle's mortality pattern occurred from the last two decades of the eighteenth century until the early years of the nineteenth century, when there was a constant surplus of burials over baptism. Using the categories employed in Dobson's study, it appears that the city experienced nine years of what might be termed 'crisis mortality' from the late 1770s and eleven years of 'high mortality'. In context this means that between 1780 and 1801 for every one child who was baptised in one of the Anglican parishes, there was on average nineteen burials taking place. This average figure somewhat conceals the occasional critical extremity of the ratio, for in the same period there were two years when there were over 30 burials to every one baptism; three years when there were over 40 burials to every one baptism, and one year (1793) when the ratio reached the apogee of 67 burials for every one baptised child.

¹³⁵ One of the most striking features of Figure 2.1 is the eruption in the ratio in 1740-41, this is not easily explainable, but we do know that this was a year of dearth in the city, for discussion see: J. Bohstedt. *The Politics of Provisions: Food Riots, Moral Economy and Market Transition in England, c. 1550-1850* (Farnham, 2010), 256-57. Further-to-this, and probably more importantly Wrigley and Schofield have also shown that this was a year of high national mortality reaching a 3 star peak: Wrigley & Schofield. *The Population History of England, 1541-1871*, 340-45. Similarly both Schwarz and Landers in their work on the London Bills of Mortality have also shown that the period 1740-41 was one of high mortality in the metropolis. Schwarz suggests that an increase in deaths from fevers occurred in London by over 30% from the year preceding 1740-41, for discussion see: Schwarz. *London in the Age of Industrialisation*, 145-47; Landers. *Death and the Metropolis*, 266-68. The 1740-41 peak in mortality was also experienced in the 112 south-east English parishes studied intensively by Dobson, who linked the peak to smallpox and respiratory diseases conditions, see: Dobson. *Contours of Death and Disease*, 370-73.

Figure 2.1 Newcastle and Gateshead burial and baptism ratio over time from the Bills of Mortality, 1736-1849



Source: Newcastle and Gateshead Bills of Mortality database, 1736-1848. For discussion of the categories used on the Y-axis see: Dobson, *Contours of Death and Disease*, 370

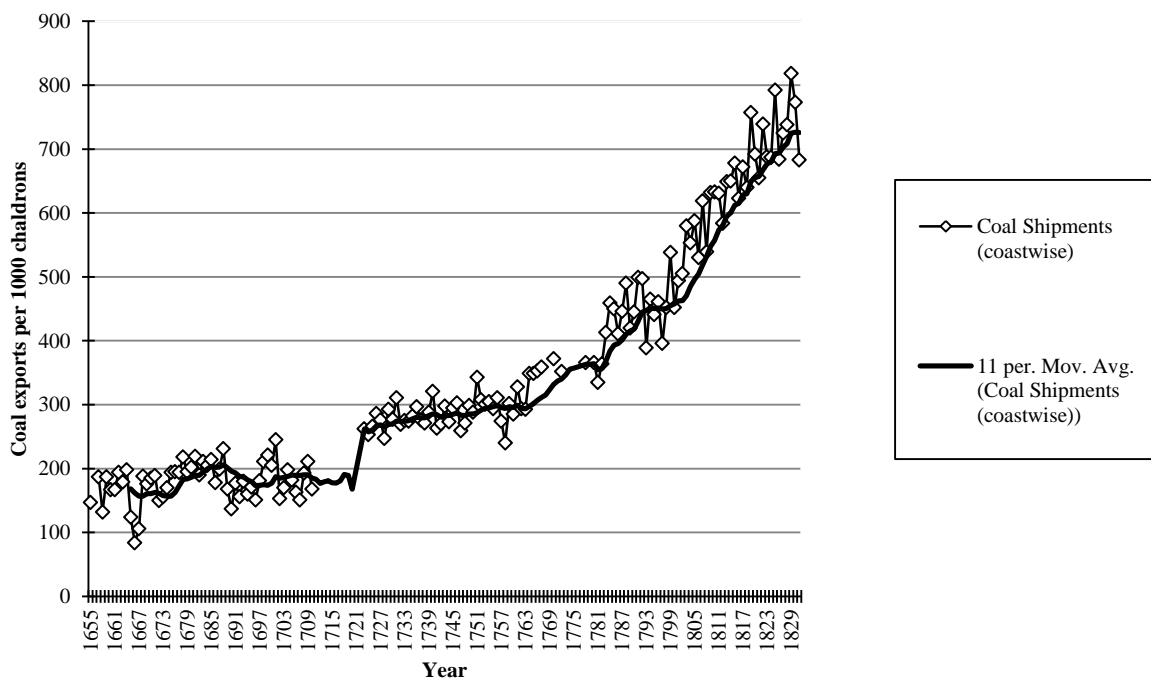
Table 2.1 Parish burial and baptismal data used for the construction of Figure 2.1

	Period of coverage	Number of Burials	Percentage distribution (burials)	Number of baptisms	Percentage distribution (baptisms)
St Nicholas	1736-1849	10,933	8.9%	12,332	10.7%
All Saints	1736-1849	20,324	16.5%	55,875	48.6%
St John	1736-1849	14,977	12.2%	16,775	14.6%
St Andrew	1736-1849	15,367	12.5%	15,324	13.3%
Gateshead	1764-1827	7,907	6.4%	7,454	6.4%
St Ann's	1832-1849	485	0.3%	281	0.2%
Gateshead St Mary	1828-1849	7,421	6.0%	5,588	4.8%
Gateshead St John	1828-1849	1,127	0.9%	942	0.8%
St Paul's	1845-1849	533	0.4%	197	0.1%
St Peter's	1845-1849	91	0.0%	—	—
Ballast Hills	1776-1849	36,855	30.0%	—	—
Westgate Hill Cemetery	1829-1849	5,128	4.1%	—	—
Jesmond Cemetery	1838-1849	1,298	1.0%	—	—
Friends Cemetery	1840-1849	26	0.0%	—	—
New Cemetery	1834-1837	177	0.1%	—	—
Total		122,649	100.0%	114,768	100.0%

Source: Same as Figure 2.1

This demographic ‘slump’ does not appear to have had a great impact upon the economy of the port. With Newcastle experiencing such a sustained fall in population during 1780-1801 would lead one to expect that the port’s economy would also have slowed or even declined, but as Figure 2.2 demonstrates this was not the case. Newcastle coal exports in the closing years of the seventeenth century were fairly stable at an average of 188,000 chaldrons per year, increasing somewhat in the early eighteenth century before plateauing from 1720 until 1770 at an average of around 293,000.¹³⁶ What is most arresting, however, is the remarkably rapid post-1780 rise in exports, during the very period when the city’s population was experiencing a prolonged burial surplus. Between 1780 and 1801 the average number of chaldrons of coal exported per year was 440,000, an increase of over 150%.¹³⁷ This suggests strongly that ‘in the face of such a burial surplus’ the city must have been attracting a reasonable number of immigrants to fuel the expanding coal trade.¹³⁸

Figure 2.2 Coal exports from the port of Newcastle: with 11-point moving average, 1655-1831



Source: Mitchell *et al.* *An Abstract of British Historical Statistics*, 109-11

¹³⁶For a discussion of the ways in which chaldrons of coal were made and measured see: Wright. ‘Water Trades on the Lower River Tyne’, x.

¹³⁷ The comparison between this figure and that presented in Landers study for London’s coal consumption in the eighteenth century is striking, see: Landers. *Death and the Metropolis*, 42. This surely adds weight to the close relationship between London’s growth and Tyneside’s in this period.

¹³⁸ Landers. *Death and the Metropolis*, 43; Barke. ‘The People of Newcastle’, 133-66.

A stream of migrants coming to the city is an important aspect of life within the city because migration plays an important role in the incidence and spread of disease.¹³⁹ As Galley has pointed out, it 'is likely that ... [migrants] would not have acquired immunity from the diseases common or endemic in cities'.¹⁴⁰ The free movement of men and women to towns and cities of England in our period was a key component in the demographic regimes of urban settlements, most notably in the nation's capital, where a 'regular inflow of migrants was required to balance the high urban mortality rates and to maintain the population'.¹⁴¹ The problem for the historian is that migrants are a very difficult group to study because they were rarely recorded in parish registers or in Bills of Mortality. What we do know however, is that it was 'adolescents and young adults [that] featured disproportionately in immigrant flows'.¹⁴² The immune status of immigrants could have made them more vulnerable 'or possibly more robust than their urban-born peers, depending on the nature of the diseases they encountered, and the epidemiology of their native environment[s]'. Migrants would have been subject to residential segregation.¹⁴³ For such reasons alone, we need to say more about migration in the city.

Rather than simply rehearse the difficulty of understanding this important aspect of urban life, a more pragmatic approach is to make the best use we can of the source material we actually have, which comes from the 1841 and 1851 Newcastle censuses. The problem here of course is that both of these sources were compiled after a period of rapid industrialisation on Tyneside and in the country as a whole, so that the census results may not be wholly representative of the century before. This is not enough on its own, however, to discount the utility of the census data. The 1841 census reveals that over 30% of Newcastle population were born outside of the county of Northumberland, and the 1851 census shows an even

¹³⁹ For a detailed collection of essays relating to this subject for the early modern period see: P. Clark & D. Souden ed. *Migration and Society in Early Modern England* (London, 1987).

¹⁴⁰ Galley. *The Demography of Early Modern Towns*, 27.

¹⁴¹ R. Davenport, J.P. Boulton & L.D. Schwarz. *Infant and Young Mortality in London's West End, 1750-1824*, Working Paper, <http://research.ncl.ac.uk/pauperlives/>. Thanks to Davenport, Boulton and Schwarz for allowing me to reference their paper.

¹⁴² For discussion of this see Schofield's pioneering study: R.S. Schofield. 'Age Specific Mobility in an Eighteenth-Century Rural Parish', *Annales de Demographie Historique*, (1970), 261-74.

¹⁴³ Davenport et al. *Infant and Young Mortality*, forthcoming. The residential segregation of migrants is a fascinating aspect of urban life in the period, for a discussion of the impact of cheap lodging houses in eighteenth-century London and possible influence on mortality see: Landers. *Death and the Metropolis: Studies in the Demographic History*, 47-49.

higher proportion of over 37%.¹⁴⁴ This is interesting if we consider that of Northumberland's total population only 21% were born outside of the county in 1841, and only 23% in 1851.¹⁴⁵ This certainly adds weight to the notion that Newcastle as a regional centre had the ability to attract a greater number of immigrants than anywhere else in the county. Furthermore, Newcastle also had the ability to attract a large proportion of migrants from the surrounding hinterland. In 1851 for example, over 62% of Newcastle's population came from Northumberland and 11% were from Durham.¹⁴⁶

What do the Bills of Morality suggest about migration in the city? An interesting way of examining migration within society in the period before civil registration was employed by Levine and Wrightson in their seminal study of the industrial village of Whickham, located six miles upriver from Newcastle, on the south banks of the river Tyne. Their pioneering study used a ratio of male to female burials as an indicator of migration in Whickham's mining community.¹⁴⁷ Given that the Bills systematically record the gender composition of the burials which took place in the city, it seems feasible to use the method employed by Levine and Wrightson in this present study. The sex ratio recorded in the city's Bills of Mortality have therefore been presented graphically for the four ancient parishes in Newcastle in Figures 2.3-2.6 together with nine-year moving averages to show the resulting trends over time.¹⁴⁸

¹⁴⁴ The exact figures are 33.3 per cent in 1841 and 37.2 per cent in 1851, see Rowe's expert essay: Rowe. 'The Population of Nineteenth-Century Tyneside', 21.

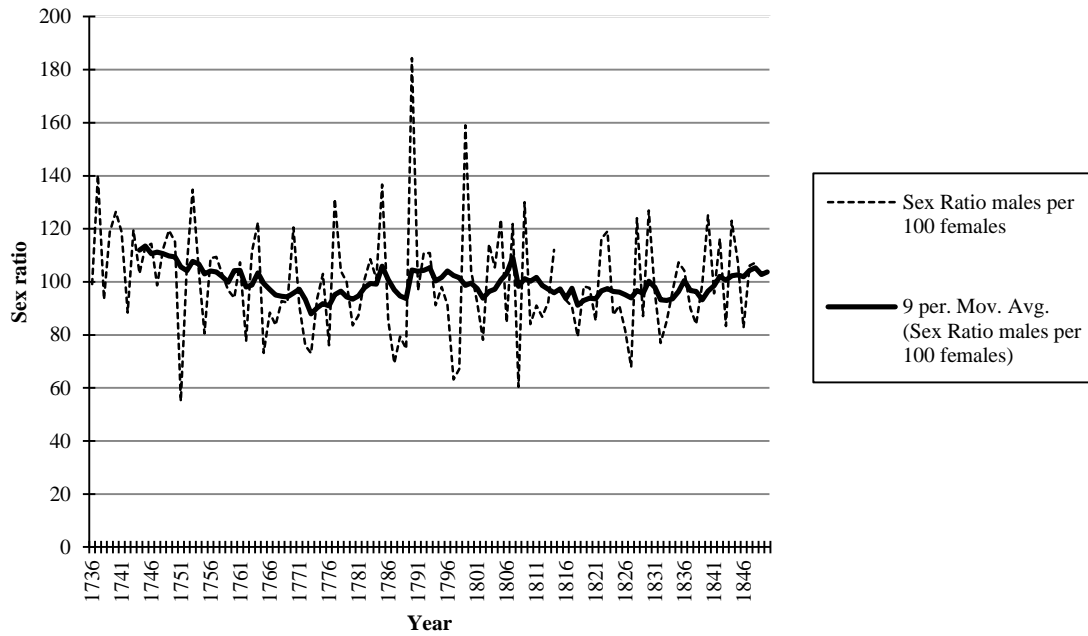
¹⁴⁵ *Ibid*, 21. The neighbouring borough of Gateshead also had a higher proportion of individuals who were not born in the county (Durham) for instance, 35.9% of Gateshead's population were not born in the county as opposed to the 23.8% of Durham's total population in 1841, 37.0 per cent in 1851 for Gateshead and 32.1 per cent for Durham.

¹⁴⁶ Northumberland (62.8%), Durham (11.1%), Ireland (8.0%), Scotland (6.5%), Cumberland & Westmorland (3.1%), London (1.3%) and Overseas (0.7%), see: Barke. 'The People of Newcastle', 156.

¹⁴⁷ Levine & Wrightson. *The Making of an Industrial Society*, 179. For similar methods see: D. Souden. 'East, West – Home's Best: Regional Patterns in Migration in Early Modern England', in P. Clark & D. Souden eds., *Migration and Society in Early Modern England* (London, 1987), 292-32.

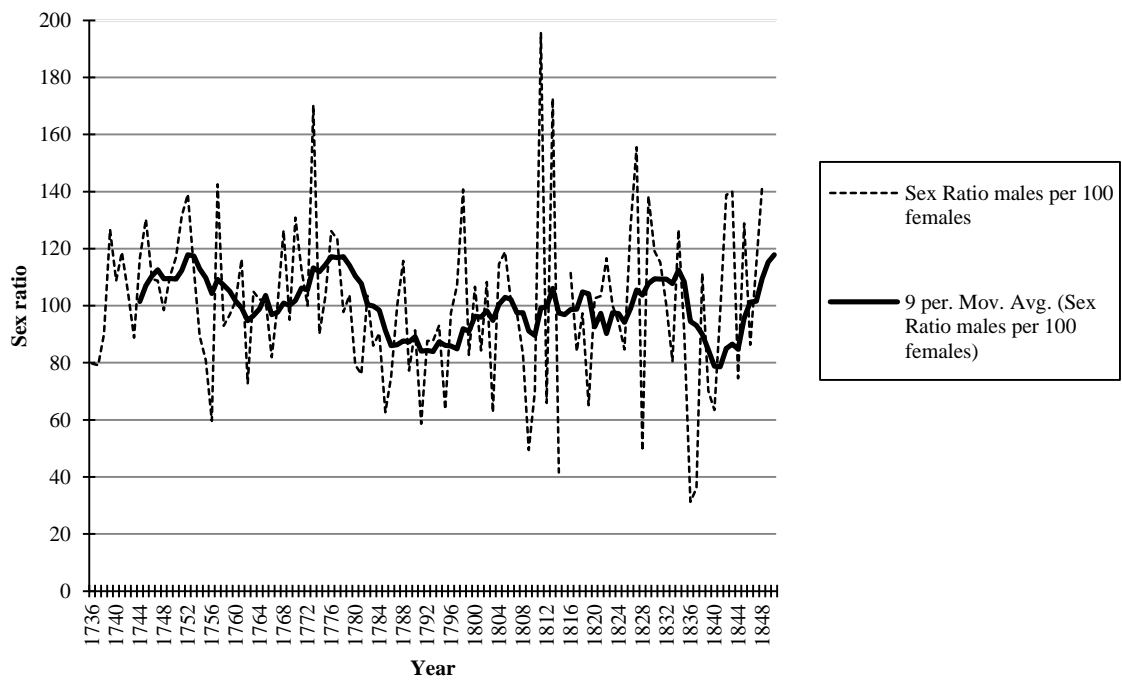
¹⁴⁸ The ratio is males per 100 females.

Figure 2.3 Sex ratio at burial in All Saints Parish, Newcastle; 9-year moving average, 1736-1848



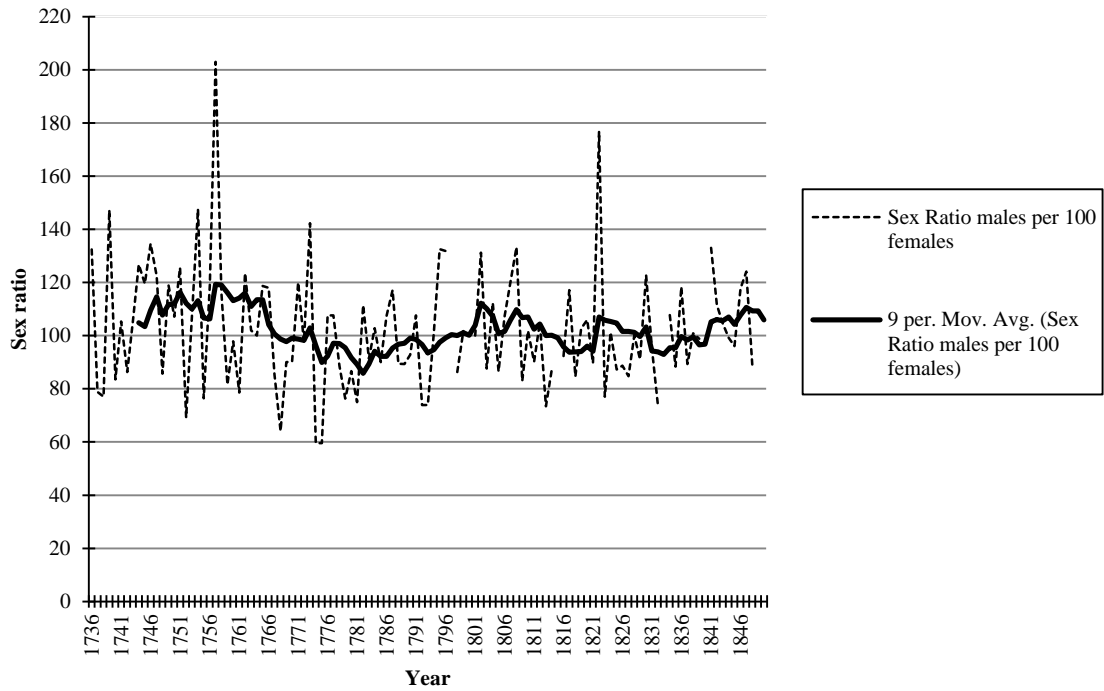
Source: Bills of Mortality database.

Figure 2.4 Sex ratio at burial in St Nicholas Parish, Newcastle and 9-year moving average, 1736-1848



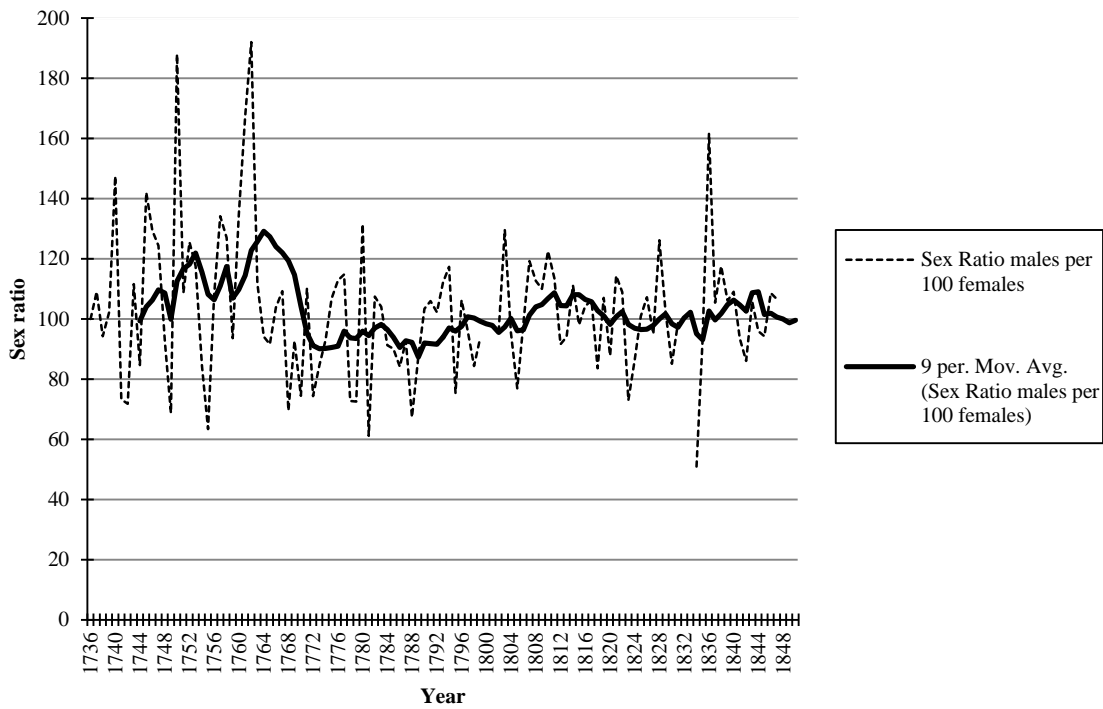
Source: Same as Figure 2.1

Figure 2.5 Sex ratio at burial in St John's Parish, Newcastle; 9-year moving average, 1736-1848



Source: Same as Figure 2.1

Figure 2.6 Sex ratio at burial in St Andrews Parish, Newcastle; 9-year moving average, 1736-1848



Source: Same as Figure 2.1

The evidence from the Bills demonstrates that the sex ratio at burial in Newcastle was subject to extreme volatility year by year. In all four parishes there was an apparent fall in mortalities amongst the female population from ca.1736 until the 1770s; thereafter all of the parishes seem to experience a levelling-out over time. We are fortunate, that the Bills actually recorded the gender composition of the burials which took place at Ballast Hills from the beginning of the nineteenth century which may be indicative of what had been occurring previously, these have been set out Table 2.1 below.

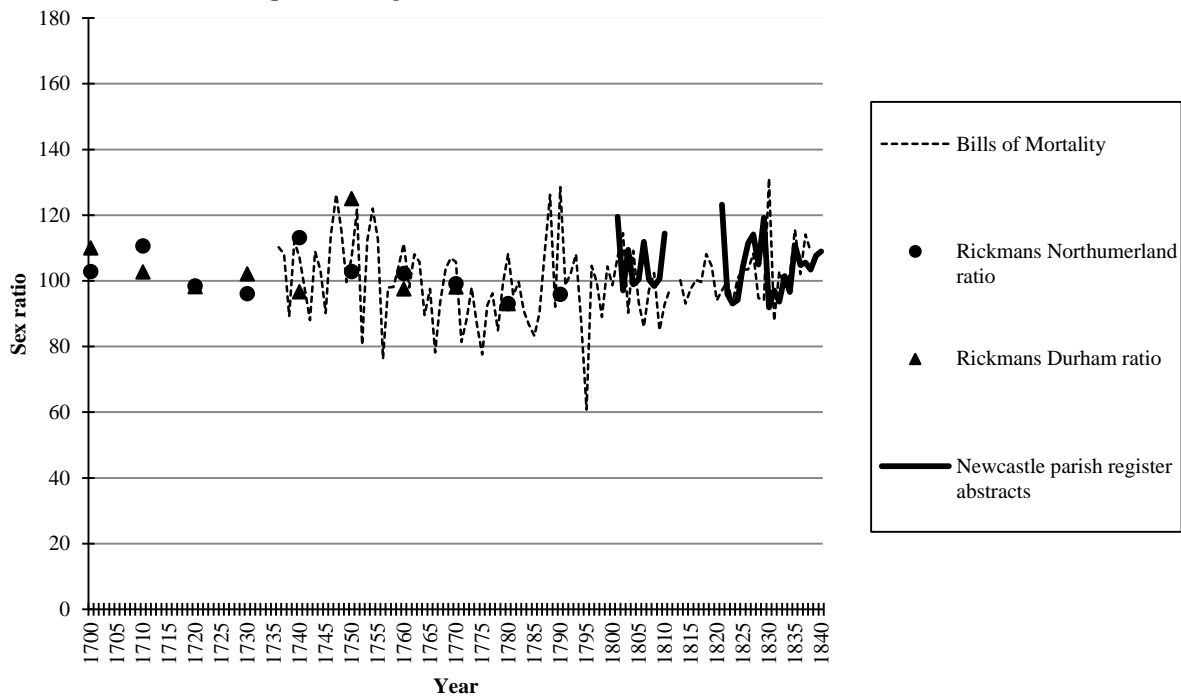
Table 2.2 *Sex ratio of Ballast Hills burials, 1806-1840*

	Sex Ratio		Sex Ratio
1806	108	1825	101
1809	93	1826	92
1810	103	1827	94
1811	99	1828	101
1812	98	1829	93
1813	98	1830	101
1815	97	1831	92
1816	93	1832	87
1817	101	1833	95
1818	99	1834	107
1819	106	1835	110
1820	100	1836	105
1821	101	1837	108
1822	98	1838	108
1823	79	1839	103
1824	108	1840	110
Total			20,739

Source: Same as Figure 2.1.

The nineteenth-century evidence suggests that in most years there was a small male surplus. If we combine the parochial data with the Ballast Hills evidence together with what we know of both county Durham and Northumberland we can gain an overall impression of the sex ratio of the *dead* population over a long period (Figure 2.7).

Figure 2.7 Sex ratio at burial in Newcastle to Rickman's county ratios and those returned in the Newcastle census parish register abstracts, 1700-1840



Source: Newcastle and Gateshead Bills of Mortality database. For Rickman's Northumberland and Durham's data, see: Souden. 'East, Weast – Home's Best'? Regional Patterns of Migration', 321, 325. The Newcastle parish register abstracts were taken from the 1801-1841 censuses.

Generally this data suggests different findings from those made by Levine and Wrightson. As already mentioned, in Whickham, there was a continual surplus of male burials to female burials, arguing that the village had high male mortality rates, maintained by a flow of male immigrant workers employed in the coal industry.¹⁴⁹ Wright's recent study of the water trades in All Saints Parish in Newcastle has also suggested a similar pattern in the seventeenth century. All Saints may well have experienced similar patterns of immigration resulting from the occupational structure of the parish.¹⁵⁰ The evidence from the Bills of Mortality, however, suggests something very different for Newcastle as a whole. The data demonstrates that there was very little difference between the numbers of male and female burials which occurred annually in the city. The average sex ratio from the Bills data was 97 males per 100 females, in Northumberland it was 101 males per 100 females and in Durham it was slightly higher at 102 males per 100 females. The city's parish register abstracts suggests a higher sex ratio than the Bills, of 104 males to per 100 females. This last estimate may be skewed as the parish register abstracts published in the census do not include the huge number of burials

¹⁴⁹ Levine & Wrightson. *The Making of an Industrial Society*, 179.

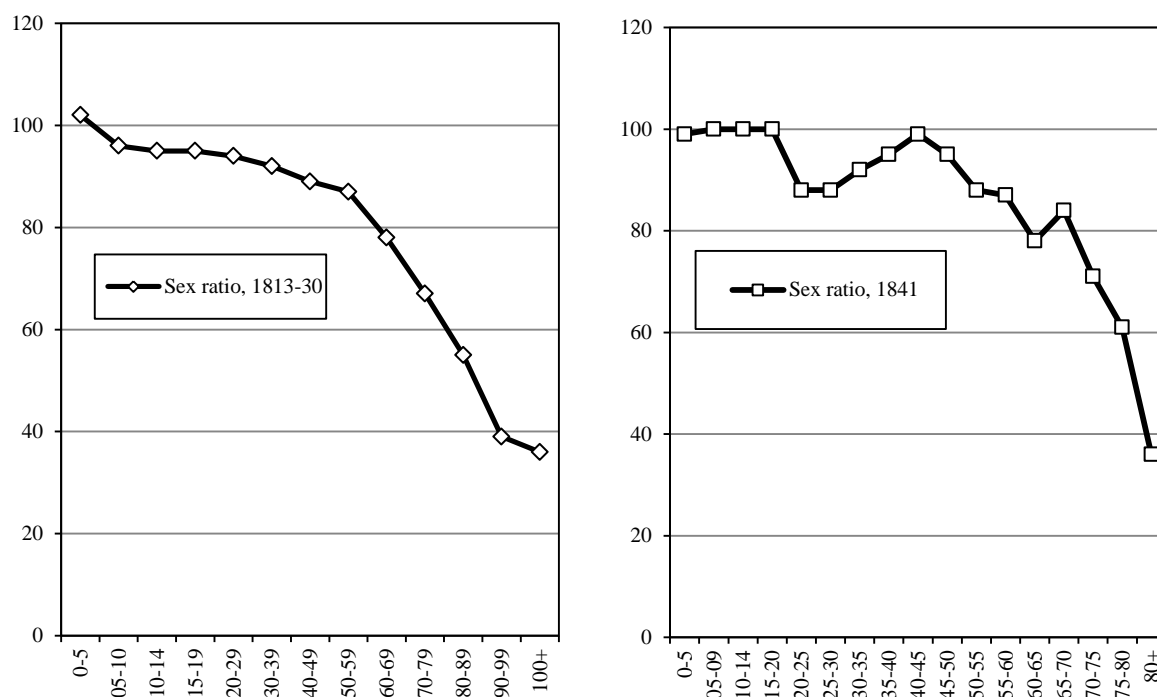
¹⁵⁰ Wright. 'Water Trades on the Lower River Tyne', 46-86.

from Ballast Hills. Indeed, the later census ratio of burials reveal that in 1831 there were 89 males per 100 females and 85 males per 100 females in 1841, which suggests that the Bills provide an accurate impression of what was going over the whole period. Newcastle, as the region's 'metropolis', had a very different occupational structure and thus a different demographic profile than the mining village of Whickham or indeed of the parish of All Saints alone.¹⁵¹ Such evidence, might suggest that the sex ratio of migrants coming to the city was more balanced than what we know of other urban centres in the period.

What of the living population? While analysis of the sex ratio of the *dead* population in an urban centre offers a partial insight into its migration/demographic profile, to comprehend such phenomena in more depth we need to know more about the age specific sex profile of the city's inhabitants. In order to do this feasibly it seems sensible to look at the returns of the Newcastle censuses, which provide us with the first official breakdown of the city's extant population by age and sex profiles for the years 1813-30 and in the 1841 census

¹⁵¹ Rowe. 'The North East', 415-70;

Figure 2.8 Age specific sex ratio of Newcastle's population in 1813-30 and 1841



Source: Age Abstract 1831 and 1841 Census.

Figure 2.8 is important for several reasons. Firstly, Newcastle's live population seems to have had a closely balanced sex ratio between the ages of 5-39 with a tendency towards a slight surplus of females. The male surplus in the infant/young population (0-5 years), this is not atypical as this estimate is remarkably close to the normal biological ratio of 105.6 males to every 100 females.¹⁵² After the ages of 40 in the later census and in most age groups after childhood, the sex ratio in the live population becomes more skewed, implying that there was a surplus of females in the city's population. This data fits comparatively well with what we know of the sex ratio in other urban populations in the period.¹⁵³ Over 40% of the entire population in 1841 were aged between 10 and 30 years, of which over 76% were aged between 15 and 30 years, demonstrating that the city had a significant proportion of the population in the 'service age cohort'. The sex ratio of those aged between 15 and 30 years was 89 males per 100 females. This is what might be expected given that the city had the

¹⁵² M.S. Teitelbaum. 'Factors Associated with the Sex Ratio in Human Populations', in G.A. Harrison & A.J. Boyce ed., *The Structure of Human Populations* (Oxford, 1972), 91-92.

¹⁵³ Galley. *The Demography of Early Modern Towns*, 3-30.

ability to attract both large numbers of male immigrants who were employed in shipping coal and transports, and also large numbers of female immigrants employed in domestic service.¹⁵⁴

By and large the evidence shows that Newcastle's population was fuelled by an incoming stream of migrants. This is an aspect of living and working experience which was relatively common in contemporary towns and cities; indeed, some historians have gone so far as to estimate that anything between 60% and 80% of the population in towns and cities in this period and earlier were composed of migrants.¹⁵⁵ Newcastle's migrant population would have been more exposed to different diseases which thrived in the city's disease environment, for, as Schwarz has pointed out, the 'need for a continuous stream of immigrants was one of the dangers of the ... urban system'.¹⁵⁶ In Newcastle, particularly in the late eighteenth century, if the city had not been attracting a considerable number of migrants to counterbalance its demographic books then the economy of the port would have slowed and even declined. On the other hand, such demographic realities also brought with them certain problems; 'increasing population contributed towards an economic upspring, which, in turn, increased levels of migration, urbanisation and thus mortality'.¹⁵⁷

2.3 Growth, housing and population density in Georgian Newcastle

How did Newcastle's demographic growth relate to what we know of the physical expansion of the city? Was growth met with new building or increased population density and overcrowding within the existing housing stock? It is unfortunate that there are relatively few quantitative sources available to the historian wishing to assess building on Tyneside in the

¹⁵⁴ By the middle of the nineteenth-century the occupational structure of the city was dominated by those who were employed in domestic service which according to Rowe and Barke accounted for nearly 14% of all Newcastle occupations recorded in the 1851 Newcastle census, see for discussion: Barke. 'The People of Newcastle', 134-35.

¹⁵⁵ D. Souden. 'East, West – Home's Best: Regional Patterns in Migration in Early Modern England', in P. Clark & D. Souden eds., *Migration and Society in Early Modern England* (London, 1987). For more general discussion see: J.M. Ellis. *The Georgian Towns, 1680-1840* (Basingstoke, 2001), 28; D. Souden. 'Migrants and the Population Structure of Later Seventeenth-Century Provincial Cities and Market Towns', in P. Clark ed., *The Transformation of English Provincial Towns, 1500-1800* (London, 1984), 133; P. Corfield. 'A Provincial Capital in the Late Seventeenth-Century: The Case of Norwich', in P. Clark & P. Slack ed., *Crisis and Order in English Towns, 1500-1700* (London, 1972), 233; E.J. Buckatzsch. 'Places of Origin of a Group of Immigrants into Sheffield, 1624-1799', *Economic History Review*, 2 (1949), 292.

¹⁵⁶ Schwarz. *London in the Age of Industrialisation*, 154.

¹⁵⁷ *Ibid*, 154.

eighteenth century. The most promising material which is available comes from the annual accounts of the Newcastle Corporation which survive from 1780 until the middle of the nineteenth century, and although there are some gaps in the series it is still very useful.¹⁵⁸

Figure 2.9 sets out the expenditure of the Corporation in terms of the absolute levels of expenditure which occurred over time, as well as expenditure per capita, to take into account the changing size of the city's population. The thinking here is that the expenditure per capita (per head of population) may suggest something about the changing size of the city itself. This is especially true since the annual expenditure data included monies which were being spent on maintenance of buildings within the city and how much was being spent on actually building 'new' buildings.¹⁵⁹ Figure 2.9 shows that over the course of the period the amount of money which was being spent by the Corporation seems to have been fairly stable, but that in terms of 'real' expenditure an actual fall was experienced during the later eighteenth century and first two decades of the nineteenth.¹⁶⁰ What is truly remarkable about this lull in the 1820s is that it coincided with the period when the population of the city was increasing massively. Expenditure did not really keep up with the pace of population growth until the 1840s and then experienced a sharp fall. The accounts suggest that in terms of the Corporation's expenses little development seems to have taken place over the period. This lack of development was commented upon by Mackenzie in the early nineteenth century, who noted that some 'judicious alterations have been made during the last forty years; though they were generally carried on in so drowsy a manner, as to excite the ridicule of strangers'.¹⁶¹

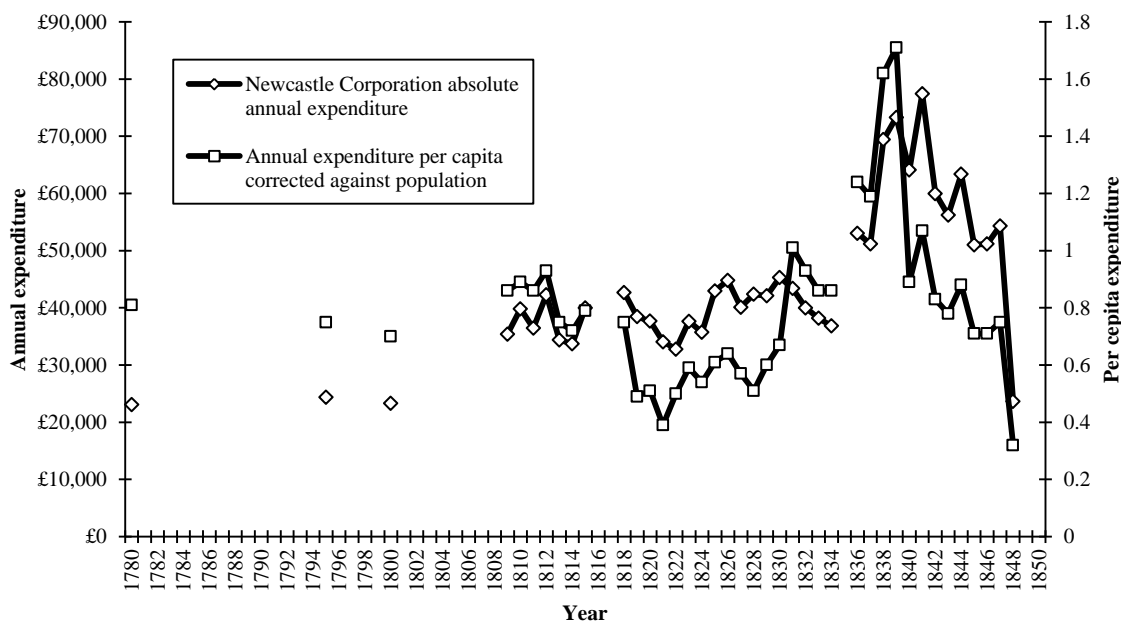
¹⁵⁸ Anon. *An Account of the Gross Income and Expenditure of the Corporation of Newcastle upon Tyne as Published Annually for the last Forty Years* (South Shields, 1849), unpaginated. For eighteenth-century expenditure data see: Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 641-48.

¹⁵⁹ The danger here is that building expenditure may actually 'just' mean or relate to Corporation property, however, while this is a valid point and one which is worth taking into consideration using the total expenditure Figures should give a better sense of how the growth of the city was occurring overtime. Anon. *An Account of the Gross Income and Expenditure*, un-paginated.

¹⁶⁰ H.P. Brown & S.V. Hopkins. *A Perspective of Wages and Prices* (London, 1981), 60-78.

¹⁶¹ Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 197, 197-203.

Figure 2.9 *Newcastle Corporation: absolute and per capita expenditure, 1780-1850*



Source: Anon. *An Account of the Gross Income and Expenditure of the Corporation of Newcastle upon Tyne as Published Annually for the last Forty Years* (South Shields, 1849). For eighteenth-century expenditure data see: Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 641-48. Estimates of the population were extracted from the baptismal data in Bills of Mortality using Wrigley and Schofield's correction methods and applying a notional birth rate of 32.5 per 1000. For annual data see Appendix 1.

To what extent can evidence from contemporary surveys and engravings of the city be employed to demonstrate the city's rather limited growth? Figure 2.10 shows an engraving of the city by James Corbridge made for Reverend Henry Bourne's *History of Newcastle* (1736).¹⁶² This shows that in the early decades of the eighteenth century the city was still within the boundaries of its ancient walls. It is observable that the topography of the city appears to have varied in different areas. As one moves through the 'central artery' of the city, via Pilgrim Street down to the Bigg Market and towards St John's Church, the city is heavily built up.¹⁶³ 'The upper town on either side of the corridor was relatively thinly populated outside the ribbons of houses along upper Pilgrim Street and Westgate Street', where there were also large areas of open ground, as, for example, in Nun's Garden's.¹⁶⁴ The same might be said of the lower south west area of the city known locally as the 'Closegate

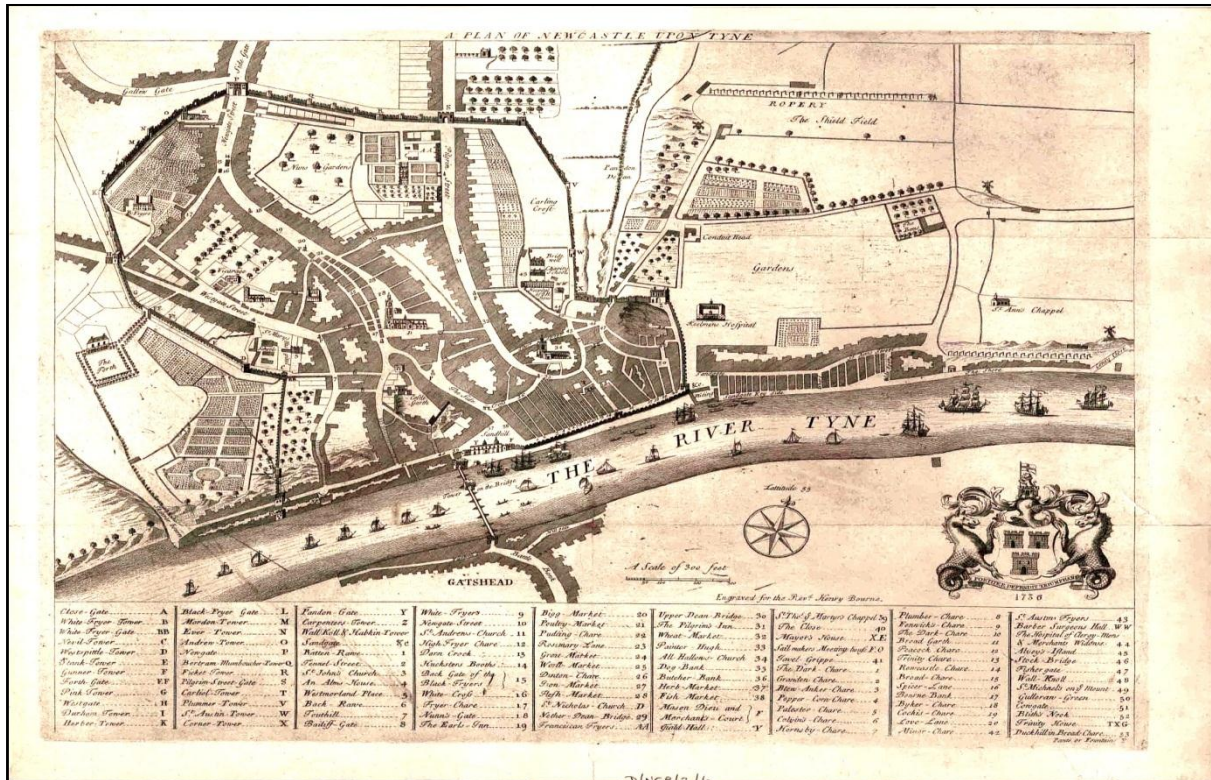
¹⁶² Map of Newcastle-upon-Tyne by Corbridge, 1736, TWAM D/NCP/2/6

¹⁶³ For a recent discussion of Newcastle in the seventeenth-century see: Wrightson. *Ralph Tailors Summer*, 25-27.

¹⁶⁴ Wrightson. *Ralph Tailor's Summer*, 25.

Ward'.¹⁶⁵ In the south-east, however, the situation was very different, especially in All Saints Parish and the 'easternmost wards of Sandgate and Wall Knoll'.¹⁶⁶

Figure 2.10 Map of Newcastle upon Tyne by Corbridge, c. 1736



Source: TWAM D/NCP/2/6

To what degree did this situation change over time? Figure 2.11 shows an engraving of the city which was completed in 1770 by Charles Hutton. When this is compared to Corbridge's engraving it become immediately apparent that the actual 'face' of the city had experienced very little change.

¹⁶⁵ *Ibid.*, 25

¹⁶⁶ *Ibid.*, 23

Figure 2.11 *Engraving of Newcastle-upon-Tyne and Gateshead by Hutton, c.1770*



Source: C. Hutton. 'A Plan of Newcastle-upon-Tyne and Gateshead 1770', in F. Graham. *Maps of Newcastle* (Newcastle, 1984), unpaginated.

Although little major change seems to have taken place, some features were clearly different. For example, in the west of the city outside the city Walls stood a new building, the Newcastle Infirmary built in 1753. There were also new buildings along the 'The Side', stretching outside of the walls to the south-west. One can gain a further vivid impression of the 'face' of the city from the engraving made by Samuel and Nathaniel Buck in 1745 (Figure 2.12). Since there appears to have been little change over the course of the eighteenth century, this image might be considered to be a rather lucid portrait of the Georgian city. This is probably the image which Daniel Defoe beheld, prompting him to remark that Newcastle is 'landward ... exceedingly unpleasant, and the buildings are close and old ... together with smoke of the coals makes it not the pleasantest place in the world'.¹⁶⁷

¹⁶⁷ D. Defoe. *A Tour Thro' the Whole Island of Great Britain* (London, 1827), 158.

By the third decade of the nineteenth century (Figure 2.13) the situation had changed dramatically. There were a significant number of new buildings in the northern part of the city which by 1830 extended well beyond the boundaries of the walls. Many of the open plots of land which had been present in the seventeenth and eighteenth century had all but disappeared. This is particularly true of the open areas around the south-west of the city, especially around the Forth Banks. However, while growth was taking place by the 1830s, the bulk of the city's population still resided in the lower parts of the city along the Chares and alleyways near to and around the Quayside and especially in Sandgate. In 1830 a royal surveyor observed that 'the town is generally enveloped in a dense atmosphere of smoke, from the coal-pit, glass-works, and other manufactories in the place'.¹⁶⁸ Mackenzie, writing in 1827, was well aware of the development of chemical plants and other buildings which would have been detrimental to the health of the poor residing in the lower parts of the city. He noted:

Glass of all kinds, silver bullion, pig-lead, red and white lead, lead shot, copper as bricks and tiles, cinders and coke, cast and wrought iron and steel, soap, litharge, earthen ware, flour, painters' colours, Prussian blue, sal-ammoniac, soda, oil of vitriol, lamp-black, whale oil, coal-tar, coal-oil, canvas, &c.¹⁶⁹

By the 1840s, with industrialisation moving at a much quicker pace, contemporaries like Ellis commented on how 'the ancient walls, gates and street plan were gradually sacrificed to the demands of improvement ... culminated ... in driving railways through the heart of the historic city centre'.¹⁷⁰

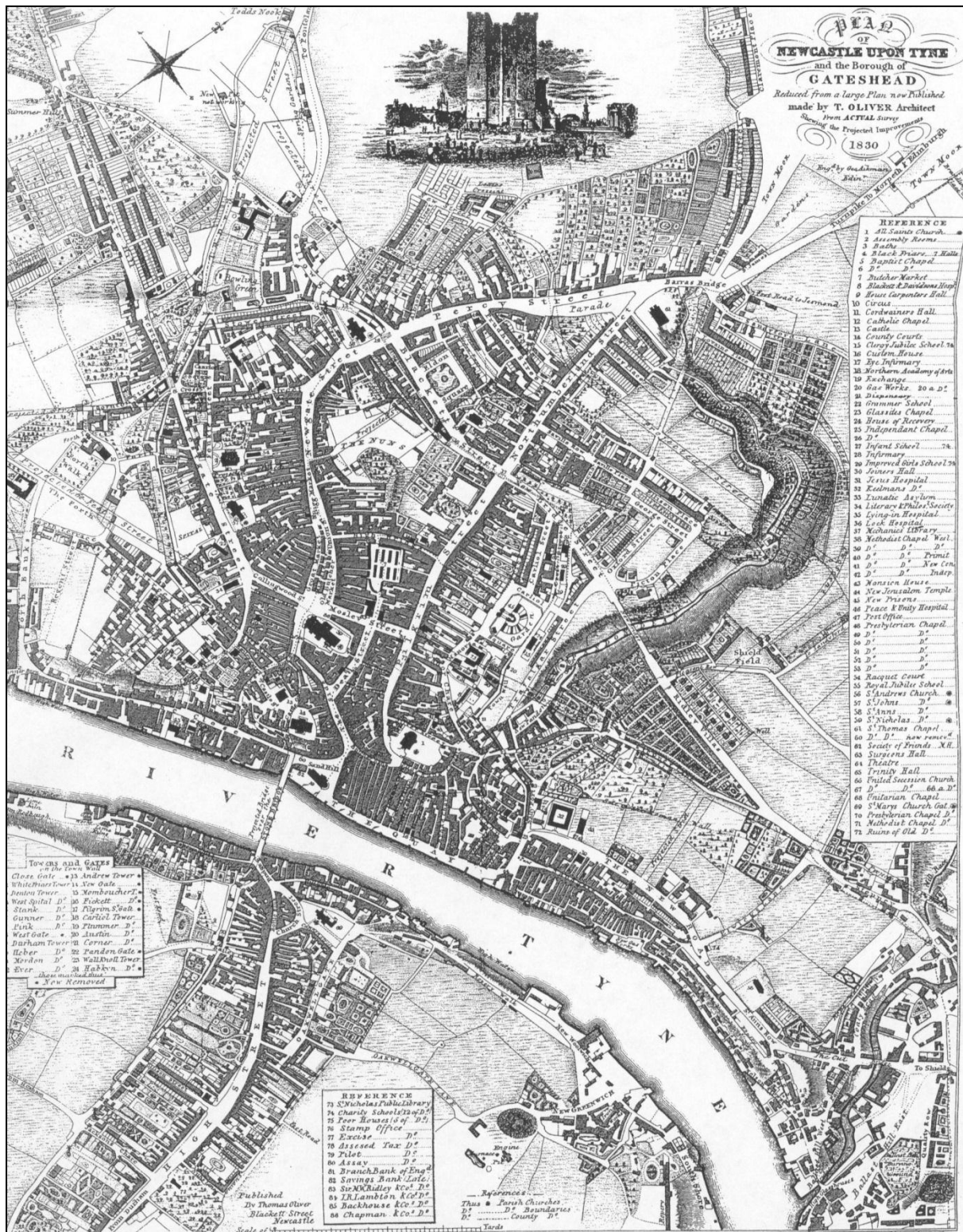
While physical growth appears to have occurred in the nineteenth century, the evidence we have suggests that during the eighteenth century the city appears to have undergone a period of sluggish development. This is important because if the city was expanding minimally physically but was increasing rapidly in population there would have been a corresponding increase in population density (and also, presumably, overcrowding and its associated disease transmission risks) within the existing housing stock. We need to look at this issue further by looking at the actual housing conditions themselves.

¹⁶⁸ D.B.Reid. *Report on the State of Newcastle-upon-Tyne and other towns, by D.B. Reid Esq, one of the commissioners appointed by her majesty for inquiring into the state of large towns and populous districts in England and Wales*, (London: 1845), 143.

¹⁶⁹ E. Mackenzie. *Historical Account of Newcastle-upon-Tyne: Including the Borough of Gateshead* (Newcastle: 1827), 715-730.

¹⁷⁰ Ellis. 'The 'Black Indies'', 26.

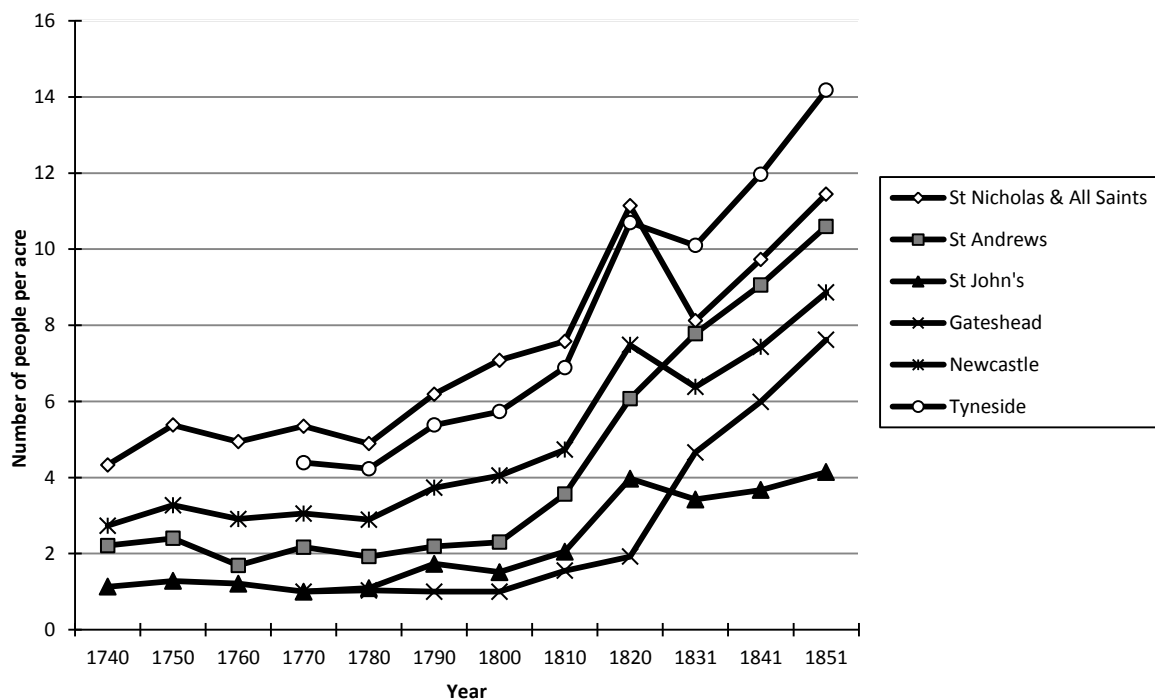
Figure 2.13 Map of Newcastle and Gateshead, engraved by T. Oliver, 1830



Source: TWAM DD/23/DS2.

Using the population estimates derived from the baptismal totals in the Bills of Mortality enables one to produce some rough estimates of population density in the city by correlating them with the parish acreage data recorded by the enumerators in the 1851 census. Figure 2.14 presents some rough estimates of the total number of individuals per acre of land in each of the parishes as well as plotting estimates of the total population of both Newcastle and Tyneside.¹⁷¹

Figure 2.14 *Population density estimates over time: number of persons in each parish per acre, 1740-1851*



Note: Population estimates were derived from the annual number of corrected baptism in each parish and the city as a whole using a notional birth rate of 32.5 per 1000. For a discussion of this method applied to the total population of Tyneside see the discussion in Chapter 1. An annual series of population estimates for each parish has been presented in Appendix 1 of the thesis.

Sources: Bills of Mortality database. The acreage of the parishes included in the above were extracted from the 1851 Newcastle and Gateshead Censuses, see Anon. *Population tables I, Vol. II. England and Wales. Divisions VII-IX. Scotland. Islands, 1851*, 6. For census population figures see: Rowe. 'Population of 19th Century Tyneside', 19-20.

Figure 2.14 shows patterns which might be expected from the previous discussion of population growth. For example, the number of inhabitants per acre during most of the eighteenth century was fairly stable in all of the parishes in question. The most densely populated areas appear to have been All Saints and St Nicholas. Between 1740 and 1790 there was an average of five inhabitants per acre in these parishes. During the last decade of the eighteenth century and first two decades of the nineteenth century this average increased

¹⁷¹ It is unfortunate that the 1851 census returns combine the acreage of St Nicholas and All Saints parish, for a discussion of the how to interpret the census material see: E. Higgs. *Making Sense of the Census Revisited: Census Records for England and Wales, 1801-1901* (London, 2005), 21-47.

to nearly 7 per acre, rising again during 1820-51 when the general population was booming to an average of nearly 10 inhabitants per acre. These avowedly rough estimates probably hide the fact that much of the northern area of city was lightly populated. In Harbottle's words the 'northern part of the township of Newcastle was ... open land, and indeed much of it still is'.¹⁷² Indeed, if we compare our evidence regarding the ratio of inhabitants to parish size to the contemporary maps and plans of the city, it is clearly the case that as the city grew over the course of the eighteenth and early nineteenth century there was no great surge in building. What of housing?

Overcrowding and insanitary living conditions seem to have been endemic in towns and cities in both pre-industrialised and industrialised England. This was nowhere more common than in London, where 'the poor physical quality of buildings ... was notorious, [and where it was] fairly common for houses to fall down around their inhabitants'.¹⁷³ In more provincial towns and cities this was also a feature of urban life. York had infamously wretched, congested neighbourhoods and streets such as 'Hagworths nest', while Liverpool's urban sprawl was notoriously blighted by areas such as 'Bachelor Street', associated with gross overcrowding and squalor.¹⁷⁴ As Hardy put it: '[these] streets haunted nineteenth-century Britain ... from them ... epidemic diseases would escape to ravage the rest of society'.¹⁷⁵ As characterised by Charles Dickens in *Bleak House*, it was from such environs and abodes that 'inhabitants were for month after month carried out by dozens, dead and dying'.¹⁷⁶ The fear was that these 'fever nests' would 'spread infection and contagion somewhere through every order of society, 'up to the proudest of the proud, and to the highest of the high'.¹⁷⁷

What was the situation on Tyneside in our period? In order to answer this question it seems important to begin by surveying the general housing conditions. The most relevant study on this topic is Grace's essay published in 1977 which examined the housing conditions in Newcastle and Gateshead in the later nineteenth century. Grace suggested that 'in general

¹⁷² B. Harbottle. 'The Medieval Archaeology of Newcastle', in D. Newton & A.J. Pollard ed., *Newcastle and Gateshead Before 1700* (Chichester, 2009), 38, 23-40.

¹⁷³ Landers. *Death and the Metropolis; Studies in the Demographic History*, 68.

¹⁷⁴ ¹⁷⁴S. Burrell *et al.* 'The Liverpool Cholera Epidemic and Anatomical Dissection, Medical distrust and Civil unrest', *Journal of the History of Medicine and Applied Sciences* 60 (2005), 479.

¹⁷⁵ Hardy. *The Epidemic Streets*, 1.

¹⁷⁶ *Ibid*, 1.

¹⁷⁷ C. Dickens. *Bleak House* (Harmondsworth, 1971), 364, 683; Hardy. *The Epidemic Streets*, 1.

terms, it seems that the typical working man's dwelling in the late eighteenth and early nineteenth century was about 15 feet square'.¹⁷⁸ Grace stressed that, while housing conditions and building standards might not have been much worse in the nineteenth century than in the eighteenth, the massing of houses together which occurred in the period prior to 1850 'made it much worse, leading to sanitary problems and epidemics'.¹⁷⁹ Indeed, as we shall demonstrate below, there appears to have been a strong spatial pattern of housing quality in the city.

At least during the eighteenth and early nineteenth century Newcastle seems to have been divided in terms of prevailing housing conditions into three core parts. Firstly, there was the northern part, consisting of spacious squares, large expensive houses, and open plots of land in Newgate, Westgate and at the top of Pilgrim Street. By the late eighteenth century there also appears to have been some development of housing in Gallowgate. Bourne noted that these were areas which were 'more retired than any other ... there being no Artificers or Mechanicks ... nor any market [being] ... chiefly inhabited by the clergy and the Gentry [whose] houses are situated in the middle of fields and Gardens'.¹⁸⁰ As one moves down through Pilgrim Street the situation seems to have been much different. This second area, associated with the city's trade and commerce started at the Bigg Market and the Side stretching down to the Sandhill and along the Quayside. Some of these areas were home to weekly markets in the seventeenth century, one of which was the Flesh Market, which Gray described as being 'one of the greatest markets in England'.¹⁸¹ By the end of the eighteenth century, some of these had disappeared and had given way to more specialist shops. Bourne noted in 1736 'the Side [a street moving down towards the river was] from the one end to the other fill'd with shops of Merchants, Goldsmiths, Milliners, Upholsterers &c'.¹⁸² By 1800 this 'trading' had developed around Castle-yard with 'a good many shops'.¹⁸³ In the early nineteenth century the houses in this area were described by Mackenzie as consisting 'mostly of low old houses'.¹⁸⁴ In the third chief area of the city, its southern part, housing conditions

¹⁷⁸ Grace. 'Tyneside Housing', 178.

¹⁷⁹ *Ibid*, 178.

¹⁸⁰ H. Bourne. *The History of Newcastle upon Tyne, or the Ancient and Present State of that Town* (Newcastle, 1736), cited in S. Middlebrook. *Newcastle upon Tyne: Its Growth and Achievement* (Newcastle, 1950), 118.

¹⁸¹ W. Gray. *Chorographia, or a Survey of Newcastle upon Tyne* (Newcastle, 1649), 68.

¹⁸² Bourne. *The History of Newcastle upon Tyne*, 121-22.

¹⁸³ *Ibid*, 53.

¹⁸⁴ Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 182-86.

do not seem to have been much better. Housing around the Quayside was described as ‘narrow, dirty and inconvenient’.¹⁸⁵ To the west of the Quayside there was The Close, which had in the seventeenth century been home to some of the more notable gentlemen, but by the early nineteenth-century was ‘noted ... for ... manufactories and warehouses’.¹⁸⁶ Moving west through to The Side, housing conditions were remarked upon for their ‘extreme narrowness ... dingy houses ... [which were] gloomy and dangerous’.¹⁸⁷ It is possible to gain an impression of house density on Tyneside by using the evidence recorded in the 1851 census of the number of individuals per inhabited building and comparing these numbers to what we know of the population size of Newcastle over the period. This has been done for each parish in Figure 2.15.

This graph most immediately confirms that it was All Saints and St Nicholas parishes where conditions were most cramped. Indeed throughout the eighteenth century there were more people per building in these two parishes than in the city as whole. This had changed somewhat by 1851 when the parish boundaries had increased substantially.¹⁸⁸ The parishes which had the fewest individuals per building during the Georgian era were St John’s and St Andrew’s, where there were more areas of open space.

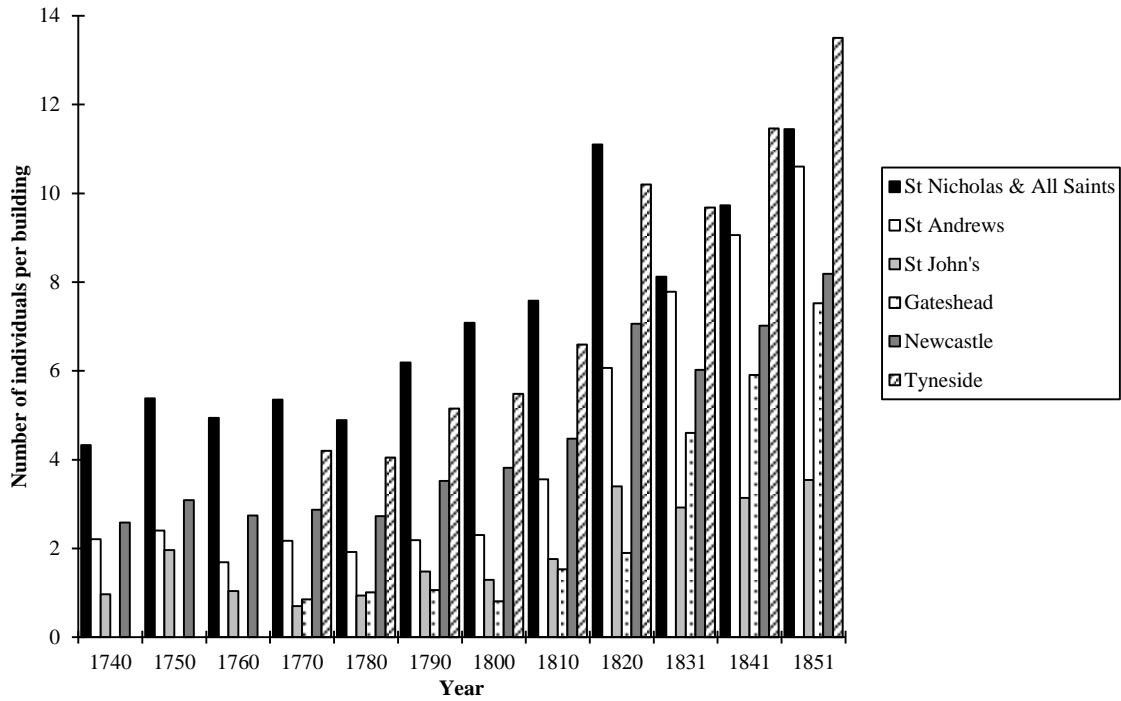
¹⁸⁵ *Ibid*, 182-86.

¹⁸⁶ *Ibid*, 182-86.

¹⁸⁷ *Ibid*, 182-86.

¹⁸⁸ For discussion of the registration district of Newcastle in the nineteenth-century see: Barke. ‘The People Of Newcastle’, 135-36.

Figure 2.15 *Estimated housing density on Tyneside and Newcastle over time: number of individuals per inhabited building, 1740-1851*



Note: The enumerators listed buildings in St Nicholas and All Saints jointly in the 1851 census.

Sources: Same as Figure 2.1

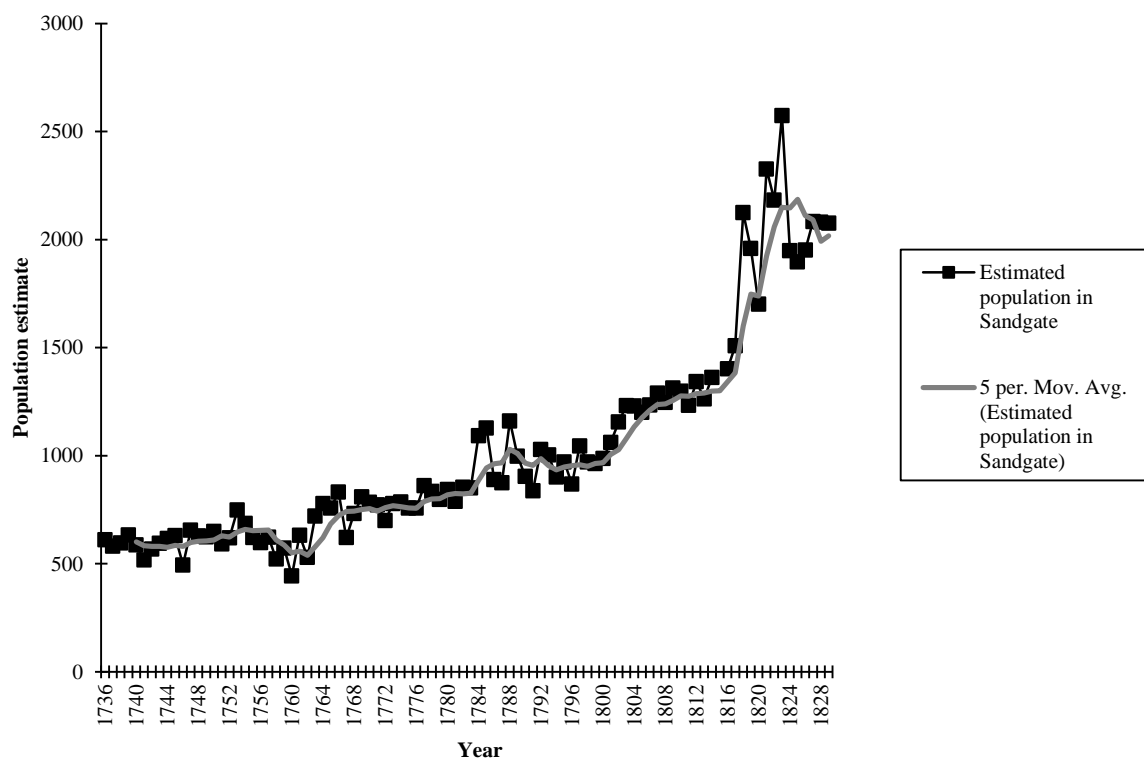
Figure 2.16 *Newcastle's East-End and Suburb of Sandgate, 1745*



Source: Same as Figure 2.12

It was in the city's third area, its east-end, where housing conditions were at their worst and where people were most crowded (2.16). This was particularly the case in Sandgate, the area of the city which Wrightson has called 'the established epicentre of infection in Newcastle' and in Wall Knoll and around the lower parts close to Pandon Dene.¹⁸⁹ In 1850 it was estimated that 3,000 people lived in Sandgate alone, constituting over 3% of the total population of the city.¹⁹⁰ It is possible to take this estimate of 3% of the population further to give one some rough understanding of how many individuals lived in Sandgate over the course of our period. This is demonstrated in Figure 2.17 together with a five-year moving average to show the resulting trend over time.

Figure 2.17 *Estimated population resident in Sandgate over time, 1736-1830*



Source: Bills of Mortality database.

¹⁸⁹ Wrightson. "That Lamentable Time", 247.

¹⁹⁰ This estimates probably under represent the number of people who actually lived in this area in the years prior to 1850, given that there the population of the city was growing massively in the first three decade of the nineteenth-century yet the city's building boom didn't take off until after 1850, which suggest that the population may have been much denser in that period, for discussion of this see: Grace. 'Tyneside Housing', 178-97.

These figures must be viewed as minimum population estimates.¹⁹¹ The evidence shows that the population in Sandgate grew steadily during the eighteenth century. The mean number of people residing in Sandgate during 1736-60 was ca. 600; from 1761-1800 this increased by 142% to a mean of over 855 people. During the first two decades of the nineteenth century the population in the suburb swelled to numbers which had never been experienced before. Between 1801 and 1830 there were on average 1,617 people living in this one area alone which was only 370 yards long 'and a single cart's width'.¹⁹² By the end of our period the population in Sandgate is said have doubled from this latter figure. In the nineteenth century and probably before 'there were 19 common lodging houses' in Sandgate.¹⁹³ 'Overcrowding in these tenement dwellings was likewise un-remedied' over the period.¹⁹⁴ The area was as Smith had already noted 'notorious for scenes of low life, vile odours and disregard of everything sanitary on the part of the tenants of the quaint, threatening looking houses which appear as if undecided whether they should forthwith resolve themselves into their original elements, or decide upon standing a little longer'.¹⁹⁵

We are fortunate that a detailed survey of All Saints parish which included Sandgate was made on the eve of a cholera epidemic 1831 by the Overseers of the Poor. The committee was ordered to investigate the state of the parish, and it was unanimously resolved:¹⁹⁶

That ... the Select Vestry and other Officers of this parish to use every means in their powers to prevent its [cholera's] introduction into this parish and also to put the parish into such a state as to render the probability of its spreading less likely to take place in the weeks of its unfortunate introduction for which purpose it was determined to survey the houses and streets and to order such precautionary measures as might seem likely to attain the object in view.¹⁹⁷

¹⁹¹ This arises from the fact the population estimates used to calculate Figure 2.15 were compiled using the baptismal totals in the Bills of Mortality which are likely to grossly undercount the number of children being born amongst the floating population in this part of the city. The data are however suggestive.

¹⁹² Grace. 'Tyneside Housing', 178-97.

¹⁹³ A vivid portrait of life in Sandgate can be gleaned from Grace's study. He notes that in the nineteenth-century in Sandgate, prostitution was 'emphatically the traffic' of the district, carried on in the 'most systematic manner', and that there was 'one prostitute to every one man'. See: Grace. 'Public Health on Tyneside', 36. Mackenzie noted that 'Plumber Chare was, noted a few years ago, as the receptacle of Cyprian Nymphs, whose blandishments were of the most coarse and vulgar description'; Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 163-64.

¹⁹⁴ J. Smith. 'Public Health on Tyneside, 1850-80', in N. McCord ed., *Essays in Tyneside Labour History* (Newcastle, 1977), 25, 25-46.

¹⁹⁵ Smith. 'Public Health on Tyneside', 35.

¹⁹⁶ A full transcribed copy of this document has been presented in Appendix 4. For reference to the original document see: TWAM 566/10.

¹⁹⁷ TWAM 466/10.

After investigating the situation in Sandgate, the committee made the following observations regarding various residents:

[in] Pothouse Lane they found that Henry Carr was in the habit of keeping pigs in a very improper situation ... owing to the faulty state of the roof of a house belonging to Luke Scaif of Summer Hill the tenants Renwick and others were under the necessity of laying ashes rubbish etc to absorb the moisture which rendered the room moist and damp [and] consequently un-healthy.¹⁹⁸

They was also 'large deposit[s] for ashes and filth of every kind ... behind Proctors Lane, North Shore belonging to the Gas Company'.¹⁹⁹ In 'Blue Bells Entry James Robertson's house' was said to be in a very poor state and also in dire need of being 'washed over with quick lime'.²⁰⁰ The committee also paid considerable attention to remedying the poor state of several local sewers, including a 'sewer at Fighting Cocks' which was ordered to be cleaned out, and a very large 'sewer' or 'wholesale deposit called Sandgate Midden where Butchers offal, blood and other animal matter from the slaughter houses, often in a high state of futurity are laid'.²⁰¹ In 'James Chare, Galloway's property occupied by Mary Montgomery was extremely dirty and should also be washed with quick lime ... [and] in Blue Bells Entry Jams Robertson's house was in the same state'.²⁰² The committee also found that the 'pavement of Sandgate in several places but particularly opposite Gibley's Public House where it has cut into deep rutts so as to throw past scavengers'.²⁰³

The housing and sanitary conditions in Sandgate were also much commented on by Thomas Greenhow, a notable doctor in the city, who noted that:

[The] houses are old, low and overcrowded and in narrow lanes and courts in such a manner as to preclude, as far as human ingenuity can accomplish, those changes of atmosphere and air which are essential to health. They are filthy, damp and crowded to excess with inhabitants, and frequently 10-12 persons sleeping in a room not more than four yards wide. Such is the character of the Sandgate, the lanes running from the quay to the close.²⁰⁴

¹⁹⁸ TWAM 466/10.

¹⁹⁹ TWAM 466/10.

²⁰⁰ TWAM 466/10.

²⁰¹ TWAM 466/10.

²⁰² TWAM 466/10.

²⁰³ TWAM 466/10. These are only some of the reports which were found by the committee, for more detail see Appendix 4.

²⁰⁴ Butler. 'Cholera and Newcastle', 25.

While Sandgate seems to have been the principle area of poor housing and overcrowding, the parish committee also reported similar conditions in the other wards including Pandon, remarking for example, the uncleanly state of ‘the Dunghill in Maggot Lane belonging to Catherine Jordon’, while ‘a very bad smell issued from the Barn Loft in Pandon belonging to Geo Willkie’.²⁰⁵ In the Newcastle Chare area of Quayside ward the great majority of ‘dirty people in many dirty rooms’ was highlighted, while Pandon Street was similarly found ‘in a dirty state [the] pavement bad [with] dirty houses and filthy inhabitants is a nuisance of a bad kind’, with ‘several tenements immediately adjoining [were] in a filthy condition’.²⁰⁶ Likewise in Pilgrim Ward, it was observed that:

The midden behind the Three Tonnes Inn at the Head of Manor Chare was most offensive and ought without loss of time to be removed ... it is the convenience used by numerous workmen in the employment of Wm. Grainger and the accumulation of soil is such as to impact the neighbourhood for a considerable time and is grossly offensive to those in the immediate vicinity.²⁰⁷

Clearly the conditions in the east-end and in Sandgate were not ‘conducive to health’.²⁰⁸ While there must have been a proportion of the population who resided in more spacious accommodation in the northern parts of the city, these areas were not where the majority of the city’s residents lived. It was in ‘All Saints [and] St Nicholas [parishes where] – the inhabitants lived in damp, over-crowded conditions, families often occupying one room’.²⁰⁹ As Reid’s nineteenth-century report confirmed it was in these areas of the city that ‘filth and refuse accumulate in the lanes and vacant corners’.²¹⁰ Worst of all were the lodging houses, presenting, ‘... the most deplorable exhibitions of the want of sanitary regulations to be found in the country – crowded in the extreme, dirty, ill-managed, occupied promiscuously by both sexes’.²¹¹ By the very end of the period 50% ‘of the population [of Newcastle] lived in tenements, 10,000 families in single rooms, and 6000 families with but two rooms each’.²¹² From the evidence we have examined and from what we know from late nineteenth-century

²⁰⁵ TWAM 466/10.

²⁰⁶ TWAM 466/10.

²⁰⁷ TWAM 466/10.

²⁰⁸ TWAM 466/10.

²⁰⁹ Smith. ‘Public Health on Tyneside’, 25.

²¹⁰ Reid. *Report on the State of Newcastle upon Tyne and other Towns, By D.R. Reid Esq. One of the Commissioners Appointed by Her Majesty*, 85.

²¹¹ *Ibid*, 93.

²¹² Butler. ‘Cholera and Newcastle’, 25.

sanitary reports, it is not at all surprising to find that it was Newcastle which headed the list of the most overcrowded and insanitary towns and cities in England.²¹³

2.4 Standards of living: the broad picture

What else can we say about living standards in the city? Early modern standards of living are normally estimated by the calculation and analysis of a series of real wages, which ‘have the advantage of being defined in relatively unambiguous terms’; unfortunately, as of yet, there is no series available for Newcastle’s working population in our period.²¹⁴ The only series which is available to understand the general picture is the ‘national’ sequence produced by Phelps Brown and Hopkins published in the 1950s.²¹⁵ Their series ‘drew together published material on wages and on the price of a basket of consumables over a period of seven centuries’.²¹⁶ Although the subject of real wages and the standard of living debate is now ‘one of the most controversial issues in English economic history’, national data does suggest some general patterns.²¹⁷ Wrigley and Schofield have emphasized that the Phelps Brown and Hopkins sequence if regenerated to take into account the north of England is useful ‘in providing a guide to the approximate timing and magnitude of changes in real wages over a very long period’.²¹⁸ For this reason, it seems defensible to use the real-wage series presented in Wrigley and Schofield’s study to help interpret long-term patterns at least at a national level, which should possibly tell us more about what was going on locally. These have been presented in Figure 2.18 together with an 11-year moving average.

²¹³ Reid. *Report on the State of Newcastle upon Tyne and other Towns*, 93.

²¹⁴ For a discussion of real wages in the seventeenth, eighteenth and nineteenth centuries see: J. Boulton. ‘Food Prices and the Standard of Living in London in the Century of Revolution, 1580-1700’, *Economic History Review*, LIII, 3 (2000), 455-92; L.D. Schwarz, ‘The Standard of Living in the Long Run: London, 1700-1860’, *Economic History Review*, 38, 1 (1985), 39-40; Wrigley & Schofield. *The Population History of England*, 638-44. Landers. *Death and the Metropolis: Studies in the Demographic History*, pp. 64-68; E. Hunt & W. Botham. ‘Wages in Britain during the Industrial Revolution’, *Economic History Review*, 40 (1987), 380-99; C.H. Feinstein. ‘Pessimism Perpetuated: Real Wages and the Standard of Living in Britain during and after the Industrial Revolution’, *Journal of Economic History*, 58 (1998), 625-58. For a recent discussion of the standard of living debate see: Floud *et al.* *The Changing Body: Health, Nutrition and Human Development*, 6-14.

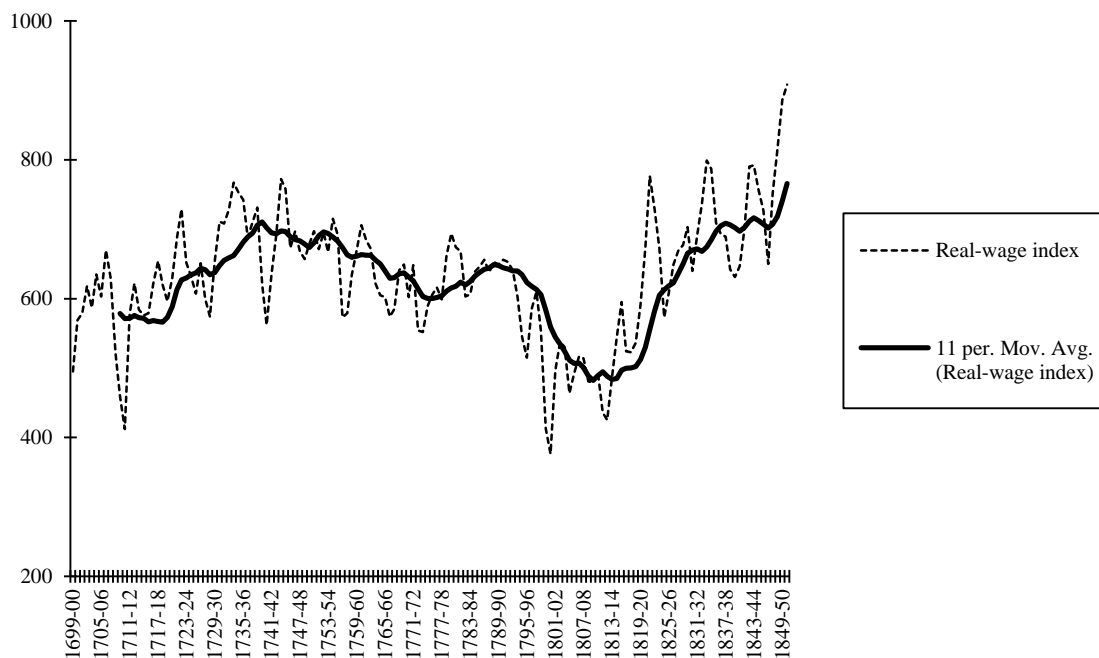
²¹⁵ E.H. Phelps Brown & S.V. Hopkins. ‘Seven Centuries of Building Wages’, in E.M. Carus-Wilson ed., *Essays in Economic History II* (London, 1962), 179-96.

²¹⁶ Wrigley *et al.* *The Population History of England*, 638.

²¹⁷ Landers. *Death and the Metropolis*, 65.

²¹⁸ Wrigley & Schofield. *The Population History of England*, 639

Figure 2.18 Movement in national real-wages, 1699-1851(11-year moving average)



Source: Wrigley & Schofield. *The Population History of England*, 643-44

There appears to have been a general improvement in real wages during the first half of the eighteenth-century (up until 1740). Subsequently the series shows a marked fall and, as Lindert has stated: ‘there was no clear improvement ... for the masses between 1750 and 1815’.²¹⁹ The most dramatic fall in wages in this period of decline seems to have been in the last decade of the eighteenth and first 15 years or so of the nineteenth century. Then from approximately 1814-15 onwards there seems to have been general improvement – something now commonly known by historians.²²⁰ Schwarz, claims that in these years ‘money wage rates fell rather little [but] prices fell a great deal ... this process was repeated at the end of the 1840s, this time without money wage rates falling at all’.²²¹ Botham and Hunt, however, have argued that there was a north-south divide in patterns of real wages and that ‘in the north real wages may well have increased in the second half of the eighteenth century’.²²² They suggest that the north’s ‘advantage [was] a consequence of the increased demand for labour and

²¹⁹ P.H. Lindert. ‘English Living Standards, Population Growth and Wrigley and Schofield’, *Explorations in Economic History*, 21 (1984), 135, 131-55.

²²⁰ Schwarz, has shown that real-wage rates for the London bricklayers in the exact same period shows a similar trend, he states: ‘there is the improvement in real wages ... for about a decade from 1814 – which will be familiar to historians since it is found in many parts of the country’, see: Schwarz. *London in the Age of Industrialisation*, 172.

²²¹ Schwarz. *London in the Age of Industrialisation*, 173.

²²² Botham et al. ‘Wages in Britain during the Industrial Revolution’, 382.

rising labour productivity'.²²³ This has yet to be proven, however, in terms of the north-east. Lindert's study emphasized that the decline was more widely felt than Botham *et al.* would allow for, stressing that 'neither common labourers nor artisans nor white-collared salaried employees, neither London workers nor rural workers, neither northerners nor southerners saw a clear rise in real incomes'.²²⁴ More recently, Feinstein has demonstrated that at a national level only 'from the 1850s did this give way to the greater sense of harmony, safety and social stability' in terms of wages.²²⁵ Thus in the period that this study is concerned it seems likely that there was no significant improvement in real wages, which suggests that the levels of disposable income of the city's working population may have been under pressure, particularly during the closing years of the eighteenth century. This notion is further strengthened by Huck's analysis of infant mortality in the north of England. Huck demonstrated that infant mortality rates rose during 1813-46, providing no basis to 'support ... the view that living standards were rising' in northern urban towns.²²⁶ This may have been more especially the case in Newcastle, since Basten's study demonstrated that the city's infant mortality was increasing particularly sharply in the first decade or so of the nineteenth century.²²⁷

What about food prices? Bread that 'food so necessary to the life of man' as one recent historian has put it, seems to have been increasing in price after 1760. Although one cannot highlight individual peak years in bread prices as Schwarz has argued, national movements over time are particularly instructive.²²⁸ Figure 2.19 the trend in bread prices over the period, wheat prices have also been presented for some important reasons. Firstly it has recently been suggested that besides bread in almost the same quantity 'wheat as oats' were commonly consumed in the north of England, particularly by novocastrians.²²⁹ Muldrew has emphasized that while '[w]heat could grow well in the lower areas of Lancashire, Cheshire and Yorkshire ... much was imported by coast into Newcastle, where it was consumed by labourers in the coal industry'.²³⁰ Frederick Eden was also well aware of this and noted that '[t]he usual diet for miners, keelmen and other labourers, in ... Newcastle, is hasty pudding and crowdie for

²²³ *Ibid.*, 382.

²²⁴ Lindert. 'English Living Standards, Population Growth', 135.

²²⁵ Feinstein. 'Pessimism Perpetuated: Real Wages and the Standard of Living', 651.

²²⁶ P. Huck. 'Infant Mortality and Living Standards of English Workers during the Industrial Revolution', *Journal of Economic History*, 55 (1995), 528-50.

²²⁷ Basten. 'Registration Practices in Anglican Parishes and Dissenting Groups', 110-43.

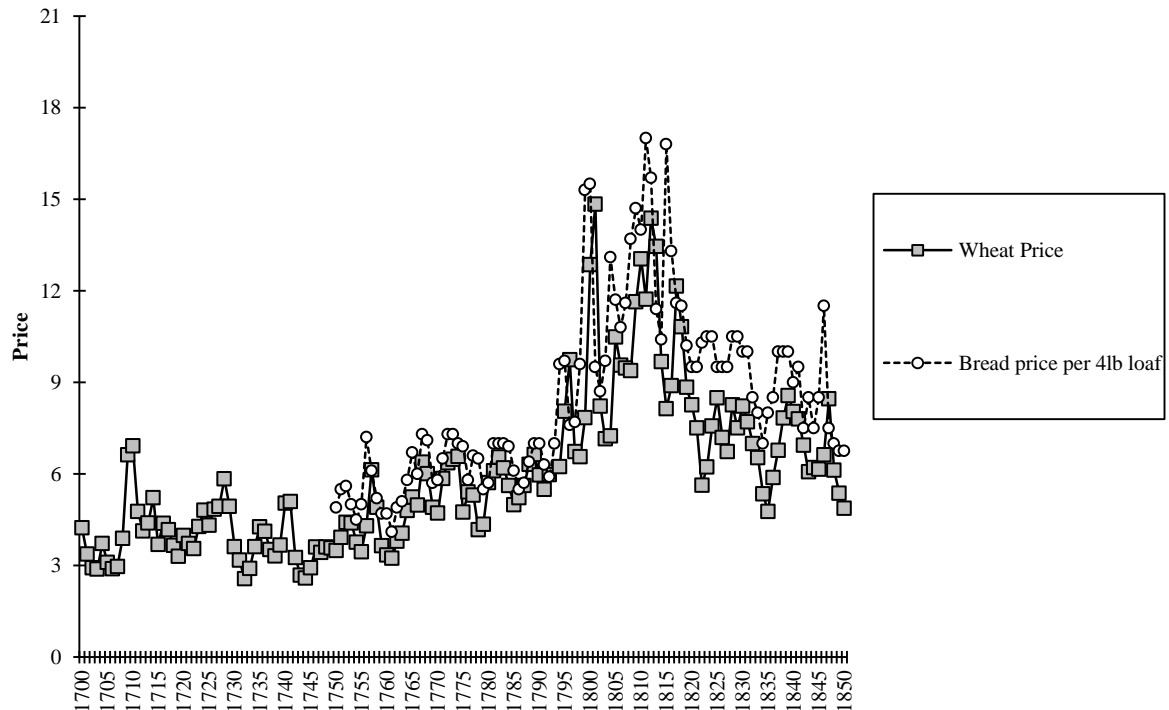
²²⁸ Schwarz. *London in the Age of Industrialisation*, 168.

²²⁹ Muldrew. *Food, Energy and the Creation of Industriousness*, 57-62.

²³⁰ *Ibid.*, 61.

breakfast; butchers meat (whenever they can purchase it), much butter [and] bread made of wheat'.²³¹

Figure 2.19 Bread prices and national wheat prices, 1700-1850



Source: London bread prices per 4lb wheaten loaf were extracted from: Mitchell *et al.* *An Abstract of British*, pp. 497-8: National wheat prices were extracted from: G. Clark. 'Prices of 22 domestic farm products, 1500-1914 from *The Price History of English Agriculture, 1500-1914*' [data-set URL: <http://www.econ.ucdavis.edu/faculty/gclark/English%20Data/farm2002.xls>] [Accessed March 15th, 2011].

Both bread and wheat prices seem to have been rising from the beginning of an era well known for grain riots, which were taking place from the later 1750s.²³² Dobson found that, particularly from the 1760s, industrial disputes were also beginning to break out.²³³ These were years of economic hardship and falling real wages, the effects of which were deeply felt on Tyneside, especially as contemporaneously city baptisms were at an all-time low and mortality rates conspicuously high. Contemporary accounts stress the first decade of the nineteenth century as a period of near 'famine conditions' in several years.²³⁴ On the 10th November 1796, when prices were beginning to rise rapidly, it was noted that:

²³¹ Eden. *The State of the Poor: Or an History of the Labouring Classes*, 560.

²³² R.B. Rose. 'Eighteenth-Century Price Riots and Public Policy in England', *International Review of Social History*, 6 (1961), 277-92.

²³³ For a discussion of these riots, see: Rose. 'Eighteenth-Century Price Riots', 277-92; C.R. Dobson. *Masters and Journeymen: A Pre History of Industrial Relations, 1717-1800* (Totowa, 1980), 22, 154-70.

²³⁴ Barke. 'The People of Newcastle', 137.

Great numbers of the working classes assembled ... in the several markets in Newcastle, and, in the presence of the town's officers, retailed the butter at the reduced price of 8d. per lb. the wheat at 12s. per boll, and potatoes out of the warehouses at 5s. a load. No violence was committed, except what was necessary in enforcing this illegal and temporary regulation of the market.²³⁵

Things got worse in the closing years of the eighteenth century when prices were soaring. In 1799, 'a bad harvest, [and] the effects of the war, combined to produce such a dearth, that wheat in the Newcastle market sold at one guinea a Winchester bushel'.²³⁶ In order to combat pressure from the city's working poor, 'on January 4, 1800, a public meeting was held in the Guildhall ... for the purpose of establishing a public soup-kitchen for the relief of the poor ... to which benevolent scheme the corporation gave 50 guineas'.²³⁷ During these years of hardship this provision was greatly utilised by the poor in the city: 'Cheap soup, had been carried on during the winter of 1797 and 1798; and, after this time, was occasionally revived with great success' ...²³⁸

The years between ca. 1797-1910 were recognised by contemporaries as particularly unhealthy for the city's population, as we have already demonstrated. Notable city physicians remarked upon the possible link between an increase in fever outbreaks and high food prices, one stating that:

The unusual appearance of this disease (fever), not only in Newcastle, but in most other large towns in the kingdom, can only be imputed to scarcity, to the bad quality, and to the high price of provisions. The Harvest of 1800, was late, the grain and potatoes damaged; and therefore the food of the poor has not only been scanty, but afforded little nutriment.²³⁹

The relationship between the health of the poor in the city and the impact of high food prices was also commented upon some years later:²⁴⁰

²³⁵ E. Mackenzie. *Historical Account of Newcastle-upon-Tyne: Including the Borough of Gateshead* (Newcastle, 1827), 66-88.

²³⁶ Mackenzie. *Historical Account of Newcastle*, 77.

²³⁷ *Ibid*, 66-88. It is also worth noting that the high prices in the city clearly caused some disturbance as Mackenzie notes: 'At this period of suffering and ill-humour, the public viewed all those who trafficked in the necessaries of life with an evil eye; and on August 18, a meeting was held to devise means for bringing to punishment all forestallers and regraters!', see: *Ibid*, 66-88.

²³⁸ Mackenzie. *Historical Account of Newcastle*, 77-78.

²³⁹ Anon. *An Account of the Newcastle Dispensary for the Year Ending Michaelmas 1801* (Newcastle, S Hodgson, 1801), 7.

²⁴⁰ For a detailed modern discussion of the relationship between nutrition and disease see: M. Livi-Bacci. 'The Relationship of Nutrition, Disease and Social Conditions: A Geographical Presentation', in R.I. Rothberg & T.K. Rabb ed., *Hunger and History* (Cambridge, Mass, 1985), 308; Landers. *Death and the Metropolis: Studies in the Demographic History*, 30.

During the winter (of 1805) the number of admissions (to the dispensary) was very great, from the long continued bad weather, which prevented many from earning a sufficient sum to procure proper food and clothing for themselves and families, thus inducing the predisposition to every species of disease, and more particularly from the prevalence of Typhus Fever. The epidemic which commenced in October last has continued, with unabated virulence, during the greater part of the year.²⁴¹

Our forgoing discussion has examined real wages and basic food stuffs. But as sickness and ill health could so easily impact the ‘economic lives’ of poor in the city is important to devote a brief section of this chapter to the types of employment in which the population were engaged.²⁴²

2.5 The structure of Newcastle’s economy and labour force

How did people make a living in early industrialising Tyneside? Understanding the types and patterns of occupation people were involved in is vital to adequately contextualising the pace, quality and longer-term experience/impact of life in early industrialising Tyneside. This is not merely a matter of broadly grasping the day-to-day activities in which the local population engaged, but scrutinising the seasonality of employment in the city in order to more comprehensively assess the varying levels and effects of hardship and prosperity experienced by the poor.²⁴³ For example sudden drops in wages and unemployment evidently impacted significantly, if not always measurably, on standards of living, as well as on access to healthy lifestyles, in the city. Thus some focus upon occupational patterns seems essential in a study concerned with the health experience of the city.²⁴⁴

The evidence on occupations for Newcastle is much more reliable in the nineteenth century than in the eighteenth.²⁴⁵ Recent extensive research, however, has been conducted on the

²⁴¹ Anon. *An Account of the Newcastle Dispensary for the Year Ending Michaelmas 1805* (Newcastle, 1806), 8-9.

²⁴² K. Wrightson. *Earthly Necessities: Economic Lives in Early Modern Britain, 1470-1750* (New Haven, 2000), 8, i-iii.

²⁴³ As Schwarz has noted, in ‘all trades, people would be laid off in a slack period, and earnings for all others would be less’, Schwarz. *London in the Age of Industrialisation*, 104.

²⁴⁴ For a discussion of the seasonality of rural workers see; Snell. *Annals of the Labouring Poor*, 15-66.

²⁴⁵ D.J. Rowe. ‘Occupations in Durham and Northumberland, 1851-1911’, *Northern History*, 8 (1973), 119-31; J.F. Clarke. ‘Workers in Tyneside Shipyards’, in N. McCord ed., *Essays in Tyneside Labour History* (Newcastle, 1977), 109-31; Barke. ‘The People of Newcastle’, 133-35.

occupational structure of England between 1750 until 1850, led by Leigh Shaw-Taylor and E.A. Wrigley of the *Cambridge Group for the History of Population and Social Structure*.²⁴⁶ Their detailed project included an examination of Northumberland and Newcastle in the early nineteenth century.²⁴⁷ The data for Newcastle and Gateshead set out in Table 2.3 is based on parental occupational titles recorded in over 16,000 legitimate registered baptisms in one of the region's Anglican parishes, as well as on those recorded in the register of the Newcastle Lying-in Hospital between 1813 and 1820 (the evidence from the 1851 census has additionally been included for comparison).²⁴⁸

²⁴⁶ L. Shaw-Taylor & E.A. Wrigley. 'The Male Occupational Structure of England, c. 1750-1850: A Preliminary Report', available on the University of Cambridge Geography Department website: www.hpss.geog.cam.ac.uk. I am extremely grateful to Leigh Shaw-Taylor and Tony Wrigley for supplying the relevant datasets for Newcastle and Gateshead which were compiled by Dr Peter Kitson and to Peter Kitson for production of the Table 2.3.

²⁴⁷ P. Kitson. 'The Male Occupational Structure of Northumberland, 1762-1871: A Preliminary Report', 1-19, available on the University of Cambridge Geography Department website: www.hpss.geog.cam.ac.uk.

²⁴⁸ The occupational coding system is the PST classification system pioneering by Tony Wrigley, for discussion see: E.A. Wrigley. 'The PST System of Classifying Occupations', available on the University of Cambridge Geography Department website: www.hpss.geog.cam.ac.uk. The parish register data is based upon legitimate baptisms in the four parishes of Newcastle as well as the returns for the Lying-in Hospital which have been re-weighted since they only survive from 1816. All of these figures relate only to the male occupations in the city since they are based upon the occupational status of the Fathers involved.

Table 2.3 *The male occupational structure of Newcastle and Gateshead, 1813-20, 1851*

	Gateshead Parish registers (1813-20)	Percentage Distribution	Newcastle Parish registers (1813-20)	Percentage Distribution	'Tyneside' Parish registers (1813-20)	Percentage Distribution
Primary	890	21.2%	1,575	12.4%	2,465	14.6%
Secondary	2,178	51.8%	5,406	42.5%	7,584	44.8%
Tertiary dealers	58	1.4%	268	2.1%	326	1.9%
Tertiary sellers	48	1.1%	470	3.7%	518	3.0%
Tertiary services and professions	252	6.0%	1,419	11.2%	1,671	9.8%
Transport and Communications	532	12.6%	2,624	20.6%	3,156	18.6%
Without occupation or unstated	15	0.4%	79	0.6%	94	0.5%
Sectorally unspecific occupations	235	5.6%	874	6.9%	1,109	6.5%
Total	4,208	100.0%	12,715	100.0%	16,923	100.0%
	Gateshead 1851 Census	Percentage Distribution	Newcastle 1851 Census	Percentage Distribution	Tyneside 1851 Censuses	Percentage Distribution
Primary	2,296	17.7%	1,191	4.3%	3,487	8.5%
Secondary	7,079	54.6%	15,125	54.3%	22,204	54.4%
Tertiary dealers	164	1.3%	695	2.5%	859	2.1%
Tertiary sellers	337	2.6%	1,538	5.5%	1,875	4.5%
Tertiary services and professions	575	4.4%	3,015	10.8%	3,590	8.7%
Transport and Communications	1,190	9.2%	3,510	12.6%	4,700	11.5%
Without occupation or unstated	258	2.0%	592	2.1%	850	2.0%
Sectorally unspecific occupations	1,060	8.2%	2,190	7.9%	3,250	7.9%
Total	12,959	100.0%	27,856	100.0%	40,815	100.0%

Source: ESRC Project: 'Male Occupational Change and Economic Growth, 1750-1851', led by Dr Leigh Shaw-Taylor and Prof Sir Tony Wrigley, Cambridge University. I am grateful to Dr Peter Kitson for providing the data in Table 2.2. A full list of the occupations used to construct Table 2.4 has been presented in Appendix 3.

Newcastle and Gateshead possessed a dynamic occupational structure. The largest proportion of the occupations of both Newcastle and Gateshead belonged in the secondary sector accounting for nearly 45% of the 1813-20 parish register occupations and nearly 55% of the occupations recorded in the census. The evidence also demonstrates some disparity in dominant occupations that came under this heading. For example in Gateshead it was iron and steel manufacturing which accounted for the largest proportion of the occupations in that group, while in Newcastle it was building and construction. Despite these differences in the secondary sector, there seems to have been some similarities. Other commonly listed occupations included those who were employed in footwear working, glass industries, building and construction, food industries and wood industries.

Transport and communication also made up a reasonable proportion of the city's occupations accounting for just over 12% of Gateshead's occupational groups and just over 20% of Newcastle's. Collectively they amounted to 19% of the total employed on Tyneside. In Newcastle, the majority of these were men involved in inland navigation, sea and road transport, reflecting the strongly maritime industrial and commercial nature of port. These sorts of occupations had long played an important part in the economy of the city from at least the seventeenth century, and moreover following development of the coal trade.²⁴⁹ Overall, however, the evidence suggests that inland navigation and sea transport appears to have been of slightly more significance in Newcastle than in Gateshead.²⁵⁰

As for the other occupational categories, the primary sector, in both Newcastle and Gateshead, was dominated by men employed in mining and quarrying and those still employed in agriculture.²⁵¹ In the tertiary sector, dealers were numerous, including dealers in drink and textiles as were sellers of chemical products, textile products and tobacco. In the tertiary services and professions sector there was a substantial proportion of males in the armed forces, as well as significant numbers in food, drink and accommodation services and commercial and administrative services.

²⁴⁹ Wright. 'Water Trades on the Lower River Tyne in the Seventeenth', 132-63.

²⁵⁰ For example in Gateshead these categories accounted for 9.5% of Transport and Communications occupations, while in Newcastle they accounted for 18.9%, see Appendix 3.

²⁵¹ For discussion of the decline in agriculture during the industrial revolution see: E.A. Wrigley. 'Urban Growth and Agricultural Change: England and the Continent in the Early Modern Period', *Journal of Interdisciplinary History*, 15 (1985), 683-728.

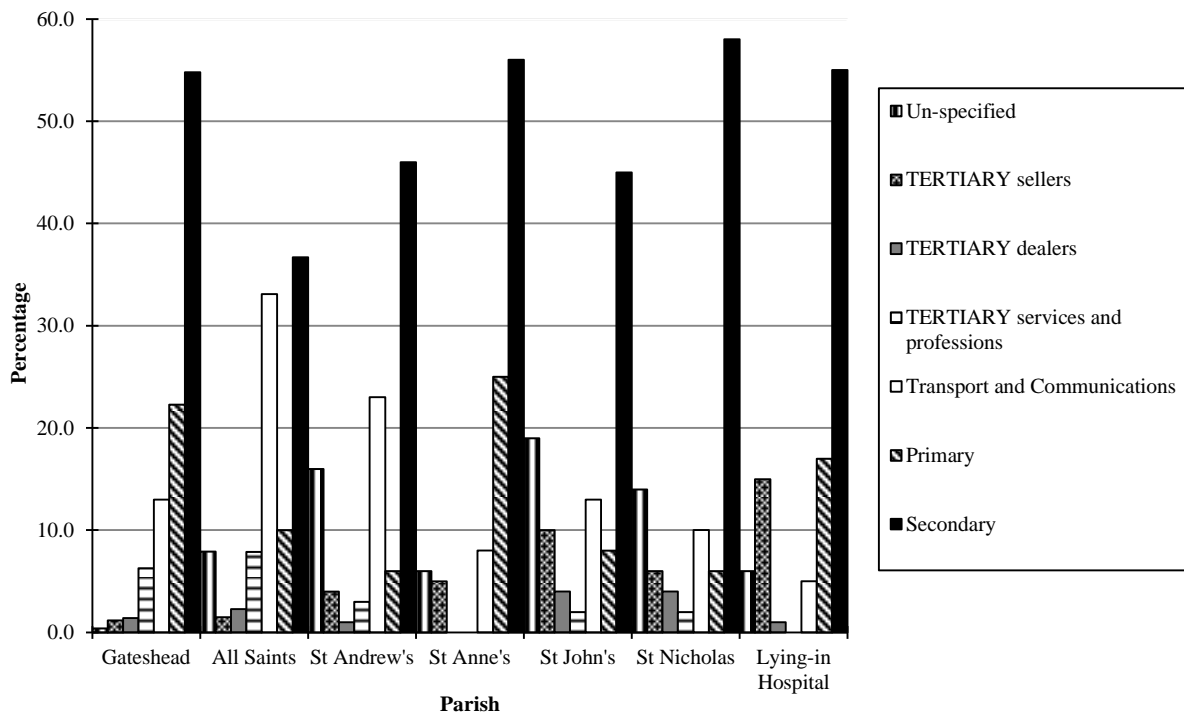
By 1851 there seems to have been a general fall in the primary sector, which was probably caused by rapid industrialisation on Tyneside during 1820-50. The secondary sector by contrast seems to have grown significantly in Newcastle and slightly in Gateshead. The 1851 census shows that the most common occupational profile in the secondary sector comprised males employed in construction, footwear, iron and steel manufacture, and food and drink. As Kitson has shown, during 1813-20, the tertiary sector accounted for 34.2% of male occupations, while by 1851 this proportion had altered little, declining marginally to 32.7%, at this mid-century juncture there remained large numbers of men employed in transport dealing, retailing, and the professions.²⁵²

In order to more concertedly examine occupational zoning in the city we need to return to the parish register data. This has been presented in Figure 2.20 below using the PST coding system for each parish in the city. All of the parishes were dominated by the secondary sector but there also appears to have been some degree of occupational zoning.²⁵³ Most strikingly, All Saints parish appears to have had nearly as many men engaged in transport and communications as there were in the secondary sector, something which is not observable in any of the other parishes.

²⁵² Kitson. 'The Male Occupational Structure of Northumberland, 1762-1871', 11.

²⁵³ For discussion of this in early modern London, see: M.J. Power. 'The Social Topography of Restoration London', in A.L. Beier & R. Finlary eds., *The Making of the Metropolis: London, 1500-1700* (London, 1986), 199-223.

Figure 2.20 *The Occupational Structure of Newcastle and Gateshead by parish, 1813-20*



N = 16,923

Source: Same as Table 2.3 above.

Comparatively the only parish which comes anything close to All Saints is St Andrews Parish, but overall evidence reveals that Newcastle's parishes were dominated by the secondary sector. Table 2.3 takes the discussion somewhat further by presenting the most common occupational labels used in the city baptism records for each parish. The significance of the water trade occupations in All Saints comes immediately to the fore, though All Saints is not alone in this. The data also reveal that all of the other parishes in the city had males with recorded occupations linked to the water trades; for example, 23 Keelmen had children baptised in St John's Parish; 40 Mariners had children baptised in St Nicholas' and 52 mariners had children baptised in St Andrew's.

Table. 2.3 *Most commonly occurring male occupations recorded in Newcastle's parish registers, 1813-20*

<u>All Saints</u>			<u>St Andrews</u>			<u>St Anne's</u>			<u>St John's</u>			<u>St Nicholas</u>		
	No.	%		No.	%		No.	%		No.	%		No.	%
Waterman	1,246	19.1	Yeoman	183	8.8	Mariner	12	11.7	Pitman	140	9.1	Cordwainer	137	7.6
Mariner	661	10.1	Pitman	182	8.8	Ship wright	8	7.8	Labourer	124	8.0	Labourer	107	5.9
Labourer	449	6.9	Cordwainer	99	4.8	Keelman	7	6.8	Cordwainer	70	4.5	Glass maker	95	5.2
Pitman	302	4.6	Joiner	89	4.3	Blacksmith	6	5.8	Joiner	48	3.1	Tailor	88	4.8
Yeoman	243	3.7	Butcher	65	3.1	Pitman	5	4.9	Tailor	41	2.6	Yeoman	87	4.8
Ship wright	234	3.5	Labourer	64	3.1	Potter	5	4.9	Agent	37	2.4	Shoemaker	62	3.4
Cordwainer	186	2.8	Carpenter	54	2.6	Bottle maker	4	3.9	Butcher	34	2.2	Soldier	50	2.7
Smith	154	2.3	Mariner	52	2.5	Joiner	4	3.9	Grocer	32	2.0	Pitman	47	2.6
Joiner	147	2.2	Smith	49	2.3	Sawyer	4	3.9	Blacksmith	31	2.0	Joiner	46	2.5
Glass maker	130	1.9	Merchant	49	2.3	Labourer	4	3.9	Bricklayer	25	1.6	Smith	40	2.2
Tailor	111	1.7	Gardener	44	2.1	Waterman	4	3.9	Tanner	25	1.6	Mariner	40	2.2
Butcher	109	1.6	Bricklayer	42	2.0	Brick maker	3	2.9	Cabinet maker	24	1.5	Innkeeper	33	1.8
Soldier	102	1.5	Husbandman	40	1.9	Miller	3	2.9	Unknown	24	1.5	Bottle maker	29	1.6
Merchant	97	1.4	Millwright	35	1.6	Ship carpenter	3	2.9	Servant	23	1.5	Bricklayer	26	1.4
Master mariner	97	1.4	Soldier	35	1.6	Collier	2	1.9	Keelman	23	1.5	Butcher	26	1.4
Potter	91	1.3	Private	34	1.6	Glass maker	2	1.9	Esquire	22	1.4	Collier	25	1.3
Weaver	90	1.3	Mason	33	1.6	Master mariner	2	1.9	Farmer	21	1.3	Flax dresser	24	1.3
Agent	74	1.1	Esquire	33	1.6	Husbandman	1	0.9	Painter	21	1.3	Excise officer	22	1.2
Carpenter	66	1.0	Tanner	32	1.5	Block maker	1	0.9	Coach maker	19	1.2	Barber	20	1.1
Other	1,916	29.4	Others	848	79.8	Others	22	21.5	Others	748	48.8	Others	797	44.2
Total	6,505	100.0	Total	2,062	100.0	Total	102	100.0	Total	1,532	100.0	Total	1,801	100.0

Source: Same as Table 2.3 above.

Clearly the city's occupational structure was diverse. Newcastle's status as a trading metropolis was well recognised and oft celebrated by contemporaries, the city being 'next to Bristol ... the greatest trading [provincial] town in England ... large populous and rich'.²⁵⁴ As Ellis observed over ten years ago:

Newcastle's status as a port and commercial centre ranking fourth in the urban hierarchy after London, Norwich and Bristol is apparent in all contemporary accounts ... It was in fact an ideal example of Defoe's sea-port towns where trade flourishes, as well as foreign Trade and home Trade, and where navigation, Manufacturing and Merchandize seem to assist one another.²⁵⁵

Frederick Eden's description of the city's labour force also reinforces with the other primary evidence we have regarding the city's occupational main strengths and diversity:

Every occupation, derived from, or connected with, the coal trade, or mines, is here carried out with great vigour. There are glass-works, potteries, foundries, forges, a fail-cloth, and other manufactories, in and near Newcastle ... The inhabitants consist of sailors, coal miners, keelmen, seamen, shopkeepers of various descriptions, merchants and gentlemen of independent fortune.²⁵⁶

2.6 Poverty and the Seasons

What can we say about poverty in the city? For most historians, it has been a truism that the 'the predominant feature of [early modern] English society ... was social inequality'.²⁵⁷ It is also well known that there were serious economic divides between northern and the southern England. As Snell has observed: 'the economic divides between the poorly paid, "de-industrialised" south and the high wage, industrial north [are] clearly recognised'. While this is especially pertinent for the mid-nineteenth century, it is also well acknowledged that the situation in the eighteenth century had been very different, as 'the high and low wage regions ... had become entirely reversed'.²⁵⁸ More recently it has been suggested by King that poverty levels 'were similar in the north and the south and that in both regions we can see a developing late eighteenth- and early nineteenth-century life-cycle poverty problem'.²⁵⁹ In a

²⁵⁴ Ellis. 'The Black Indies: The Economic Development', 1.

²⁵⁵ D. Defoe. *A Plan of English Commerce* (1728), 85, cited in, Ellis. 'The Black Indies: The Economic Development', 2.

²⁵⁶ F.M. Eden. *The State of the Poor: Or an History of the Labouring Classes in England, from the Conquest to the Present Period* (London, 1797), 560.

²⁵⁷ Boulton. *Neighbourhood and Society: A London Suburb*, 99, 99-119; K. Wrightson. *English Society 1580-1680* (London, 1982), 17-38.

²⁵⁸ Snell. *Annals of the Labouring Poor*, 1.

²⁵⁹ S. King. *Poverty and Welfare in England 1700-1850: A Regional Perspective* (Manchester, 2000), 181.

city where the local economy was dominated by the coal/shipping and transport the economy of the poor is likely to have experienced seasonal prosperity, vulnerability and hardship.²⁶⁰ Wrightson and Levine in their study of the industrialising parish of Whickham have shown that the economic prosperity of the local mining community was subject to considerable levels of volatility, with rapid and marked shifts at different times in the year. In Whickham, a fall in the mining industry in 1715 left a staggering 43% of village households reliant on the parish, something which occurred again in 1743 when 36% of households in the village were ‘on the parish’ coffers.²⁶¹

The 1665 hearth tax returns demonstrate that 43% of all households in the city were exempt from paying tax in that one year.²⁶² More striking is that the majority of these poor households came from the one area in the city which we have already examined at great length, namely Sandgate.²⁶³ The problem with these estimates is that ‘hearth tax exemption only captures the stable sections of the population’, generally excluding ‘the more marginal and transitory (including large numbers of lodgers vagrants and squatters)’.²⁶⁴ Despite this element of incompleteness, the data (which if anything underestimates the most destitute classes of all) does reliably confirm that a significant proportion of the households in seventeenth-century Newcastle were poor.²⁶⁵

²⁶⁰ Wright. ‘Water Trades on the Lower River Tyne in the Seventeenth and Eighteenth’, 132-63.

²⁶¹ Levine & Wrightson, *The Making of an Industrial Society: Whickham*, 379-80.

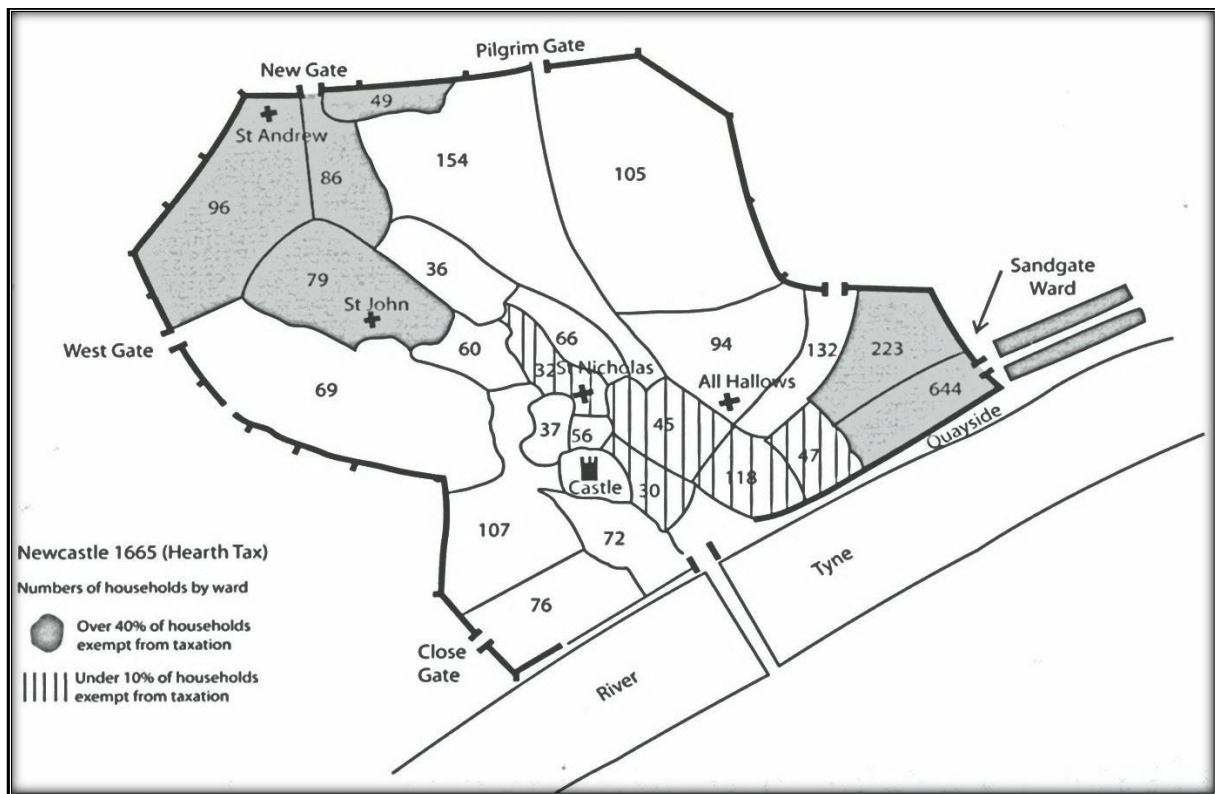
²⁶² R. Welford. ‘Newcastle Households in 1665’, *Archaeologia Aeliana*, 3 (1911), 49-76. For a useful discussion of benefits and limits of the Hearth Tax records, see: N. Goose. ‘How Accurately do the Hearth Tax Returns Reflect Wealth? A Discussion of some Urban Evidence’, *Local Population Studies*, 67 (2001), 44-63.

²⁶³ Welford. ‘Newcastle Households’, 49-76; Also see: K. Wrightson. ‘“That Lamentable Time”: Catastrophe and Community in the Great Newcastle Plague of 1636’, in D. Newton & A.J. Pollard ed., *Newcastle and Gateshead before 1700* (Chichester, 2009), 241-64.

²⁶⁴ A. Green. ‘Heartless and Unhomely? Dwellings of the Poor in East Anglia and North East England’, in J. McEwan & P. Sharpe ed., *Accommodating Poverty: The Housing and Living Standards of the English Poor, c. 1600-1850* (Basingstoke, 2011), 72, 69-101.

²⁶⁵ Green. ‘Heartless and Unhomely’, 72.

Figure 2.21 *Hearth Tax Map of Newcastle, 1665*



Source: Wrightson 'That Lamentable Time': Catastrophe and Community', 246

Reliable quantitative data for the eighteenth century are extremely hard to come by. According to Eden, however, in 1797 Newcastle, 'exclusive of the out-townships,.. very little land, un-built on, belongs to either of the parishes; so that the poor rates are chiefly raised from houses'.²⁶⁶ The number of assessed houses in the city was 2,516, 49% of which were in the parish of All Saints alone.²⁶⁷ Eden stressed that 'the number of exempted houses must be considerably greater' (exempted from the poor rate).²⁶⁸ This suggests that by the late eighteenth-century there were still a significant numbers of households in the city who were on the poverty line and that the vast majority of these were still located in All Saints.

Contemporary evidence from the late eighteenth century reveals much money was being spent on the poor in the city. In 1784 for example the annual amount raised from the city's four ancient parishes of St Nicholas, St John's, All Saints and St Andrew's amounted to a

²⁶⁶ Eden. *The State of the Poor*, 560. These figures also suggest that around 50% of the city's total population resided in the All Saints parish in the period.

²⁶⁷ There were 2,516 houses assessed in Eden's study, of which, 1,224 were in All Saints parish, 476 were in St Andrew's parish, 476 in St John's and 340 in St Nicholas parish, see: Eden. *The State of the Poor*, 560.

²⁶⁸ Eden. *The State of the Poor*, 551.

total of £3,307 13s 1d.²⁶⁹ By 1803 this had increased by to the sum of £8,635 7s 6d.²⁷⁰ In 1803 nearly 5% of the total population of Newcastle were permanently relieved by the Poor Law. But what is most interesting is that of this 5%, 48% of these paupers were in All Saints Parish, 11% were in St Andrews parish, 18% were in St Nicholas parish and a mere 8% were in St John's.²⁷¹

What can we say of the seasonality of poverty in the city? This is an important topic to study in a thesis concerned with sickness and healthcare because, while there can be specific levels of 'background' poverty in a population, it is well recognised by scholars that poverty, employment, illness and mortality levels could fluctuate substantially in relation to the seasons. As Woodward pointed out:

The changing seasons affected labourers and building craftsman ... less work was available in the winter months than at other times in the year, and the reduction in hours of daylight meant that at least some workers were paid at lower daily rates during the winter.²⁷²

Recent work on poverty and poor relief in the eighteenth century has demonstrated that while there were many paupers who were permanently relieved indoors and outdoors, there was a proportion of the poor who received temporary relief only.²⁷³ This population is far more difficult to study and in many instances these people can often 'be invisible to the historian'.²⁷⁴ John Marshall was aware of this floating population and his work which was published in the early nineteenth century is particularly helpful in understanding this locally. The evidence he compiled for Newcastle and Gateshead demonstrated that 56% of Newcastle's poor were being relieved outdoors (out of workhouse) and 11% were relieved permanently in Newcastle's workhouses.²⁷⁵ Marshall also showed that there was a

²⁶⁹ St Nicholas Parish, £660; St John's, £483 11s 1d; All Saints, £1572 6s 9d; St Andrew's, £591 15s 3d. See for reference: Mackenzie. *Historical Account of Newcastle*, 540, 540-45.

²⁷⁰ St Nicholas Parish, £2,200 5s 9d; St John's, £969 8s 1d; All Saints, £4,285 15s 5d; St Andrew's, £1,179 18s 3d. See for reference: Ibid, 540. In 1815 poor relief expenditure was distributed thus: St Nicholas Parish, £3,479; St John's, £2,355; All Saints, £6,232; St Andrew's, £3,117 0s 0d. See for reference: Ibid, 540.

²⁷¹ All Saints (646 paupers), St Andrews (146 paupers), St Nicholas (238 paupers) and St John's (113 paupers), for reference see Chapter 5.

²⁷² D. Woodward. *Men at Work: Labourers and Building Craftsmen in the Towns of Northern England, 1450-1750* (Cambridge, 1995), 135.

²⁷³ For reference see: King. *Poverty and Welfare in England*, 141-80, 181-226, Green. *Pauper Capital: London and the Poor Law*, 25-50; Levine & Wrightson. *The Making of an Industrial Society*, 344-74.

²⁷⁴ L. Schwarz & J.P. Boulton 'The Lives of the Poor in the West End of London, 1724-1867: Full Research Report' *ESRC End of Award Report* (2007), 3-4.

²⁷⁵ Marshall. *An Account of the Population in Each of Six Thousand of the Principle Towns and Parishes in England*, 9.

considerable proportion of the poor in the city who were relieved occasionally, something close to 32% of the pauper population.²⁷⁶ The situation was different in the Gateshead, where 78% of the poor were relieved outdoors, some 10% were relieved in local workhouses and only 11% were on the occasionally relief lists. The significant number of paupers receiving occasional relief in the city was most likely a result of the seasonality of the city's economy.²⁷⁷

So how then did the seasonality of trade impact upon the levels of poverty, hardship and mortality in the city's population?²⁷⁸ Figure 2.21 sets out the seasonality of coal export from the port of Newcastle.²⁷⁹ Clearly, coal shipments from the port were subject to much seasonal variation. As other historians have suggested this was usually due to the fact that Tyneside's coal trade slowed down and virtually stopped in the winter months due mainly to bad weather and sea conditions, and because coal became badly damaged from freezing winter frosts. This is what Levine and Wrightson describe as the 'dead season in the coal trade'.²⁸⁰

²⁷⁶ *Ibid*, 9. It is also worth mentioning that Marshall records that some 6,840 person in the city were also member of the various Friendly societies. *Ibid*, 9

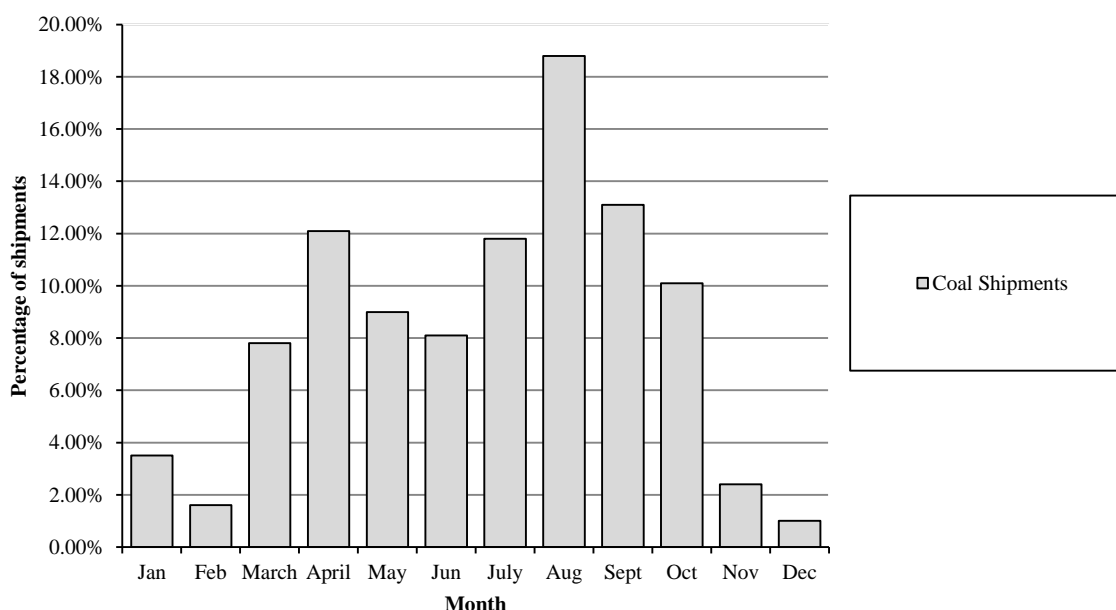
²⁷⁷ For a recent discussion of the seasonality of the Newcastle coal trade see: Ellis. 'The Black Indies: The Economic Development', 1-5. For a detailed study of the seasonality of rural hardship see: Snell. *Annals of the Labouring Poor: Social Change and Agrarian England*, 148-59. The impact that the seasons had upon the economy of London has been explored in great depth by Schwarz see; Schwarz. *London in the Age of Industrialisation*, 103-23.

²⁷⁸ Landers, study of the London Bills of Mortality has demonstrated that the diseases and conditions which killed Londoners were subject to specific levels of volatility at certain times in the year, see: Landers. *Death and the Metropolis*, 203-42.

²⁷⁹ These data are based upon material extracted from Newcastle's Port Books held in The National Archives, Kew, for reference, see, TNA: E/190/207/4. Thanks to Dr Peter Wright for providing the author with a copy of his thesis. The Newcastle port books have been examined extensively by historians interested in the History of city and the region, see for discussion: Ellis. 'The Black Indies: The Economic Development', 1-5.

²⁸⁰ Welford. *Newcastle and Gateshead, Vol. 3*, 348; Hughes. *North Country Life*, 251; Wright. 'Water Trades on the Lower River Tyne', 142-44; Levine & Wrightson. *The Making of an Industrial Society*.

Figure 2.21 *Seasonality of shipments from the port of Newcastle, (1702-03)*



Source: For shipping data see: Wright. 'Water Trades in the Lower River Tyne', 142.

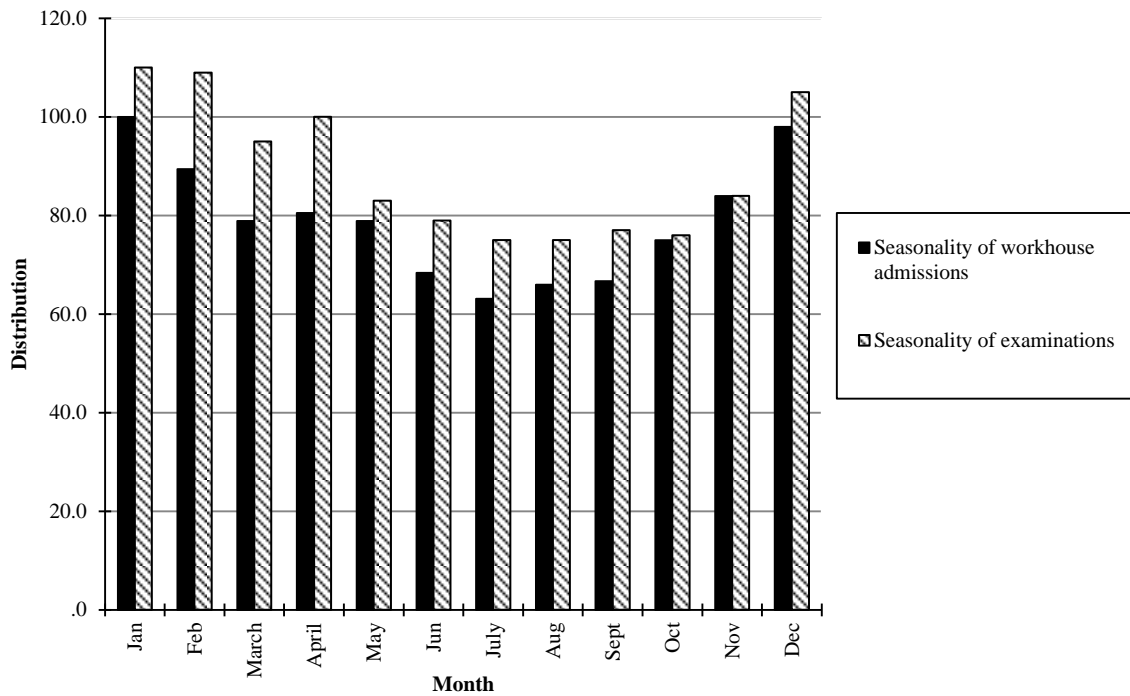
In order to better establish the impact of this seasonality we need to look more closely at the mechanics of poor relief in the city. This however is no easy task and is not something which historians of Newcastle have attempted to do previously. It is impossible to gain a total picture of the seasonality of poor relief for all of the city's parishes given the lack and limitations of surviving sources. We can however, provide some direct evidence on this subject by looking at the records of the east-end parish of All Saints which have survived. As explored in greater detail in Chapter 5, All Saints was a large populous parish which made up around 50% of the total population of the city throughout the period. In 1803 All Saints poor comprised 56% of the total number of paupers in the city. This large parish may in many ways be considered to be representative of the (pauper) experience of the city.²⁸¹ Workhouse admission and discharge registers which have survived for this parish, accompanied with a reasonably large set of settlement examinations, provide us with particularly useful and extensive data on the seasonality of the poor relief in the parish.²⁸² All of the surviving admissions registers (1,139 paupers) were entered into a simple database, along with over

²⁸¹ *Abstract of Answers and Returns Under Act for Procuring Returns Relative to Expense of Maintenance of the Poor in England*, P.P. 1803-04 XIII, PP. 361-420.

²⁸² For discussion of the mechanics behind the Old Poor Law in England, see: A. Tomkins & S. King. 'Introduction', in A. Tomkins & S. King ed., *The Poor in England, 1700-1850: An Economy of Makeshifts* (Manchester, 2003), 1-38; King. *Poverty and Welfare in England*, 18-47.

3,000 settlement examinations. Figure 2.22 below presents these admission data in monthly totals.

Figure 2.22 *Seasonality of settlement examinations (1801-12) and workhouse admissions (1795-1801)*

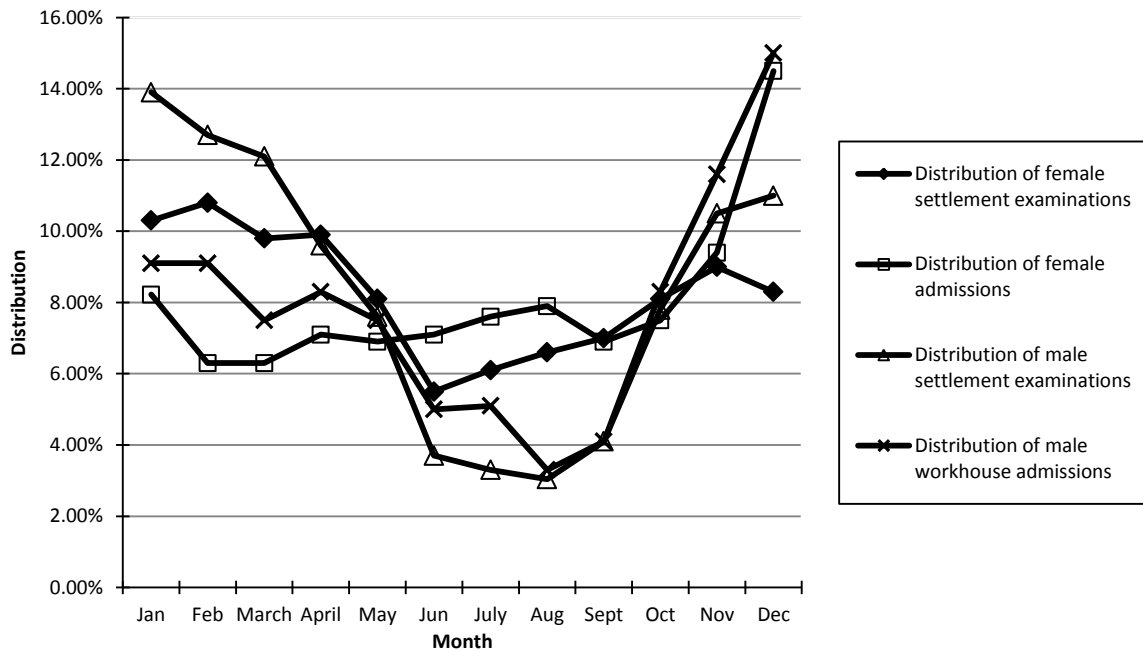


Note: Settlement examinations, N = 3,226. Workhouse admissions, N = 1,139. Admission index = January/100. Examinations index = April/100

Source: All Saints Parish Workhouse admissions and settlements database: TWAM 465/38, 183/186

Both workhouse admissions and settlement examinations were subject to significant seasonal fluctuations. The evidence shows that there was a strong relationship between admissions to the parish workhouse, settlement pleas and seasonal hardship. Both admissions to the workhouse and settlement pleas tended to peak in the colder months from around November until February. The figures also show a marked drop in admissions and settlement examinations in the summer months. We can understand this in a little more detail if the seasonality data is broken down in terms of sex. This has been done in Figure 2.23 below.

Figure 2.23 Relationship between the seasonality of male and female settlement examinations and workhouse admissions, 1795-1812



Source: Same as Figure 2.22.

Figure 2.23 shows that during the summer months there was a U-curve in both the settlement examinations of male paupers and male admissions to the workhouse. This evidence suggests that the experience of the male inhabitants was subject to much variation over the course of a year. This is not all surprising when we consider our previous discussion of the occupational structure of the city. In a city where a large proportion of the male inhabitants were engaged directly in shipping and transport, during the summer months there would generally be fewer males within the population at risk of being admitted to the workhouse or at risk of making a settlement plea. The experience of the female population is somewhat different with the exception of winter peaks. Female admissions and examinations tended to fall over the course of the colder months; during the summer they tended to plateau and even rise until the huge surge in both series occurs in the winter. How can we explain this?

Two things need to be considered here. Firstly, Newcastle seems to have had, like most towns and cities, a surplus female population, evidence suggesting that during the summer months substantial numbers of husbands and sons would be away at sea. This in turn is likely to have increased the socio-economic hardship of wives and mothers who were taking care of

children and relatives.²⁸³ It is also generally accepted that women were far more exposed in the economy than their male counterparts. As one recent study observed, the reason why women made up a significant proportion of relief applicants in the period is owing to their ‘exceptional vulnerability ... in an economy where [they]... were underpaid, and performed seasonal and intermittent tasks’.²⁸⁴

Some case studies are particularly instructive for understanding these issues in more depth. On 25 August 1812, Mary Baird’s settlement claim was heard.²⁸⁵ She was resident in All Saints parish, and the wife of John Baird ‘a healthy young man on board a collier for London’.²⁸⁶ Mary served her time as an apprentice in Pandon Bank as a pipemaker.²⁸⁷ The financial impact of her husband’s absence must have been particularly great as it was noted that she was applying on behalf of herself and her children: Ann 9 years old, Thomas 8, Martha 7, James 5, Mary 3 and Robert 4 months.²⁸⁸ It was ordered that Mary and her children were to be relieved ‘until her husband returns’.²⁸⁹ Another example is that of Elizabeth Dean who made a plea to the Overseers in All Saints on 22 July 1812, being the mother of two children David 2 ½ years and Mary 2 months old.²⁹⁰ The Overseers noted that she had ‘served her time [as an apprentice] in Sandgate’ and that her ‘husband is a seaman, gone away’.²⁹¹ Elizabeth received relief of ‘3/ temporary’.²⁹² On 22 November 1822 Ann Atkinson ‘now in the workhouse ... states that her husband James Atkinson, a Keelman is in Edinburgh, is willing to provide for her if she goes there to him [and she] applies for the means of the journey’.²⁹³ Her husband may well have felt the pressures of the winter sink in the coal trade as a Keelman. It was ordered that ‘the acting Overseers [were] to allow but make sure [her journey] does not exceed £1 7 6d towards making her way to Edinburgh’.²⁹⁴

²⁸³ For a recent discussion of male employment and its impact upon the family economy during the early industrial revolution see: Humphries. *Childhood and Child Labour*, 49-83, 84-124.

²⁸⁴ Boulton *et al.* ‘The Lives of the Poor in the West End of London’, 9. For a discussion of female occupations in this period see: Schwarz. *London in the Age of Industrialisation*, 14-22.

²⁸⁵ TWAM 183/186.

²⁸⁶ TWAM 183/186.

²⁸⁷ TWAM 183/186.

²⁸⁸ TWAM 183/186.

²⁸⁹ TWAM 183/186.

²⁹⁰ TWAM 183/186.

²⁹¹ TWAM 183/186.

²⁹² TWAM 183/186.

²⁹³ TWAM 183/186.

²⁹⁴ TWAM 183/186.

2.6 *The water supply*

From the end of the seventeenth century, Newcastle's water supply was pumped by an engine erected by Cuthbert Dykes in 1680, which extracted water directly from the river Tyne at Sandgate.²⁹⁵ In the neighbouring borough of Gateshead, water was not pumped directly from the Tyne but instead was 'supplied by the Ellison family, using as a source springs outside of the town'.²⁹⁶ However in 1697 'these supplies were superseded by an intervention by William Yarnold, who 'entered into an agreement with the common council of Newcastle, so enabling him to lay the necessary pipes and to build storage cisterns'.²⁹⁷ To obtain the necessary amount which was required for both the population of Newcastle and Gateshead, springs located on Heworth Common about three miles southwards of the township were tapped from a natural lake where a 'wooden main carried the water to storage ponds at Holmes Close in Gateshead' (see Figure 2.12).²⁹⁸

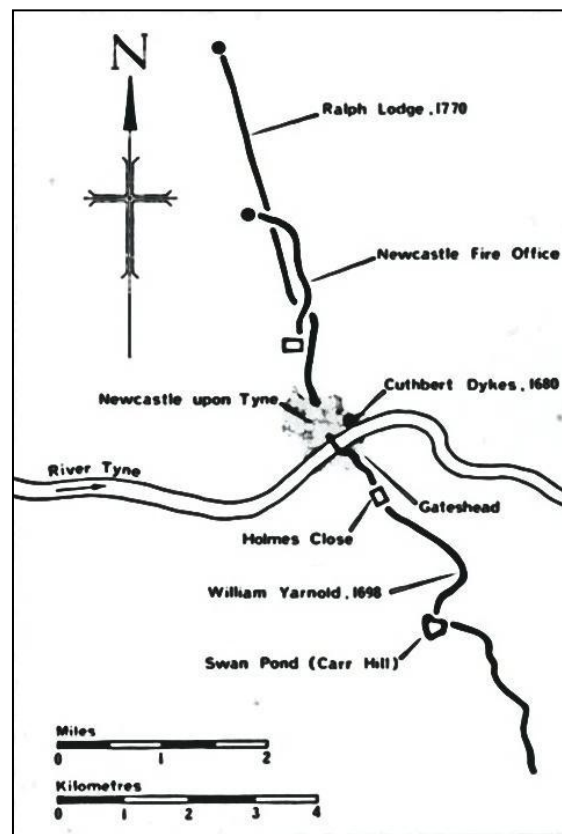
²⁹⁵ Prior to this, the city had been in the earlier period supplied by springs and wells. For more detail see: R.W. Rennison. 'The Supply of Water to Newcastle upon Tyne and Gateshead, 1680-1837', *Archaeologia Aeliana*, 5 (1977), 179-96; R.W. Rennison. *Water to Tyneside: A History of the Newcastle & Gateshead Water Company* (Gateshead, 1979), 1-21, 22-46, 46-65.

²⁹⁶ Rennison. *Water to Tyneside*, 1.

²⁹⁷ *Ibid.*

²⁹⁸ *Ibid.*

Figure 2.12 Newcastle and Gateshead water supply systems 1680-1797



Source: Rennison. *Water to Tyneside*, 2

From these two sources, wooden and lead pipes carried the water to Newcastle where it was stored in the cisterns which had also been purpose built by Yarnold. This supply was only ‘provided to the wealthier inhabitants of the two towns although the lack of water was such as to permit it being made available only on one day a week’.²⁹⁹ In 1769, the city’s supply was taken over by Ralph Lodge who entered into an agreement with the city’s council to erect a new source on the Town Moor. This new venture was not entirely successful and in 1785 the Common Council warned Lodge that his system would be replaced.³⁰⁰ Lodge’s venture was short lived and in ‘1797 ... [it] was taken over by the town’s insurance company, the Newcastle Fire Office’.³⁰¹ The Fire Office, tried to improve things further by sinking a shaft at the south end of Coxlodge estate (Figure 2.12) From this flooded coal mine shaft, the city’s water was extracted by a windmill which forced the water to flow through ‘a 10 [inch]

²⁹⁹ Rennison. *Water to Tyneside*, 1.

³⁰⁰ *Ibid*, 5.

³⁰¹ *Ibid*, 5.

diameter brick conduit to a new reservoir at the south end of the Town Moor'.³⁰² Although this was something of an improvement, water was still available only two days a week with only some 75,000 gallons being pumped per day.

During the late 1820 and early 1830, the Fire Office came under attack from its rival company the Newcastle Subscription Water Company, who argued that:

The importance of an abundant supply of the good wholesome water, a prime necessity of life, is so obvious that no argument can be required in proof of it. That the inhabitants of Newcastle have not for a considerable period been able to obtain a sufficiency of water of any kind and that with which they have been furnished has been for the most part unclean and wholly unfit for many purposes, are factors too universally known to admit of dispute.³⁰³

Thus, by the early nineteenth century contemporaries were well aware of the limitations of the city's water supply and the quality of the water itself was probably beginning to deteriorate rapidly as industrialisation progressed. As Smith has noted, 'along the steeply banked sides of the Tyne ... steam-boat stacks ... the manufacture of alkali, Prussian blue, glue, boiling of blood, burning of horse-flesh and bones, added stench'.³⁰⁴ The methods of storage and transportation of water to the city would have also compromised its purity. As Landers has found in London, 'the state of domestic sanitation ... posed serious risks of contamination for ... water'.³⁰⁵ Further to this, the actual pipes which were used to transport the water to the city's residents were made of wood and unlikely to have been watertight, which means that a great deal of water could have simply been lost in transmission and where pipes ran through contaminated soil, there would have also been a greater risk of infection and contamination.

The Fire Office was aware of the situation and in 1832 published 'a notice expressing regret as to the difficulties which had been and were being experienced by consumers'. They planned to incorporate a new system based on that which had been designed by James Simpson of the Chelsea Water Company in London, who in 1828 has used sand filters to

³⁰² *Ibid*, 5.

³⁰³ Prospectus, *Proposed New Water Company in Newcastle* (Newcastle, 1832), cited in Rennison, *Water to Tyneside*, 6.

³⁰⁴ Smith. 'Public Health on Tyneside', 25-26.

³⁰⁵ Landers. *Death and the Metropolis*, 72.

purify Thames water, but these plans 'were not brought to fruition'.³⁰⁶ It was not until two years later that a system of iron pipes was proposed to replace the wooden ones, and these were not put in place until the 1840s. Once in operation the city was supplied by the newly constructed Whittle Dean Reservoirs which is likely to have improved in both quantity and quality of the water consumed by the city's residents compared to the previous period. But even this new supply was subject to the effects of pollution, industrialisation and Newcastle's rapid population growth.³⁰⁷ Throughout our period, supply could not keep up with demand and the water which was supplied was probably more detrimental to health than it was beneficial.

2.6 Conclusion and Summary

This chapter has clarified several important aspects of urban life within early industrialising Newcastle. The evidence we have examined argues that in several respects Newcastle fits well with McNeill's model of an epidemiological regime.³⁰⁸ There are five key conclusions which can be drawn from the foregoing discussion.

i) Newcastle's population was greatly influenced by a stream of migrants coming to the city throughout the period, which fuelled the city's population especially in the closing years of the eighteenth century. The evidence from both the Bills and the nineteenth-century census suggest that the city may have had a more balanced population in terms of the gender composition of those in the prime of life. Although unusual, when compared to what we know of other towns and cities in the period, the structure of Newcastle's population was probably primarily a result of the increasing male-dominated labour force in and around Tyneside.³⁰⁹

³⁰⁶ Rennison. *Water to Tyneside*, 6.

³⁰⁷ The failings of this new water supply were shown during the 1853 cholera epidemic, when infected water was supplied directly to the city, see for discussion, see: M. Callcott. 'The Challenge of Cholera: The Last Epidemic of Cholera at Newcastle-upon-Tyne, 1853', *Northern History*, 20 (1984), 167-86.

³⁰⁸ See for discussion: McNeill. *Plagues and Peoples*, 185-217; Landers. *Death and the Metropolis*, 86-87; Dobson. *Contours of Death and Disease*, 1-19.

³⁰⁹ For a discussion of the sex ratio in early modern urban populations see: Galley. *The Demography of Early Modern Towns*, 3-30.

ii) From the evidence we have, it would appear that housing stock in the city was unable to keep up with supply (population growth). This is a central point to our understanding of the epidemiological regime in the city, because it implies that the levels of exposure to mortality may have increased over time. Our evidence suggests that much of the housing in the city was badly built, with little or no building regulations and that over the course of the period most housing was in a chronic state of repair, as many contemporary testimonies confirm. We have also demonstrated that population density increased over the period and differed in different zones in the city. The majority of the population resided in the lower parts of the city, namely in the parishes of All Saints and St Nicholas, cramped together in dense tenements and lodging houses in the Quayside, the Close, Wall Knoll and principally in Sandgate.

iii) The population also seems to have acutely experienced some of the wider economic pressures of the period. There is no evidence to suggest that there was any improvement on real wages in the period; indeed, it seems more likely that the poor's levels of disposable income significantly depreciated. Rising food prices in the last three decades of the eighteenth century, oft emphasised in both secondary literature and contemporary accounts, argue that the nutritional status of the poor may have also deteriorated in the period.³¹⁰

iv) We have also seen that the city possessed a dynamic occupational structure, and that there was some degree of occupational zoning amongst the city's ancient parishes. While the city's occupational profile was dynamic, nonetheless, we have also shown that the economy of the working poor was subject to much variation over the course of the average year. This fluctuating urban labouring economy owed much to the city's substantial reliance upon the coal trade. In the dead season of the coal trade, the population became poorer and were more susceptible to poverty and hardship.

v) There was evidently no fundamental improvement in the city's water supply over the period. Indeed, some of the ways in which water was stored and sent to the city may conversely have been actively detrimental to the health experience of the population. It has

³¹⁰ Floud *et al.* *The Changing Body: Health, Nutrition and Human Development*, 6-15; Landers. *Death and the Metropolis: Studies in the Demographic History*, 86-88.

been demonstrated that there were no significant improvements in the city's water supply occurred until around the middle of the nineteenth century, but even these developments were subject to the problems arising from increased industrial activity and population growth which took place along the banks of the river Tyne.³¹¹

In sum, Newcastle's exposure model appears to have been relatively high. Immigration, domestic and international trade, population density, overcrowding and insanitary housing on Tyneside would have made the population of the city particularly susceptible to disease and mortality, while increasing food prices and falling real wages would have made the situation even worse. This chapter has set-the-scene on some important aspects of life within the city. These are things which may have directly or indirectly impacted the health experience of the population. The ensuing chapters concentrate more exclusively on the types of medical services which were available to the poor, on who utilised these services and on the types of diseases and conditions which assailed the population over the century.

³¹¹ Callcott. 'The Challenge of Cholera', 167-86.

Chapter 3. ‘Rack’d and Tortur’d with the most inveterate diseases, and painful distempers’?³¹² The sick poor and the Newcastle Infirmary, 1751-1850

Human nature in almost all of its variety of wretchedness, many of our fellow creatures languishing under the severest of maladies: Many groaning under the pressing anguish of a maimed limb, or mangled body and before they were admitted to this friendly Receptacle, without any prospect, than a continuation of their misery, and wearing out the remains of a painful life, without hope of relief.

(Anon. 1752: Un-paginated)

4.1 Introduction

On 7 September 1780, James Turner, a twenty-two old man from the village of Wooler in the county of Northumberland came to Newcastle because he was ill.³¹³ He had travelled some twenty two miles to the city from his place of residence. Turner was probably not a wealthy man as he was in receipt of a letter of recommendation entitling him to be admitted to the Newcastle Infirmary which suggests that he did not have the financial means to turn to a private medical attendant. He received the recommendation from one of the Infirmary’s subscribers, one Thomas Pemberton.³¹⁴ Turner was admitted to the Infirmary along with seventeen other patients that day suffering from ‘the stone’ a ‘common and crippling condition’ in this period.³¹⁵ Once admitted, Turner was treated by William Ingham, an honorary surgeon.³¹⁶ Turner was just one of 29,868 patients to have been admitted to the Infirmary between 1751 and 1850, and we know that he suffered from his condition for 4 months prior to admission.³¹⁷ Once admitted he spent 5 months in the Infirmary under the care of Ingham and on 4 January 1781 he was discharged as ‘cured’.³¹⁸ What happened to

³¹² TWAM HO.RVI/72/1.

³¹³ TWAM HO.RVI/72/1, TWAM HO.RVI/72/2.

³¹⁴ TWAM HO.RVI/72/1. This may well have been Thomas Pemberton, of the Pemberton family, who were colliery owners in county Durham. It is worth pondering whether or not James Turner was a member of the Pemberton staff or an apprentice, this being a period when it was not uncommon for hospital subscribers to recommend patients as patronage (or insurance), rather than have their servants, apprentices or workers treated privately. For a discussion of some of these issues, see: A. Tomkins. ‘The Excellent Example of the Working Class: Medical Welfare, Contributory Funding and the North Staffordshire Infirmary from 1815’, *Social History of Medicine*, 21 (2008), 13-30.

³¹⁵ F.J.W. Miller. ‘The Infirmary on the Forth, 1753-1906’, *Archaeologia Aeliana*, 16 (1986), pp. 154; TWAM HO.RVI/72/1.

³¹⁶ TWAM HO.RVI/72/1. For discussion, see: G.H. Hume. *The History of the Newcastle Infirmary* (Newcastle, 1906), 142-45.

³¹⁷ TWAM HO.RVI/72/1.

³¹⁸ TWAM HO.RVI/72/1.

Turner after he was discharged is unknown, perhaps he returned to his home but we can only speculate on this, for of Turner as an individual, we know no more.³¹⁹

The aim of this chapter is to uncover the part played by the Infirmary in the treatment of the sick poor such as James Turner, over a hundred year period. It will ask the following questions: How typical was Turner of the patients who were treated by the Infirmary? What role did the institution play in the medical landscape of the city? To what extent did the Infirmary provide healthcare to the population of the Newcastle and its hinterland? And lastly, what sorts of diseases and conditions assailed the population who were admitted to the Infirmary? The history of the Newcastle Infirmary is now reasonably well documented. However, most previous studies of this institution have been principally concerned with the motives behind its origin, the way it was financed and its conversion into the Royal Victoria Infirmary in the middle of the nineteenth-century. At present, we still know virtually nothing about the patients who were treated at the Infirmary in the first century of its existence.

The historiography of Georgian voluntary hospitals is now well documented. Those studies ‘mostly written by doctors tended to focus upon medical staff’ and indeed it has already been noted within such studies that it is often difficult to know that ‘there were actually patients’ in these institutions’.³²⁰ More recent scholarly attention has focussed upon topics that historians want and need to know about.³²¹ Additionally, several pioneering works have emerged in recent years by historians such as Mary Fissell, Susan Lawrence, Anne Borsay and Jonathan Reinartz to name but a few.³²² Such work insists on the need for hospitals to be understood in the wider context of society with an emphasis on ‘empirical scrutiny’ incorporating ‘demographic, social and economic change’.³²³ It is well known that the voluntary hospitals were ‘an invention to absorb charity’, but recent research has shown that the ways in which these institutions operated locally was far from uniform: rather, such [h]ospitals were the

³¹⁹ James Turner does not turn up in any of the Anglican registers of Wooler’s St Mary’s parish. The village had a large number of religious dissenting congregations which might account for his disappearance. For discussion, see: A. Reid. *A History of Northumberland Volume 11* (Newcastle, 1922), 293-98.

³²⁰ L. Granshaw. ‘Introduction’, in L. Granshaw & R. Porter ed., *The Hospital in History* (London, 1989), 11.

³²¹ Granshaw. ‘Introduction’, 11.

³²² Fissell. ‘Patients, Power and the Poor in Eighteenth-Century’, in S. Lawrence. *Charitable Knowledge: Hospital Pupils and Practitioners in Eighteenth-Century London* (Cambridge, 1996); A. Borsay. *Medicine and Charity in Georgian Bath: A Social History of the General Hospital, c. 1739-1830* (Aldershot, 1999); J. Reinartz. *Healthcare in Birmingham: A History of the Birmingham Teaching Hospitals, 1779-1939* (Suffolk, 2009).

³²³ Borsay. *Medicine and Charity in Georgian Bath*, 5.

‘creation of particular societies’.³²⁴ This chapter will examine the extent to which Newcastle’s record compares with what we know of other studies.

4.2 Sources and Methodology

This chapter is based upon a number of sources. The most important are a series of Infirmary admission and discharge registers which survive unbroken for a period of ten years, between 1778 and 1787.³²⁵ These supply information on age of admission, the origin of the patients by county and parish, reasons for discharge from the hospital and the patients’ outcome. The registers also provide information on the physicians and surgeons who attended the patients and on those individuals who recommended each patient. These records have been supplemented by the annual reports of the Infirmary which provide valuable data on the overall number of patients who were admitted over a century long period; they reveal much about those who financed and supported the institution. There are also detailed minutes of the ‘House Committee’ as well as reports from the ‘Board of Governors’ who ran the Infirmary. This material allows for a detailed quantitative analysis of the part played by the Infirmary in the city’s ‘medical landscape’, but also enables one to construct individual case studies of the patients themselves.

This chapter is structured into six parts. The first discusses the ways in which the Infirmary operated and the methods by which patients could be treated. Section two looks at how many patients were admitted to the Infirmary over the course of our period. Thirdly, the characteristics of patients are discussed at length. The fourth part looks at the geographical origins of the patients, while the fifth part examines the types of diseases and conditions which were brought before the staff at the Infirmary. Lastly, the causes and levels of patient mortality are addressed.

4.3 Structure and Operation

The first question has to be of course, how did the Infirmary operate? By the time that it was founded in 1751, there were already fourteen other voluntary Infirmaries in England – five of which were in London and nine in the provincial towns and cities.³²⁶ There is some

³²⁴ Granshaw. ‘Introduction’, 11.

³²⁵ TWAM HO.RVI/1-115; TWAM HO.RVI/146; TWAM HO.RVI/148; TWAM HO.RVI/150.

³²⁶ Westminster Hospital (1720), Guys Hospital (1724), St George’s Hospital (1733), London Hospital (1740), Middlesex Hospital (1745). In the provinces: Winchester County Hospital (1736), Bristol Royal Infirmary (1736), York County Hospital (1740), Royal Devon & Exeter Hospital (1741), Bath General Hospital (1742), Northampton General Hospital (1743), Worcester Royal Infirmary (1746), Royal Salop Infirmary (1747) and the

uniformity in the ways in which these hospitals operated. For example, ‘the Leeds Infirmary borrowed its manual of regulations from the Manchester Infirmary’ founded in 1752 – the year after the founding of Newcastle Infirmary.³²⁷ Most historians now acknowledge that the ‘moral interpretive’ of the founders and supporters of these voluntary hospitals was to only afford relief to those who were deemed ‘deserving’.³²⁸ In Newcastle, the Infirmary was founded for the ‘Sick and Lame Poor of Newcastle, Northumberland and Durham’, and as Miller notes ‘it was not intended for paupers who should have received care under the Poor Law’ as was common elsewhere in this period.³²⁹ Whether this policy was actually carried out is difficult to measure, as the admission registers rarely record the occupational status or social profile of the patients who were treated.³³⁰ However, paupers were not the only category of poor persons who were not to be recommended, others who were not entitled included:

No women big with child, no children under seven years of age (except when an important surgical operation is required); no person afflicted with insanity, labouring under measles, smallpox or infectious fevers, afflicted with cancer not admitting of extirpation of labouring under scrofula of a high taint (unless important operations is required); no person in the last stage of consumption, hectic fever or of dropsy; no person afflicted with palsy proceeding from a worn out constitution or from decay of old age and no person judged to be incurable, and in a dying state, can be admitted ... on any account.³³¹

The statutes requested that recommenders ‘in doubtful cases [were] to obtain information from medical men within their neighbourhood whether the disease be admissible, according to the rules – by which means the fatigue and expense of an unnecessary journey to the

Liverpool Royal Infirmary (1749), see: I. Loudon. ‘The Origins and Growth of the Dispensary Movement in England’, *Bulletin of the History of Medicine*, 55 (1981), 324-25.

³²⁷ A. Holden, W. Funnell & D. Oldroyd. ‘Accounting and the Moral Economy of Illness in Victorian England: the Newcastle Infirmary’, *Accounting, Auditing & Accountability Journal*, 22 (2009), 533. For the best discussion of the Manchester Infirmary, see: Pickstone. *Medicine and Industrial Society*, 10-15.

³²⁸ See for discussion: L. Granshaw & R. Porter eds. *The Hospital in History* (London, 1989), 1-25; R. Porter. ‘The Gift Relation: Philanthropy and Provincial Hospitals in Eighteenth Century England’, in L. Granshaw & R. Porter eds., *The Hospital in History* (London, 1989), 123-48; J. Reinartz. ‘The Birth of a Provincial Hospital: The Early Years of the General Hospital, Birmingham, 1765-1790’, *Dugdale Occasional Papers*, 42 (2000), 1-34; P. Wallis. ‘Charity, Politics and the Establishment of the York County Hospital: ‘A Party Job’?’, *Northern History*, 38 (2001), 241-60.

³²⁹ Miller. ‘The Infirmary on the Forth’, 152. Barry points out that in communities with medical services being delivered to the pauper population under the Poor Law, via a workhouse or a workhouse infirmary, such individuals were normally excluded from being sent to voluntary hospitals, see for discussion: A. Barry. ‘Community Sponsorship and the Hospital Patient in Late Eighteenth-Century England’, in P. Horden & R. Smith eds., *The Locus of Care: Families, Communities, Institutions and the Provision of Welfare Since Antiquity* (London, 1998), 128-29, 132-34.

³³⁰ Fissell. *Patients, Power and the Poor in Eighteenth-Century* 94-110.

³³¹ Statement made by Dr John Clark in 1802, cited in: Miller. ‘The Infirmary on the Forth’, 152.

Infirmary ... [would] be prevented'.³³² Patients, as in most other voluntary hospitals in the period were admitted via a letter of recommendation, a template of which was recorded in the first annual report of the Infirmery in 1751(see Figure 3.1):

Figure 3.1 *Newcastle Infirmery letter of recommendation, 1751*

GENTLEMEN,

Being well satisfied that the Bearer of the parish of is a proper object of the Charity, as to Circumstance; if upon Examination you think to be so, with regard to Distemper: I desire you will admit to be an In or Out-patient of the Infirmery.

To the Governors of the
Infirmery at Newcastle }

Source: TWAM HO.RVI/72/1

The proportion of recommendations distributed to the subscribers, depended on the amount each individual subscribed each year. 'Every subscriber of one Guinea ... [could] each year, recommend one Out-patient; and to such subscribers jointly, one In-patient. Every subscriber of two Guineas ... [could] recommend one In-patient, or two Out-patients, and so in proportion to larger subscriptions'.³³³ Once a patient was in receipt of a recommendation they could attend the Infirmery on 'Thursdays, between the hours of 10 and 12, and [thereafter] punctually before twelve o'clock, it having been found inconvenient to admit any who offer themselves after that hour'.³³⁴

Once these statutes and regulations were agreed upon, a public subscription commenced on 9 February 1751 which raised over £1,200. Hume notes that:

At the early hour of half-past nine, the subscribers ... of the infirmery ... assembled at the Exchange on the Sandhill ... proceeded to St Nicholas to hear a sermon by Dr Sharp, Archdeacon of Northumberland ... at the close of the

³³² *Ibid*, 153.

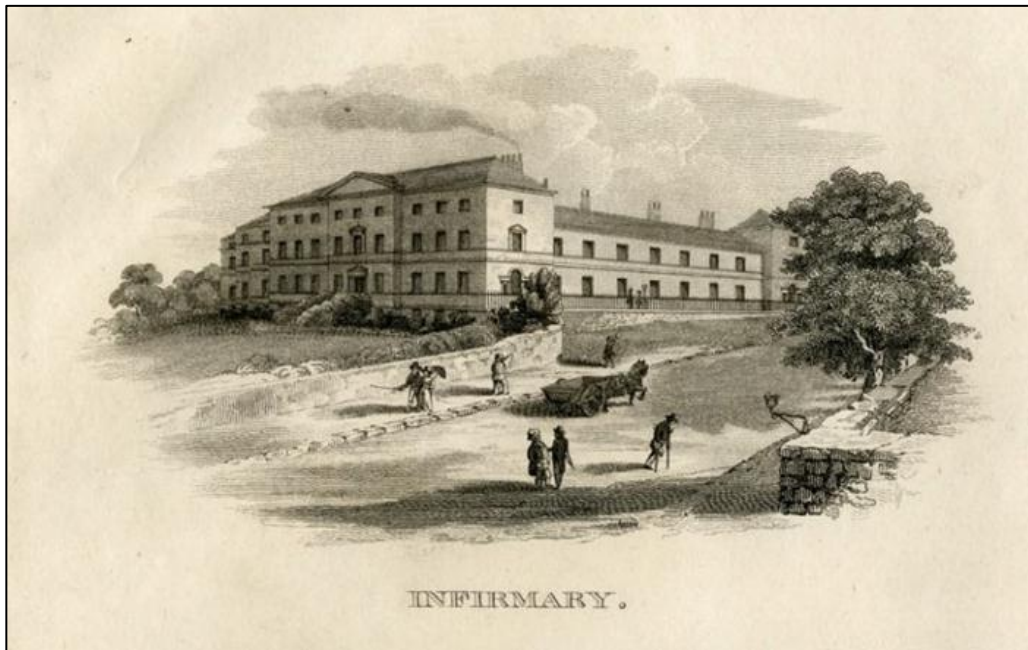
³³³ TWAM HO.RVI/72/1.

³³⁴ TWAM HO.RVI/72/1.

religious service, the committee went to the house in Gallowgate and without loss of time began the work of the Infirmary.³³⁵

Within two years the house in Gallowgate, which had been rented as a temporary home for the Infirmary, was unable to accommodate the increasing patient numbers and in October 1753, the Infirmary moved into purpose built premises on the Forth banks outside of the city's walls (see Figure 32) which had cost £3,967.³³⁶

Figure 3.2 *The Newcastle Infirmary c. 1770*



Source: Newcastle University Special Collection, Local Illustrations, reproduced with kind permission from the Newcastle University Robinson Library librarian.

This area was chosen because of the remarkably “lush” gardens surrounding the west walls. ‘The building, of stone ashlar, comprised of a main block of three floors facing south and a wing of two floors facing east’.³³⁷ On the ground floor there was a Chapel and Board Room. There was also a room where the physicians could examine prospective patients as well as the Matron’s accommodation. On the first floor there were two wards for male patients named ‘BK’ and north, a small ward named ‘Job’.³³⁸ On the second floor there were three

³³⁵ Hume. *The Infirmary, Newcastle-upon-Tyne*, 6.

³³⁶ Miller. ‘The Infirmary on the Forth’, 152.

³³⁷ *Ibid*, 144.

³³⁸ Miller has already pointed out that: ‘The Idea for a hospital was brought before the public when a letter, signed only with the initials “BK”, appeared in the Newcastle Courant from 28 December- 5 January 1751. The writer, thought to be ... ‘a young surgeon, made a strong appeal for a hospital to care for the Sick and Lame Poor’, see: Miller. ‘The Infirmary on the Forth’, 151-53.

wards for female patients, one named ‘Butler’ (after the Lord Bishop of Durham, Joseph Butler) and two others, called Magdalene and Lazarette (both names having typical biblical connotations common in the period). Outside of the main building, there were two smaller out-buildings, used as a brewing house and bakery, suggesting that the Infirmary was self-sufficient in producing its own victuals. In the North of the grounds of the Infirmary, a burial ground has recently been excavated by archaeologists.³³⁹ The accommodation at the Infirmary remained unchanged until extensions in 1803 and 1830. What is interesting about the actual physical location of the Infirmary is that although the banks of the Forth had originally been chosen as a site because of its pleasant ‘dry elevated situation’, by the end of the period the situation had changed quite dramatically.³⁴⁰

4.3 The Newcastle Infirmary: Admission rates

We now need to ask: How many people entered the Infirmary and did this alter over time? Figure 3.3 charts the total number of patients who were admitted to the Infirmary from its opening in 1751 until the end of our period.³⁴¹ Figure 3.3 is essentially of three parts. The first showing the initial two years of the Infirmary’s operation in rented premises in Gallowgate. After 1753, the remarkable growth in the number of patients who were admitted increased by around 200%, corresponding with the move from Gallowgate to the purpose built premises on the Forth Banks. The second observable part of Figure 3.2 shows a plateau in admissions between approximately 1757 and 1804. Such a plateau may be explained in two ways: firstly, as we have already discussed in Chapter 1, the population of both Newcastle and Tyneside does not appear to have taken off by national standards until the second decade of the nineteenth-century. As Wrigley has also suggested, Northumberland’s population growth in the early modern period seems to have been rather sluggish, which suggests that the catchment area for the Infirmary may not have expanded significantly during the period in which admissions flattened.³⁴² Further to this, there were no internal nor external

³³⁹ The site of the Newcastle Infirmary was redeveloped by the Tyne and Wear Development Corporation for a Millennium Project in 1997. It was led by John Nolan of the former Newcastle City Archaeological Unit.

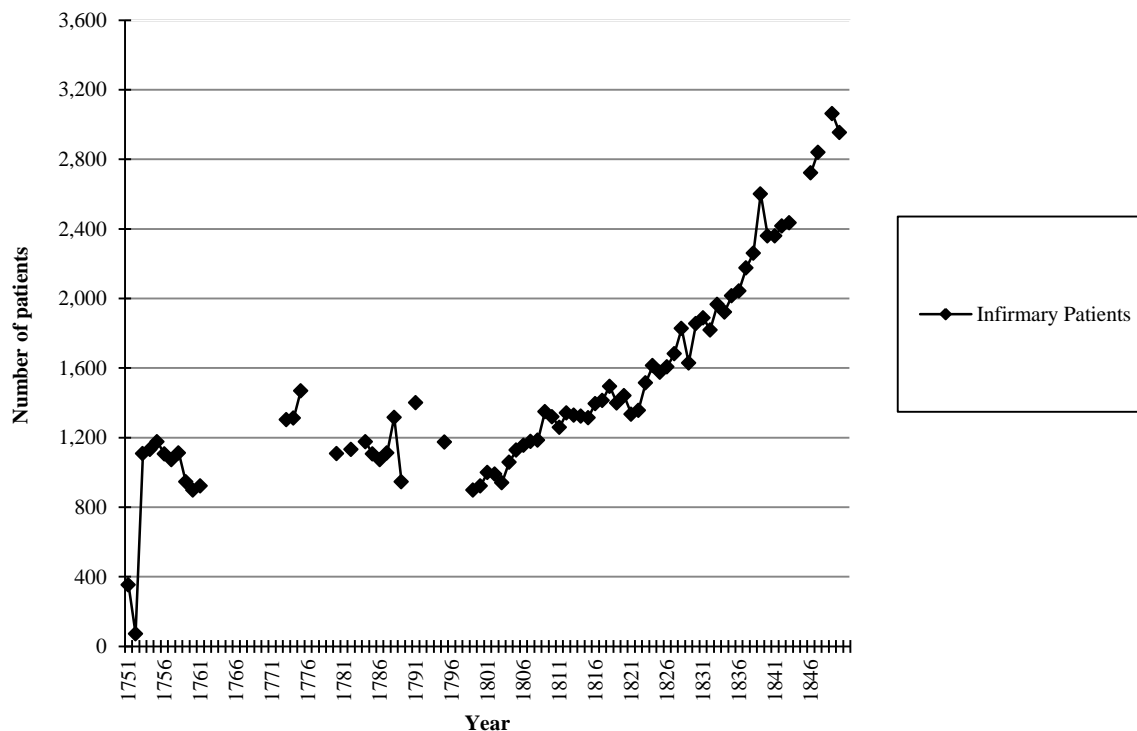
³⁴⁰ By the early nineteenth-century the situation had changed, and in 1827, feeling the impact of industrialisation on Tyneside, along with unprecedented population growth, Mackenzie commented that during ‘the spring months [the Infirmary] ... is considerably annoyed by immense clouds of smoke brought from the Town and glass houses’, see: E. Mackenzie. *Historical Account of Newcastle-upon-Tyne: Including the Borough of Gateshead* (Newcastle, 1827), 501-2.

³⁴¹ TWAM HO.RVI/72/;1-80.

³⁴² For county population figures, see: Wrigley. ‘English County Populations’, 35-69; Wrigley. ‘Rickman Revisited’, 723. For a recent discussion of the ‘early modern period’ up to 1850, see: J. McEwan & P. Sharpe.

alterations made to the Infirmary building until the middle of the first decade of the nineteenth-century. As Miller has shown, during this earlier period ‘over-crowding ... seemed to be a common occurrence in the wards ... where mutual misery and disturbance usually prevail[ed]’.³⁴³ After the first five years of the nineteenth-century there was a steady increase in the number of patients who were admitted to the Infirmary. Like the period before this, admissions appear to broadly follow the growth of the city. The third and final observable trend in Figure 3.3 is the relatively rapid increase in patients after the third decade of the nineteenth-century, which again corresponds with what we know of the population growth of Newcastle.

Figure 3.3 Annual numbers of patients supported by the Newcastle Infirmary, 1751-1850



Source: Annual Reports database, 1750-1850: TWAM HO.RVI/72/1-80.

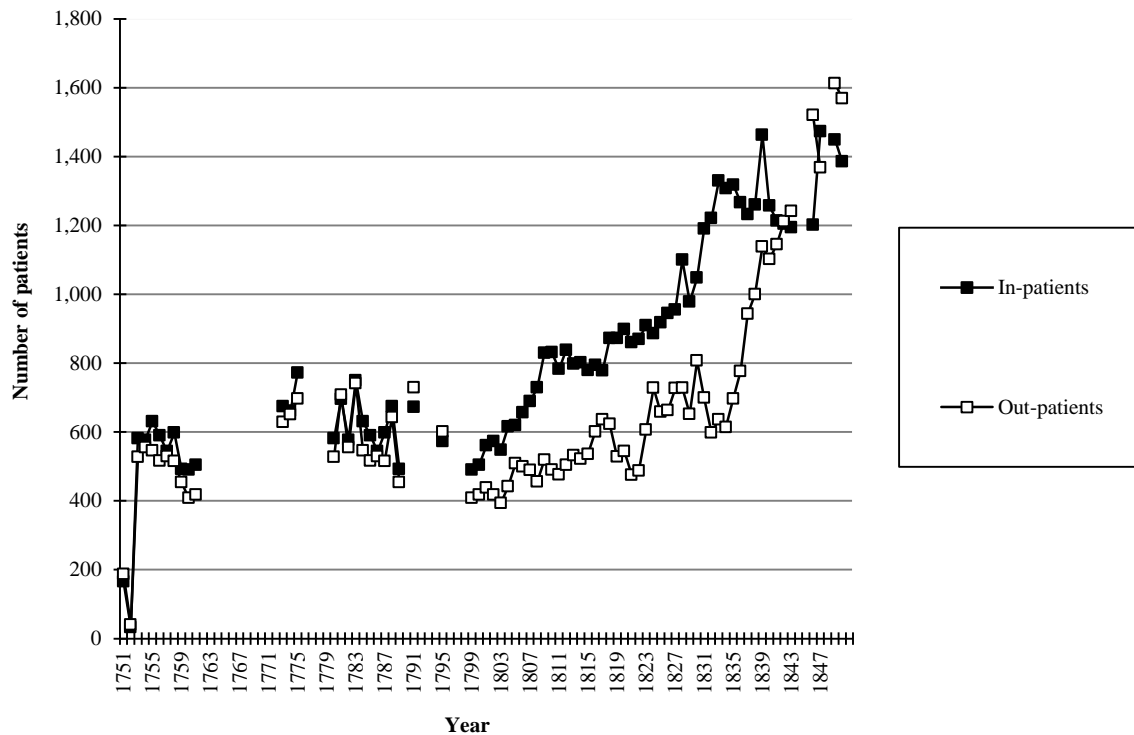
How was the balance between the number of in-patients and number of out-patients distributed? In order to answer this question it is instructive to disaggregate Figure 3.3

‘Introduction’, in J. McEwan & P. Sharpe eds., *Accommodating Poverty: The Households of the Poor in England, c. 1650-1850* (Basingstoke, 2011), 1-12.

³⁴³ Miller also notes that ‘it was not until the nineteenth-century that attention was given to window sashes to ensure ventilation and on the first floor ... proposal was for extension ... and removal of wooden bedsteads which housed vermin’, Miller. ‘The Infirmary on the Forth’, 155.

according to the types of patients who were admitted as either out-patients or in-patients. Figure 3.4 does precisely this.

Figure 3.4 *Distribution of in-patients and out-patients admitted to the Newcastle Infirmary, 1751-1850*



Source: Same as Figure 3.3

Figure 3.4 is of interest in two respects. Firstly, both sets of data show a similar pattern over time. Secondly, it is demonstrably the case that by the end of the eighteenth-century the number of patients being treated as out-patients had fallen significantly, something which continued throughout most of the first half of the nineteenth-century. From the beginning of the period to the end of the eighteenth-century, the average annual number of patients who were treated as in-patients was 560 compared with an average of 520 out-patients per year.³⁴⁴ Figure 3.4 demonstrates that there was some level of continuity in this. Between 1800 and 1850 the situation had changed, with, on average, the number of in-patients who were supported by the Infirmary standing at 985 per year, as opposed to an average of only 722 out-patients.³⁴⁵ Fissell's study of the Bristol Infirmary in the eighteenth and early nineteenth-

³⁴⁴ TWAM HO.RVI/72/; 1-72. For a general discussion of the Newcastle Infirmary across the period under study, see: N. McCord. *North East England: The Region's Development, 1760-1960* (London, 1979), 98-100.

³⁴⁵ TWAM HO.RVI/72/; 1-72.

century found very different patterns of admission to that institution.³⁴⁶ Her study showed that there was a rapid growth in the number of out-patients which continuously outstripped the number of patients who were treated as in-patients in Bristol.³⁴⁷ Marland's study of Wakefield and Huddersfield found that in the eighteenth-century, out-patients accounted for the largest proportion of patients who were treated by the Wakefield and Huddersfield Infirmary.³⁴⁸ She concluded that 'the reasons for this bias in admissions was straightforward ... outpatients ... cost less to treat ... and involved none of the capital expenditure associated with construction and fitting out of infirmary wards'.³⁴⁹ Why then, was Newcastle different from these other studies? The answer to this question may be quite simple. Figure 3.4 shows that there was a marked break between in-patients and out-patients in the 1840s. This might have been a result of a change in admission policy at the Newcastle Dispensary, which was founded in 1778 – and this will be discussed at length in Chapter 5. In 1790 the governors of the Dispensary began to admit *casual* patients who did not require a recommendation, which may well help explain the fall in the number of out-patients who were being treated at the Infirmary. Indeed, as we shall see, this policy had a huge impact upon the overall medical landscape of the city. However, it may have well been the case that it was only residents of Newcastle who were turning to the Dispensary for gratis care, as was stipulated in the statutes of that institution.³⁵⁰ While the fall in out-patients is observable, it is also clearly the case that this Infirmary was providing, like that in Bristol, 'something people wanted; [and] however unpleasant ... it was much in demand in its own time'.³⁵¹

³⁴⁶ Fissell's study shows that there were approximately 1,500 out-patients being treated in the early 1750s as opposed to around 600 in-patients in the same period. By the first decade of the nineteenth-century, there were over 4,500 out-patients being treated per year compared with little over 1000-1200 in-patients. For discussion see: Fissell. *Patients, Power and the Poor in Eighteenth Century*, 94-109.

³⁴⁷ *Ibid*, 109.

³⁴⁸ H. Marland. *Medicine and Society in Wakefield and Huddersfield, 1780-1870* (Cambridge, 1987), 94-108.

³⁴⁹ Marland. *Medicine and Society*, 94-108, 102, 104-105. For another important provincial study, see: J.V. Pickstone. *Medicine and Industrial Society: A History of Hospital Development in Manchester and its Region, 1752-1946* (Manchester, 1985), 42-62, 63-77.

³⁵⁰ Figure 3.4 also shows a marked increase in the out-patient sector after 1830. This may have been caused by the closure of the Newcastle Lock Hospital, which forced the Infirmary to open a Lock Ward, which seems to have attracted patients from a large catchment area. For example, out of nearly 200 patients who were treated in the Lock Ward in 1850, 148 of these outpatients came from outside Newcastle, that is that over 75% of Lock patients did not come from within the city itself. Moreover of this 75% nearly 25% came from counties outside Newcastle, Durham and Newcastle, the original catchment area of the Infirmary.

³⁵¹ Fissell. *Patients, Power and the Poor*, 108. It should be remembered however, that the growth in in-patients and decline in out-patients may have been related to the types of conditions which the patients brought before the subscribers. For example, in seventeenth and eighteenth-century London, the admission of 'venereal' patients as opposed to those who were 'clean' led to a growth and then subsequent decline in 'outhouse' patients, for discussion see: K. Siena. *Venereal Disease, Hospitals and the Urban Poor: London's 'Foul Wards', 1600-1800* (Rochester, 2004), 62-95, 96-134.

3.5 Infirmary patient characteristics: the demographic context

Who were these patients who entered the Infirmary? Having an understanding of the demographic characteristics of the thousands of patients who were admitted to the Infirmary is essential if we are to understand the role of this institution in the context of society in early industrialising Tyneside. For instance, if the Infirmary catered for a specific gender or if specific age groups were excluded, this might reveal something about the limitations of Infirmary medicine upon the local population. Moreover, such an understanding will allow one to place the experience of Newcastle in a wider context of what we know of voluntary hospitals in other provincial cities and metropolitan settings.

What were the relationships between the reported age structure of the Infirmary patients and the whole population? Before examining the specific demographic profile of the Infirmary patients, it is essential to begin with a discussion of the demographic composition of the wider population of the city. Table 3.1 sets out age specific sex ratios for Newcastle's population as recorded by census enumerators in 1841. In order to understand Newcastle's experience, three other large populous port cities (Plymouth, Hull and Bristol) have been included in the tabulation.³⁵² Table 3.4 shows that the city seems to have had, like most others cities in the period, a surplus female population in most age groups. However, unlike Plymouth, Hull and Bristol, Newcastle appears to have had a slightly more balanced sex ratio for those between the ages of 5 years and 20 years.

³⁵² For example, in 1841, Plymouth had a total population of some 70,000, Hull had a population of 67,000 and Bristol's population was somewhere closer to 70,000. See for reference see: B.R. Mitchell & P. Deane. *An Abstract of British Historical Statistics* (Cambridge, 1962), 24-26.

Table 3.1 *Comparative age and sex structure of Newcastle, Plymouth, Hull and Bristol, 1841*

	Newcastle				Plymouth			
	Number of Males	Number of Females	Total	Sex ratio	Number of Males	Number of Females	Total	Sex ratio
0-5	3,109	3,120	6,229	99	4,539	4,618	9,157	98
05-09	2,673	2,661	5,334	101	4,067	4,307	8,374	94
10-15	2,337	2,331	4,668	100	3,524	3,943	7,467	89
15-20	2,337	2,655	4,992	100	3,099	4,411	7,510	70
20-25	2,639	2,989	5,628	88	3,367	5,315	8,682	63
25-30	2,321	2,508	4,829	88	2,694	4,272	6,966	63
30-35	2,067	2,167	4,234	92	2,521	3,610	6,131	69
35-40	1,495	1,500	2,995	95	1,942	2,544	4,486	76
40-45	1,462	1,525	2,987	99	1,793	2,552	4,345	70
45-50	918	976	1,894	95	1,391	1,974	3,365	70
50-55	918	1,039	1,957	88	1,719	2,216	3,935	77
55-60	509	580	1,089	87	1,212	1,422	2,634	85
60-65	550	705	1,255	78	1,282	1,457	2,739	87
65-70	273	382	655	84	745	818	1,563	91
70-75	231	323	554	71	551	791	1,342	69
75-80	97	158	255	61	277	404	681	68
80+	85	157	242	36	199	339	538	58
	24,021	25,776	49,797	85	34,922	44,993	79,915	77

	Hull				Bristol			
	Number of Males	Number of Females	Total	Sex ratio	No. Males	Number of Females	Total	Sex ratio
0-5	2,776	2,844	5,620	97	3,571	3,790	7,361	94
05-09	2,504	2,395	4,899	104	3,109	3,199	6,308	97
10-15	2,119	2,249	4,368	94	2,991	3,019	6,010	99
15-20	1,879	2,254	4,133	83	2,742	3,513	6,255	78
20-25	2,094	2,656	4,750	78	3,076	4,133	7,209	74
25-30	1,883	2,238	4,121	84	2,773	3,442	6,215	80
30-35	1,694	1,939	3,633	87	2,487	3,017	5,504	82
35-40	1,246	1,387	2,633	89	1,763	2,000	3,763	88
40-45	1,189	1,421	2,610	83	1,771	2,197	3,968	80
45-50	797	965	1,762	82	1,152	1,415	2,567	81
50-55	815	938	1,753	86	1,183	1,484	2,667	79
55-60	508	607	1,115	83	677	872	1,549	77
60-65	531	638	1,169	83	760	1,004	1,764	75
65-70	338	434	772	77	380	574	954	66
70-75	270	393	663	68	323	539	862	59
75-80	134	190	324	70	153	288	441	53
80+	82	135	217	60	132	295	427	44
	20,859	23,683	44,542	88	29,043	34,781	63,824	83

Source: Age Abstract 1841 Census, 54-55, 94-95, 182-83, 200-201.

What of the Infirmary patients? To answer this question, Figure 3.5 plots the age structure of over 8,000 patients who were admitted to the Infirmary from September 1778 until September 1787. This data demonstrates that there were very few children admitted to the Infirmary. On average for the years for which the data survives, only 1.6% of all patients who

were admitted were aged in the very young category, that is, between 0-4 years and only 4% of patients across the period were aged between 5 and 9 years. This is unsurprising. As we have already noted, the Infirmary was never designed to treat children aged under seven years. However our evidence suggests that in any one year there could have been anything between 1% and 7% of admitted patients who were children. The children admitted to the Infirmary in these age groups were normally those who had suffered from some form of minor accident or injury and often required small surgical operations, so in most instances their stay in the hospital was not a long one. For example, George Mason, a one year old boy, residing in All Saints parish in Newcastle, was admitted on 13 February 1783, suffering from a ‘fractured thigh’.³⁵³ Unfortunately for Mason, his stay in the Infirmary was short lived, given that he died two days after having been admitted.³⁵⁴ Two-year old Mark Humble of St John’s parish in Newcastle was admitted as an in-patient on 23 March 1786, and it was recorded in the register that he had a ‘broken hand’ which he had suffered from for ‘two weeks’. Once admitted he was treated by a Mr Abbs. Humble was ‘cured’ and discharged on 6 April 1786, making his length of stay only thirteen days.³⁵⁵ Some case studies however, suggest that young patients who came from further distances in order to be treated may have experienced longer stays. Seven year-old William Henderson from Chester-Le-Street in county Durham, was admitted on 18 March 1784 with a ‘tumour on thigh’ which he had suffered with for ‘6 months’. His stay was exceptionally long, as Henderson spent over a year in the Infirmary only to be discharged as ‘incurable’ on 31 March 1785.³⁵⁶

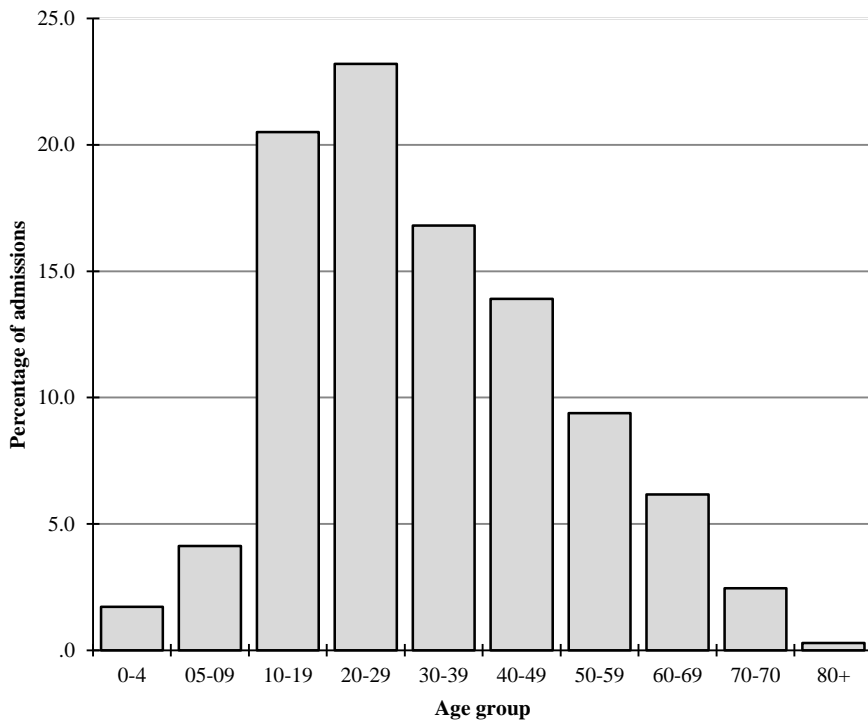
³⁵³ TWAM HO.RVI/72/1-2. Mason does not turn up in All Saints parish burial register, so it is likely that he was interred at Ballast Hills. This is especially likely, given that a large majority of the population of All Saints were using this burial ground across the eighteenth-century, with an estimate of somewhere between 40-50% of all of the dead in All Saints being interred at this site. Also see: Basten. ‘Registration Practices in Anglican Parishes’. 33-37.

³⁵⁴ TWAM HO.RVI/72/1-2.

³⁵⁵ TWAM HO.RVI/72/1-2.

³⁵⁶ TWAM HO.RVI/72/1-2.

Figure 3.5 *Reported age structure of Infirmary patients, 1778-1787*



Note: N = 8,026
Source: Same as Table 3.2

Another interesting aspect of Figure 3.5 is that it demonstrates that there appear to have been very few elderly patients treated. The problem in understanding this depends on how we actually define the term ‘elderly’. Indeed:

In a society lacking a rigid notion of retirement age, and where age reporting could be often less than exact definition of the elderly would have been subject with respect to the dilapidation of time, much will depend on constitution, mode of life, and climate: some are worn out at 60, whilst others at 70 are healthy and vigorous.³⁵⁷

In this chapter we shall use Ottaway and Thane’s thinking in taking 60 as the ‘gateway to old age’.³⁵⁸ It appears that there were a greater proportion of patients aged between 60 and 69 years admitted in any given year than those who might be considered to be in the more extreme elderly age groups. Moreover, the figures for those aged 60+ seem to be

³⁵⁷ Boulton et al. ‘The Comforts of a Private Fireside’, 224; W. Black. *An Arithmetical and Medical Analysis of the Disease and Mortality of the Human Species*, 2nd ed. (London, 1789), 227.

³⁵⁸ See, for discussion: Ottaway. *The Decline of Life: Old Age in Eighteenth-Century*, 16-64; Boulton et al. ‘The Comforts of a Private Fireside’, 221-45.

representative of the wider population of the city, given that these ages made up approximately 6% of Newcastle’s population by the middle of the nineteenth-century.³⁵⁹

The most striking feature of Figure 3.5 is the proportion of patients at ages which might be described as the ‘prime of life’, probably from their mid-teens through to the 50s. It is also interesting to note the predominance of patients aged between 20-29 years, accounting for well over 20% of the sample.³⁶⁰ These were those persons thought to be of ‘working years’. Fissell found similar evidence at the Bristol Infirmary and that ‘[t]he Infirmary ... embodied an understanding of the relationship between rich and poor ... merchants and manufacturers ... admission served as a rationalization of benefaction, a redefinition of the “deserving” poor’.³⁶¹

Table 3.2 *Age-Specific sex ratio of admissions, 1778-87*

	Sex Ratio
0-4	142
05-09	183
10-19	110
20-29	110
30-39	121
40-49	125
50-59	121
60-69	96
70-70	135
80+	100
Total N	8,026

Source: Same as Table 4.3

Table 3.2 sets out age-specific sex ratios of the Infirmary patients.³⁶² The skewed sex ratio suggests that there was a predominance of male patients, especially amongst children. This might suggest that parents in the city may have been able to obtain a recommendation more easily for working boys than girls, given their growing importance to the economy of a poor

³⁵⁹ Although one might argue that there could have been a greater proportion of patients of 60+ coming from the city’s surrounding hinterland, Newcastle, as an urban centre was likely to have a net export of people from older age groups, as Landers has suggested for eighteenth-century London. See, Landers. *Death and the Metropolis*, 180-30.

³⁶⁰ Wrigley et al have suggested that within the national population in the same period those aged between 20-29 years accounted for around 20-21% of the English population, see: Wrigley & Schofield. *The Population History of England*, 529.

³⁶¹ Fissell. *Patients, Power and the Poor*, 74.

³⁶² The sex ratio employed is the standard measure used by historical demographers of males per 100 females, for discussion see: Souden. ‘East, West – Home’s Best’? Regional Patterns in Migration’, 292-32.

household in this period.³⁶³ Although difficult to prove, it may have also been the case that young boys were exposed to illness and injury from the types of employment they may have been engaged in.³⁶⁴ The presence of male patients seems to have been pretty dominant in most other age groups in Table 3.2, which is an aspect of the early voluntary hospital movement which is now well known to historians. For example, both Fissell and Borsay have shown that both men and women were treated at the Bristol and Bath Infirmaries, with there being a slight tendency towards men.³⁶⁵

Overall, the Infirmary data seems to compare well with what we know of other hospitals in provincial towns and cities in this period. While there appears to have been a dominant male presence, the mean age at admission for male patients to Newcastle Infirmary was 33.53 years and the mean for women was proportionately younger at some 28.41 years.³⁶⁶ At the Bath institution, the mean age was 30.31 years for male patients, while for female patients it was 28.86.³⁶⁷ This suggests that despite the gender difference the Infirmary was more likely to treat those patients who were in the ‘prime-of-life’ thereby acting as a more therapeutic institution, designed to return men and women to productive working lives.³⁶⁸

4.5 The origins of the Infirmary patients

Where did these patients come from? An analysis of their origins is important because it may tell us something about the levels and types of diseases experienced by Infirmary patients. For example, if the patients who were being admitted came from a particularly large catchment area, (that is, from both rural and urban settlements) it would suggest that the disease environment within the hospital was ‘probably constantly changing’ with mixed pathogens creating ‘cocktails of diseases’ which would have impacted on the levels of

³⁶³ For a discussion of childhood labour and its important part in the household economy of the poor, see: J. Humphries. *Childhood and Child Labour in the British Industrial Revolution* (Cambridge, 2010), 84-124.

³⁶⁴ For a discussion of this in the early modern period, see: H. Cunningham. *Children and Childhood in Western Society Since 1500* (London, 1995), 79-106; H. Cunningham. *The Children of the Poor: Representations of Childhood Since the Seventeenth Century*, 50-151; D. Payne. ‘Children of the Poor in London, 1700-1780’ (Unpublished, PhD Thesis, University of Hertfordshire, 2008), 1-32. Humphries. *Childhood and Child Labour*, 210-55; P. Kirby. *Child Labour in Britain, 1750-1870* (Basingstoke, 2003), 51-79, 93-115.

³⁶⁵ Fissell. *Patients, Power and the Poor in Eighteenth-Century*, 103. For the Bath General Hospital, see: Borsay. *Medicine and Charity in Georgian Bath*, 227.

³⁶⁶ TWAM HO.RVI/72/1-2.

³⁶⁷ Borsay. *Medicine and Charity in Georgian Bath*, 224.

³⁶⁸ M.F. Fissell. ‘The Sick and Drooping Poor’ in Eighteenth-Century Bristol and its Region’, *Medical History*, 2 (1989), 36.

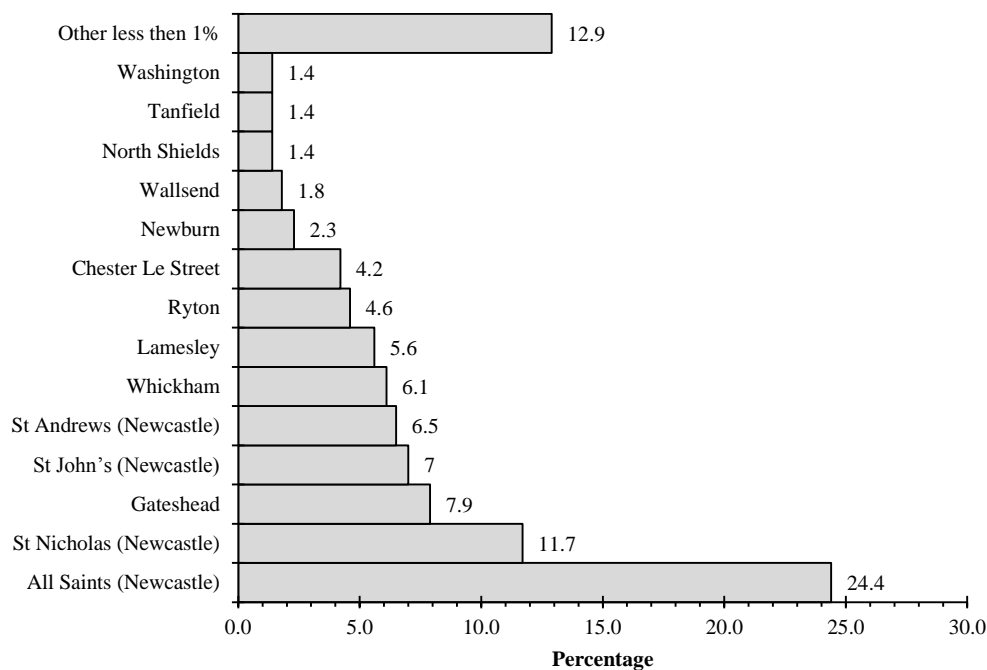
immunity amongst the hospitals patients themselves.³⁶⁹ However, although this is an important part of the analysis of the Infirmary, it is a hard subject to study. To begin we will consider what can be extracted from the admission registers. Figure 3.5 therefore, shows the origin of Infirmary patients who were admitted between 1778 and 1787 as percentages of the total number of patients.³⁷⁰ In the eighteenth-century, well over 50% of all Infirmary patients came from Tyneside, with around half of this figure coming from All Saints parish alone. There were also a reasonable proportion of patients coming to the Infirmary who were resident in areas outside the city, particularly from county Durham and most especially from the large industrialised parish of Whickham, some six miles from the city.³⁷¹ What was the situation in the nineteenth-century? We are extremely fortunate that a list of over 2,400 patients who were treated by the Infirmary at the very end of our period in 1850 and listing the patients' origin has survived. This has been tabulated in Table 3.3 below:

³⁶⁹ A. Levene. *Childcare, Health and Mortality at the London Foundling Hospital, 1741-1800: Left to the Mercy of the World* (Manchester, 2007), 157, 145-74; For a discussion of this generally, see: Schwarz. *London in the Age of Industrialisation*, 125-55; Landers. *Death and the Metropolis*, 131-61, 162-196.

³⁷⁰ TWAM HO.RVI/72/1-2.

³⁷¹ For the best work on this important parish, see: Levine & Wrightson. *The Making of an Industrial Society*, 1-76.

Figure 3.6 *The origin of Newcastle Infirmary patients, 1778-87*



Note: N = 4,078
Source: TWAM HO.RVI/72/1-2

Table 3.3 *Origins of Newcastle Infirmary patients, 1850*

	Number of patients	Percentage
All Saints	678	24.1%
St John's	667	23.7%
Gateshead*	493	17.6%
St Nicholas	276	9.8%
Others	201	7.2%
St Andrews	181	6.4%
South Shields	133	4.7%
Tynemouth	132	4.7%
Foreigners	47	1.7%
Total	2,808	100.0%

*Note: Total includes all areas within a 15 mile radius of Gateshead
Source: TWAM HO.RVI/72/1-58

Clearly there was some continuity in the origins of the patients who were treated at the Infirmary. Over 81% of all of the patients admitted in 1850 came from within the immediate

vicinity of Tyneside. In reality, this is not surprising if we consider the expenses which could be incurred by individuals who needed to travel great distances to the Infirmary, and given that the Infirmary ‘did not ... have any form of conveyance’ for the sick, so all expenses incurred would have had to have come from the patients’ own pockets.³⁷² Another observable point in Table 4.6 is the increasing number of patients who were from St John’s parish in Newcastle. In the eighteenth-century, the largest parish in Newcastle was All Saints, accounting for around 50% of the population of the city, however, as we have demonstrated in Chapter 1, St John’s parish experienced a surge in population growth in the nineteenth-century which could explain the larger proportion of patients coming from that parish in 1850. Overall, our evidence shows that a large majority of patients came from Newcastle and its surrounding neighbourhood. However, there were some patients who came from further afield, for example, from the smaller townships and parishes north and south of the river Tyne. This would surely suggest that the ‘disease environment’ within the hospital must have been constantly changing, given that patients who were from more rural parishes would have had different levels of exposure to diseases which were present among the city’s urban population.³⁷³

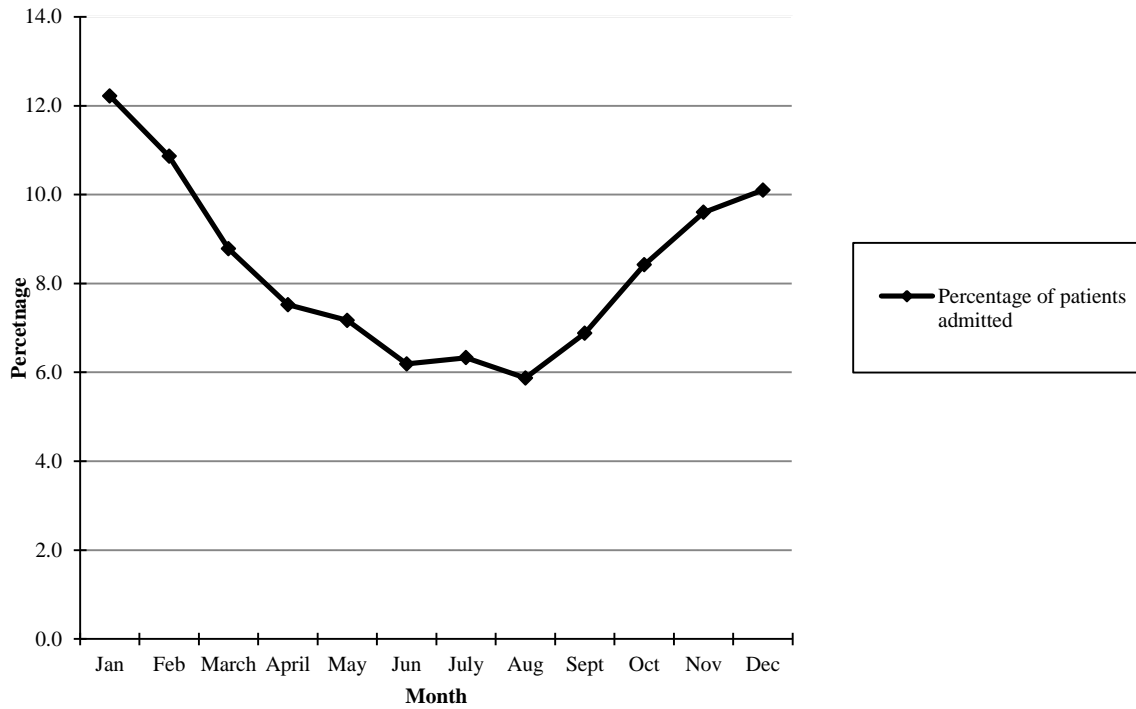
4.4 *The seasonality of admissions*

What can we say about the seasonality of patients who were admitted to the Infirmary? If admission to the Infirmary was subject to seasonal fluctuations this might also reveal something more about the patients and their ailments. In order to shed some light on this issue, Figure 3.7 plots the monthly Infirmary admission totals as proportions of the total number of patients who were admitted over the decade.

³⁷² For a discussion of the transfer of patients to and from hospitals in this period, see: H.W. Hart. ‘The Conveyance of Patients to and from Hospital, 1720-1850’, *Medical History*, 22 (1978), 397-404; Miller. ‘The Infirmary on the Forth’, 153.

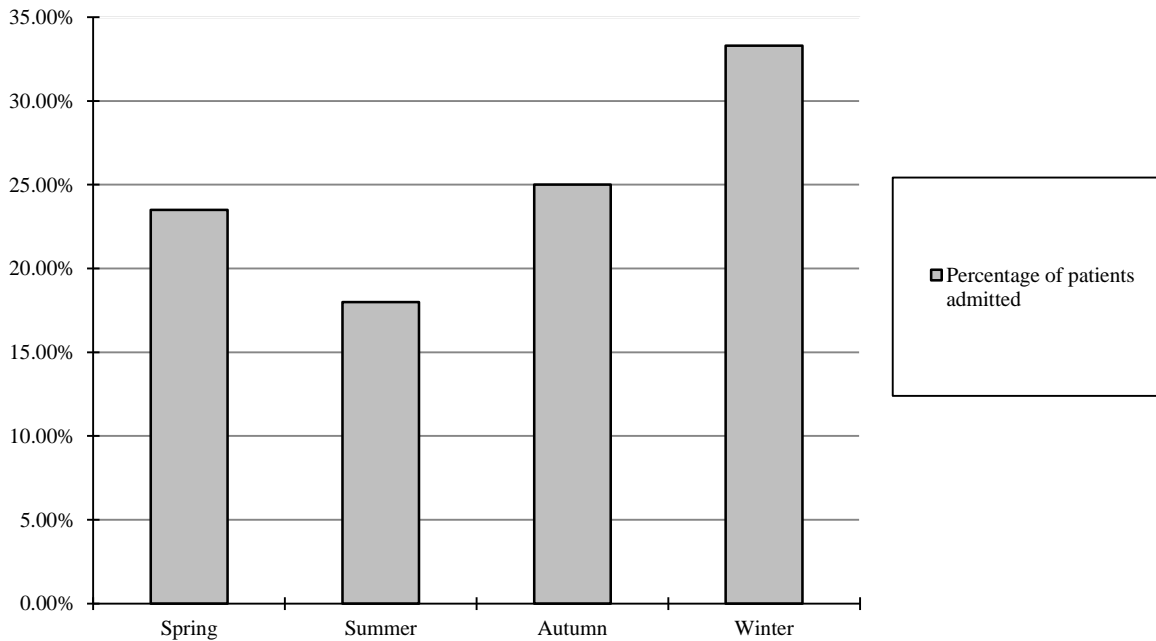
³⁷³ McNeill. *Plagues and Peoples*, 217-68; Landers. *Death and the Metropolis*, 89-126; Schwarz. *London in the Age of Industrialisation*, 125-55; Dobson. *Contours of Death and Disease*, 9-43, 81-222, 493-539; Levene. *Childcare, Health and Mortality*, 49-67, 145-176. Davenport *et al.* ‘The Decline of Adult Smallpox in Eighteenth-Century London’, *Economic History Review*, 64 (2011), 1289-1314.

Figure 3.7 *Seasonality of Infirmary admissions, 1778-87*



Source: Same as Table 4.3

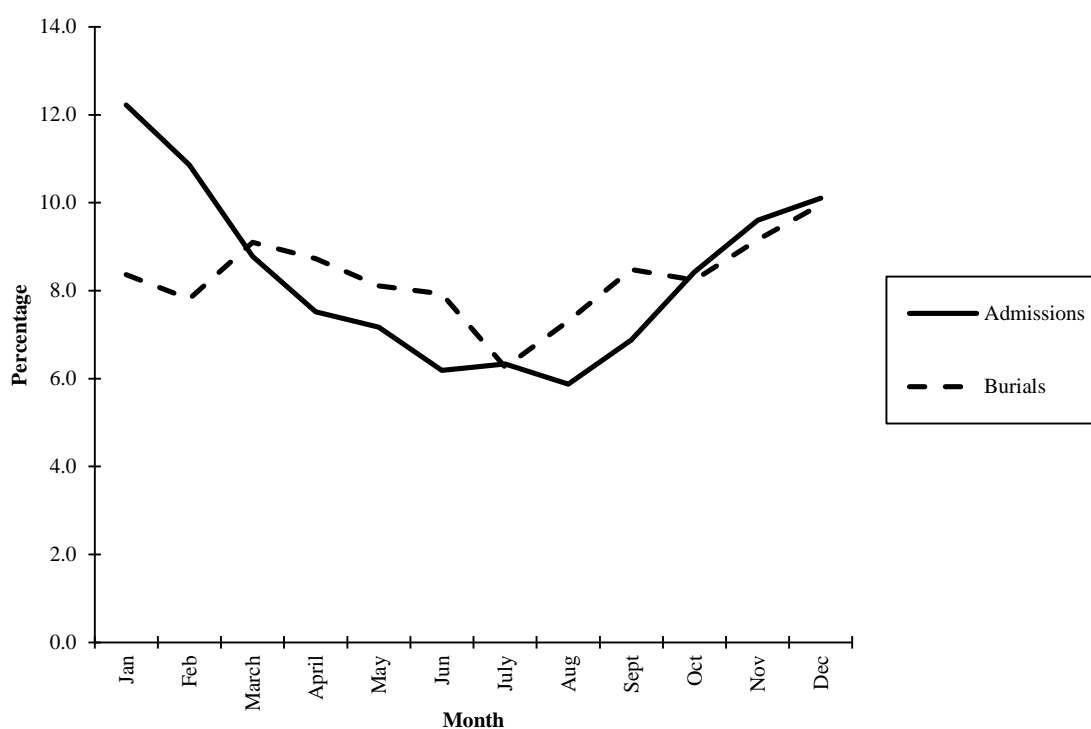
Figure 3.8 *Newcastle Infirmary patient admissions by season of admission, 1778-1787*



Note: these seasons each represent clusters of three calendar months (summer consisting of June, July and August, and so on).
 Source: Same as Table 4.3

Figure 3.7 demonstrates that admissions were subject to marked seasonality. Admissions display a marked fall which commences in February and continues through until June, thereafter admissions seem to plateau. After the three summer months of June, July and August, admissions appear to rise steadily as autumn progresses. To examine this in more detail, Figure 3.8 above sets out these admissions by breaking the data down into three calendar months per season. In this case summer represents June, July and August, and so on. Demonstrably there was a surplus of patients admitted in autumn with admission rates falling during spring and particularly in the summer.³⁷⁴

Figure 3.9 *Seasonal distribution of burials and admissions to the Newcastle Infirmary, 1778-87*



Source: Same as Table 3.3. Burials were extracted from the Transcripts of the parish registers for St Nicholas, All Saints, St John's and St Andrews parishes held in Newcastle city library. Copies of the original registers are available in TWAM on microfilm but the quality of the films is poor for most years.

How does this compare to the seasonal distribution of burials in Newcastle? Figure 3.9 sets out the seasonality of admissions to the Infirmary against the seasonal distribution of burials which took place within the Anglican parishes in Newcastle, with both of these series showing a similar degree of seasonal variation, which may be understood in the following

³⁷⁴ The exception to this pattern falls between spring and summer of 1785, when summer admission increased by 1.6%, a small figure which should distort the overall patterns observable in both Figure 4.6 and Table 4.7. TWAM HO.RVI/72/1-2.

ways. Firstly, in the previous section we have seen that the majority of patients who were actually admitted to the Infirmary were closely proximal to the city (Tyneside). This is important because of the maritime nature of Newcastle's economy, meaning that a sizeable proportion of the city's population could be away at sea at any one time, thereby reducing the population at risk of being admitted, particularly during the summer months, when the ports trade tended to peak.³⁷⁵ It has also been demonstrated from evidence discussed in the previous section, that even in the nineteenth-century a reasonable proportion of patients who were admitted to the Infirmary came from All Saints parish in Newcastle. In 1850 alone for instance, something close to 30% of all the patients admitted came from this one parish, a figure which would surely be an underestimate for the eighteenth-century, when All Saints made up an even greater proportion of the city's population.³⁷⁶ All Saints parish had a large proportion of its population employed in some form of water-trade, including a very large number of migrant Keelmen employed in transporting coal from the port to the mouth of the river Tyne.³⁷⁷ This would also suggest a degree of gender bias in the population at certain times of the year such as the summer months, when more males were at sea. This becomes even more apparent when one breaks down the seasonality of admissions to the Infirmary by sex (Figure 4.7). Clearly there was a surplus of male patients in the Infirmary during the winter months when the Newcastle ports trade slowed down, which changed significantly during the spring and summer months when the ports activity began to liven up.³⁷⁸

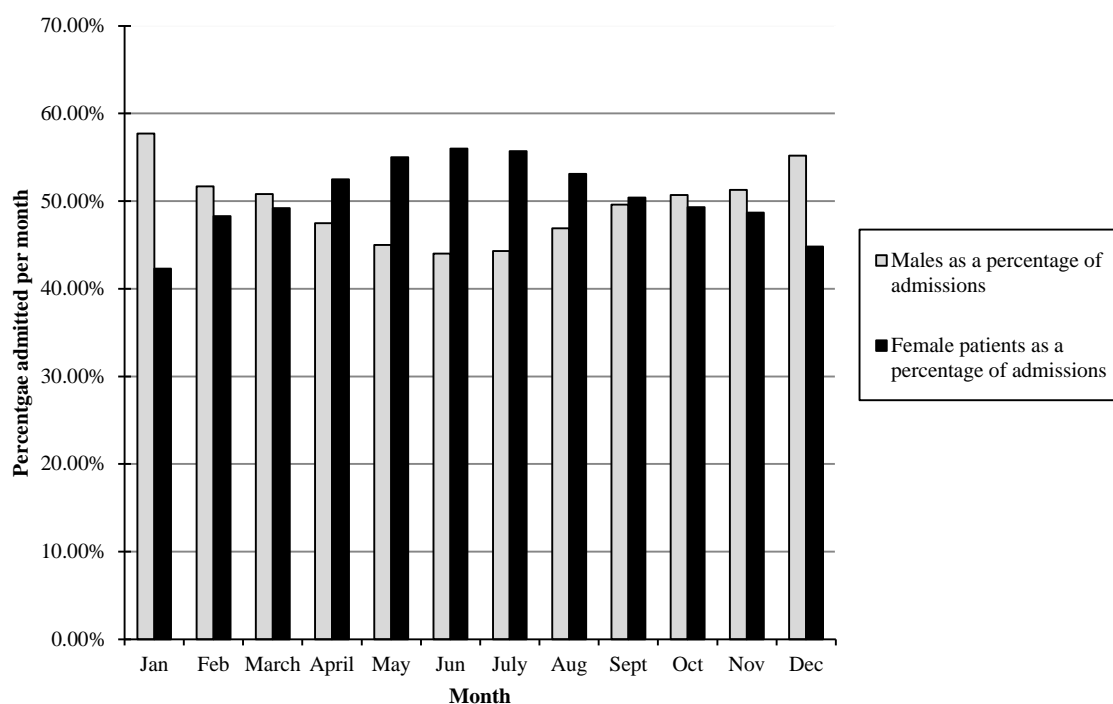
³⁷⁵ For discussion of Newcastle's economic activities in this period, see: Ellis. 'The 'Black Indies'', 26.

³⁷⁶ TWAM HO.RVI/72/1.

³⁷⁷ Wright's recent PhD thesis has suggested that around 46% of the male Keelmen in the parish were from outside the city, with a large proportion of these men coming from Scotland. Interestingly, Wright has also suggested that 'once migrants came to Newcastle they tended to stay for long periods ... suggesting a natural process of migration rather than a transient population of seasonal workers'. This might imply that during the winter months, the number of persons at risk of being admitted from within the city itself would have peaked, see, Wright. 'Water Trades on the Lower River Tyne in the Seventeenth Century', 46-86. Also, for discussion, see: E. Hughes. *North Country Life in the Eighteenth Century* (London, 1952), 251.

³⁷⁸ For a discussion of the seasonal nature of shipping in the eighteenth-century, see: Schwarz. *London in the Age of Industrialisation*, 103-23.

Figure 3.10 *Seasonality of admissions by gender composition, 1778-87*



Same as Table 3.3.

The seasonality of admissions was also related to seasonal hardship. Welfare historians have found that admissions to workhouses in the period were marked ‘by seasonality ... which peak in the winter months characterized by higher levels of unemployment’.³⁷⁹ The infirmary was an institution which provided ‘total care’, in the form of not only medicine but also providing food which included quantities of meat and beer. Further to this, once patients had been admitted it was not uncommon for them to be given free clothing. Indeed, in the early nineteenth-century one of the city’s most prominent physicians commented upon this phenomenon, stating bluntly that ‘the Infirmary [had] hitherto been converted into an Alms-House’.³⁸⁰

Indeed, if Clark’s observation was true, it would suggest that the Infirmary was allowing some patients to stay in the hospital for particularly long periods of time. Why would this be so? How long did patients actually stay in the Infirmary? Table 3.4 sets out the reported length of stay for nearly 2,000 patients who were admitted as in-patients to the Infirmary

³⁷⁹ Boulton *et al.* ‘The Lives of the Poor in the West End of London’, 6. For discussion also see: D.R.Green. *Pauper Capital: London and the Poor Law, 1790-1870* (Farnham, 2010), 25-50; King. *Poverty and Welfare in England*, 227-53.

³⁸⁰ J. Clark. *Papers on the Establishment of a Fever Institution* (Newcastle, 1802).

from 1778 until 1787. The data has also been broken down in terms of the sex of the patients, to try and understand if there were any gender-specific differences in the length of time that patients spent in the Infirmary. By and large, there were very few differences between the reported length of time spent in the Infirmary and the reported gender of the patient. The evidence shows that the majority of patients were resident in the Infirmary for less than around six months. Out of the sample, a total of 1,211 patients left the hospital in less than 160 days, some 61% of the total. Of these individuals over 76% spent little more than four months in care. There were very few patients who spent longer than 280 days in the hospital, some 5%, and only 1% of these were there for longer than a year. Margaret Greggs, of Chester-le-Street in County Durham was one patient whose stay was exceptionally long. She had been admitted to the Infirmary as an in-patient on 9 April 1778, labouring under ‘consumption’.³⁸¹ Greggs received a letter of recommendation from one Mrs Auckland and was attended to by Dr John Hall. She appears to have laboured under the ‘consumption’ for three months prior to her admission and was discharged as ‘cured’ on 1 July 1779, therefore making it a stay of over 15 months.³⁸² It is likely that it was the nature of Greggs’ condition which meant that she required a longer stay than most patients. Consumption, often thought to be tuberculosis, may have required a long period of bed rest. Further, the fact that consumptives were not supposed to be admitted to the Infirmary at all, suggests that Greggs may have been in the preliminary stages of the disease.³⁸³

³⁸¹ TWAM HO.RVI/72/1.

³⁸² TWAM HO.RVI/72/1.

³⁸³ For a detailed discussion of consumption/tuberculosis in the nineteenth-century, see: Hardy. *The Epidemic Streets*, 211-66.

Table 3.4 *Infirmiry patients length of time in hospital by reported age sex profile, 1778-1787*

Length of stay in days	Number of Males	%	Number of Females	%	Total number of patients	%
1-40	156	15.1%	145	15.5%	301	15.3%
41-80	198	19.2%	176	18.8%	374	19.0%
81-120	145	14.0%	101	10.8%	246	12.5%
121-160	134	12.9%	156	16.7%	290	14.7%
161-200	146	14.1%	103	11.0%	249	12.6%
201-240	104	10.0%	123	13.1%	227	11.5%
241-280	86	8.34%	76	8.1%	162	8.2%
280+	47	4.5%	53	5.6%	100	5.0%
Total	1,031	100.0%	933	100.0%	1,964	100.0%

Source: Same as Figure 3.3.

Exceptionally long stays such as that documented in the Margaret Greggs' case were however, atypical. The average length of stay was little over 100 days or so – approximately three months. Our evidence is comparable to Borsay's study of Bath. Borsay found that patients experienced longer stays at the Bath Infirmiry than our evidence from Newcastle suggests.³⁸⁴ While these comparisons are interesting, the data hides the fact that some patients could actually move from one patient type to another, that is, if one was admitted as an in-patient, depending on the course of one's treatment it was entirely possible for a patient to be made an out-patient. This is a fact which some historians of medicine have avoided confronting, as it is difficult to measure without introducing detailed quantitative data. Figures 3.11 and 3.12 demonstrate the extent to which this transference occurred over time. Both of these figures suggest that reasonable proportions of both in-patients and out-patients may have changed their status per year, although the evidence demonstrates that in-patients were at greater risk of being transferred from the wards than out-patients were from being admitted. The data shows that in any one year, about 10% of all in-patients admitted would be deemed as appropriate for treating as an out-patient and sent home but less than 5% of out-patients were sent to one of the Infirmiry wards.³⁸⁵ However, this may simply have been a result of the patients' course of treatment and progress. For example, 12-year old Margaret Coldwille of St John's parish in Newcastle was admitted to the Infirmiry on 17 March 1778 suffering from an 'ulcer' on her leg, having laboured under this condition for two months.

³⁸⁴ The problem with comparing the Newcastle evidence to Borsay's study of Bath, is that she based her argument on reported lengths of stay and reported patient outcome. Such an exercise is impossible to carry out for Newcastle and would, in some respects, be statistically insignificant. See, Borsay. *Medicine and Charity in Georgian Bath*, 222-23.

³⁸⁵ In any one year, an average of 9.8% of all in-patients were sent home and made into out-patients, who would have been required to travel to the Infirmiry for treatment. From the evidence we have for out-patients, an average of 4.7% were made in-patients and sent to one of the Infirmiry wards. TWAM HO.RVI/72/1-2.

She was subsequently treated by one of the house surgeons at the Infirmary, one Mr Lambert.³⁸⁶ Unfortunately the register does not provide any information on how long Coldwille was in the Infirmary as an in-patient, although the evidence suggests that her condition may have improved enough for her to be sent home and readmitted as an out-patient.³⁸⁷ Likewise, on 26 March 1778, 17-year old, John Mitchison of All Saints parish, also in Newcastle, who was suffering from ‘asthma’, received a recommendation to be become an out-patient at the Infirmary from Lord Ravensworth.³⁸⁸ Mitchison was treated as an out-patient until the 17 July 1778 and was then admitted as an in-patient; perhaps his condition had worsened and required more ‘intensive care’.³⁸⁹

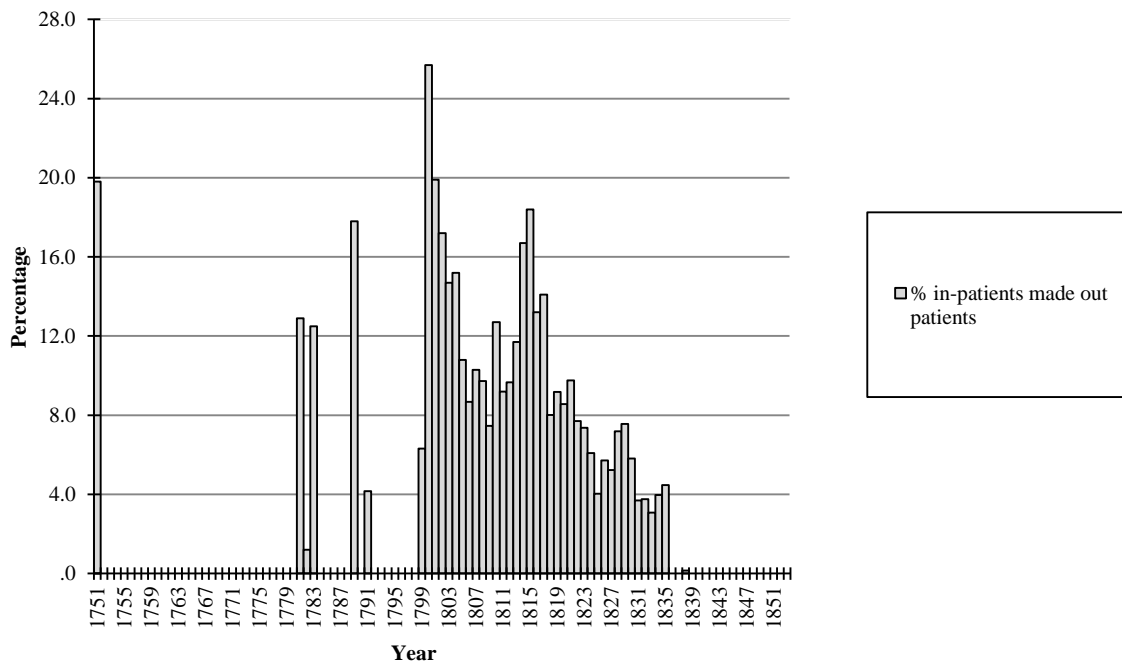
³⁸⁶ TWAM HO.RVI/72/1-2.

³⁸⁷ TWAM HO.RVI/72/1-2.

³⁸⁸ TWAM HO.RVI/72/1-2. For a discussion of the Ravensworth family and their involvement in the regions coal trade, see: Levine & Wrightson. *The Making of an Industrial Society: Wickham*, 54, 132, 144. The fact that Mitchison was 17-years old might suggest that he was an apprentice or was in the employment of Ravensworth. For a discussion of the issue of patrons sending servants and employers to voluntary hospitals in the eighteenth-century, see: Porter. ‘The Gift Relation: Philanthropy and Provincial Hospitals’, 123-48.

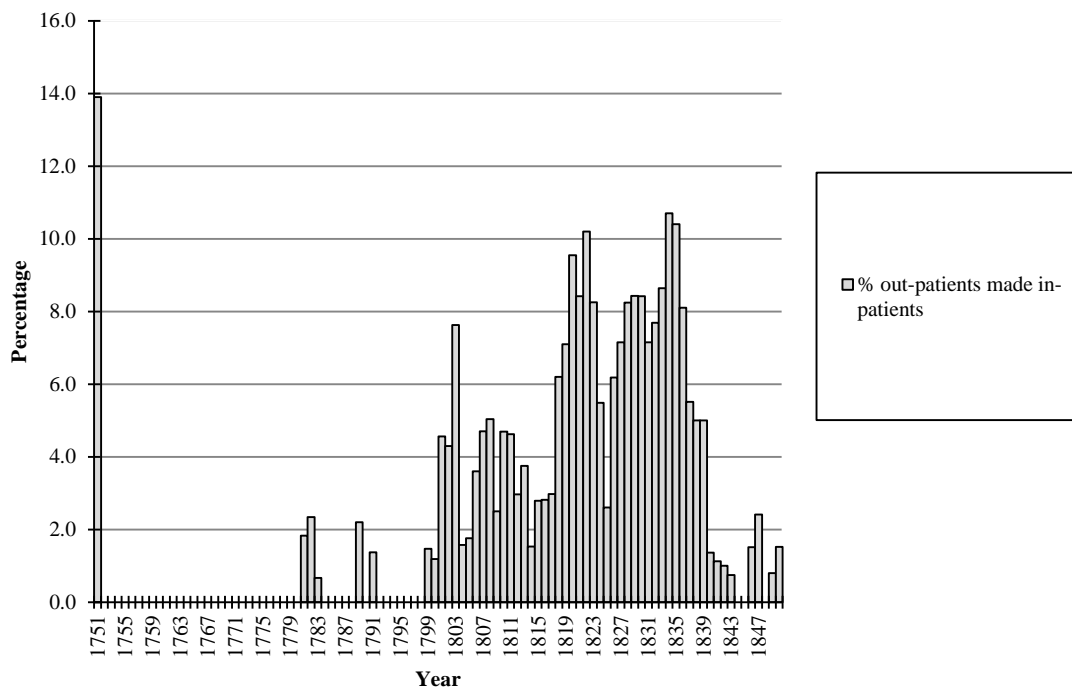
³⁸⁹ TWAM HO.RVI/72/1-2.

Figure 3.11 *Proportion of in-patients made an out-patient over time, 1751-1850*



Source: Same as Figure 3.3

Figure 3.12 *Proportion of out-patients made an in-patient over time, 1751-1850*



Source: Same as Figure 3.3

The previous section has established the demographic characteristics of the patients who were admitted to the Infirmary, and it has been shown that the configuration of both the reported age structure and sex profile of the patients is comparable to what we know of other voluntary hospitals in the period. We have also been able to establish that the number of patients who were admitted were subject to a degree of seasonality, with the majority of patients entering the Infirmary during the colder winter months. We need now to know more about the impact that the Infirmary would have had upon the sick and injured in the city. In this next section there are essentially two points which we need to consider. The first is what types of diseases assailed the population who were admitted. And the second, which is clearly related to the former, asks how representative were these conditions? Thus it is to the morbidity of the Infirmary patients that we now must turn.

4.5 Morbidity at the Newcastle Infirmary

If we are to fully understand the role played by the Infirmary in treating the sick and ill in Newcastle we obviously need to know more about the types of medical conditions which assailed the population who were admitted and treated by the Infirmary staff. Such an understanding should allow us to consider questions about the types of ill health experienced by the city's local population. These may also reveal something about some the possible limitations of Infirmary medical provision in the period, for example, if specific diseases and complaints were not being treated on a day to day basis.

We are fortunate that the Infirmary admission and discharge registers provide information on the reasons why patients were admitted as in-patients or treated as out-patients. Table 3.5 sets out the causes of admission for over 4,000 patients who were treated by the Infirmary across the decade for which the data survives (1778-87). The types of medical conditions which were treated on a regular basis were muscular and joint related illnesses such as rheumatism. These were conditions which were the most economically devastating, for although not necessarily the most lethal, they were particularly debilitating, crippling conditions, and those which could have caused chronic ill health for long periods, thereby prohibiting work. They were not terribly infectious, but diseases such as Fevers and conditions like Smallpox were commonly excluded from Infirmaries in the period because of risks of contagion. While the absence of such diseases is unsurprising it should be noted that some Infirmary's did indeed treat large numbers of patients suffering from some infectious diseases in this period, for

example, Fissell found a large number of ‘fever’ cases being treated at the Bristol Infirmary, which accounted for over 16% of the total number of patients admitted.³⁹⁰

We should also note the absence of diseases associated with childhood, such as ‘water in the head’, ‘gripping’, ‘rickets’, and ‘convulsions’, conditions which some contemporaries associate with those incidental to childhood.³⁹¹ There also seem to have been a sizable number of patients suffering from the ‘pox’ (possibly venereal disease). This malady, which appears to have been omnipresent in all major port towns and cities in the period, would have, as we shall see in the next chapter, been particularly rife amongst the Newcastle poor.³⁹² Even though the evidence suggests that there were only around 4 ‘poxed’ patients per year on average, this figure is still a significant number because ‘foul’ patients were prohibited from admission, a founding statute which remained in place until the third decade of the nineteenth-century. It is also worth pondering that some of the other conditions in Table 3.5 may have also been related to the ‘foul disease’.³⁹³ By the 1850’s, there were well over 200 patients being treated for venereal complaints per year which might suggest that venereal diseases were actually a common complaint amongst the urban poor.³⁹⁴

³⁹⁰ Fissell. *Patients, Power and the Poor in Eighteenth-Century*, 106-07.

³⁹¹ For discussion of some of the medical complaints which assailed young children in the eighteenth-century, see Levene’s detailed examination of the London Foundling Hospital children: Levene. *Childcare, Health and Mortality at the London Foundling Hospital*, 145-58. For a discussion of the types of conditions which commonly killed children in the metropolis, see Landers’ work on the London Bills of Mortality: Landers. ‘Age Patterns of Mortality in London during the ‘Long Eighteenth Century’, 49-51; Landers. *Death and the Metropolis*, 203-43.

³⁹² See Siena’s detailed study of the ‘foul’ disease in early modern London: K.P. Siena. *Venereal Disease, Hospitals and the Urban Poor: London’s ‘Foul Wards’, 1600-1800* (Rochester, 2004), 152-61. Loudon has also shown that venereal disease was a common complaint treated by Dispensaries in cities such as London and Liverpool, see: Loudon. *Medical Care and the General Practitioner*, 57.

³⁹³ Given the social stigma attached to this condition it would not be surprising for patients to try and hide their symptoms, which may suggest that some of the other conditions listed in the Infirmary admission register could be in reality the ‘foul disease’, for instance: Abscesses (42) and Inflamed testicles (35). See for discussion of the ‘foul disease’ and privacy: K. Siena. ‘The ‘Foul Disease’ and Privacy: The Effects of Venereal Disease and the Patient Demand on the Medical Marketplace in Early Modern London’, *Bulletin of the History of Medicine*, 75 (2001), 199-224; A. Fessler & R. France. ‘Advertisements on the Treatment of Venereal Disease in the Eighteenth and Nineteenth Centuries’, *British Journal of Venereal Diseases*, 23 (1947), 125-27.

³⁹⁴ Holden et al have shown that in 1850 there were 237 Lock patients admitted to the Infirmary, see: Holden *et al*. ‘Accounting and the Moral Economy of Illness in Victorian England’, 542.

Table 3.5 *Types of diseases and complaints admitted to the Infirmary (rank order), 1778-1787*

Reason for admission	Number treated	%
Rheumatism	706	16.8%
Ague	540	12.8%
Scurvy	268	6.4%
Wounded Leg	265	6.3%
Wounded Hand	197	4.7%
Wounded Knee	195	4.6%
Asthma	170	4.0%
Stone	167	4.0%
Wounded Arm	152	3.7%
Hernia	137	3.3%
Wounded Face	132	3.1%
Fractured thigh	120	2.9%
Hectic	107	2.5%
Fits	51	1.2%
Diarrhoea	50	1.2%
Dysentery	50	1.2%
Epilepsy	48	1.1%
Fractured Hand	47	1.1%
Dropsy	45	1.1%
Gout	45	1.1%
Pox	44	1.0%
Indigestion	43	1.0%
Others less than 1.00%	626	14.8%
Total	4,205	100.0%

Source: Same as Table 3.3

It is also demonstrably the case that there were large numbers of patients who were admitted suffering from some form of wound or injury. Collectively, wounds represent the largest single cause of admission across the decade for which the data survives. Out of a total of 4,205 patients, 941 patients were admitted with wounds. If we were, for example, to include ‘fractures’ in the same category, then this would equal 1,108 patients, some 26% of the total sample.³⁹⁵

³⁹⁵ In 1999 an archaeological excavation was carried out on the Newcastle Infirmary burial ground. This project was able to trace some biological evidence which showed all the burials which were relocated, In about a third of all cases ... a reason for amputation was evident ... [s]everal bones showed sign of chronic infection, for example Syphilis and TB [Tuberculosis]. Others revealed evidence of severe trauma, such as crushing or compound fracture ... and cancer’, which adds some weight to the evidence presented in Table 4.8. For discussion, see: A. Chamberlain. ‘Teaching Surgery and Breaking the Law’, *British Archaeology*, 48 (1999), <http://www.britarch.ac.uk/ba/ba48/ba48feat.html> [Accessed 23/09/2009].

Table 3.6 *Accident cases admitted (as in-patients) to the Newcastle Infirmary by rank order, 1819-24*

Accident admissions	Number	%
Wounds	385	25.3%
Contusions	345	22.7%
Burns and scalds	190	12.5%
Fractured arm	104	6.8%
Sprains	101	6.6%
Cases admitting no delay	78	5.1%
Fractured leg	61	4.0%
Fractured collar bone	61	4.0%
Fractured bones of the hand or feet	28	1.8%
Fractured skull	27	1.7%
Fractured thigh	22	1.4%
Dislocated shoulder	16	1.0%
Dislocated hands or foot	16	1.0%
Fractured ribs	15	0.9%
Dislocated elbow	13	0.8%
Dog bites	12	0.7%
Dislocated ankle	10	0.6%
Fractured jaw	9	0.5%
Fractured nose	8	0.5%
Dislocated hip	8	0.5%
Fractured pelvis	7	0.4%
Total	1,516	100.0%

Source: Annual Reports database TWAM HO.RVI/72/1-80

Was there any continuity in this? What was the case in the nineteenth-century? Unfortunately, although no admission or discharge registers have survived for the Infirmary covering the first half of the nineteenth-century, we are fortunate that a detailed listing of the number and types of accident cases which were treated has survived; this covers the years 1819-24. These have been set out in Table 3.6. Out of the total of 5,296 in-patients treated between 1819 and 1824, 1,516 were accident cases alone.³⁹⁶ That is, nearly 30% of all patients were classified as accident and wound victims. Such findings strongly suggest that the Infirmary was providing a mending service to the labouring and ‘deserving’ poor who had encountered a brief interlude in their daily working lives. The conditions which were treated in great numbers were either chronic in nature such as Rheumatism or were conditions which might last for short bursts of time, requiring periods of bed rest, which may have been severely damaging to the household economy of labouring poor.

The evidence we have examined thus far is comparable to what we know of other voluntary hospitals and institutions in this period. In Bath for instance, Borsay has shown that the

³⁹⁶ The annual number of in-patients who were treated in these years was as follows: 1819: 872, 1820: 898, 1821: 860 1822: 870 1823: 910, 1824: 886. TWAM HO.RVI/1-115.

Infirmary there treated large numbers of rheumatic cases, accounting for 26% of her sample.³⁹⁷ There were nearly identical numbers of patients who were deemed ‘paralytic’ and there were also a reasonable proportion being treated for conditions such as ‘lameness’, ‘leprosy’ (skin disorders) and ‘hip cases’.³⁹⁸ These cases when grouped collectively with rheumatic cases account for over 87% of the patients treated by that institution.³⁹⁹ Fissell’s study of the Bristol Infirmary found rather different results. Unlike Newcastle and Bath, the Bristol Infirmary treated large numbers of patients labouring under fevers as mentioned previously. In Bristol, respiratory disorders also made up a significant proportion of cases, with additional numbers relating to abscesses, ulcers and traumas, collectively accounting for around 60% of all conditions that assailed patients who were admitted.⁴⁰⁰ Fissell has emphasised that one of the reasons for the large number of fever cases admitted to the Bristol Infirmary relates to the ‘marshy low-lying’ areas surrounding the city, where fever ‘was both endemic and epidemic’.⁴⁰¹ In Newcastle, as we shall see in the forthcoming chapter, fever and infections were, like in most other urban environments, ever present amongst the poor in the city.⁴⁰² Indeed, in the early nineteenth-century, Dr John Clark, one of the Infirmary’s senior physicians, put measures in motion to build an extension to the Infirmary for patients labouring under fevers. He argued strongly that the types of diseases which were being treated on a regular basis at the Infirmary were:

[I]mproper for a convalescent Hospital; and, that, from the great number of incurable diseases, which have been admitted, contrary to an express rule, the Infirmary has hitherto been converted into an Alms-House. Neither the medical gentlemen, nor the committee, can help this, so long as patients are sent from a great distance, labouring under incurable diseases, in a weak state, or under disease of the most hopeless nature, and even sometimes when they are actually in a dying condition.

³⁹⁷ Borsay. *Medicine and Charity in Georgian Bath*, 220-21. Borsay’s analysis involved converting the contemporary diagnostic labels recorded in the Bath Infirmary registers and ‘casebook,’ using the method employed by Risse’s study of the Edinburgh hospital, see: G.B. Risse. *Hospital Life in Enlightenment Scotland: Care and Teaching at the Royal Infirmity of Edinburgh* (Cambridge, 1986).

³⁹⁸ Borsay. *Medicine and Charity in Georgian Bath*, 220-21.

³⁹⁹ *Ibid*, 220-21.

⁴⁰⁰ The exact figures were as follows (%): Fever (16.6%), Respiratory (15.1%), Trauma (13.9%), Abscess and Ulcers (13.2%). Interestingly Fissell’s study also found that there were a number of ‘Miscellaneous’ conditions included in her findings, accounting for over 10% of patients. See: Fissell. *Patients, Power and the Poor in Eighteenth-Century*, 107.

⁴⁰¹ Fissell. *Patients, Power and the Poor in Eighteenth-Century*, 106.

⁴⁰² See, for discussion: L.D. Schwarz. ‘Review Article: ‘Death in the Eighteenth Century’, *Continuity and Change*, 11 (1996), 295-302; J. Landers. ‘Mortality in Eighteenth-Century London: a Note’, *Continuity and Change*, 11 (1996), 303-10.

From the careful inspection of these tables, the truth of Dr Haygarth's practical deduction will appear evident, 'that Fever wards will do ten times more real good, in the prevention of human misery, than all other parts of the Infirmary'.⁴⁰³

Clark's plea 'fell on deaf ears' and no fever ward was ever attached to the Infirmary. Instead like in Manchester, a separate Fever Hospital was erected in Newcastle, outside the city walls in Gallowgate.⁴⁰⁴

In short, the evidence we have suggests that the Infirmary was a hospital which treated those individuals who were largely in the 'prime of life', and thus the diseases and medical complaints which were treated regularly were those conditions which one might normally associate with the labouring poor, conditions which were highly debilitating and or caused illness for a long time. That is, they were not therefore the diseases and conditions which were killing the wider population. Instead there were conditions which briefly interrupted the economic prosperity of the labouring poor, for example, accidents, rheumatism and ulcers.⁴⁰⁵ The evidence for the Infirmary in Newcastle therefore suggests that the institution was seeking to return those of working years 'to a balanced state of health'.⁴⁰⁶ Thus since few patients suffered from lethal diseases, most were discharged as having been cured (see Figure 3.13), for instance on average 78% of patients were discharged cured over the entire century.

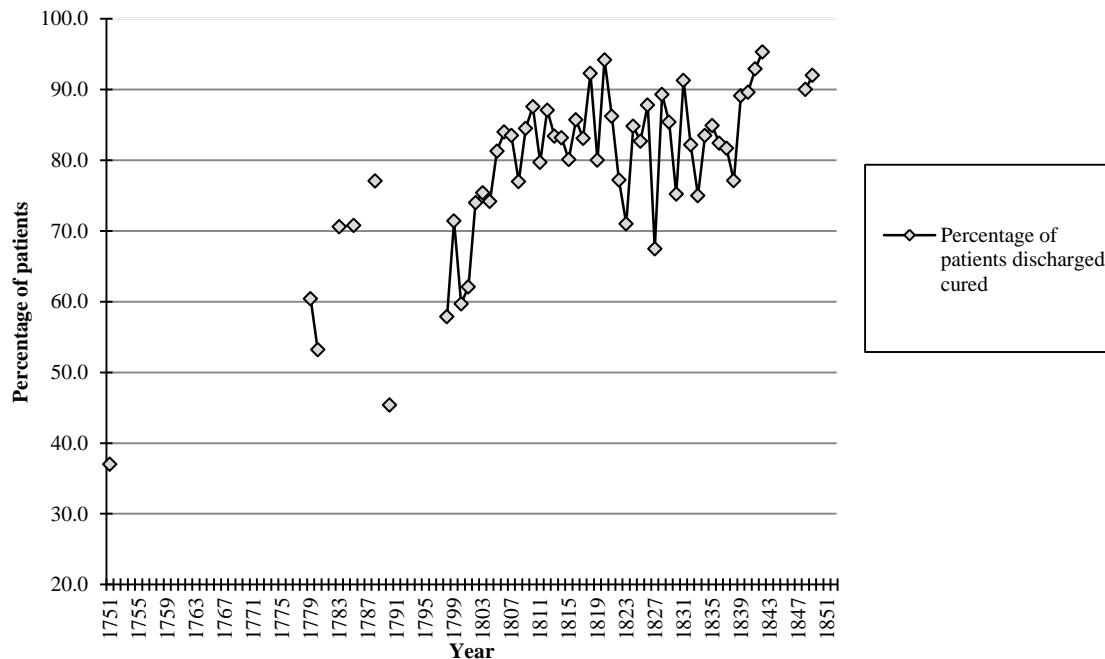
⁴⁰³ J. Clark. *A Collection of Papers Intended to Promote an Institution for the Cure and Prevention of Infectious Fevers in Newcastle and Other Populous Towns. Together with the Communications of the Most Eminent Physicians Relative to the Safety and Importance of Annexing Fever-Wards to the Newcastle and other Infirmary* (Newcastle, 1802).

⁴⁰⁴ The building still remains today and houses the offices of Newcastle's city Council. For a detailed discussion of the failure of Clark's efforts, see: Miller. 'Dr John Clark: the Forgotten Physician', 104-31; Miller. 'The Infirmary on the Forth', 143-65; Maehle. 'John Clark (1744-1805)', 813-14. For Manchester, see: Pickstone. *Medicine and Industrial Society*, 3-34.

⁴⁰⁵ James Riley has already shown in great detail that the types of diseases and conditions which assailed the labouring poor who were members of friendly societies in the nineteenth-century commonly experienced similar conditions and ailments, see: J.C. Riley. *Sick, not Dead: The Health of British Workingmen during the Mortality Decline* (Baltimore, 1997), 193-94.

⁴⁰⁶ Fissell. *Patients, Power and the Poor in Eighteenth-Century*, 108.

Figure 3.13 *Proportion of patients discharged cured from the Infirmary over time, 1751-1851*



Source: Same as Figure 3.5

4.3 Death and the Infirmary

How many patients died while under the care of the Infirmary staff? What sorts of diseases and conditions caused death? And how do these compare to what we know of the morbidity of Infirmary patients?

We should begin by looking at the total number of patients who died. Figure 3.14 plots the total number of deaths as recorded in the Infirmary's annual reports. The data suggests that the number of patients who died while in the care of the Infirmary were subject to levels of volatility. It is also observable that the number of people dying was increasing over time as more patients were utilising the infirmary. Figure 3.15 takes the analysis a little further by plotting the annual number of deaths which occurred as a proportion of the number of patients who were admitted. Although the annual data in Figure 3.14 suggests an increase in the number of Infirmary deaths over time, proportionately, mortality seems to have plateaued, with the exception of three major peaks in 1783 and between 1792 and 1793. These were particularly unhealthy years in the city, as Creighton has already noted:

Newcastle saw the worst kinds of contagious Fever, in workhouses and in the 'sordid and crowded habitations of the indigent ... it was seldom out of

Newcastle a whole year; and in some years ... 1783 ... it was usually rife ... attacking whole families ... [and] dysentery attacked great numbers of the poor in the autumns of 1783 and 1785.⁴⁰⁷

Creighton also found that the 1790s were particularly unhealthy years for the city and that Fever was epidemic with 'the largest totals (of deaths) being in 1793'.⁴⁰⁸ Perhaps these epidemics were felt at the Infirmary. While these peaks are interesting and difficult to explain, the general picture suggests that there were few patients who died while under the care of the Infirmary staff. Over the entire period for which evidence survives, 3,197 patients died, making the mean number of deaths per years 50, although the model number was 40, suggesting relatively stable levels of volatility. Overall, less than 3% of the total number of patients who were admitted died while under care of the Infirmary staff. However, this impressive estimate must be viewed with some caution, given that it is based upon contemporary evidence which was published in order to promote the Infirmary's work. The contemporary physician Dr Clark was well aware of the problems of these reports, and in 1802 he commented that:

[T]he Apothecary has always been in the custom of dis-missing such inpatients as wished to go home, or he thought well enough to be made out-patients, on the Thursday morning; and I have often remonstrated with him, making the practice appear more favourable than it really was. But if the committee cast their eyes upon dropsy, palsy, and several other diseases, they will be at no lost to estimate the probably event of such temporary cures.

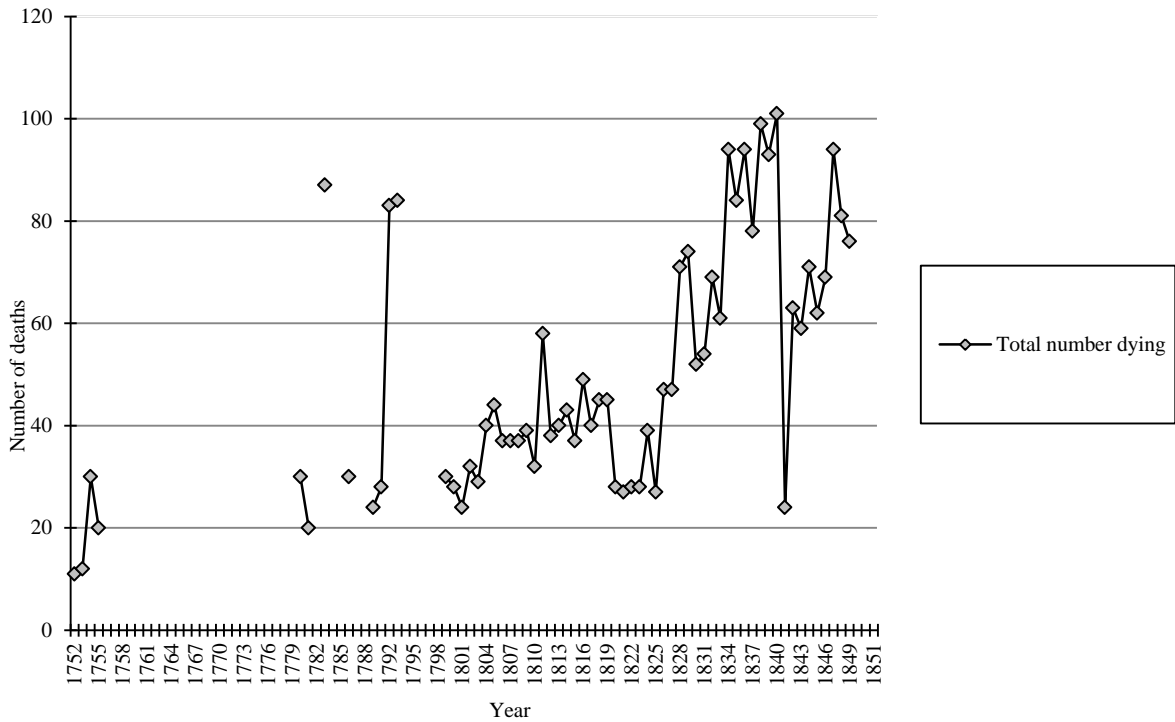
Another defect, with respect to the column cured, it that, neither the journals, nor the hospital register, ascertain clearly whether the cure has been made in the house, or afterwards when the patient has returned to his home.⁴⁰⁹

⁴⁰⁷ C. Creighton. *A History of Epidemics in Britain* (London, 1894), 142-43.

⁴⁰⁸ C. Creighton. *A History of Epidemics*, 142-43.

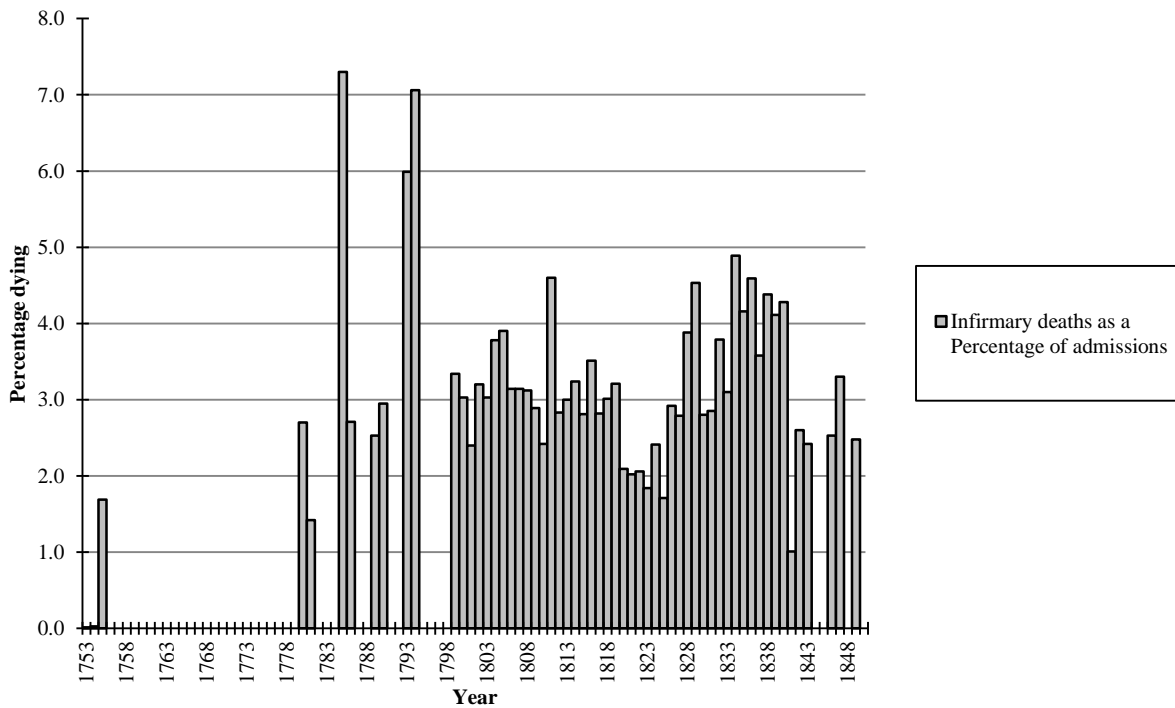
⁴⁰⁹ J. Clark. *An Account of the Epidemical Catarrhal Fever, Commonly Called Influenza: As it first appeared in the City and Environs of Durham in the Month of June, 1782. To which is prefixed, a discourse on the improvement of medical knowledge by P. Dugud-Leslie, M.D.FRS. With a letter from the Author on the Influenza as it Appeared in Newcastle upon Tyne by Dr John Clark M.D* (London, 1783); Clark. *Papers on the Establishment of a Fever Institution* (Newcastle, 1802).

Figure 3.14 Mortality at the Newcastle Infirmary, 1752-1851



Source: Annual Reports database TWAM HO.RVI/72;1-80

Figure 3.15 Infirmary patient deaths as a proportion of the total number of admitted patients, 1753-1853



Source: Annual Reports database TWAM HO.RVI/72;1-80

In this sense, it is difficult to challenge or agree with the notion stressed by previous historians, ‘who questioned whether hospitals were “gateways to death” in this period.’⁴¹⁰ We have no evidence to suggest that the Infirmary was a ‘last resort institution’, in much the same way that workhouses may have operated in this period, that is, where people (particularly the elderly) often went to die.⁴¹¹ The reported age at death adds a little more to this discussion (see Table 3.7).

Table 3.7 Age and Sex profile of reported patient deaths at the Newcastle Infirmary, 1778-87

	Number of male deaths	Percentage distribution	Number of female deaths	Percentage distribution	Total number of deaths	Total percentage distribution
0-4	1	1.2%	1	1.6%	2	1.4%
5-9	1	1.2%	2	3.2%	3	3.1%
10-19	11	13.6%	7	11.1%	18	12.5%
20-29	13	16.0%	9	14.3%	22	15.3%
30-39	12	14.8%	11	17.5%	23	16.0%
40-49	15	18.5%	14	22.2%	29	20.1%
50-59	13	16.0%	12	19.0%	25	17.4%
60-69	9	11.1%	4	6.3%	13	9.0%
70-79	5	6.2%	2	3.8%	7	4.9%
80+	1	1.2%	1	1.6%	2	1.4%
Total	81	100.0%	63	100.0%	144	100.0%

Source: Same as Figure 3.5

The majority of deaths were adults in the prime of life, accounting for over 81% of the total. If the Infirmary had been acting as a hospice, we would normally suspect that there would be significant numbers of patients dying who were elderly.⁴¹²

⁴¹⁰ For discussion, see: Fissell. *Patients, Power and the Poor in Eighteenth-Century*, 106-08; E. Sigsworth. ‘Gateways to Death?’, in P. Mathias ed., *Science and Society 1600-1900* (Cambridge, 1972), 97-110; W. Guy. ‘On the Mortality of London Hospitals: And Incidentally in the Prisons and Public Institutions of the Metropolis’, *Journal of the Statistical Society of London*, (1867), 293-322.

⁴¹¹ Fissell. *Patients, Power and the Poor in Eighteenth-Century*, 108; For a discussion of workhouse and Poor Law medical services in this period, see: Boulton *et al.* ‘The Parish Workhouse, the Parish and Parochial Medical Provision’, Forthcoming; M. Pelling. ‘Healing the Sick Poor: Social Policy and Disability in Norwich, 1550-1640’, *Medical History*, 29 (1985), 115-37.

⁴¹² In 1841, when the Registrar General’s report on the causes of death was published, it showed that ‘old age’ was the most common causes of death amongst novocastrians, accounting for some 8% of all known deaths in the city in that year. For discussion, see Chapter 4 of this thesis.

Table 3.8 *Commonest causes of death of Newcastle Infirmary patients, 1778-1787, by rank order*

Causes of death	Number of deaths	Percentage of reported deaths
Dropsy	22	15.3%
Palsy	16	11.1%
Ague	14	9.8%
Accident	12	8.3%
Fractures	12	8.3%
Scrofula	10	6.9%
Tumours	7	4.9%
Swelling	7	4.9%
Asthma	6	4.2%
Consumption	5	3.5%
Abscesses	5	3.5%
Leg Ulcer	4	2.8%
Colic	3	2.1%
Fever	3	2.1%
Cancer in Breast	3	2.1%
Inflammation of the Liver	2	1.4%
Cancer	2	1.4%
Broken Thigh	2	1.4%
Cough	2	1.4%
Drinkers	2	1.4%
Hernia	1	0.7%
Dysentery	1	0.7%
Hectic	1	0.7%
Rheumatism	1	0.7%
Aneurism	1	0.7%
Total	144	100.0%

Source: Same as Figure 3.5

What were the sorts of diseases and ailments which *killed* the Infirmary patients? Table 3.8 sets out all of the reported deaths which were recorded in the admissions and discharge register between 1778 and 1787. This data shows that there was some difference between the types of conditions which were being commonly admitted and treated in large numbers and the diseases which *killed* the patients. The most common causes of death were conditions such as ‘dropsy’, and ‘palsy’ accounting for over 26% of the total known causes of death, but only accounting for approximately 2% of admissions. It is however entirely possible that some of the patients may have contracted a form of disease or illness which was more lethal, once they had already been admitted. William Potts may be one such case. Potts, who was resident in the parish of Whickham, in county Durham, was admitted to the Infirmary on 17 March 1779 aged 14 years.⁴¹³ He received his letter of recommendation from Lord Ravensworth, one of ‘the patriarchs of the coal trade’.⁴¹⁴ What is interesting about this case is

⁴¹³ TWAM HO.RVI/72/1-2.

⁴¹⁴ TWAM HO.RVI/72/1-2; Levine & Wrightson. *The Making of an Industrial Society*, 73.

that in the admission register two reasons are ascribed to his admission, one which notes ‘ague’ and the other ‘consumption’, with the former having a line stricken through (which may have been done by the Apothecary). Perhaps Potts had been admitted labouring under ‘ague’ but on 9 April 1779, he died from ‘consumption’.⁴¹⁵

Clearly there were relatively few patients who died while under the care of the Infirmary staff, and those who did die may have been in a more vulnerable state than the majority of patients who were admitted. Some case studies are particularly instructive. On 27 July 1780, 20 year old Francis Dixon, resident of St Nicholas parish in Newcastle, was admitted to the Infirmary after having received a letter of recommendation from the Mayor. From what can be gleaned from the admissions register, he appears to have suffered from ‘asthma’ for 8 months. However his stay was not a long one and he died the following day.⁴¹⁶ Nicholas Anderson, a 14-year old boy from Gateshead, was admitted on 10 August 1780, labouring under an ‘inflammation of the liver’; he lasted approximately one month in the Infirmary, dying on 9 September in that same year. John Robinson, a 33-year old man resident in All Saints parish, was admitted on 18 December 1784 after having received a letter of recommendation from Trinity House. He suffered from ‘colic’ (a condition associated with convulsive pain in the abdomen or bowels and abdominal pains and cramping). Unfortunately, Robinson’s stay was also short-lived as he died on 25 December 1784 (Christmas day) after only seven days in the Infirmary.

There are also some interesting and quite revealing case studies which reveal information about the characteristics of the patients, for example, Sarah Dixon and Elizabeth Kneal, both of whom were resident in All Saints parish, were treated as out-patients at the Infirmary. Dixon, who was aged some 20-years, as first treated on 12 February 1786, and Kneal, who was 35-years old, was first treated on 18 March 1786.⁴¹⁷ Both of these patients were recorded as being ‘drinkers’ in the admission register, suggesting that both may have been labouring under alcoholism. Most revealing is that Kneal had only suffered from this condition for two weeks, but there is evidence to suggest that Dixon’s condition was more ‘chronic’. When she had first received her recommendation from the March Company, it was noted in the register that she was some 20-years old, however, Dr Hall who treated her must have known or been

⁴¹⁵ TWAM HO.RVI/72/1-2.

⁴¹⁶ TWAM HO.RVI/72/1-2.

⁴¹⁷ TWAM HO.RVI/72/1-2.

informed of her condition, because the register notes that she had been a drinker for ten years. Unfortunately, her stay was not a long one, as she died in the Infirmary two weeks later, on 26 March (one wonders whether Kneal and Dixon actually knew one another).⁴¹⁸

4.7 Conclusion

This chapter has demonstrated several key points regarding the role played by the Infirmary in the treatment of the sick and the injured poor in the city. The first is that while voluntary hospitals in this period have often been criticised regarding the part they played in the prevention of mortality, the dramatic growth in the number of patients who were being treated by the Infirmary, suggests that there was a market for the services which were being given to the sick and lame poor from the city and from further afield.

The examination of the demographic profile of the patients has shown that there was a surplus male population within the hospital, which was disproportionate given the sex ratio of the wider population of the city. It has also been shown that there were fewer patients among the very young age groups or the elderly. The Infirmary treated individuals who took part in the poor's economy of 'make-shift and mend'. The morbidity of the patients revealed that most of the lethal and highly dangerous diseases and conditions were not in fact treated by the Infirmary staff. Instead, it was chronic and debilitating conditions and accidents which were admitted in great numbers, namely the conditions which would have greatly impacted the 'fragile economy' of the urban poor.⁴¹⁹

In sum, the Infirmary played an important part in the city's and the region's medical landscape, especially since it appears that the institution seems to have coped with an increased demand for its services over time. However, while this is true it should be remembered that the evidence we had examined suggested that the care was limited. We have seen that the typical patient was aged somewhere in the 'prime of life' and was male. But what happened to those who were not in this age group when they were sick and ill? What were the responses to sickness and infectious diseases to which we know the urban poor were so prone? If those who required surgical operations for injuries and chronic muscular complaints were sent to the Infirmary, what happened to those who required more serious

⁴¹⁸ TWAM HO.RVI/72/1-2.

⁴¹⁹ Wrightson. *Earthly Necessities: Economic Lives in Early Modern*, 1-14; Boulton *et al.* 'The Parish Workhouse, the Parish and Parochial Medical Provision', *Forthcoming*.

medical attention? These are the questions which need to be addressed in the next chapter, which will look at the part played by the Newcastle Dispensary.

Chapter 4. 'Humanity Ought Prompt Relief to the Diseased Poor, Justice Demands it?': Dispensary Medicine in Newcastle, 1778-1851

5.1 Introduction

On the 24 October 1778 Mary Lambly, a 57-year-old women who lived in one of the narrow lanes on Newcastle's quayside, received a letter of recommendation from one the subscribers of the newly founded Newcastle Dispensary. She had 'been troubled with a slight cough for about a week [and] had been seized with a shivering, three days before' she was visited by a physician.⁴²⁰ Lambly was visited thirteen times during her illness by Dr John Clark. Clark recorded that 'she ... had been frequently exposed to infection from visiting the sick' in the neighbourhood.⁴²¹ On one of his latter visits Clark noted that 'she made her stools and urine involuntarily; she had constant spasms on her face; and her neck and breasts were covered while miliary eruptions', he prescribed 'strong wine and lemon juice'. On Clark's last visit he noticed that Mary's 'hands, her arms and whole trunk of her body was covered with white miliary eruptions; her respiration was wheezing and rattling; and mortification (possibly gangrene) was noticed upon her hip'.⁴²² Unfortunately for Mary, there was little else that could be done and on the 11 November at around 'seven in the evening ... she died'.⁴²³

How did the poor of Newcastle afford medical assistance while labouring under serious and possibly life threatening conditions? We have seen in the previous chapter that in 1751 Newcastle's medical landscape was beginning to develop with the establishment of the county Infirmary. However, for many individuals like Mary Lambly the founding of infirmaries meant little because many of these institutions would not admit those conditions which commonly assailed and killed the poor. In Mary's case it was a 'fever' - a common complaint in the eighteenth century and also one of the most dangerous.⁴²⁴ The nature of infectious diseases was well known to contemporaries and normally meant isolation and misery for the sufferer. However in the late eighteenth century a development took place

⁴²⁰ J. Clark. *Observations on Fevers Especially those of the Continued Type* (London, 1779), 155-60.

⁴²¹ Clark. *Observations on Fevers*, 155-60.

⁴²² *Ibid*, 155-60.

⁴²³ *Ibid*, 155-60.

⁴²⁴ Hardy. *The Epidemic Streets*, 191-92.

which sought to provide relief to the poor who suffered from such conditions. This was the Dispensary movement.⁴²⁵

These 'new' charities were set up to supply medicines and medical care to the poor on unprecedented levels. Between 1769 and 1805, twenty one dispensaries were established, fifteen of which had been founded in the 1770s and 1780s. By 1800 there were 38 dispensaries in England, 57% of which were in the provinces.⁴²⁶ While the movement originated in the early eighteenth century, the real mushrooming, as Donna Andrew has already pointed out, began with the Aldersgate Dispensary in London.⁴²⁷ We know much about the ways in which these institutions operated and how they enabled physicians to become 'expert in the natural history and treatment of epidemic fever. This was because Dispensary service took doctors into the homes of their patients, allowing them to witness at first hand, the nature of infectious diseases.⁴²⁸

The Dispensaries have received considerable attention from historians. Irvine Loudon, Hilary Marland, Anne Hardy, John Pickstone, Bronwyn Croxon, Robert Kilpatrick and others have explored in great detail the movement's origin, the career strategies of Dispensary physicians and the religious, political and social motives behind the individuals who supported these

⁴²⁵ See for example: R.B. Outhwaite. 'Objects of Charity: Petitions to the London Foundling Hospital, 1768-72', *Eighteenth Century Studies*, 32 (1999), 497-510; A. Wilson. 'Illegitimacy and its Implications in Mid-Eighteenth Century London: the Evidence of the London Foundling Hospital', *Continuity and Change*, 4 (1981); 103-64, A. Levene. 'Origins of the London Foundling Hospital Children, 1741-60: a reconsideration', *Continuity and Change*, 18 (2003), 201-36; A. Levene. 'The Estimation of Mortality at the London Foundling Hospital, 1741-99', *Population Studies*, 59 (2005), 87-97; A. Levene. *Childcare, Health and Mortality at the London Foundling Hospital, 1741-1800* (Manchester, 2007); L.F. Cody. 'Living and Dying in Georgian London's Lying-in Hospitals', *Bulletin for the History of Medicine*, 78 (2004), 304-48; D. Andrew. 'Two Medical Charities in Eighteenth-century London: the Lock Hospital and the Lying-in Charity for Married Women', in J. Barry and C. Jones ed., *Medicine and Charity before the Welfare State* (London, 1991), 82-97; J.E. Burton. 'Out-door versus In-door Maternity Charities', *Medical Press and Circular*, II (1882), 150-2; S.A. Seligman. 'The Royal Maternity Charity: the First Hundred Years', *Medical History*, 24 (1980), 403-18; E.M. Halcrow. 'The Charity for the Relief of Poor Women Lying-in at Their Own Homes', *Archaeologia Aeliana*, 34 (1956), 110-29; W. Parry-Jones. *The Trade in Lunacy: A Study of Private Madhouses in England in the Eighteenth and Nineteenth Centuries* (London, 1972); J. Andrews & A. Scull. *Customers and Patrons of the Mad Trade: The Management of Lunacy in Eighteenth Century London* (Berkeley, 2003).

⁴²⁵ D. Andrew. *Philanthropy and Police: London in the Eighteenth Century* (Princeton, 1989), 135-136; J. Andrews & A. Scull. *Customers and Patrons of the Mad Trade: The Management of Lunacy in Eighteenth-Century London* (Berkeley, 2003); A. Suzuki. 'The Household and the Care of Lunatics in Eighteenth-Century London', in P. Holden & R. Smith ed., *The Locus of Care: Families, Communities, Institutions and the Provision of Welfare since Antiquity* (London, 1998), 153-75.

⁴²⁶ I. Loudon. 'The Origins and Growth of the Dispensary Movement in England', *Bulletin for the History of Medicine* (1981), 322-42.

⁴²⁷ D. Andrew. *Philanthropy and Police: London in the Eighteenth Century* (Princeton, 1989), 135-136.

⁴²⁸ Pickstone. *Medicine and Industrial Society*, 16; A. Hardy. 'The Medical Responses to Epidemic Disease during the Long Eighteenth-Century', in J. Chapman ed., *Epidemic Disease in London* (London, 1993), 65-70.

charities.⁴²⁹ Loudon's, *Medical Care and the General Practitioner*, in particular has shed important light on the Dispensaries and the part they played in shaping developments in public health normally associated with the next century. Unlike many authors, Loudon devoted a great deal of his attention to the role played by dispensaries in collecting what he called 'the most valuable source[s] for understanding the whole spectrum of medical disorders treated by medical practitioners'.⁴³⁰ What can the historian actually learn from the evidence which was collected, or more properly produced, by Dispensaries?

Before moving on to address this, it seems sensible to say what this chapter is not about. It is not about the motives behind the foundation of the Newcastle Dispensary, something that has been researched thoroughly by other historians.⁴³¹ Nor does this chapter intend to say much about the political, religious or social status of those individuals who funded the Dispensary, something which we know a great deal about with regard to voluntary hospitals from the work of Andrew, Borsay, Porter and Lane.⁴³² What is intended is to shed new light upon a normally overlooked aspect of dispensaries – the patients.

⁴²⁹ B. Croxon. 'The Public and Private Faces of Eighteenth-Century London Dispensary Charity', *Medical History*, 47 (1997), p. 127 and Andrew. *Philanthropy and Police*, 135.

⁴²⁹ See: W. McMenemey. 'Medical Dispensaries in Eighteenth-Century London', *Section for the History of Medicine*, 56 (1963), 18-22; H. Marland. 'Lay and Medical Conceptions of Medical Charity during the Nineteenth Century: The Case of the Huddersfield General Dispensary and Infirmary', in Jonathan Barry and Colin Jones ed., *Medicine and Charity before the Welfare State* (London, 1991), 149- 171; B. Croxon. 'The Public and Private Faces', 127-149; R. Kilpatrick. 'Living in the Light': Dispensaries, Philanthropy and Medical Reform in Late Eighteenth-Century London', in A. Cunningham and R. French ed., *The Medical Enlightenment of the Eighteenth Century* (Cambridge, 1990), 254-280, Pickstone. *Medicine and Industrial Society*, 42-54; F.J. Miller. 'The Newcastle Dispensary 1777-1976', *Archaeologia Aeliana*, 18 (1990), 177-195; R. Cooter and J. Pickstone. 'From Dispensary to Hospital: Medicine, Community and Workplace in Ancoats, 1828-1948', *Manchester Region History Review*, 7 (1993), 73-84; A. Rosenberg. 'The London Dispensary for the Sick Poor', *Journal for the History of Medicine and Allied Sciences*, 14 (1959), 41-56; J. Pickstone & S. Butler. 'The Politics of Medicine in Manchester, 1788-1792: Hospital Reform and Public Health Services', *Medical History*, 28 (1984), 227-249; Fissell. *Patients, Power and the Poor*, 94-147; R. Porter. 'The Gift Relation: Philanthropy and Provincial Hospitals in Eighteenth Century England', in L. Granshaw & R. Porter ed., *The Hospital in History* (London, 1989), 149-178; R. Cassel. *Medical Charities and Medical Politics: The Irish Dispensary System and the Poor, 1836-1872* (Rochester, 1997); F. Miller, 'Dr John Clark: The Forgotten Physician, 1744-1805', in D. Gardner-Medwin, A. Hargreaves & E. Lazenby eds., *Medicine in Northumbria: Essays in the History of Medicine*, (Newcastle upon Tyne, 1993), 104-13; Kent. 'An Institution of Great Utility', 44-72; M. Sydney. *Bleeding, Blisters and Opium: Joshua Dixon and the Whitehaven Dispensary* (Workington, 2009); H. Marland. *Doncaster Dispensary, 1792-1867* (Doncaster, 1989); Loudon. 'The Origins and Growth of the Dispensary Movement', 322-342.

⁴³⁰ Loudon. *Medical Care and the General Practitioner*, 55.

⁴³¹ *Ibid*, 55-57; Kilpatrick. 'Living in the Light', 254-80; Croxon. 'The Public and Private Faces', pp. 127-49; Cooter et al. 'From Dispensary to Hospital', 73-84; Miller, 'Dr John Clark: The Forgotten Physician', 104-13; Miller. 'The Newcastle Dispensary', 177-95.

⁴³² Andrew. *Philanthropy and Police*; A. Borsay. 'Cash and Conscience: Financing the General Hospital at Bath, c. 1738-1750', *Social History of Medicine*, 4 (1991), 207-29; R. Porter. 'The Gift Relation', 123-48; A. Wilson. 'Conflict, Consensus and Charity: Politics and Provincial Voluntary Hospitals in Eighteenth-Century', *English Historical Review*, III (1996), 599-619; P. Wallis. 'Charity, Politics and the Establishment of the York County Hospital: 'A Party Job?', *Northern History*, XXXVIII (2001), 241-60; S. Cavallo. 'Charity, Power and

The overall aim of this chapter is to investigate the experiences of the sick and diseased poor who were treated by the Newcastle Dispensary during the period. The questions that need answering are, therefore, who was actually treated by the Dispensary when they were sick and ill? Did the institution cater for specific age groups or particular genders? How did the diseases and conditions treated by the Dispensary compare to those that afflicted the whole population of the city? Lastly, what impact did the types of medical care provided by the Dispensary have upon the healthcare options available to the poor in Newcastle?

5.2 Sources and methodology

The data for this chapter has been extracted from the Dispensary's annual reports and Disease tables. These were normally published annually and distributed to the institution's subscribers. The Disease Tables were compiled from what was termed as an 'accurate register of names, ages [and] diseases' of the thousands of patients who were either treated at the Dispensary building or who were visited at their homes by one of the Dispensary's staff. The tables survive in a virtually unbroken series from 1778 until 1853. Further information is also contained in the literature which accompanies the Tables distributed to each of the subscribers and benefactors. Quantifying this material over the entire period in which the archives survives allows for an unparalleled insight into the diseases and conditions which assailed Newcastle's poor population in the period before civil registration. Moreover, having more detailed information about the characteristics of the Dispensary patients allows one to place patients' lives in context and this will, in Anne Hardy's words 'extend ... our understanding of the way disease affected the lives of ordinary people' like Mary Lambly.⁴³³

This chapter is divided into four parts. The first looks at the origin of the Dispensary, how it operated and the methods by which patients could be admitted. The second section analyses the characteristics of the patients by looking at their specific demographic profiles. The third looks at the morbidity of the poor who were recommended. Lastly, the causes and levels of mortality of patients is examined and compared with what we know of the wider population.

Patronage in Eighteenth-Century Italian Hospitals: The Case of Turin', in L. Granshaw & R. Porter eds., *The Hospital in History* (London, 1989), 63-93. On some of the economic aspects see: A. Borsay. 'Persons of Honour and Reputation: The Voluntary Hospitals in the Age of Corruption', *Medical History*, 35 (1991), 281-94.

⁴³³ Hardy. *The Epidemic Streets*, 8.

5.3 The origin, organization and operation of the Dispensary

If we are to fully understand the role which was played by the Dispensary in Newcastle's medical landscape, it is essential to have some understanding of the origin and organisation regarding the day-to-day management of the institution.⁴³⁴ This section will provide a brief overview of the routine operation of the Dispensary, a subject which has already been thoroughly examined by Miller.⁴³⁵

The rules concerning the running and management of the Newcastle Dispensary were confirmed at a meeting 'of a few private gentlemen held in April 1777', these included amongst others the then Mayor of Newcastle, Mr John Carr, who chaired the meeting.⁴³⁶ Carr was accompanied by Dr John Clark, an Edinburgh-trained physician and one of the town's resident surgeons Mr John Anderson. Those involved made it clear that this institution was not to be in opposition to the work carried out at the Infirmary, instead the Dispensary was to act as an auxiliary to the Infirmary, and would only treat those conditions which could not be admitted there. The regulations stipulated that:

Fevers, with other frequent and fatal diseases, to which the laborious poor are most peculiarly subject, cannot, on account of their infectious nature, with propriety, be admitted into an Infirmary; and many other distempers are too violent in their attacks, and too violent in their progress to admit of the delay of the weekly mode of admission.⁴³⁷

At a second meeting in September the general Court and Governors finalised the rules and regulations on the way in which the Dispensary would function.⁴³⁸ The founders of the Dispensary were clearly in communication with the London Dispensaries. The first annual report gives intricate details of number of patients treated by both the Aldersgate Dispensary and that in Westminster. The anonymous author of the report in 1780 noted that:

These charities [infirmaries] ... cannot afford succour to every distemper ... From such considerations Dispensaries have been lately established. Experience has already proved them to be very beneficial to the public, and extensive to their

⁴³⁴ See especially: Miller. 'The Newcastle Dispensary', 177-95; A. Maehle. 'John Clark (1744-1805), Physician', in H.C.G. Matthew & B. Harrison ed., *Oxford Dictionary of National Biography* Vol. 11 (Oxford, 2004), 813-14; F.J. Miller. 'Dr John Clark: The Forgotten Physician', 104-13. For a detailed discussion of Clark's medical practices see: M. Harrison. *Medicine in an Age of Commerce and Empire: Britain and its Tropical Colonies, 1660-1830* (Oxford, 2010), 74-80, 83-84, 127-33, 144-49, 156, 288.

⁴³⁵ Miller. 'The Newcastle Dispensary', 177-95.

⁴³⁶ *Ibid*, 179. John Anderson was a surgeon practising in Pilgrim Street in Newcastle, although little is known about his life he appears frequently in the reports of the Dispensary.

⁴³⁷ Anon. *The Annual Account of the Newcastle Dispensary for 1780: Instituted October 1st 1777 for the Relief of the Poor Confined to their Own Houses by Sickness* (Newcastle, 1780), 4.

⁴³⁸ Miller. 'The Newcastle Dispensary', 179.

benefits to the afflicted. As the rapid success of these charitable institutions in the metropolis is the most incontestable proof of this observation, it is judged requisite to give a short account of their rise and progress.⁴³⁹

Further evidence demonstrates that the Newcastle Physicians were in contact with influential doctors in the metropolis. 'We are likewise indebted to this ingenious and humane physician [Dr Lettsom], for furnishing us in the most obliging manner, with the account and success of the Aldersgate, as well as the other Dispensaries in London'.⁴⁴⁰ In this sense Newcastle's operation was clearly based upon those in London and as Miller has already noted while some details changed 'the principles remained throughout'.⁴⁴¹

The way in which the Dispensary was funded was similar to that of the county Infirmary and there is nothing particularly unique about the system when compared to others operating in London and other provincial cities.⁴⁴² Each subscriber of one guinea was entitled to recommend four patients per year to whom they would give a signed and printed letter of recommendation which would be presented to the resident Apothecary, who noted the medicines dispensed to the patients and method by which they were to be administered. One subscription of two guineas, or a benefaction of ten guineas at one payment enabled the subscriber to become a governor and he or she could recommend eight patients per year.⁴⁴³ Those who gave larger sums could recommend a proportionate number of patients.

When the Dispensary first began to operate there were three resident physicians, Dr John Clark as well as Dr Hall and one Dr Pemberton. Both of these latter were very influential doctors in Newcastle.⁴⁴⁴ In the 1770s the only salaried member of the Dispensary's staff was the resident apothecary, Mr William Stuart. It was the role of the apothecary to 'keep a register of the names, ages and abodes and diseases of the patients' as well as the name of

⁴³⁹ Anon. *An Account of the Newcastle Dispensary for the Relief of the Poor: Instituted 1777* (Newcastle, 1778), 2-3.

⁴⁴⁰ Anon. *An Account of the Newcastle Dispensary*, 3.

⁴⁴¹ *Ibid.*

⁴⁴² Miller. 'The Newcastle Dispensary', 179.

⁴⁴³ *Ibid.*, 179.

⁴⁴⁴ By 1777 Dr John Hall was one of the most prominent physicians in the city. Hall was also one of the senior members of the Infirmary's staff and president of the Newcastle Philosophical and Medical Society in 1786-87 and Founded the Newcastle public Baths in 1781. More interesting Hall had been in charge of the Town's Pauper Lunatic Hospital founded in 1766 as well as the Bath Lane Asylum, and his dealings in the 'mad trade', in 1766 he opened up his own ventures known as the St Luke's and later the 'Bellegrove Retreat'. For a helpful biographical account of Hall and his work see: J. Le Gassicke. 'Early History of Psychiatry in Newcastle upon Tyne', *The British Journal of Psychiatry*, 120 (1972), 419-22 and J. Le Gassicke. 'History of Psychiatry on Tyneside' in, D. Gardner-Medwin, A. Hargraves & E. Lazenby eds., *Medicine in Northumbria: Essays in the History of Medicine* (Newcastle, 1993), 277-85. Dr Stephen Pemberton was elected to the staff of the Infirmary in 1775 where he remained until 1800, little is known about him after this date; see: G.H. Hume. *The History of the Newcastle Infirmary* (Newcastle, 1906).

their attending physician. Originally he was not permitted to practice outside of the Dispensary but as will be shown his position changed as patient ‘demand’ increased. Initially, the physicians and governors agreed that:

‘the town would be divided into seven districts; and one allotted to each physician who will visit the home patients at their own dwellings as often as circumstances of their cases shall require; and when he is prevented from attending he will procure one of his colleagues. Two physicians were to attend every Monday and Wednesday mornings with three on Friday to give advice to outpatients. Thus each physician had one outpatient session each week. Later the roster was changed to two physicians on Friday and one on Saturday’.⁴⁴⁵

Once in receipt of a recommendation patients who were unable to attend the Dispensary for care were instructed to send their letter to the Dispensary by nine o’clock on the same day to receive a visitation. Those able to attend the dispensary were to turn up before ten o’clock in the morning where they could receive advice from one of the physicians and thereafter to attend that same physician once a week.⁴⁴⁶ Once a patient’s course of treatment had ceased ‘they were given a ticket to return thanks the next Sunday at their parish church’.⁴⁴⁷ As the population of the city grew so too did the number of patients who were treated by this institution. Expansion prompted a move from the Dispensary’s original location in ‘the foot in the side’ to Pilgrim Street in 1782 ‘in an entry near the Queen’s Head Hotel’. Here the Dispensary would remain until 1790. After this date the Dispensary moved to larger premises (see Figure 4.1). Mackenzie reports that after 1790:

The governors purchased a lease for 50 years of St. John's Lodge, in the Low Friar Chare, from the Free Incorporated Company of Saddlers, which, including the fitting up, cost £626, 2s. 4d. This building consists of a hall for the meetings of the governors, a shop and waiting room for patients, two consulting rooms for the physicians and surgeons, an electrical room, and lodgings for the apothecary and his assistant, with a small laboratory behind the building.⁴⁴⁸

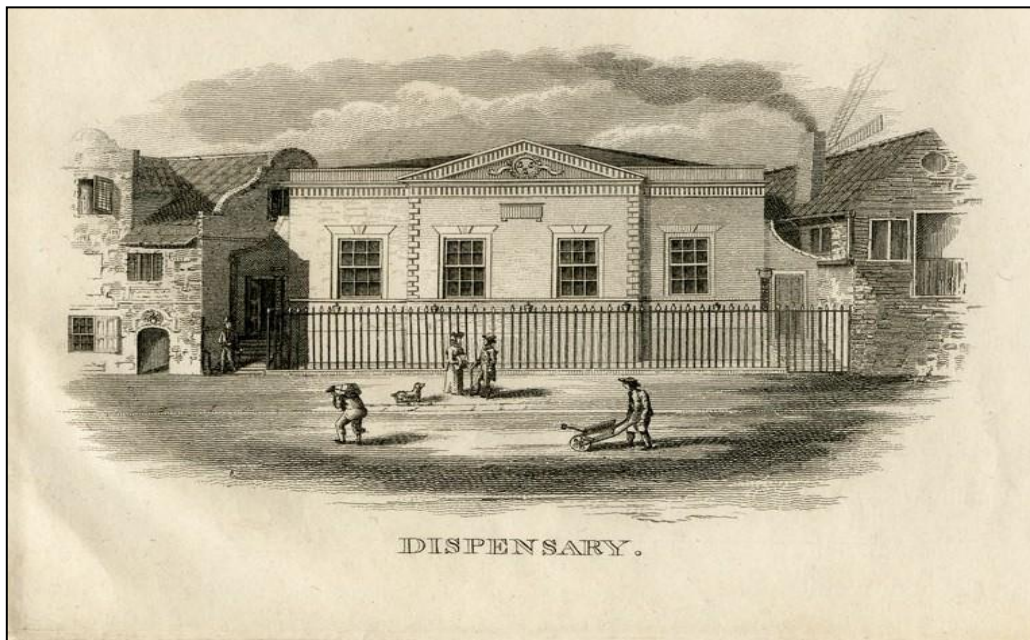
⁴⁴⁵ Anon. *An Account of the Newcastle Dispensary for the Relief of the Poor*, 16.

⁴⁴⁶ It is unfortunate that none of the letters of recommendation have survived, but from what annual reports reveal it appears that the letters were commonly returned to the Apothecary who filed them.

⁴⁴⁷ E. Mackenzie. *Historical Account of Newcastle-upon-Tyne: Including the Borough of Gateshead* (Newcastle, 1827), 513-16, <http://www.british-history.ac.uk/report.aspx?compid=43378> [Accessed 23/04/2010]

⁴⁴⁸ Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 513-16.

Figure 4.1 *The Newcastle Dispensary, Low Friar Chare, 1790-1839*



Source: Newcastle University Special Collections Library, Local Illustrations Collection.

Having now described the origins of the Dispensary, the way in which it was funded, where it was located and the method by which patients could be admitted, we need to look more closely at the patients who were admitted. There are essentially two topics that need to be addressed in the next section, one is the overall number of patients who were treated by the dispensary over the course of our period and the second, is what can we say about the characteristics of these patients? This later question is an important one, because it is something which has been completely ignored by historians.⁴⁴⁹

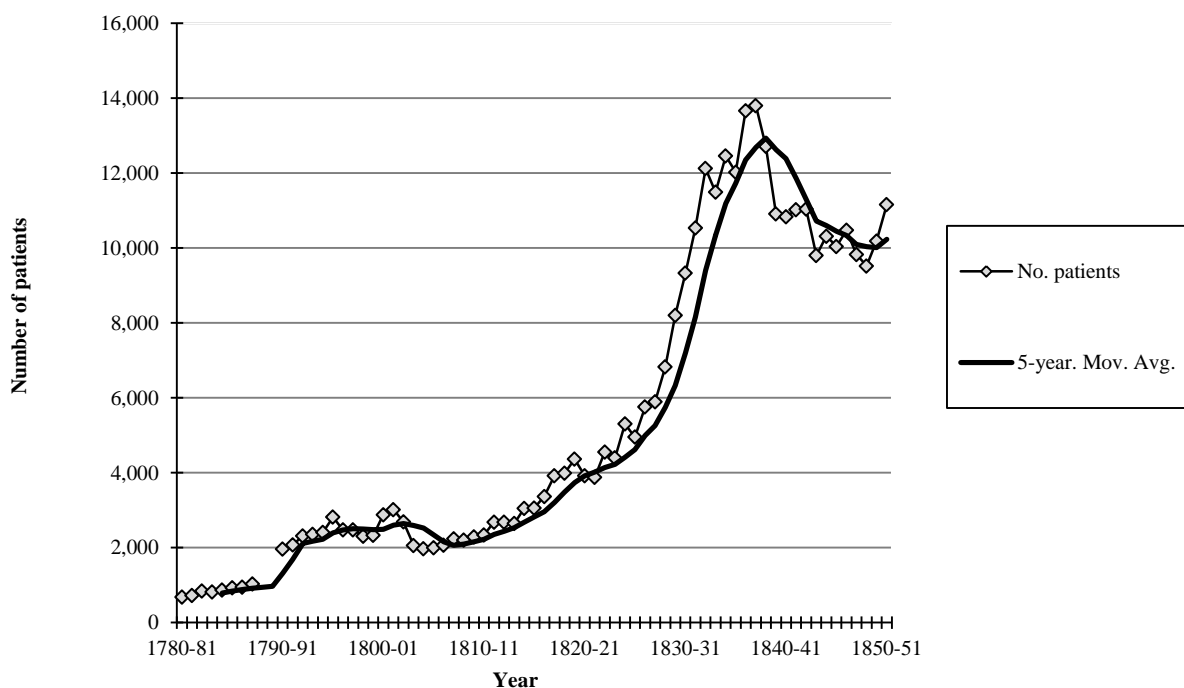
5.4 Population growth and the sick poor

Figure 4.2 plots the number of dispensary patients together with a five-year moving average. Clearly, the dispensary was an institution that operated on a substantial scale. During the first ten years of its work, the average number of patients treated *per week* was 57. By 1800 this had increased significantly, to a weekly average of 196. The number of patients treated

⁴⁴⁹ See for example: R. Cassell. *Medical Charities, Medical Politics: The Irish Dispensary System and the Poor Law, 1836-1873* (Woodridge, 1997). The only real attempt to assess the characteristics of Dispensary's patients was Marland's study using Census data, see: Marland. 'Lay and Medical Conceptions', 149-71. It must be pointed out that Marland's data are not entirely comparable to this study. The Huddersfield institution acted as both a Dispensary and an Infirmary, that is, it had in-patient facilities (beds). The Newcastle Dispensary never offered any overnight/inpatient facilities right up until its closure in 1928.

between 1800 and 1830 remained relatively stable. This may have been related to Newcastle's sluggish population growth in these years.⁴⁵⁰ Wrigley has recently estimated that Northumberland's population growth rate was the sixth lowest in England between 1750 and 1801.⁴⁵¹ As has already been examined at length in Chapter 1, Newcastle's population growth broadly followed the county's with 20-35% of Northumberland's population residing in and close to Newcastle throughout the period under study.⁴⁵²

Figure 4.2 *Dispensary patient admissions over time and five-year moving average, 1780-1851*



Source: Disease Tables database.

Between the third and fourth decades of the nineteenth-century, the number of patients coming to the Dispensary increased greatly to an average of over nine hundred per week. How was this growth achievable? The common sense explanation might suggest that the growth in patient numbers simply reflected an increase in the population in the dispensary's catchment area, but this does not take into account the fact that patients needed to be recommended by one of the subscribers. For such growth to have been obtainable would have

⁴⁵⁰ Barke, 'The People of Newcastle', 135.

⁴⁵¹ Wrigley. 'Rickman Revisited', 723.

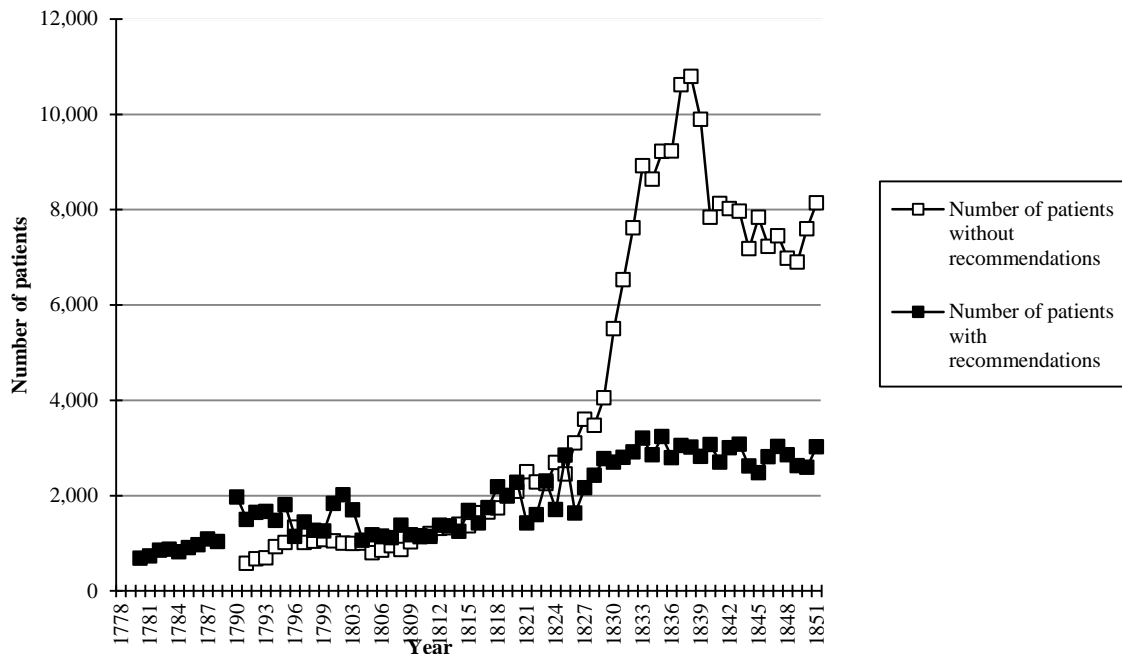
⁴⁵² For population estimates see Chapter 1. For English county population figures see: Wrigley. 'English County Populations', 35-69; Wrigley. 'Rickman Revisited', 723.

meant that the number of subscribers must have increased massively or that the amount of money which they subscribed increased. However, no such increase occurred. Instead patient demand seems to have led to a change in the admissions policy.⁴⁵³ In 1790 the committee which ran the Dispensary agreed that as well as treating those patients who were in receipt of a recommendation, casual patients would also be admitted 'gratis'.⁴⁵⁴ Figure 4.2 shows the relationship between the number of patients who were recommended and those who were deemed 'casual patients'. Clearly, the number of casual patients soon came to dominate those admitted. It should be stressed that the types of medical complaints which assailed patients who were deemed as being casual were not identical to those which assailed patients who received. A very helpful listing which was published in the 1830s reveals that of over 10,000 casual patients who were admitted between 1837 and 1838: 5,331 were given just medicines, 2,002 patients required wounds to be dressed, 2,892 required some form of dental treatment (for example had 'teeth drawn') 358 patients were 'bleeding' patients and 207 patients were admitted with burns and scalds. This growth in the number of casual patients suggests that whatever types of medical care was being carried out at the Dispensary it was clearly something that there was a 'market' for.

⁴⁵³ By 1841 Newcastle had a registration district population of 71,844, the dispensary data suggests that from among this over 10,000 patients per year were being treated by this one Dispensary, some 15% of Newcastle's population.

⁴⁵⁴ RLSC/HOSP/ARCH/75.

Figure 4.3 Breakdown of the Newcastle Dispensary recommended patients and casual patient. 1780-1851



Source: Same as Figure 4.2

Who were these patients? A demographic analysis of the thousands of patients who were treated by the Dispensary is important for several reasons. Firstly, a detailed structuring of the profile of the patients tells us much about the impact that the Dispensary may have had upon the healthcare options which were made available to the poor in the city. Moreover, if there were any specific biases in the age structure or gender composition of those persons who were recommended this might suggest something about the everyday experience of being sick and poor in Newcastle and the problems that individuals may have encountered during their pleas for assistance. Furthermore, if the Dispensary catered for specific ages groups (such as the very young), this might tell us more about the types of disease and conditions which were commonly being treated by Dispensary staff. In order to investigate this further we should begin by discussing the age structure of the patients who were treated.

Table 4.1 sets out the reported age structure of over 700 patients who were admitted to the Dispensary between October 1778 and October 1779. It is observable that there were fewer patients consulted at very young ages, presumably because it may have been much harder for a parent to obtain a recommendation for a sick child under the age of one year. The most

striking feature is the large proportion of children aged between one and ten who were treated. There also appears to have been more adults in the prime of life, aged between twenty and fifty years. Another striking feature of Table 4.1 is the relatively low number of elderly patients, particularly between the ages 60-80.⁴⁵⁵ This group accounted for only 7.6% of the overall patients treated. Only by comparing the age distribution with that of the overall population can the exact meaning of these figures be understood. Table 4.2 does precisely this.

Table 4.1 *Age distribution of Dispensary patients, 1778-79*

Age group	Number of patients	Percentage of sample
0-1	26	3.5%
1-10	238	32.1%
10-20	79	10.6%
20-30	97	13.1%
30-40	91	12.2%
40-50	87	11.7%
50-60	68	9.2%
60-70	43	5.8%
70-80	14	1.8%
Total	743	100.0%

Source: Same Figure 5.1

Table 4.2 shows that there was a clear similarity between the dispensary patients age structure to the 1851 Newcastle census. While we should not assume that the age structure of Newcastle during the late eighteenth-century was identical in 1851, we can assume with some confidence that even if the age structure was different, this difference would have been minimal. Moreover, Wrigley and Schofield's estimate of the age structure of the national population in the late eighteenth-century is remarkably similar to the Dispensary patients' sample.⁴⁵⁶ They have shown that 35% of England's population were aged between 0-15 years, over 55% were aged between 16-59 years, with about 8% being aged over 60 years.⁴⁵⁷ Such evidence suggests that in terms of the age structure at least, the patients who were treated appear to have representative of the wider population.

⁴⁵⁵ It should be remembered that as Boulton and Schwarz have recently emphasized, 'contemporaries rarely agreed on any one age as defining the start of old age', see: Boulton *et al.* "The Comforts of a Private Fireside"?, 224, 221-45.

⁴⁵⁶ Wrigley & Schofield. *The Population History of England*, 528-29.

⁴⁵⁷ *Ibid*, 529.

Table 4.2 *Newcastle Dispensary patient age distribution compared to the 1851 Newcastle census*

Ages	Number of Dispensary patients	Dispensary Distribution	1851 Census
0-15	308	41.5%	35.1%
16-59	378	50.9%	55.4%
60+	57	7.6%	9.5%
	743	100.0%	100.0%

Sources: Same as Table 4.1.

What is remarkable about the evidence from the Dispensary is that the data shows that there large numbers of children who were being treated, If we take the ages of 0-15 years then a total of over 40% of the patients in the sample were children - over 86% of which were aged between the 0-10 years.⁴⁵⁸ This suggest that the Dispensary was providing a significant level of medical care to a surplus population who were commonly refused care at some of the other voluntary hospitals in the city, namely the Infirmary examined in the previous chapter. To understand this significant paediatric role, case studies of some individuals are particularly instructive.

On 12 January 1779, Mary Hunter a 13-year old girl in Newcastle received a letter of recommendation to the Dispensary, ‘She had been confined to her bed for 8 days from a continued fever. Her pulse was very fast and her teeth were black; her eyes were dull ... and she had a tickling cough. On the 9th day of her condition ‘she was exceedingly deaf [and] very delirious’.⁴⁵⁹ Hunter was visited by Dr John Clark, who made detailed notes of her illness. What is interesting about Hunter is that she was not the only member of her family to have been treated by the Dispensary. She was however, the only member who received a recommendation. Mary was ill for 27 days and was frequently visited by Clark until she made what appeared to have been a full recovery and ‘was able to go abroad’.⁴⁶⁰ Whilst Clark had been attending to Mary, her 10-year-old brother John had been ‘seized with the same fever on the 15th day of January 1779’. John was also treated in the same way as Mary, and had been prescribed with ‘the bark very liberally from the beginning; and on the 15th day he was

⁴⁵⁸ Between the ages of 0-16 years there were 308 patients admitted, of these 266 were, aged between 0-10 years, that some 86.3%.

⁴⁵⁹ Clark. *Observations on Fevers*. page unknown.

⁴⁶⁰ *Ibid.*

sensible, and free from fever. Having given over his medicine, in two days he relapsed; the bark was again prescribed; and in five days more the fever totally disappeared'. While Mary and John had both fallen ill during January, the youngest member of the family – Thomas Hunter aged 7 years had also been 'seized with the same fever on the 2nd day of February'. Thomas's condition was more fragile, 'on the 4th day, he passed two long worms of the *teres* kind, his fever, however continued without the least abatement'. Clark prescribed:

12 grains of mercury ... at bed time. On the 6th day he had two stools, which, however, discharged no worms. For the two days following, no material alteration could be perceived. On the ninth day he vomited a long worm of the *teres* kind; and several petechial were observed upon his arms and sides. The bark was continued, and the mercurial powder was ordered to be repeated at bed time.⁴⁶¹

Clark visited Thomas until the 15th day of his condition, where he 'found him completely free from Fever'. The case study is important because it suggests that one single recommendation did not necessarily mean one single patient. Clearly, in a time when the homes of the poor were densely inhabited and 'fevers' prevalent, it was possible for the dispensary medical services to be more flexible than some historians have thought previously.⁴⁶² What can we say of the gender composition of the Dispensary patients?

Table 4.3 sets out the gender composition of patients and compares them to the 1851 Newcastle census. The snapshot sample used here once again suggests that the patients who were admitted were reasonably representative of the wider population of the city, there being in Newcastle in 1851 a slight surplus female population. Was there any age-specific gender bias amongst the patients admitted?

⁴⁶¹ *Ibid.*

⁴⁶² For discussion see: R. Grace. 'Tyneside Housing in the Nineteenth-Century' in N. McCord ed., *Essays in Tyneside Labour History* (Newcastle, 1977), 178-97; A. Green. 'Heartless and Unhomely? Dwellings of the Poor in East Anglia and North East England', in J. McEwan & P. Sharpe eds., *Accommodating Poverty: The Housing and Living Arrangements of the English Poor, c. 1600-1850* (Basingstoke, 2011), 69-101.

Table 4.3 *Dispensary patients gender composition to the 1851 Newcastle Census*

Gender	Dispensary patients	Newcastle's total population in 1851
Male	46.4%	49.1%
Female	53.6%	50.9%
Total	100.0%	100.0%

Sources: Same as Table 4.1.

In order to look at this issue further, age-specific sex ratios expressed as males per 100 females were calculated. These are presented in Figure 4.3. Firstly it is clearly the case that there were proportionately more male children treated by the dispensary than females. Secondly, and more strikingly, throughout the age groups which could be described as being in the prime of life, there were predominantly more female patients than males. The graph also shows that the sex ratio between the ages which one might label as being elderly, shows that there were once again more male patients than female.⁴⁶³ How can we explain this? The female surplus of patients who were in the 'prime of life' is likely to have been a result of the fact that the city had a surplus female population (see above Chapter 2). This would have also been subject to much seasonal variation, given the nature of the city's port economy, which meant that at specific times of the year there would have been an excess female population in the city when a considerable proportion of the male workforce were at sea.⁴⁶⁴ Moreover, as we have already seen, Newcastle, as a regional metropolis, had the ability to attract a reasonable number of migrant female workers employed in domestic service. By the middle of the nineteenth-century that sector made up around 14% of the city's occupations - the largest single occupation in the city.⁴⁶⁵ In this sense, Newcastle's ability to attract large numbers of female migrant workers is comparable to London and other early modern towns.⁴⁶⁶

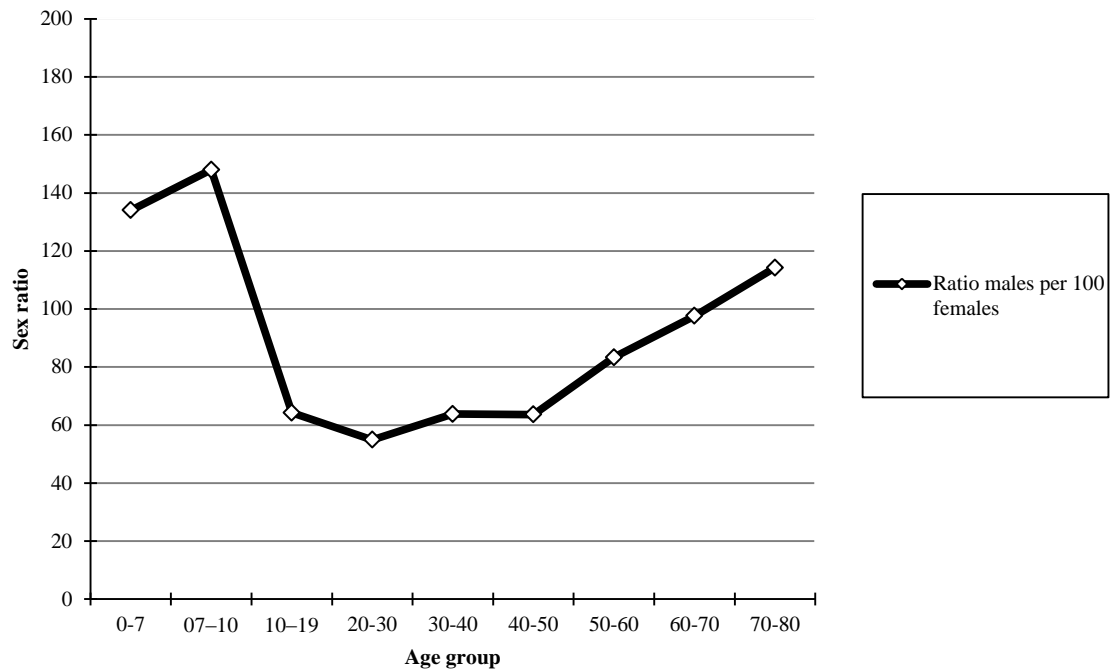
⁴⁶³ For discussion of age see: S. Ottaway. 'Providing for the Elderly in Eighteenth-Century England', *Continuity and Change*, 13 (1998), 391-418; Ottaway. *The Decline of Life: Old Age in Eighteenth-Century*, 16-64. Also see: M. Pelling & R.M. Smith ed. *Life, Death and the Elderly in Historical Perspective* (London, 1991); Boulton et al. 'The Comforts of a Private Fireside', 224.

⁴⁶⁴ Ellis. 'The Black Indies', 1-26.

⁴⁶⁵ Rowe. 'Occupations in Northumberland and Durham, 1851-1911', 119-31.

⁴⁶⁶ For example in London, the 1851 census found that 22% of domestic servants in London were aged over 20 years, see: Schwarz. *London in the Age of Industrialisation*, pp. pp. 14-23; L.D. Schwarz. 'English Servants and their Employers during the Eighteenth and Nineteenth-Centuries', *Economic History Review*, 52 (1999), 236-56.

Figure 4.4 Dispensary patients' age specific sex ratio



Source: Same as Table 4.2

Marland has offered some explanation for the large numbers of female patients who were treated by the Huddersfield Dispensary. She argues that working men in the North of England may have been more reluctant when it came to the process of making a plea to a subscriber than their southern or midland counterparts.⁴⁶⁷ The ‘sturdy’ northern labourer was depicted by contemporaries as being more willing to submit to the lure of unqualified medical personnel and self-medication ‘than to an institution with social stigma attached to admission.’⁴⁶⁸ This reluctance was commented upon by the secretary of the Dispensary in 1827 when making an appeal to the governors. This appeal was to introduce an annual health insurance subscription consisting of 3 shillings and 6 pence for adults and 2 shillings for children, to enable those reluctant ‘mechanics and labourers ...by ... annual subscription, (to) entitle themselves ... to the privilege’.⁴⁶⁹

A close examination of the characteristics of the patients treated by the Dispensary has produced important data on the Dispensary patients. Historians of medicine typically generalise that the typical hospital ‘patient ... across the country was an adult, usually male,

⁴⁶⁷ Marland. *Medicine and Society*, 206.

⁴⁶⁸ *Ibid.*

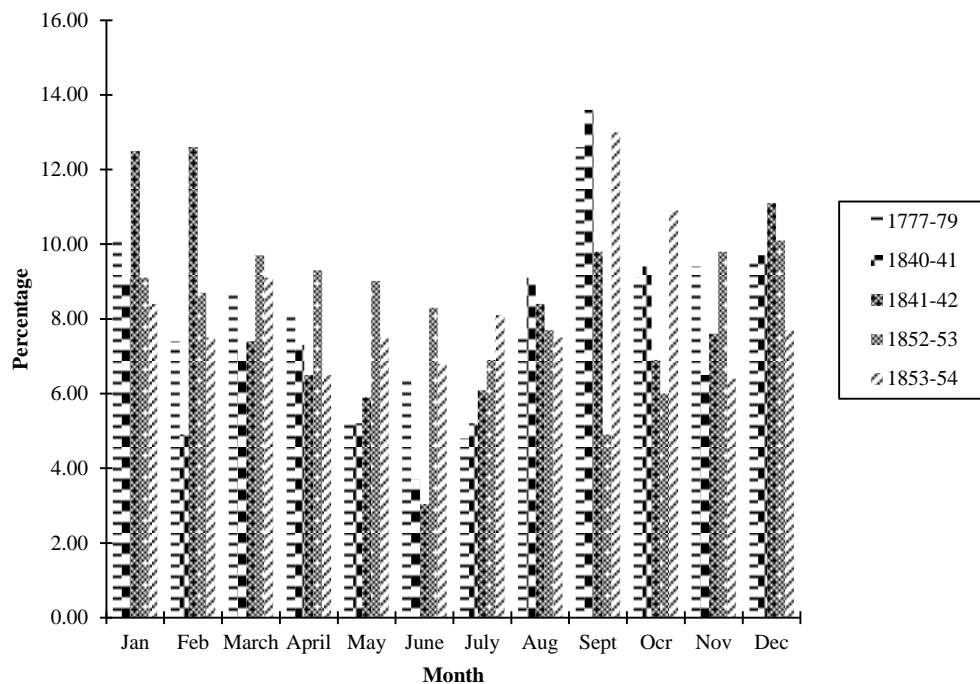
⁴⁶⁹ NUSC HOSP-ARCH/75.

between the ages of twenty five and fifty nine years old', an observation which does not fit well with the evidence we have examined thus far.⁴⁷⁰

What can be said about the seasonality of admissions to the Dispensary? Understanding the seasonality of admissions to the Dispensary has some important implication about the diseases treated by there. Moreover, if admission were subject to seasonal fluctuations this might also reveal something more about the number of individuals who were at risk of being admitted. We are fortunate that a detailed listing of the patients who were admitted on a monthly basis has survived for the Dispensary covering the years 1777-79, 1852-53 and 1853-54. Two other detailed listings have also survived for patients admitted to the Gateshead Dispensary (founded in 1832). Figure 4.5 sets out admissions to both institutions expressed as percentages of the total number of patients who were admitted in each of those years.

⁴⁷⁰ Tomkins. 'Paupers and the Infirmary in Mid-Eighteenth-century', 220.

Figure 4.5 Seasonal distribution of patients admitted to the Newcastle Dispensary 1777-79, 1852-53, 1853-54 and Gateshead Dispensary, 1840-41, 1841-32



N= 2,999

Source: Newcastle Dispensary annual reports, 1777-79, 1852-53, 1853-54 and Gateshead annual reports 1840-42.

Clearly admissions were subject to a degree of seasonal variation. It is demonstrably the case that admissions were at a high during the winter months January and February. All of the data show a marked fall during the spring and summer months. But the most intriguing feature is the fact that all sets of data show a marked surge in September. Why was this? This distribution may be explained in three ways. Firstly, the apparent surge in patients coming to the Dispensary from September through the winter months may have been a direct result of the maritime economy. For example, it is well known that the coal trade on Tyneside was a seasonal industry, especially with regard to the shipment of coal via the coast. Keelmen, in particular, seem to have experienced much seasonal variation in their employment. Hughes refers to this issue on coal which has recently addressed by Wright: ‘it was not just ‘inclement winter weather that prevented ships from sailing but the additional effect of cold weather on coal itself’.⁴⁷¹

⁴⁷¹ P. Wright. ‘Water Trades on the Lower River Tyne in the Seventeenth and Eighteenth-Centuries’, (Unpublished PhD Thesis, Newcastle University, 2011).

Winter working and leading were as yet discouraged both because winter-wrought coal quickly deteriorated into 'trash' and were, therefore, difficult to sell and because it was more difficult to maintain roads and wagon ways in repair during the wet months.⁴⁷²

Moller has also argued that this cycle changed in the spring months, which might help explain why there were fewer patients coming to the dispensary. The impact that weather and climate had upon shipping from the river Tyne was no more apparent than in '1813-14, the worst winter of the nineteenth-century ... [which] caused major crisis, and brought almost everything to a halt ... by the end of January the Thames had frozen solid and the Tyne had frozen before then'.⁴⁷³ The inability to export coal quickly led to massive increases in coal prices in the metropolis and brought the port to a standstill.⁴⁷⁴

Another plausible explanation may relate to the seasonality of disease and mortality. Landers, in his study of the London Bills of Mortality has made some important observations on the diseases which *killed* Londoners.⁴⁷⁵ He has shown with relation to mortality and in particular infant mortality, that there were considerable seasonal differences in the incidence of burials in the capital.⁴⁷⁶ He has also shown that in London deaths from gastro-intestinal diseases (those linked specifically with diet) were likely to peak at certain times in the year, especially during the autumn.⁴⁷⁷ It is not unreasonable to assume that at least some of the diseases which

⁴⁷² E. Hughes. *North Country Life in the Eighteenth Century* (London, 1952), 251.

⁴⁷³ Schwarz. *London in the Age of Industrialisation*, 111.

⁴⁷⁴ *Ibid*, 111.

⁴⁷⁵ J. Landers. *Death and the Metropolis: Studies in the Demographic History of London, 1670-1830* (Cambridge, 1993), 203-41; J. Landers. 'Age Patterns of Mortality in London during the 'Long Eighteenth Century': a Test to the 'High Potential' Model of Metropolitan Mortality', *Social History of Medicine*, 3 (1990), 27-60. Also see: Schwarz. *London in the Age of Industrialisation*, 103-23.

⁴⁷⁶ Landers has shown that infant deaths show a peak in summer and spring depending upon the age of the deceased, see: Landers. 'Age Patterns of Mortality in London during the "Long Eighteenth Century"', 49-51.

⁴⁷⁷ Landers. *Death and the Metropolis*, 203-43. This is quite a dangerous issue to ponder too greatly for discussion and debate on the subject of morbidity and mortality see: J. Riley. 'Disease without Death: New Sources for the History of Sickness', *Journal of Interdisciplinary History*, 17 (1987), 537-63; J. Riley. 'Frailty, Sickness and Death: Models of Morbidity and Mortality in Historical Populations', *Population Studies*, 43 (1989), 25-45; J.C. Riley. *The Eighteenth Century Campaign to Avoid Disease* (Basingstoke, 1987); J.C. Riley. *Sickness, Recovery and Death: A History and Forecast of Ill Health* (Iowa City, 1989); J.C. Riley. *Sick, Not Dead: The Health of British Workingmen during the Mortality Decline* (Baltimore, 1997); J.C. Riley. 'Why Sickness and Death Rates do not Move Parallel to One Another Over Time', *Social History of Medicine*, 12 (1999), 101-24; B. Harris. 'Morbidity and Mortality during the Health Transition: A Comment to James C. Riley, Why Sickness and Death Rates do Not Move Parallel Over Time', *Social History of Medicine*, 12 (1999), 125-31; R. Woods. 'Sickness is a Baffling Matter: A Reply to James C. Riley', *Social History of Medicine* 10 (1997), 157-63; R. Woods. 'Physician Heal Thyself: The Health and Mortality of Victorian Doctors', *Social History of Medicine*, 9 (1996), 467-71.

were treated by the Dispensary's staff would have been influenced by changes in climate. In fact the physicians at the dispensary were well aware of the apparent relationship between specific ailments and the weather. John Clark wrote, in a letter to a London colleague, about the climate conditions which he thought had influenced an outbreak of influenza in the city:

November and December, 1781, were exceedingly temperate; little or no rain fell, and, except on the last day of the former month, there were neither frost nor snow. The winds were, in general, from the west to the south west. The Mercury in the thermometer varied exceedingly little, generally vibrating from 40 to 46 degrees on Fahrenheit's scale, at ten a.m and in the last ten days of December the weather was so mild, that the mercury in the same hour, vibrated from 49 degree (0) to 52. - the greatest height on the Barometer, during these two months, was 30: the least height 29.2.⁴⁷⁸

What can we say of the fates of the patients who were recommended? These have been set out in Table 4.5 which presents the reported outcomes of over 138,000 patients. The most striking feature of this data is the sheer number of reported 'cures'. These are problematic. Fissell's study of medicine and the poor in eighteenth-century Bristol has discussed the problems of such terms. She argued that once a patient had been 'restored to health' in the eyes of a physician such restoration of health 'should be understood as a return to a balanced state of health rather than a specific repair of a body part or function'.⁴⁷⁹ Marland has also warned us of these types of claims, stressing 'that there is little guarantee of the accuracy of such figures, drawn up by hospital administrators anxious to demonstrate the success of the charities and to encourage support'.⁴⁸⁰ While this must be borne in mind some other aspect of the data are revealing. For instance the Dispensary seems to have operated independently in the treatment of the sick poor in the city. Very few patients seem to have been 'advised to the country', a common method of 'curing' and nursing in the period.⁴⁸¹ The most reliable statistic is that a proportion of the patients who were treated died while they were under the care of the Dispensary physicians, those like Ann Scorfield who was recommended to the Dispensary on 18 February 1779. She was labouring under a 'fever' a 'shivering fit ... sickness of the stomach, and a violent head-ach'. Fourteen days after she had been

⁴⁷⁸ J. Clark. *An Account of the Epidemical Catarrhal Fever, Commonly Called Influenza: As it first appeared in the City and Environs of Durham in the Month of June, 1782. To which is prefixed, a discourse on the improvement of medical knowledge by P. Dugud Leslie, M.D.FRS. With a letter from the Author on the Influenza as it Appeared in Newcastle upon Tyne by Dr John Clark M.D* (London, 1783), no page number.

⁴⁷⁹ Fissell. *Patients, Power and the Poor in Eighteenth-Century*, 108.

⁴⁸⁰ Marland. *Medicine and Society in Wakefield and Huddersfield*, 106.

⁴⁸¹ This was common in the metropolis, particularly at the London foundling Hospitals, see: Levene. 'Origins of the London Foundling Hospital Children', 201-36.

recommended ‘she was comatose, her teeth and tongue were black ... [with] ulcerations soon spread over her throat, a putrid diarrhoea ... and she died on the morning of the 18th day of the disease’.⁴⁸²

Table 4.4 *Reported outcome of the ‘recommended patients’ admitted to the Newcastle Dispensary, 1780-1851*

	Number of Reported patients	%
Cured	122,135	87.90%
Relieved	1274	0.90%
Sent to the Infirmary	59	0.04%
Sent to the Fever House	97	0.06%
Irregular	1336	0.96%
Refused further treatment	12	0.01%
Advised to the ‘country’	13	0.01%
Incurable	51	0.03%
Disease too advanced	50	0.03%
Dead	8,805	6.34%
Total	138,832	100.00%

Source: Newcastle Dispensary Database

5.4 The face of morbidity in late Georgian and early Victorian Newcastle

What sorts of diseases afflicted Dispensary patients? Table 4.6 sets out 9,673 cause specific admissions to the Dispensary between 1777 and 1789 where an specific ailment or disease was made explicit. It is clearly the case that the Dispensary treated a wide array of medical complaints which assailed Newcastle’s poor. The most dominant of which were conditions such as ‘Putrid fever’, ‘Stomach Complaints’, ‘Rheumatism’ and ‘Catarrh’. Table 4.6 also highlights the problems associated with this type of material. Diagnostic phrases such as Putrid fever are particularly problematic. This may have been, as Loudon pointed out- ‘a mixture of typhus and typhoid’.⁴⁸³ ‘Putrid’ was just one of 88 different terms used by Murchison in the late nineteenth-century to describe ‘fevers’.⁴⁸⁴ Other commonly used phrases were broad labels such as ‘malignant’, ‘slow’, ‘nervous’, ‘spotted’ ‘gaol’, and ‘ship’ fever.⁴⁸⁵ Putrid fever is not the only disease term which is problematic. Some clearly relate to

⁴⁸² Clark. *Observations on Fevers*, 194-95.

⁴⁸³ Loudon. *Medical Care and the General Practitioner*, 58.

⁴⁸⁴ C.A. Murchison. *Treatise on the Continued Fevers of Great Britain* (London, 1873), 2.

⁴⁸⁵ Murchison. *Treatise on the Continued Fevers*, 2.

symptoms, others are catch all terms, notably ‘consumption’. In fact one could argue that all of the disease labels in Table 4.6 need be viewed with caution.⁴⁸⁶

⁴⁸⁶ Harley has already argued that ‘the rationality of diagnosis ... can only be understood in terms of the theory employed at the time’ in which diagnosis was made, see: D. Harley. ‘Rhetoric and the Social Construct of Sickness and Healing’, *Social History of Medicine*, 7 (1999), 407-35. Woods raised some other important questions relating to this issue which have to be answered: ‘what may we say, in consequence of sickness in ancient Rome or early modern England? Only what contemporaries said of it themselves?’, see: R. Woods. ‘Medical and Demographic History: Inseparable?’, *Social History of Medicine*, 20 (2007), 486.

Table 4.5 *Diseases and conditions treated by the Newcastle Dispensary, 1777-89*

Diseases	Number of cases	%
Putrid fevers	1,920	19.84%
Surgical cases	879	9.08%
Consumptive & afflicted with hectic fever	624	6.45%
Stomach complaints	566	5.85%
Rheumatism	509	5.26%
Pleurisy & inflammation of lungs	447	4.62%
Catarrh	422	4.36%
Epidemic dysentery of 1783 and 1785	329	3.40%
Intermitting fevers	313	3.23%
Venereal disease	301	3.11%
Asthma	300	3.10%
Diarrhoea and obstinate fluxes	288	2.97%
Cautaneous eruptions	239	2.47%
Small pox	215	2.22%
Scarlet fever & ulcerated throat	203	2.09%
Uterine disease	189	1.95%
Colic	176	1.81%
Dropsy	171	1.76%
Worms	134	1.38%
Hysterics	133	1.37%
Quinsy	119	1.23%
Measles	108	1.11%
Inflammation of eyes	97	1.00%
Whooping cough	93	0.96%
Obstinate headache	80	0.82%
Inflammation of kidneys	79	0.81%
Spitting of blood	76	0.78%
Erysipelas	67	0.69%
Palsy	60	0.62%
External inflammation with fever	53	0.54%
Influenza of 1782	53	0.54%
Scrophula	50	0.51%
Jaundice	50	0.51%
Dentition	44	0.45%
Convulsions	40	0.41%
Abdominal obstruction	33	0.34%
Epilepsy	30	0.31%
Cholera morbus	23	0.23%
Water in the brain	22	0.22%
Suppression of urine	22	0.22%
Inflammation of liver	21	0.21%
Schirrhus and cancer	19	0.19%
Haemorrhoids	17	0.17%
Insanity	11	0.11%
Rickets	10	0.10%
Haemorrhage from the nose	7	0.07%
Gout	6	0.06%
Incontinence of urine	6	0.06%
Apoplexy	5	0.05%
Blindness	4	0.04%
Diseased bladder	3	0.03%
Chicken pox	2	0.02%
Nettle rash	2	0.02%
Stricture of the gullet	2	0.02%
Inflammation of brain	1	0.01%
Total	9,673	100.00%

Source: Newcastle Dispensary Disease Tables dataset, 1777-89

As demonstrated in the forgoing discussion the patients treated by the Dispensary appear to have been fairly representative of the age structure and gender composition of the city. It must be stressed, however, that the social profile of the patients cannot have been similarly representative. The Dispensary was an institution run for the sick poor, those lacking the resources to seek help from Newcastle's private sector. This needs to be borne in mind, as Mooney has recently suggested, diagnosis could be affected by a number of important variables including by both the location of diagnosis as well as the social status of the patient. The diseases which were brought before the physicians at the Dispensary may be considered to be representative of those conditions which were commonly experienced by the city's poor population. These were diseases and conditions which would have seriously affected the daily working lives of the city's poor population.⁴⁸⁷ Many of these conditions, like those causes of death listed in the London Bills of Mortality, were probably 'external symptoms whose character was very loosely defined, and which might arise from a number of different pathological conditions'.⁴⁸⁸ What else can we say about the types of diseases and conditions which were treated by the dispensary? Was there any continuity over time in the common complaints which were treated?

⁴⁸⁷ Wrightson. *Earthly Necessities*, 307-31.

⁴⁸⁸ Landers. *Death and the Metropolis*, 203-05.

Table 4.6 *Ten most common 'diseases' treated by the Newcastle Dispensary Doctors, 1780-1849*

	'Putrid fever'	'Diarrhoeal diseases'	'Consumption'	'Stomach complaints'	'Rheumatism'	'Catarrh'	'Pleurisy'	'Intermittent fever'	'Venereal disease'	'Skin eruptions'	Total No.
1780-89	1,092 (20.8%)	161 (3.0%)	429 (8.1%)	404 (7.7%)	594 (11.3%)	530 (10.1%)	538 (10.2%)	412 (7.8%)	424 (8.5%)	656 (12.5%)	5,240
1790-99	1,684 (12.3%)	522 (3.8%)	921 (5.5%)	2,652 (20.9%)	1,810 (13.2%)	3,342 (24.4%)	262 (1.9%)	402 (2.9%)	1,432 (10.4%)	648 (4.7%)	13,675
1800-09	1,787 (21.7%)	304 (3.6%)	369 (4.6%)	1,364 (16.5%)	1,231 (14.9%)	1,508 (18.7%)	152 (1.8%)	107 (1.3%)	762 (9.2%)	634 (7.7%)	8,218
1810-19	951 (10.2%)	538 (5.7%)	399 (4.2%)	1,819 (19.5%)	1,553 (16.6%)	2,337 (25.1%)	270 (2.9%)	136 (1.4%)	678 (7.4%)	623 (6.6%)	9,304
1820-29	1,489 (13.2%)	1,031 (9.6%)	333 (2.9%)	2,015 (17.8%)	1,626 (14.4%)	3,515 (35.1%)	94 (0.8%)	142 (1.2%)	489 (4.3%)	534 (4.7%)	11,268
1830-39	3,170 (20.2%)	1,238 (7.8%)	757 (4.8%)	3,028 (19.6%)	1,652 (10.5%)	3,382 (21.5%)	829 (5.4%)	38 (0.2%)	723 (4.6%)	861 (5.4%)	15,678
1840-49	3,189 (20.4%)	1,254 (8.0%)	632 (4.6%)	1,593 (10.2%)	2,714 (17.3%)	3,166 (20.2%)	440 (2.8%)	45 (0.2%)	826 (5.2%)	1,746 (11.1%)	15,605
Total	13,362 (16.9%)	5,048 (6.3%)	3,840 (4.8%)	12,875 (16.2%)	11,180 (14.1%)	17,780 (22.5%)	2,585 (3.2%)	1,282 (1.6%)	5,334 (6.7%)	5,702 (7.2%)	78,988 (100.0%)

Source: Same as Table 4.5

Table 4.7 shows the ten most common diseases treated by the Dispensary's doctors over time. The most important aspect here is that by and large the most diseases treated show a degree of continuity over time. The conditions which were commonly treated included ailments such as catarrh (possibly influenza), stomach complaints and fevers. It is also demonstrably the case that rheumatism made up a significant proportion of admitted cases. This is not that surprising given that this condition was normally associated with heavy labour and industry and was often known by contemporaries as the coachman's disease frequently associated with muscular and joint pain. There were also considerable numbers of skin eruptions and venereal diseases treated at the Dispensary. Indeed, the figures for venereal disease which we have probably underestimate its presence among the poor in the city as the social stigma attached to the condition normally prohibited sufferers from appealing to a subscriber or to a hospital for care. What else is interesting about Table 4.7 is that the number of venereal cases peak more or less during periods of warfare, when there may have been a large number soldiers and sailors in the city. We should also note that some of the other complaints recorded by the Dispensary may have been related to venereal disease. For example, ulcers, skin disorders, skin eruptions, scorbutic eruptions, sore limbs and lameness, may all have been, in reality, the 'foul disease'. Retrospective diagnosis cannot, of course, be certain. Loudon has already demonstrated that Dispensaries in other port cities also commonly treated venereal cases. He found that out of over 1,300 patients treated at the Westminster Dispensary between 1775 and 1776 nearly 5% suffered from venereal disease.⁴⁸⁹ Likewise at the Liverpool Dispensary, between 1800 and 1801, nearly 4% of all of the patients treated there laboured under this malady, these latter figures would have almost certainly been a minimum, given that as in Newcastle, the Liverpool Dispensary also treated large numbers of patients suffering from skin eruptions. Our evidence adds some weight to Siena's point that there 'is no denying that the foul disease was omnipresent in early modern London or that foul patients represented a major portion of the early modern ill'.⁴⁹⁰ Just as in the capital and other major port towns and cities, the 'foul disease' would have undoubtedly accounted for a reasonable proportion of Newcastle's sick population. Besides the presence of venereal disease and skin disorders, it is clearly the case that conditions which assailed the poor which

⁴⁸⁹ Loudon. *Medical Care and the General Practitioner*, 57. The foul disease may have been particularly rife among the poor in Georgian Westminster. Boulton and Schwarz have found large numbers of paupers suffering from the 'foul disease' in the workhouse St Martin-in-the-Fields, see: J. Boulton & L. Schwarz. 'The Parish, the Parish Workhouse and Parochial Medical Provision in Eighteenth-Century London', in S. King & A. Gestrich ed., *Narratives of Sickness and Poverty in Europe (Forthcoming, 2011)*.

⁴⁹⁰ K.P. Siena. *Venereal Disease, Hospitals and the Urban Poor: London's Foul Wards, 1600-1800* (Rochester, 2004), 152-61.

were treated were those which would have been encountered frequently in the everyday lives of the city's poor.

In our discussion of the reported age structure of the population who were treated by the Dispensary it was also found that there were a reasonable number of children being recommended for care. In fact over 40% of the sample examined were aged between 0-15 years. This, as previously mentioned, suggests that the Dispensary was providing a significant level of healthcare to the young in the city. What can we say about the age structure of these patients and the diseases which assailed them? This is an important question to answer because it is normally extremely difficult to obtain cause specific age data on the patients who were treated by Dispensaries in this period. We are extremely fortunate that an unusually detailed survey of the number of children who were treated by the Dispensary between 1778 and 1779 has survived. Although only covering a relatively short period, there are no reasons to think that this year is atypical (see Table 4.8).

Table 4.8 Age-specific Dispensary admissions by cause (0-20 years), 1777-79

	No. aged 0-1	% of dispensary admissions aged 0-1		No. aged 1-2	% of dispensary admissions aged 1-2		No. aged 2-3	% of dispensary admissions aged 2-3		No. aged 3-4	% of dispensary admissions aged 3-4
Small Pox	7	41.1%	Scarlet fever	14	34.1%	Scarlet fever	9	24.3%	Continued fever	11	36.6%
Scarlet fever	4	23.5%	Continued fever	11	26.8%	Continued fever	8	22.6%	Scarlet fever	11	36.6%
Measles	2	11.7%	Small Pox	6	14.6%	Small Pox	7	18.9%	Measles	2	6.6%
Continued fever	1	5.8%	Measles	5	12.1%	Measles	7	18.9%	External Inflammation	2	6.6%
Convulsions	1	5.8%	Convulsions	3	7.3%	Hydrocephalus internus	2	5.4%	Quinsey	2	6.6%
Hydrocephalus internus	1	5.8%	Palsy	1	2.4%	External Inflammation	1	2.7%	Small Pox	1	3.3%
Herpes	1	5.8%	Venereal disease	1	2.4%	Colic	1	2.7%	Worms	1	3.3%
External Inflammation	0	0.0%	External Inflammation	0	0.0%	Anasarea	1	2.7%	Anasarea	0	0.0%
Worms	0	0.0%	Quinsey	0	0.0%	Worms	1	2.7%	Hydrocephalus internus	0	0.0%
Quinsey	0	0.0%	Worms	0	0.0%	Quinsey	0	0.0%	Worms	0	0.0%
Total	17	100.0%		41	100.0%		37	100.0%		30	100.0%
	No. aged 4-5	% of dispensary admissions aged 4-5		No. aged 5-10	% of dispensary admissions aged 5-10		No. aged 10-15	% of dispensary admissions aged 10-15		No. aged 15-20	% of dispensary admissions aged 15-20
Continued fever	9	50.0%	Continued fever	48	51.0%	Continued fever	17	44.7%	Continued fever	14	51.8%
Scarlet fever	6	33.3%	Scarlet fever	22	23.4%	Scarlet fever	13	34.2%	Scarlet fever	4	14.8%
Small Pox	1	5.5%	Measles	8	8.5%	Measles	2	5.2%	Supression menses	3	11.1%
External inflammation	1	5.5%	Small Pox	4	4.2%	Small Pox	1	2.6%	Convulsions	2	7.4%
Worms	1	5.5%	Schrofula	4	4.2%	External Inflammation	1	2.6%	Intermittent fever	1	3.7%
Intermittent fever	0	0.0%	Worms	2	2.1%	Stomach complaints	1	2.6%	Erisipelas	1	3.7%
Measles	0	0.0%	Intermittent fever	1	1.0%	Epiplepsy	1	2.6%	Hysterics	1	3.7%
Convulsions	0	0.0%	Erisipelas	1	1.0%	Hydrops pectoris	1	2.6%	Venereal	1	3.7%
External Inflammation	0	0.0%	External Inflammation	1	1.0%	Worms	1	2.6%	Small Pox	0	0.0%
Quinsey	0	0.0%	Palsy	1	1.0%	Intermittent fever	0	0.0%	Measles	0	0.0%
Palsy	0	0.0%	Epiplepsy	1	1.0%	Colic	0	0.0%	Anasarea	0	0.0%
Epiplepsy	0	0.0%	Colic	1	1.0%	Anasarea	0	0.0%	Hydrocephalus internus	0	0.0%
Hydrocephalus internus	0	0.0%	Quinsey	0	0.0%	Hydrocephalus internus	0	0.0%	Worms	0	0.0%
Herpes	0	0.0%	Herpes	0	0.0%	Herpes	0	0.0%	Herpes	0	0.0%
Total	18	100.0%		94	100.0%		38	100.0%		27	100.0%

Source: Dispensary Disease Tables.

These figures demonstrate some important points about the diseases which infected the dozens of children who were treated. For example, of the infant patients (0-1 years) smallpox appears to have been rife, but as age increased it became less predominant. Smallpox appears to have been particularly rife amongst the poor in the city, just as it was in most towns and cities in early modern England.⁴⁹¹ In London, ‘the disease may have been responsible for nearly half the lives lost among those aged five to nine: the highest single cause of death in [that] city’.⁴⁹² Upon attempting to calculate the mortality caused by smallpox in Newcastle, the physicians Dr Clark and Dr Hall noted the following:

In the town of Manchester, which is not so populous as Newcastle, during a period of six years, viz. from 1768-1774, although the small pox was only twice epidemic, the death by it alone amounted to two out of thirteen occasioned by all diseases whatever. In the city of Chester, during the six years previous to 1778, it was proved by the certificates of the clergy, that 378 persons had died from small pox and the whole number of burials during the same period was 2522. The proportional mortality of the small pox to that occasioned by all other diseases is therefore more than one in seven. The annual medium of burials by the church registers of Newcastle and Gateshead for six years previous to 1779, 673. But great numbers of the poor are buried at the Ballast Hills: the computation if the annual burials there is 300. This last sum added to the former, will make the annual medium of burials 973.

By the different observations it appears, that the number of persons who die by the natural small pox, bears a greater proportion to the number that recover, than that one to six. But [if] we admit this proportion, it will follow that 834 persons in this town annually, upon an average, take the natural disease, this sum being six times the number of those that die. If 834 appear too large a number, then it will follow, that the proportional mortality is greater than that of one to six.⁴⁹³

Clearly, the physicians seem to have been aware that smallpox was particularly rife amongst novocastrians. An inoculating department was soon established, but was met with little success; the committee recorded the ‘unfortunate circumstance that the poor of this town

⁴⁹¹ See for example: A. Hardy. ‘Smallpox in London: Factors in the Decline of the Disease in the Nineteenth-Century’, *Medical History*, 27 (1983), 111-38; A.J. Mercer. ‘Smallpox and Epidemiological-Demographic Change in Europe: The Role of Vaccination’, *Population Studies*, 39 (1985), 287-303; Hardy. *The Epidemic Streets: Infectious Disease*, pp. 110-50; P. Razzell. *The Conquest of Smallpox: The Impact of Inoculation on Smallpox Mortality in Eighteenth Britain* (Firle, 1977); P. Skold. ‘From Inoculation to Vaccination: Smallpox in Sweden in the Eighteenth and Nineteenth Centuries’, *Population Studies*, 50 (1996), 247-62; H. Meier. ‘Smallpox in Stuart London: Causes and Effects of an Emerging Disease’ (Unpublished DPhil Thesis, Oxford University); R. Davenport, L. Schwarz & J. Boulton. ‘The Decline of Adult Smallpox in Eighteenth-Century London’, *Economic History Review*, 64 (2011), 1289-1314.

⁴⁹² Levene. *Childcare, Health and Mortality at the London Foundling Hospital*, 163.

⁴⁹³ Anon. *An account of the Newcastle Dispensary for the Relief of the Poor* (Newcastle, 1778), 7-10.

have hitherto disregarded every benevolent offering to promote inoculation amongst them. Ill-founded prejudices prevent numbers' wrote Clark and Hall.⁴⁹⁴ Smallpox that 'most loathsome but most controllable malady', could have been more controllable if inoculation had been widespread but this does not appear to have occurred.⁴⁹⁵ The age structure of those patients who *were* inoculated at the Dispensary suggests a large infant cohort, with some 80% of all inoculations being carried out on infants and young children, aged between 0-3 years.⁴⁹⁶ The greater number of infants and very young smallpox cases is not that surprising as children in older age groups probably 'came into contact with a greater variety of pathogens than ... infants, as they mixed more freely with other children and adults'.⁴⁹⁷ Smallpox 'is a typical crowd disease, thriving in dense populations, a group of non-immunes as always necessary for it to remain endemic'.⁴⁹⁸ Well known to be 'a children's disease transmitted through close contact in the form of respiratory discharges and matter from sores on the skin ... characterised by rash, fever and nausea'.⁴⁹⁹ The disease must have thrived in the densely populated suburbs of Sandgate, Wall Knoll and the lower Chares around the quayside where the bulk of the city's poor resided(see above Chapter 2).

The failure of inoculation in Newcastle seems to have been related to the economic implications on the victim and their family once the procedure had begun. 'The labour of many of the poorest class of women is so necessary to support their families, that they cannot, without exposing themselves to want, afford time to nurse their children during the period of inoculation'.⁵⁰⁰ Following this observation the dispensary committee agreed that 'from these considerations, the governors of the dispensary, last year, resolved to give five shillings to the most indigent patients, as a reward furnishing their children'.⁵⁰¹

⁴⁹⁴ Anon. *An account of the Newcastle Dispensary*, 11-12. This seems to have been common. There was also a lack of support for the later vaccination movement see: C. Brockwell. 'The Anti-Vaccination Movement and Newcastle', *North East History*, 39 (2008), 121-36.

⁴⁹⁵ *The Lancet* (1863) cited in: Hardy. *The Epidemic Streets*, 110.

⁴⁹⁶ Out of 1,049 children who were inoculated between 1786 and 1790, 43.8% were less than one year old; 25.7% were aged between 1 and 2 years; 11.6% were aged between 2 and 3 years; 6.5% were aged between 3 and 4 years; 5.9% between 5 and 6 years; 2.7% between 6 and 7 years; with some 3.3% aged between 7 and 15 years.

⁴⁹⁷ Levene. *Childcare, Health and Mortality at the London Foundling Hospital*, 156.

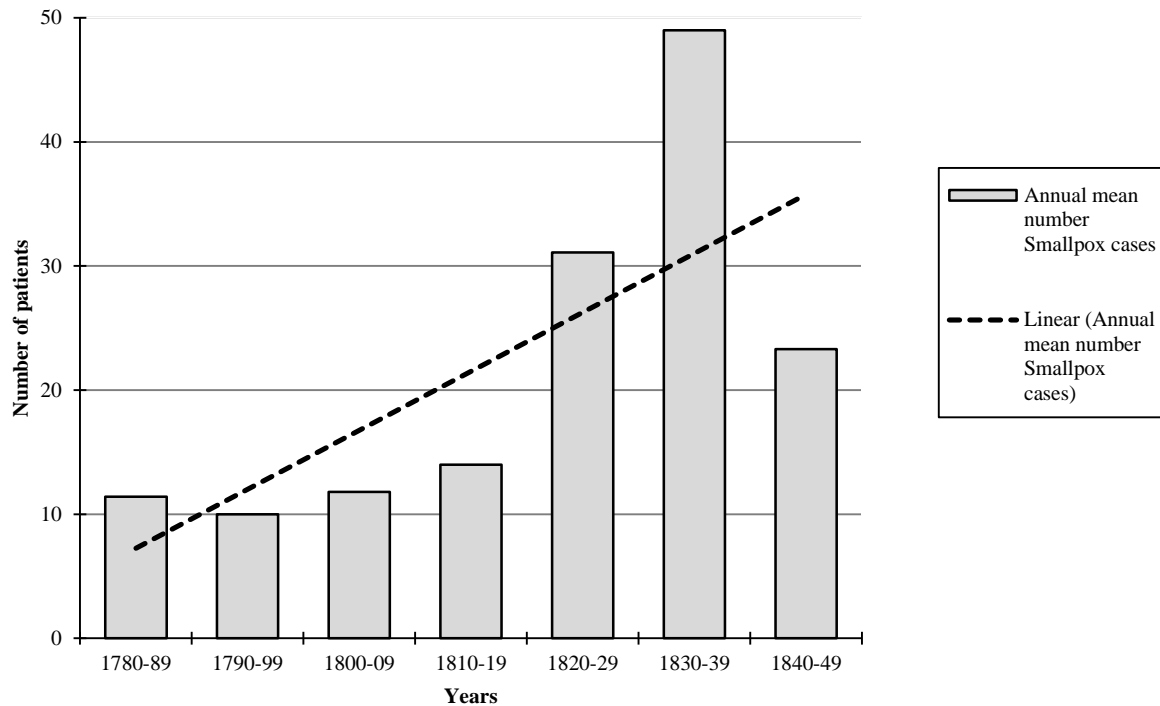
⁴⁹⁸ *Ibid*, 164.

⁴⁹⁹ *Ibid*, 164.

⁵⁰⁰ Anon. *An account of the Newcastle Dispensary*, 11-12.

⁵⁰¹ *Ibid*.

Figure 4.6 Decadal mean numbers of smallpox cases treated by the Dispensary, 1780-1849



Source: Dispensary disease tables.

This last attempt also failed. Creighton believed that the efforts made by the physicians at the Dispensary were pioneering: ‘this was perhaps the most systematic attempt at infant inoculation from year to year’.⁵⁰² Despite such valiant efforts, the system did not take-off in any great way. As Figure 4.6 suggests, smallpox patients did not really begin to be treated in significant numbers until the third decade of the nineteenth-century when the disease itself may have actually been declining within the population.⁵⁰³ The committee themselves confessed to the utter failings of the venture, ‘little progress has been made in the inoculating department’.⁵⁰⁴

Table 4.7 reveals the presence of fevers amongst the children who were treated. Continued Fever, one of the most common causes of admission to the Dispensary, seems to have been wide spread at all ages.⁵⁰⁵ This was, as already mentioned, probably a mixture of typhus and typhoid. Although typhus ‘probably predominated until about 1820, and after that date typhus

⁵⁰² C. Creighton. *A History of Epidemics in Britain* (London, 1894), 507-08.

⁵⁰³ See Davenport *et al.* ‘Decline of Adult Smallpox’, 1289-1314..

⁵⁰⁴ Anon. *An account of the Newcastle Dispensary*, 11-12.

⁵⁰⁵ For a very useful discussion of the causes of this condition see: Hardy. *The Epidemic Streets*, 151-90, 191-210.

and typhoid may have co-existed to an approximately equal extent'.⁵⁰⁶ Fever was clearly endemic amongst Newcastle's poor. A condition which today is hard to imagine, 'occasionally death was swift ... [but] more often the illness which started with a sense of weight and uneasiness, lasted two or three weeks ... fever sweating shivering ... intense pains in the back and limbs' and a rash resembling 'flea-bites'.⁵⁰⁷

Case-histories illustrate the impact of this condition. Mary Whiteoake, a 22 year-old married pregnant woman was admitted to the Dispensary in January 1779. Her husband had also laboured 'under a putrid fever, [but had] recovered'.⁵⁰⁸ Mary was first 'seized with a fever on the 31st December 1778, which brought on labour and she was delivered on the 4th January following'.⁵⁰⁹ The fact that she was nine months pregnant at the time she had contracted the fever meant that she was not eligible to be recommended to the Dispensary. Once she had given birth, however, she was visited by Dr John Clark who made the following observations:

On the 10th day of her disease she was admitted to the dispensary. For some days past she had been afflicted with severe pains in her belly, a putrid diarrhoea, and other symptoms of puerperal fever, together with a profuse discharge of the *Lochia*. Her pulse was exceedingly quick, and feeble: her countenance wild and ghastly, her temples were bedewed with a clammy sweat and her breast and arms thickly covered with broad *livid petechie*. Although every symptom demoted a speedy dissolution, in order to appease the pains and tension of the belly, and to moderate the diarrhoea, a draft of *pulv. e. bolo cum opio*, was prescribed, fomentations and the volatile liniment were ordered to be applied to the abdomen; and the decoction of the bark was directed to be given frequently with a few drops of *tinct. The baic* in the case of it running off by stool. The draught gave her little respite from her pain; she was incapable of taking any other medicine and died on the following morning at ten o'clock.⁵¹⁰

Another case study which is particularly vivid is that of Elizabeth Dickman, recommended to the Dispensary on 5 August, 1778. Dickman had suffered from a fever for five days before she was seen by one of the Dispensary's staff. She 'complained of great prostration of strength and head-ach and nausea. Her pulse was feeble, beat 100 strokes in a minute, and she had costive from the beginning; a *failine julep* and a little rhubarb was prescribed. On the 6th day the bark was ordered in infusion'.⁵¹¹ What is particularly revealing about the case of

⁵⁰⁶ Loudon. *Medical Care and the General Practitioner*, 59.

⁵⁰⁷ *Ibid*, 59.

⁵⁰⁸ Clark. *Observations on Fevers*, 193-194.

⁵⁰⁹ *Ibid*, 193-194.

⁵¹⁰ *Ibid*.

⁵¹¹ Clark. *Observations on Fevers*, 195.

Dickman is, for whatever reason, she was not satisfied with the medical care she had experienced, 'being tired of taking the medicine, she was dismissed at her own desire'. Somedays later Clark was informed that she had died.⁵¹²

The foregoing has demonstrated that the Dispensary patients appear to have been fairly representative of the wider population. The types of disease which assailed this population were wide ranging, with chronic and debilitating conditions heading the lists. The closing part of this section has ended with two case studies of two individuals who shared at least one thing in common, they both died while being treated by the dispensary's staff. This last section of the chapter will examine the number of patients who died while in the care of the dispensary staff and the types of conditions which commonly killed them. Thus it is to the mortality of the patients that we now must turn.

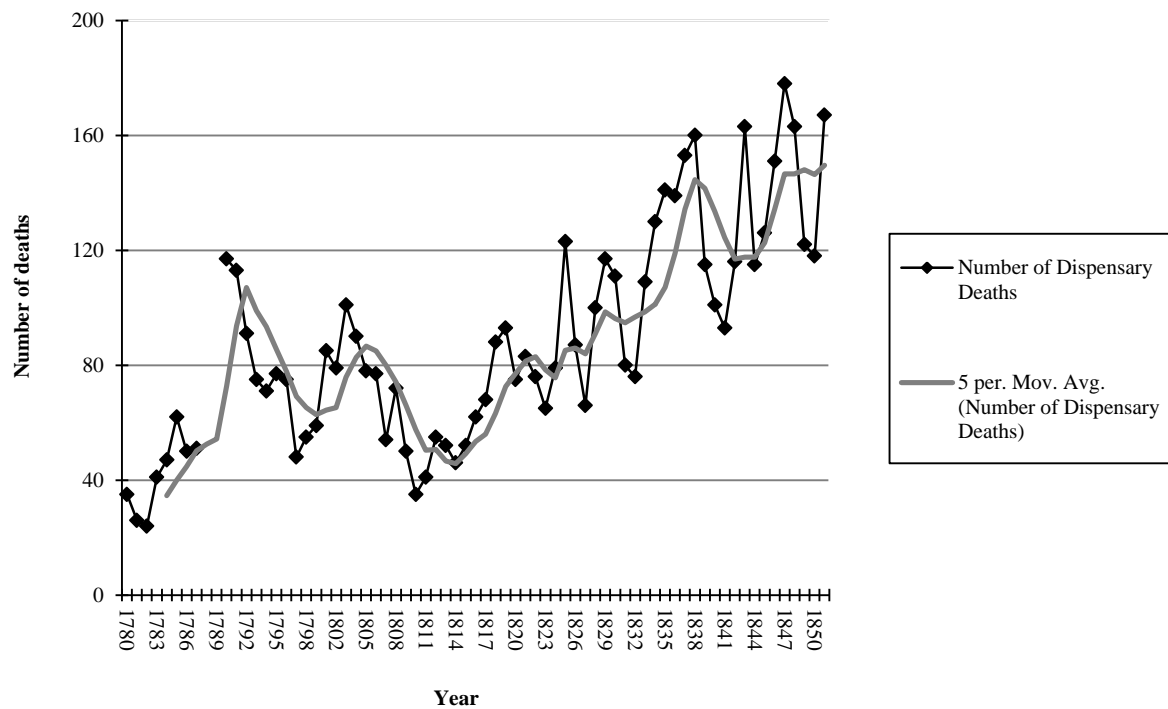
5.5 The face of mortality in late Georgian and early Victorian Newcastle

How many patients died while they were under the care of the staff at the dispensary? In order to answer this question we need to look back at the Dispensary's disease tables which fortunately record the number of patients who died while they were treated. These patients are only those individuals who were recommended as opposed to the growing numbers of 'casual' patients, who as we have already seen came to dominate the medical services provided by the Dispensary in the nineteenth-century. Figure 4.7 plots the annual numbers of deaths which occurred with a five-year moving average. Over time the annual number of deaths which occurred amongst patients was increasing.⁵¹³

⁵¹² *Ibid*, 195.

⁵¹³ The mean number of deaths per year across the entire period was 83.5.

Figure 4.7 Mortality of the Newcastle Dispensary patients and five-year moving average, 1780-1851

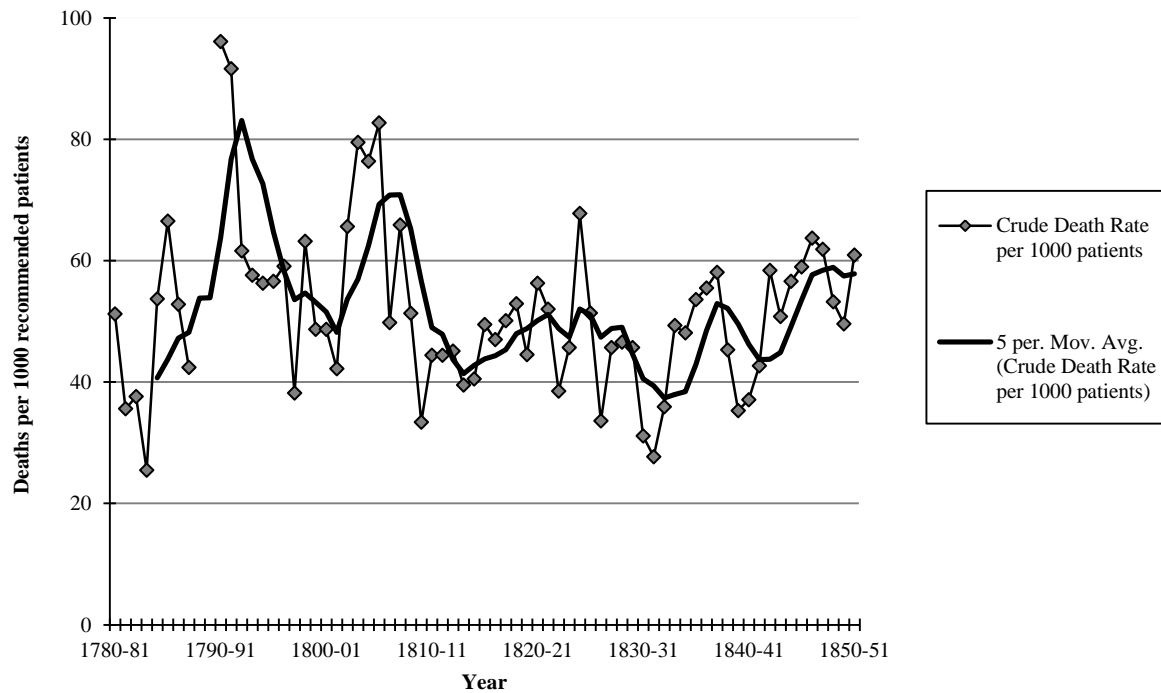


Source: Dispensary Disease Tables, 1780-1851

The use of the raw figures in Figure 4.7 hide some important points about the changing levels of mortality experienced by those patients who died whilst under care. In order to look at this further, mortality rates need to be calculated (Figure 4.8). These figures were calculated by removing all of the casual patients who were not included in the number of deaths reported in the Disease Tables. The remaining totals were used as a broad population at risk and the annual data were then converted into crude mortality rates per 1000 recommended patients. Admittedly this method has its limits since the rate is not a purely demographic figure because it is based on annual totals which do not allow one to calculate age-specific rates of mortality. It is also the case that the number of deaths recorded in the Disease Tables are not entirely representative of the entire number of deaths which may have occurred after a patient had been discharged.⁵¹⁴

⁵¹⁴ For a discussion of the problems associated with this type of material see: Marland, *Medicine and Society in Wakefield and Huddersfield*, 106; Fissell, *Patients, Power and the Poor in Eighteenth-Century*, 108.

Figure 4.8 Dispensary patients' mortality rate per 1000 recommended patients and five year moving average, 1780-1851

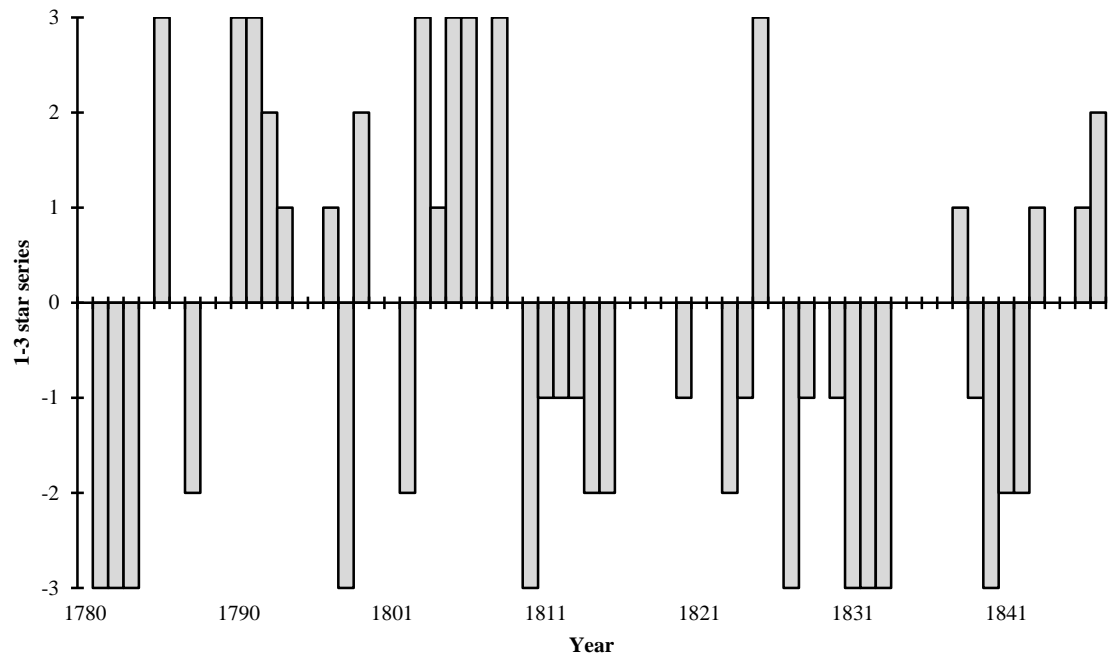


Source: Same as Figure 4.7

The resulting trend from Figure 4.8 suggest that the levels of mortality experienced by the patients was higher, and subject to more volatility during the late eighteenth and first decade of the nineteenth-century than in any other period. For something a little more systematic, Figure 4.9 has followed Wrigley and Schofield's principle of dividing what might be considered as crisis years into three categories, depending on the extent of their deviation from the period trend. This figure is revealing: in this instance a one-star peak or trough in mortality is defined when the dispensary patient's CDR was 10-15 per cent above or below the period mean, a two-star crisis when 16-25 per cent above or below and a three-star when 26+ per cent above or below the mean.⁵¹⁵ The Dispensary experienced eight years when the mortality reached three star levels, five years at two stars and six years at one star peaks. What caused these peaks in the mortality of the Dispensary patients?

⁵¹⁵ The 71 year mean mortality rate was 51.5 deaths per 1000 recommended patients between 1780 and 1851. For a discussion of this method see: Wrigley & Schofield. *The Population History of England, 1541-1871*, 333. Also see Schwarz, who uses a similar method to examine peaks and troughs in London bankruptcies, 1710-97, see: Schwarz. *London in the Age of Industrialisation*, 91-92.

Figure 4.9 *Peaks and troughs in the mortality of Dispensary patients (1-3 stars), 1780-1847*



Source: Same as Figure 4.7

Table 4.8 *Increases of mortality in peak years: percentage deviations from the mean mortality rate and proportion of mortality caused by consumption, ‘fevers’, smallpox, erysipelas, scarlet fever, dropsy, inflammations, water in brain, surgical cases and all other causes of death*

Year	Mortality rate per 1000	Percentage deviation from mean	Percentage of deaths caused by:									
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	All Others
1785	66.5	+22.4	16.6	22.9	0.0	6.25	0.0	12.7	20.8	0.0	2.1	18.7
1790	96.1	+46.3	37.6	14.5	5.9	0.0	0.0	11.9	5.1	1.7	16.2	7.1
1791	91.6	+44.1	38.1	14.1	1.8	0.0	0.0	16.8	2.6	1.7	0.0	24.9
1803	65.6	+21.3	34.4	34.4	0.0	0.0	0.0	5.5	0.0	5.5	5.5	14.7
1804	79.5	+35.1	55.1	7.6	0.0	0.0	0.0	8.9	8.9	2.6	1.3	15.6
1805	76.4	+32.5	31.1	3.8	7.8	0.0	0.0	9.1	11.6	11.6	0.0	25.0
1806	82.7	+38.1	31.4	1.8	0.0	1.9	0.0	12.9	1.9	11.1	3.7	35.3
1808	65.9	+21.7	37.5	2.7	0.0	0.0	8.3	8.3	4.2	6.9	5.6	26.5
1825	67.8	+23.8	49.4	14.9	1.1	0.0	0.0	9.2	1.1	4.6	0.0	19.7
1846	63.7	+18.9	18.5	7.3	0.0	n/a	25.2	6.2	16.2	3.9	1.1	21.6
1847	61.9	+16.6	20.8	15.3	3.1	n/a	1.8	3.6	0.0	1.8	0.0	53.6

Source: Newcastle Dispensary database

Table 4.8 puts all of the evidence together. While the most dominant singular cause of death amongst the Dispensary patients was consumption, the figures also reveal that during some peak years mortality could be caused by different diseases. The mortality of the patients reached a high in 1790 when the rate was 46% higher than average. In that year consumption accounted for the greatest number of deaths. But it is also clearly the case that there was a dramatic increase in the number of deaths from surgical cases. The most striking feature of Table 4.8 is the two sharp spikes in mortality in both 1790 and 1791 caused predominantly by deaths from ‘Dropsy’ and ‘Consumption’. Deaths from ‘Fevers’ appear to have been most prevalent in 1803 when they equalled deaths from consumptions. The closing years of the eighteenth-century and opening years of the nineteenth were, as discussed in Chapter 2, were years of hardship. The Newcastle Bills of Mortality showed that the city experienced several years of crisis and high mortality. These ‘un-healthy’ years were commented upon by the Dispensary committee who wrote that:

It ... appears that four hundred and twenty five patients, labouring under fevers, were admitted ... The unusual appearance of this disease, not only in Newcastle, but in most other large towns in the kingdom, can only be imputed to scarcity, to the bad quality, and to the high price of provisions. The Harvest ... was late, the grain and potatoes damaged; and therefore the food of the poor has not only been scanty, but afforded little nutriment.⁵¹⁶

Of course, there is only an incidental link between fever and nutrition.⁵¹⁷ Nationally, these were indeed years of high prices and falling real wages.⁵¹⁸ Creighton's survey also found the closing years of the eighteenth-century were particularly unhealthy in Newcastle. He noted that:

During the winter of 1790 and the spring and summer of 1791 it was prevalent among the poor, and was frequently introduced into genteel families and sometimes even into those in the first distinction. That outbreak was supposed to have been generated in the Gateshead Poor House. For some time its ravages were confined chiefly to the low, ill-aired narrow street called Pipewell Gate. In September it made its appearance in Newcastle; at first the contagion was easily traced from Pipewell Gate, and afterwards from one House to another. In that outbreak 188 poor persons were visited by the Newcastle Dispensary, the Gateshead poor having been attended by the parochial surgeon.⁵¹⁹

In the nineteenth-century, fever deaths seem to have declined, with consumption claiming the most lives. The most interesting aspects of the peaks in mortality in the nineteenth-century was in 1846. In that year, the number of deaths from consumption was strikingly low. An epidemic of scarlet fever broke out in Newcastle that year. Such was the extent of the mortality caused by this disease, that a Dr Charlton published a detailed account of the its progress.⁵²⁰ He recorded the following observation:

It has been very difficult to obtain the correct data of the mortality of the epidemic; the general report of the Registrar General, which would supply the requisite of the information, not having as yet been published. Many deaths no

⁵¹⁶ Anon. *An Account of the Newcastle Dispensary* (Newcastle, 1801), 7.

⁵¹⁷ See for discussion: Schwarz. *London in the Age of Industrialisation*, 139-49; Hardy. 'Diagnosis, Death and Diet', 395-97; M. Livi-Bacci. 'The Nutrition-Mortality Link in Past Times: A Comment', in R.I Rothberg & T.K Rabb ed., *Hunger and History* (Cambridge, 1985), 95-100; S.K. Watkins & E. Van de Walle. 'Nutrition, Mortality and Population Size: Malthus Court of Last Resort', in R.I. Rotberg & T.K. Rabb ed., *Hunger and History*, 26-28; T. McKeown. 'Food, Infection and Population', R.I. Rotberg & T.K. Rabb ed., *Hunger and History*, 29-33.

⁵¹⁸ For discussion of real wages see: Wrigley & Schofield. *The Population History of England, 1541-1870*, 638-41. As of yet there is no real wage index for working men in the north east of England. For a discussion of this and other aspects and debates on real wages see: G.N. Tunzelmenn. 'Trends in Real Wages, 1750-1850, Revisited', *Economic History Review*, 32 (1979), 33-49; Botham et al. 'Wages in Britain during the Industrial Revolution', 380-99; Schwarz. 'Trends in Real Wages, 90-98; Mitchell et al. *An Abstract of British*, pp. 769-70

⁵¹⁹ Creighton. *A History of Epidemics*, 142-43. For a detailed discussion of the standard of living debate in this period see: Floud et al. *The Changing Body*, 6-14.

⁵²⁰ Hardy suggests that Scarlet Fever was one of the most feared diseases in nineteenth-century England, see: Hardy. *The Epidemic Streets*, 56-59.

doubt have been registered as dropsy or pneumonia, where the primary disease was scarlet fever, of which the fatal disorder was only a consequence. From all that we can learn, the increase above the usual average of deaths from this epidemic, cannot have been much less than 700, in Newcastle, Gateshead and the immediate vicinity of these two boroughs; whilst we must not forget that this fearful mortality has been still further augmented, by the prevalence of measles and [w]hooping cough, which have also respectively been extremely fatal to children.⁵²¹

The poorest parish in Newcastle, which will be discussed at great length in the next chapter, seems to have suffered greatly in this epidemic:

In the parish of All Saints there died, during the quarter ending September 1st, 1846, one hundred and forty three children under eight years of age, and of these forty-two perished from Scarlatina. The mortality of the succeeding quarter was not less appalling, there were one hundred and forty-nine deaths of children in this parish under six years of age, and of these seventy-one were referred to Scarlatina.⁵²²

Uncovering the true level of mortality caused by this epidemic is rendered even more difficult by the fact that some of the other causes of death in that year may have been from the same ailment, as Charlton was well aware. This may have been particularly so with deaths from dropsy. The symptoms of this disease could have been related to some of the other causes of death in Table 4.9, which included a ‘dangerous swelling of the throat, with gangrenous ulcers of the tonsils and soft palate’.⁵²³

5.6 Morbidity and mortality in late Georgian and early Victorian Newcastle

What can we say about the possible relationship which may have existed between the causes of death listed in the Disease Tables to those conditions which were killing the wider population? In order to answer this question we need to have some independent cause of death information. This is however, is not easily recoverable, especially for the eighteenth-century. None of the Anglican parish registers in the city, nor the Bills of Mortality provide us with any information on the actual causes of death of those who died in Newcastle.⁵²⁴ We are fortunate however, that one source does provide some information (albeit for a relatively short period).The Westgate Hill Cemetery burial register which begins at the end of 1820s is

⁵²¹ Charlton. *The Late Epidemic of Scarlatina in Newcastle* (Newcastle 1847), 49.

⁵²² *Ibid*, 49.

⁵²³ *Ibid*, 49.

⁵²⁴ The only references to any known causes in the burials registers were during plague epidemics in the seventh-century and the 1831-32 cholera epidemics, see: Butler ‘Cholera and Newcastle’, 1-22, for plague, see: Wrightson. *Ralph Taylor’s Summer*, 10-27, 28-42.

such a source. This register provides cause of death information on most of the burials which took place at that site from its opening in 1829. The register also provides some important information on the ages of the deceased which allows some further analysis to be undertaken. Whilst this register is useful, more data can be gleaned from the Registrar Generals' Reports. Before going on to analyse these, we should compare the causes of both morbidity and mortality of the Dispensary patients. Figure 4.10 sets out the ten most commonly treated diseases of the Dispensary patients and Figure 4.11 shows the ten most common causes of death of the patients, the former relating to nearly 80,000 patients and the latter nearly 7,000.⁵²⁵

The diseases which were commonly *killing* the Dispensary patients were not the conditions which were being admitted in great numbers. It was chronic conditions like fevers, rheumatism, stomach complaints and catarrh which were treated more often than not, but the diseases which caused most deaths were more dangerous conditions such as consumption, dropsy and smallpox. About 41% of the deaths with a known cause were not one of the conditions which were treated in reasonably large numbers (Figure 4.8). The most common killer was consumption, which accounted for only 5% of admissions. In terms of mortality, however, it was responsible for well over 40% of the deaths. The dominance of deaths from consumption is striking. Although, difficult to pin down precisely, this condition may have been tuberculosis. As Hardy has pointed out, consumption was closely linked 'to environment and domestic habit ... and in all its forms ... was [a] leading killer' in the nineteenth-century.⁵²⁶ It is not therefore surprising to find consumption as a major cause of death amongst the Dispensary patients. As one of the major killers in our period; 'it had come to be feared through all levels of society'.⁵²⁷ Another interesting feature of Figures 4.10 and 4.11 is that some of the conditions which commonly killed the Dispensary patients are conditions that in the eighteenth-century were associated with children. Conditions such as 'smallpox', 'water in the head', 'scarlet fever', 'water in the chest', and 'convulsions'. Marshall's study of the Bills of Mortality in London classified these sorts of disease as those

⁵²⁵ The deaths reported were broken down as follows (Number of deaths): Consumption (2,875), Dropsy (904), Continued Fever (679), Water in head (448), Abdominal Obstruction (408), Small Pox (385), Scarlet Fever & Ulcerated Throat (318), Water in chest (237), Surgical Cases (216), Palsy (178), Putrid Fevers (154), Inflammation of the lungs (120), Dysentery (119), Measles (116), Whooping cough (108), Spitting Blood (103), Scrophula (90), Pleurisy & inflammation of Lungs(88), Inflammation of Liver (86), Apoplexy (78), and All others (1,095).

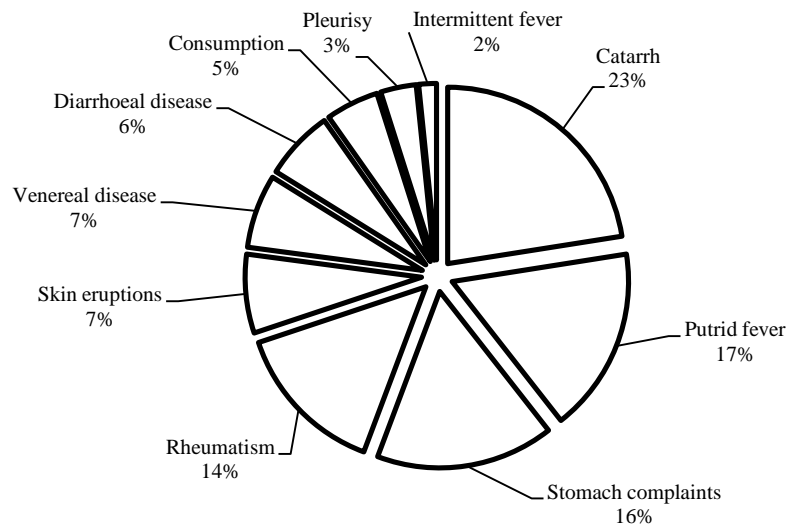
⁵²⁶ Hardy. *The Epidemic Streets: Infectious Disease*, 8.

⁵²⁷ For a discussion of Consumption in eighteenth-century London see: Schwarz. *London in the Age of Industrialisation*, 139-41; Landers. *Death and the Metropolis*, 89-151; Hardy. *The Epidemic Streets: Infectious Disease*, 211-66.

‘diseases incidental to infancy’.⁵²⁸ This is not surprising given the large numbers of children we found among the patients.

⁵²⁸ For the best discussion of Marshall and the disease categories used in the London Bills of Mortality, to date, see: Landers. *Death and the Metropolis*, 94-126. It should be stressed that some of the other conditions listed in Table 5.6 were also commonly experienced by both adult and infant members of the population for instance Small Pox, see: R. Davenport, L.Schwarz & J. Boulton. ‘The Decline of Small Pox’. Also see: A. Hardy. ‘Small Pox in London: Factors in the Decline of the Disease in the 19th Century’, *Medical History*, 23 (1983), 111-38; A. Rusnock. ‘Catching Cowpox: The Early Spread of Small Pox Vaccination, 1798-1810’, *Bulletin of the History of Medicine*, 83 (2009), 17-36; P. Skold. ‘From Innoculation to Vaccination: Small Pox in Sweden in the Eighteenth and Nineteenth-Centuries’, *Population Studies*, 50 (1996), 247-62.

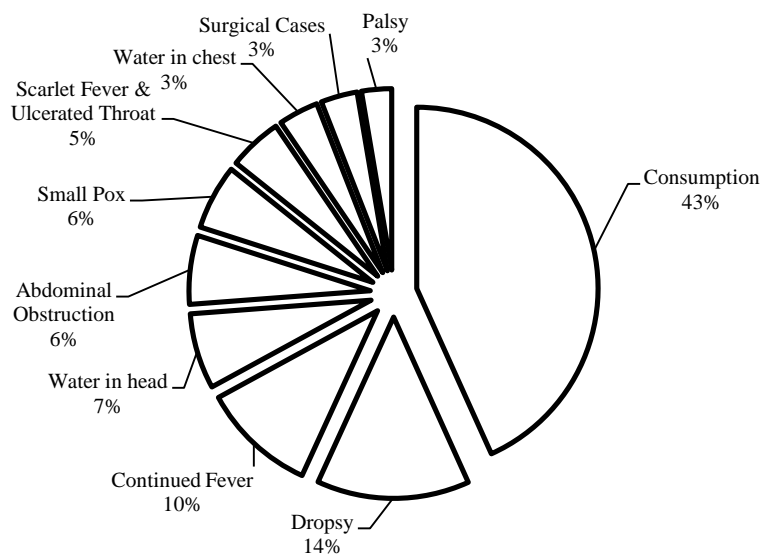
Figure 4.10 *Ten most common causes of morbidity amongst the Dispensary patients, 1780-1851*



Note: N = 78,988

Source: Dispensary disease Tables.

Figure 4.11 *Breakdown of the ten most common causes of death of the Dispensary patients, 1779-1851*



Note: N = 6,648

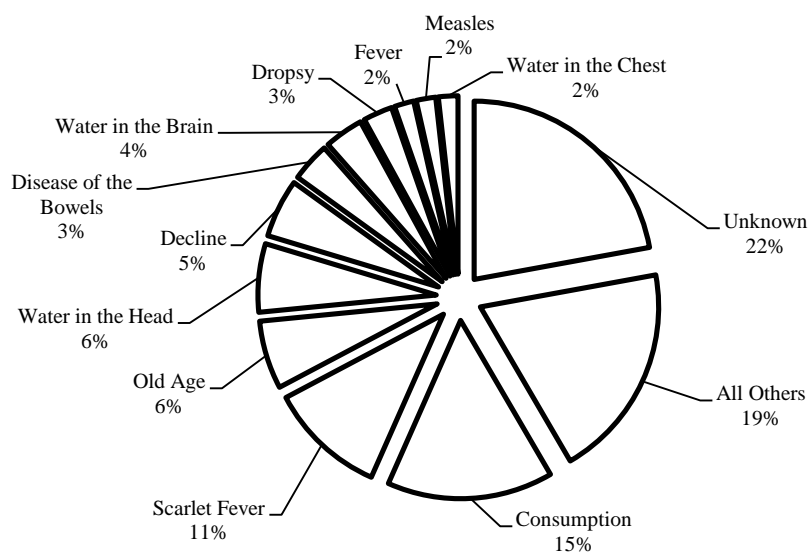
Source: Dispensary disease Tables.

What was going on amongst the wider population of the city? Figure 4.12 shows the most common causes of death which were listed in the Westgate Hill burial register from 18

September 1829 until January 5 1831 and Table 4.9 lists the causes of death extracted from the Registrar Generals 1841 report for Newcastle.⁵²⁹

⁵²⁹ The cut-off point in 1831 was chosen because of the outbreak of Cholera in Newcastle in in the latter months of 1831 and through 1832. The thinking here was that the inclusion of an ‘unusually large number of burials from a unusual epidemic would distort the emerging pattern of deaths by cause which can be gleamed from the source. TWAM CE.WHG/1. For a detailed discussion of cholera and its impact in Newcastle, see: Butler. ‘Cholera and Newcastle’, 1-44.

Figure 4.12 Causes of death listed in the Westgate Hill burial register, 18th September 1829-5th January 1831



Source: Westgate Hill burial registers, TWAM CE.WHG/1

Table 4.9 Ten most common causes of death in the Registrar Generals report for Newcastle, 1841

	Number of deaths	Percentage Distribution
Consumption	236	11.50%
Measles	202	9.87%
Small Pox	173	8.45%
Old age	164	8.01%
Pneumonia	158	7.72%
Debility	127	6.21%
Dropsy	89	4.35%
Convulsions	80	3.91%
Hydrocephalus	74	3.61%
Whooping cough	69	3.37%
All others	673	32.90%
Total	2,045	100.00%

Source: Third Annual report of the registrar-general BPP 1841, 134-36.⁵³⁰

The most illuminating aspect of these figures is the sheer dominance of consumption in all three sets of data. Over 40% of the Dispensary patients were carried off by this fearful complaint. Likewise in the Westgate Hill cemetery, out of all of the burials within the sample examined here, 15% were recorded to have been consumptives, the largest single known cause of death. The returns of the Registrar General for 1841 show that 11% of the reported

⁵³⁰ http://www.histpop.org/ohpr/servlet/Download/0464_00032_00032.html [accessed 23/09/2010].

‘known’ causes of death in the city were caused by consumption. Consumption was clearly a leading killer in late Georgian and early Victorian Tyneside. Consumption is an ‘urban disease’, ‘closely related to environment and domestic habit’ and its decline in the mid nineteenth-century was thought to have been essential to the overall mortality decline identified by McKeown, although this latter theory has been challenged more recently by historians such as Szreter, McFarlane and Mitchell.⁵³¹ It is also the case that the proportion of deaths from consumption in the Dispensary sample is much greater than in either the Westgate Hill burial register or indeed in the report of the Registrar General in 1841 (see Table 4.13).

Table 4.13 *Consumption deaths as a proportion of deaths in three different samples*

	Period	Consumption as % of all deaths
Dispensary deaths	1780-1851	43.0%
Westgate Hill	1829-1831	15.0%
Registrar General	1841	11.0%

Source: Dispensary database. Westgate Hill burial register, TWAM CE.WHG/1. Third Annual report of the registrar-general BPP 1841, 134-36

How can this be understood? In eighteenth-century London consumption was one of the five leading killers in most age groups.⁵³² Landers, using the London Bills of Mortality, has shown, that deaths from consumption accounted for over 12% of London burials between 1700 and 1724, over 15% between 1725 and 1749, rising to over 19% between 1750 and 1774. It peaked between 1775 and 1779 at over 24% and plateaued after that date at little over 23%.⁵³³ Schwarz (using exactly the same data) has suggested something similar. He has shown that from the mid-eighteenth-century consumption deaths were rising quite steadily as deaths from other conditions such as convulsions, fevers and smallpox were falling..⁵³⁴ The

⁵³¹ Hardy. *The Epidemic Streets: Infectious Disease*, 211. T. McKeown. *The Modern Rise of Population* (London, 1976), 68; S. Szreter. ‘The Importance of Social Intervention in Britain’s Mortality Decline, c. 1850-1914: A Reinterpretation of the Role of Public Health’, *Social History of Medicine*, 1 (1980), 1-39; N. McFarlane. ‘Hospitals, Housing and Tuberculosis in Glasgow’, *Social History of Medicine*, 2 (1989), 59-85; A. Mitchell. ‘An Inexact Science: the Statistics of Tuberculosis in Late Nineteenth-Century France’, *Social History of Medicine*, 3 (1990), 387-404.

⁵³² For discussion see: Schwarz. *London in the Age of Industrialisation*, 139.

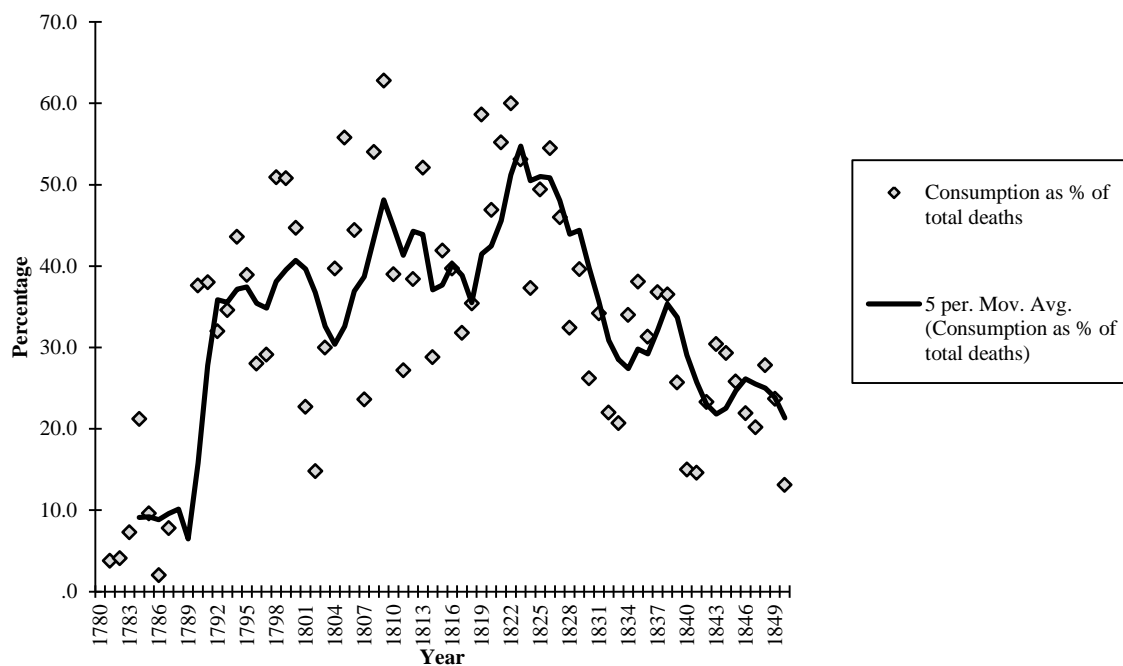
⁵³³ Landers. *Death and the Metropolis*, 94-95.

⁵³⁴ Schwarz. *London in the Age of Industrialisation*, 139-40.

dominance of consumptive deaths at the Dispensary may well suggest that sufferers were turning to the subscribers as a last resort only when death was near.

Did consumption mortality alter over time? The Dispensary data allows one to look at this question. Figure 4.14 plots a scatter graph of the proportion of deaths from consumption of the Dispensary patients expressed as percentages of the total number of deaths which took place, together with a five-year moving average.

Figure 4.13 *Consumption as a percentage of the total number of deaths of the Dispensary and 5-year moving average, 1780-1851*



Source: Dispensary database.

For the most part deaths from consumption at the Dispensary were rising during the late eighteenth century, reached something of a plateau in the early nineteenth, and then began to decline quite rapidly. Something similar seems to have been happening in London: deaths from consumption ‘fell from 8.3 per thousand in the late 1730s to 5.4 per thousand between 1838 and 1844’.⁵³⁵ However, much of the fall in the nineteenth-century was probably ‘a result of changes in diagnosis and terminology’ which may well have been occurring in Newcastle in the same period. Moreover, ‘Hardy is suspicious of the apparent sharp fall’ in the 1840s when registration tightened up’.⁵³⁶ The comparison between the fall in

⁵³⁵ Schwarz. *London in the Age of Industrialisation*, 140. The apparent increase in consumption in Newcastle in the eighteenth century may have been a result of a fall in infant mortality in these years, as well as a decline in other causes of death.

⁵³⁶ *Ibid*, 140.

consumption in London and Newcastle after 1830 is striking, but again this was probably, as Hardy and Schwarz have already pointed out, a result in changes of registration practices as opposed to a decline in the disease's severity and incidence.⁵³⁷ Indeed, Smith has emphasised that elements such as 'better nutrition, housing, nature, lessening of fatigue' are essential in the decline of tuberculosis.⁵³⁸ While many of these variables are hard to measure, we have no reason to think that social conditions in Newcastle actually improved significantly in our period. Firswell's has suggested that public health on Tyneside seems to have actually worsened during the nineteenth-century.⁵³⁹ Why consumption should have fallen locally and nationally in this period is particularly unclear since living standards on Tyneside may have been getting worse (see above Chapter 2) and there was certainly more atmospheric pollution in the nineteenth-century than there had been previously as industrial activity increased dramatically after 1830.⁵⁴⁰

What can we say about the types of disease which killed Dispensary patients? As we have already seen, the Dispensary appears to have treated large numbers of young children and several types of disease and conditions were specific to these individuals. In order to examine this further it is instructive to look back at the sample data extracted from those burials which took place at Westgate Hill Cemetery. Figure 4.15 sets out the causes of death of all of the burials where an age was given. The figure includes only cases aged between 0 and 10 years. The thinking here is that the disease which killed these ages might tell us something about the types of diseases which were killing the Dispensary patients.

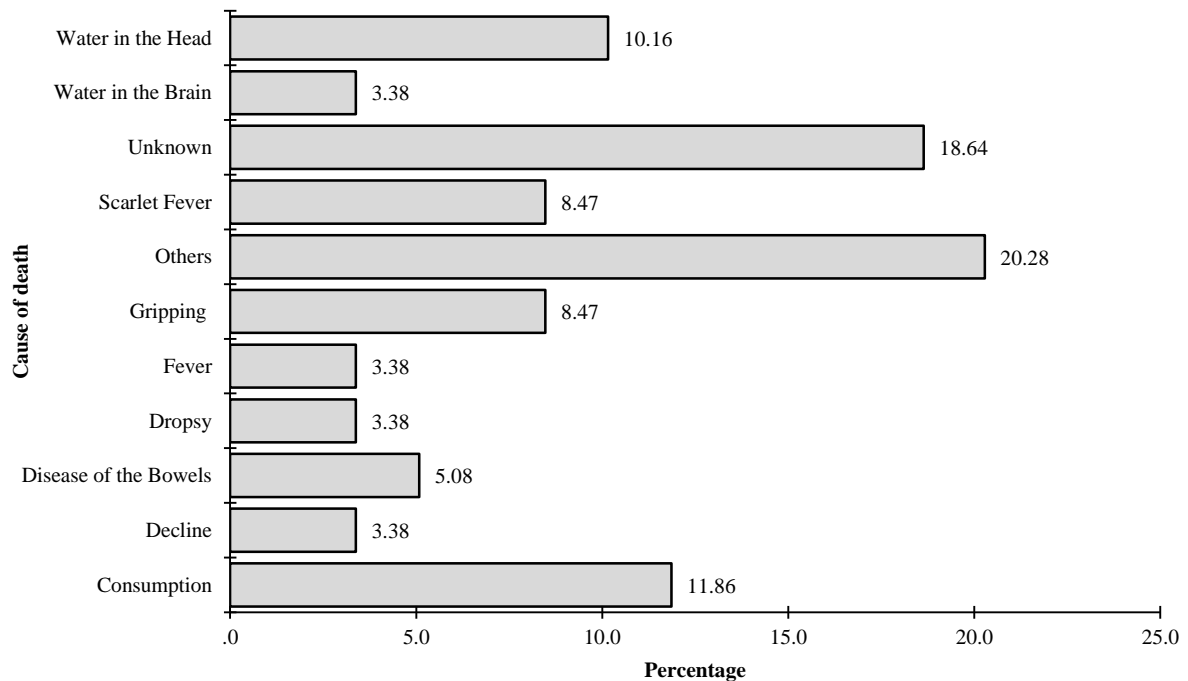
⁵³⁷ *Ibid*, 140-4; Hardy, 'Diagnosis, Death and Diet', 387-401.

⁵³⁸ Hardy, *The Epidemic Streets: Infectious Disease*, 213.

⁵³⁹ C. Firswell, 'Did King Dirt' and 'Bumbledon' Defeat the Object of Public Health, 1848: A Case Study of the Political, Social and Cultural Attitude to Public Health Reform in Newcastle-upon-Tyne, Gateshead and Sunderland, 1835-58' (Unpublished PhD Thesis, Durham University, 1999).

⁵⁴⁰ For discussion of the Impact of industrialisation on Tyneside in the nineteenth-century see for example: McCord, *North East England*, 1-19.

Figure 4.15 *Percentage of Westgate Hill burials by given cause aged 0-10 years, 18th September 1829- 5th January 1831*



Source: Same as Figure 5.8

Figure 4.15 is revealing. If one was to look back at the common causes of death amongst the Dispensary patients over the entire period, it becomes immediately apparent that the types of diseases which were carrying-off the Dispensary patients were representative of those which assailed and killed young children in Newcastle. It was conditions such as Scarlet Fever, Water in the Head/Brain, Fevers and even Consumption which were killing children. Moreover, as all of the deaths recorded in the Dispensary Disease Tables relate only to patients who were in receipt of a recommendation suggests that many of the poor in the city were turning to one of the subscribers for assistance, not only for themselves but also when their children were ill, and even when their child's sickness was a serious and possibly life threatening disorder.

5.7 Conclusion

In conclusion, the evidence collected by the Dispensary has allowed for an unusually detailed quantitative analysis of the medical care delivered by this institution across the period. In essence, there are six conclusions which can be drawn from the foregoing:

Firstly, by the end of our period the Dispensary was providing a significant level of healthcare to the poor population in the city. Secondly, analysis of the characteristics of the patients has suggested that, by and large, they were broadly representative of the wider population of the city. In this sense the diseases and conditions may be representative of the types of common diseases which were experienced by the poor in Newcastle. Thirdly, it has also been found that there were large numbers of children being recommended to the Dispensary, so much so that the institution appears to have been providing the most significant level of paediatric care to the poor than any other institution. This latter point is something which medical historians seem to have overlooked.

Fourthly, we have also been able to establish that the types of diseases and complaints which assailed the poor were wide-ranging, with the majority of patients labouring under conditions which were chronic, debilitating and long-lasting. These ailments greatly damaged the fragile economy of the poor by preventing work and others were often dangerous and highly lethal diseases which had the ability to quickly remove breadwinners from families. In this sense alone, the Dispensary must have played an important part in the lives of the poor in the city.⁵⁴¹

Fifthly, in terms of the mortality of the patients, we have seen that there were many short term fluctuations in the death rate, with higher levels of mortality taking place in a few years in the eighteenth-century. During epidemics, the mortality of the patients could in many ways reflect what was taking place amongst the wider population. Lastly, we have also seen that the types of diseases which commonly *killed* the patients were representative of the diseases and conditions which killed the wider population. The data suggest that Newcastle like most towns and cities in our period had many highly infectious diseases. But overall our evidence suggests that ‘if nothing else got you first, consumption ... was rather likely to get you in the end’.⁵⁴²

In short, the examination of the evidence of the Dispensary suggests that the institution played a significant role in the overall medical landscape of the city and impacted extensively on the lives of ordinary individuals such as Mary Lambly. What relationship did this extensive provision have with the medical services provided by the Old Poor Law in Newcastle? It is to Poor Law medicine that we finally must turn.

⁵⁴¹ For discussion of the urban environment see: Pelling, *The Common Lot*, 19-79.

⁵⁴² Schwarz, *London in the Age of Industrialisation*, 140.

Chapter 5. ‘On the parish’? The poor law, the parish workhouse and parochial medical provision in Newcastle-upon-Tyne, 1770-1830: a micro-history

On 2 October 1822, Isabella Collins, a 36 year old single woman applied to church wardens in her parish of All Saints in Newcastle, claiming that she was in bad health. When questioned by the parish overseers, she ‘admitted to have procured a *foul distemper*’.⁵⁴³ Collins did not receive a cash payment, she was not sent to the Infirmary nor was she visited by one of the Dispensary physicians, instead she was ‘ordered into the house’ – the parish workhouse, until she was cured.⁵⁴⁴ The way in which the poor, like Isabella Collins, were able to secure aid during periods of distress brought on by sickness, economic depression or the loss of a spouse or family member has fascinated historians over the past 60 years, to such a degree that this subject alone has ‘manifested itself as the single most important social issue at local and national level’.⁵⁴⁵ The next section of this thesis looks at this issue in light of one

⁵⁴³ TWAM 466/10.

⁵⁴⁴ TWAM 466/10.

⁵⁴⁵ S. King. *Poverty and Welfare in England, 1700-1850: A Regional Perspective* (Manchester, 2000), 1. There is now a huge literature of the English Poor Law system, for some of the most notable studies, see: P. Slack. *Poverty and Policy in Tudor and Stuart England* (London, 1988); M.A. Crowther. ‘Pauper or Patients?’, *Journal of the History of Medicine and Allied Sciences*, 60 (1984), 33-54; D. Baugh. ‘The Cost of Poor Relief in South East England, 1790-1834’, *Economic History Review*, 28 (1978), 50-68; J.P. Boulton. ‘The Poor Among the Rich and the Parish in the West End, 1600-1724’ in, P. Griffiths & M. Jenner eds., *Londonopolis: Essays in the Cultural and Social History of Early Modern London* (Manchester, 2000), 197-227; J. Broad. ‘Parish Economies of Welfare, 1650-1834’, *Historical Journal*, 42 (1999), 985-1006; M. Fissell. ‘Charity Universal? Institutions and Moral Reform in Eighteenth Century Bristol’ in, L. Davison, T.V. Hitchcock, T. Keirn & R.B. Showmaker eds., *Stilling the Grumbling Hive: The Response to Social and Economic Problems in England, 1689-1750* (New York, 1992), 121-44; D.R. Green. ‘Pauper Protests: Power and Resistance in Early Nineteenth-Century London Workhouses’, *Social History*, 31 (2006), 137-59; S. Hindle. ‘“Not by Bread Only”? Common Right, Parish Relief and Endowed Charity in a Forrest Community, c. 1600-1800’ in, S. King & A. Tomkins eds. *The Poor in England, 1700-1850: An Economy of Makeshifts* (Manchester, 2003), 39-75; S. King. ‘Reconstructing Lives: The Poor, the Poor Law and Welfare in Calverley, 1650-1820’, *Social History*, 22 (1997), 318-38; S. King. ‘Making the Most of Opportunity: The Economy of Makeshifts in the Early Modern North’ in, S. King et al. *The Poor in England*, 228-57; S. King. ‘“Stop this Overwhelming Torment of Destiny: Negotiating Financial Aid in Times of Sickness under the Old Poor Law, 1800-1840’’, *Bulletin for the History of Medicine*, 79 (2005), 228-60; L.H. Lees. *The Solidarities of Strangers: The English Poor Laws and the People, 1700-1949* (Cambridge, 1998); S. Ottaway. ‘Providing for the Elderly in Early Modern England’, *Continuity and Change*, 13 (1998), 391-418; M. Pelling. ‘Healing the Sick Poor: Social Policy and Disability in Norwich, 1550-1640’, *Medical History*, 29 (1985), 115-37; J.R. Poynter. *Society and Pauperism: English Ideas on Poor Relief, 1795-1834* (London, 1969); P. Slack. *The English Poor Law, 1531-1782* (London, 1990); R.M. Smith & M. Pelling eds. *Life, Death and the Elderly: Historical Perspectives* (London, 1991); R. Smith. ‘Aging and Well Being in Early Modern England: Pension Trends and Gender Preferences Under the Old Poor Law, c. 1650-1800’ in, P. Johnson ed., *Old Age from Antiquity to Modernity* (London, 1998), 64-95; K. Snell. ‘Pauper Settlements and the Right to Poor Relief in England and Wales’, *Continuity and Change*, 6 (1991), 375-415. For the medical aspects of Poor Law see for example: E. Thomas. ‘The Old Poor Law and Medicine’, *Medical History*, 14 (1980), 1-19; K. Waddington. ‘Paying for the Sick Poor: Financing Medicine under the Victorian Poor Law: The Case of the White Chapel Union, 1850-1900’ in, M. Gorsky & S. Sheard eds., *Financing*

Newcastle parish. In doing so it hopes to rise to the challenge made by King that ‘we do not have enough local studies’ of poor relief under the old Poor Law, and more specifically, in the north-east, a region which has been subject to many generalisations.⁵⁴⁶ Moreover, by concentrating directly on the medical aspects of parish poor relief, this chapter will test Boulton and Schwarz’s recent observation, based on metropolitan evidence, that by the end of the eighteenth century, the local ‘parish workhouse, became ... an important receptacle for the sick and diseased poor’.⁵⁴⁷

5.1 Introduction

Previous sections of this thesis have been concerned with Newcastle’s demographic experience and the city’s voluntary hospitals.⁵⁴⁸ This chapter will examine the medical care experienced by those who did not have the means to turn to the city’s private sector and who were often excluded from hospital wards; the poor, a group within society who, Fissell points out, were unable to ‘partake in the medical marketplace’.⁵⁴⁹ Newcastle’s pauper ‘experience’ will be examined by a micro-historical analysis of one individual parish in the city – namely the parish of All Saints, in the eastern district. All Saints was the poorest and largest parish in Newcastle. It has been singled out because it possesses an archive of considerable size and richness. This chapter will examine the extent to which medical relief was delivered to the pauper population of this important urban parish and will thereby shed new light on a hitherto uncharted aspect of Newcastle’s medical history.

This chapter will ask the following questions: What types of sickness afflicted Newcastle’s pauper population? To what extent did sickness prompt application for poor relief? And

Medicine: The British Experience Since 1750 (London, 2006), 95-111; R. Hodgkinson. *The Origins of the National Health Service: The Medical Services of the New Poor Law, 1834-1871* (London, 1967).

⁵⁴⁶ The most pioneering examination of poverty and poor relief in the North East of England to date is Rushton’s expert study: P. Rushton. ‘The Poor Law, the Parish and the Community in North East England, 1600-1800’, *Northern History*, 25 (1989), 135-52. For the period after 1834, see McCord’s important work: N. McCord. ‘The 1834 Poor Law Amendment Act on Tyneside’, *International Review of Social History*, 14 (1969), 1-23.

⁵⁴⁷ J.P. Boulton & L.D. Schwarz. ‘The Parish Workhouse, the Parish and Parochial Medical Provision in Eighteenth-Century London: Challenges and Possibilities’, in S. King & A. Gestrich ed., *Narratives of Sickness and Poverty in Europe* (forthcoming, 2010), see: <http://research.ncl.ac.uk/pauperlives/> [Accessed 12/05/2010]

⁵⁴⁸ For two detailed examinations of the growth of the medical profession in the eighteenth and nineteenth centuries see: I. Loudon. *Medical Care and the General Practitioner, 1750-1850* (Oxford, 1986), 208-27; A. Digby. *Making a Medical Living: Doctors and Patients in the English Market for Medicine, 1720-1911* (Cambridge, 1994), 107-34.

⁵⁴⁹ M.E. Fissell. *Patients, Power and the Poor in Eighteenth-Century Bristol* (Cambridge: 1991), 94. For a more recent collection of essays on what has been deemed the ‘medical marketplace’ see: M.S.R. Jenner & P. Wallis eds. *Medicine and the Marketplace in England and its Colonies c.1450-c.1850* (Basingstoke, 2007). In particular, see the introductory chapter: Jenner et al. ‘The Medical Marketplace’, 1-24.

lastly, what sort of ‘care’ did the parish provide to the sick and diseased poor in All Saints?⁵⁵⁰ One conclusion of this study is that a more meticulous examination of *poor law* in Newcastle is required urgently, as poor law medicine is just one of many aspects in what historians now *famously* call the ‘economy of makeshifts’.⁵⁵¹

Eighteenth-century England, as we have already seen, was ‘characterised by bursts of institutional provision for various categories of poor persons’.⁵⁵² This was particularly marked in London, the nation’s capital, where institutions (particularly hospitals) often acted as blue prints for those founded in the provinces. As already discussed in the previous chapters, the founding of the Westminster Infirmary (1719) marked the beginning of an evolutionary period in the history of institutional medicine in England.⁵⁵³ Alongside voluntary hospitals, workhouses also sprouted up, mainly as a result of the Workhouse Act of 1723.⁵⁵⁴ The movement however, was not chiefly confined to London and by 1777 there were at least 1,916 workhouses in England.⁵⁵⁵ While the previous chapters have demonstrated the medical care delivered by Newcastle’s hospitals, ‘the more difficult task for the historian is to understand how the workhouses and the hospitals related to each other’.⁵⁵⁶ One might assume that the development of the city’s Infirmary and more significantly, the Dispensary, which by the third decade of the nineteenth-century, delivered medical care to nearly 10% of the city’s population, might have inhibited the medical relief provided by the city’s parochial authorities. There are also good reasons to think that the parochial authorities were keen to utilise these new institutions. An examination of the annual accounts of both the Infirmary and Dispensary shows that the Overseers of All Saints regularly subscribed hefty sums to both institutions. Moreover, All Saints was the only Newcastle parish that subscribed to the Dispensary, which might suggest that the parish could not provide adequate indoor medical

⁵⁵⁰ Rowe. ‘The North east’ North-East?’, 415-70.

⁵⁵¹ See: A. Tomkins & S. King. ‘Introduction’, in A. Tomkins & S. King eds. *The Poor in England, 1700-1850: An Economy of Makeshifts* (Manchester, 2003), 1-38.

⁵⁵² J.P. Boulton & L.D. Schwarz. ‘The Parish Workhouse, the Parish and Parochial Medical Provision in Eighteenth-Century London: Challenges and Possibilities’, in S. King & A. Gestrich eds. *Narratives of Sickness and Poverty in Europe (forthcoming, 2010)*, see: <http://research.ncl.ac.uk/pauperlives/> [Accessed 12/05/2010].

⁵⁵³ For a discussion, see: Schwarz. *London in the Age of Industrialisation*, 27.

⁵⁵⁴ For a detailed examination of the movement, see: T.V. Hitchcock. ‘The English Workhouse: A Study in Institutional Poor Relief in Selected Counties, 1696-1750 (Unpublished DPhil Thesis, Oxford University, 1985).

⁵⁵⁵ T.V. Hitchcock. ‘Paupers and Preachers: The SPCK and the Parochial Workhouse Movement’, in L. Davison, T.V. Hitchcock, T. Keirn & R.B. Showmaker ed., *Stilling the Grumbling Hive: The Response to Social and Economic Problems in England, 1689-1750* (New York, 1992), 145. For three provincial and one metropolitan examination of ‘Poor Law medicine’, see: J.V. Pickstone. *Medicine and Industrial Society: A History of Hospital Development in Manchester and its Region, 1752-1946* (Manchester, 1985), 35-7 and Fissell. *Patients, Power and the Poor*, 74-109; Marland. *Medicine and Society in Wakefield and Huddersfield*, 52-93; Siena. *Venereal Disease, Hospitals and the Urban Poor*, 135-80.

⁵⁵⁶ Boulton *et al.* ‘The Parish Workhouse, the Parish and Parochial Medical Provision’ (*forthcoming*, 2011).

care to the pauper population of the parish. To investigate whether this was so requires close study of this large parish, and the context of Newcastle's 'medical landscape'.

5.2 Sources and methodology

Records which supply information on medical care include a full set of Overseer's accounts which survive from 1778-1830, and some surviving itemised accounts of the parish workhouse. Further medical information is contained in the vestry minutes which often note the cause of admission to the workhouse. Some medical information can also be gleaned from the settlement examinations which often include information on sickness and disability. Such material allows for an unusually close study of poverty and poor relief in Georgian and early Victorian Newcastle and it is to this close study that this chapter will now turn.⁵⁵⁷

This chapter is structured into seven parts. The first discusses the actual size of All Saints parish. The second looks at the origins of the parish workhouse. Section three analyses the demographic characteristics of the paupers who were incarcerated. Fourthly, the 'housed environment' within the parish workhouse is discussed. The fifth part looks at the extent to which sickness and disease prompted an application for relief in the parish. Section six looks more closely at the medical role of the parish by examining workhouse medicine and the types of medical care which could not be delivered locally. The final part seeks to draw conclusions about the type of in-house medical care which was made available to the pauper population in the workhouse.

5.3 Size of population

Figure 5.1 presents some rough estimates of the total population of All Saints parish across the period with which this study is concerned. These figures were calculated using baptismal totals corrected for under-registration caused by the growth of religious dissent, delayed baptism and other factors.⁵⁵⁸ Three estimates have been presented, using notional birth rates of between 30 and 35 per 1000, with 'The lower the birth rate, the higher the estimated

⁵⁵⁷ For reference see: TWAM 465/14; TWAM 465/1; TWAM 465/16; TWAM MF349; TWAM MF352; TWAM465/31; TWAM 465/32; TWAM 466/10; TWAM 183/1-187; TWAM 465/38; TWAM 465/37; TWAM 465/38; TWAM 466/11; TWAM MF388-92; TWAM 183/234; TWAM MF371; TWAM MF382-85; TWAM E.NC36, TWAM T241; TWAM DX1008/1.

⁵⁵⁸ Boulton *et al.* 'The Comforts of a Private Fireside', *The Workhouse, the Elderly and the Poor Law in Georgian Westminster*, 221-45. The correction ratios that take into account the growth in religious dissent and birth-baptism intervals are those pioneered by Wrigley and Schofield. For discussion, see: Wrigley *et al.* *The Population History of England, 1541-1871*, 89-154. Also, see Landers pioneering study of eighteenth-century London: Landers. *Death and the Metropolis: Studies in the Demographic History*, 165-66.

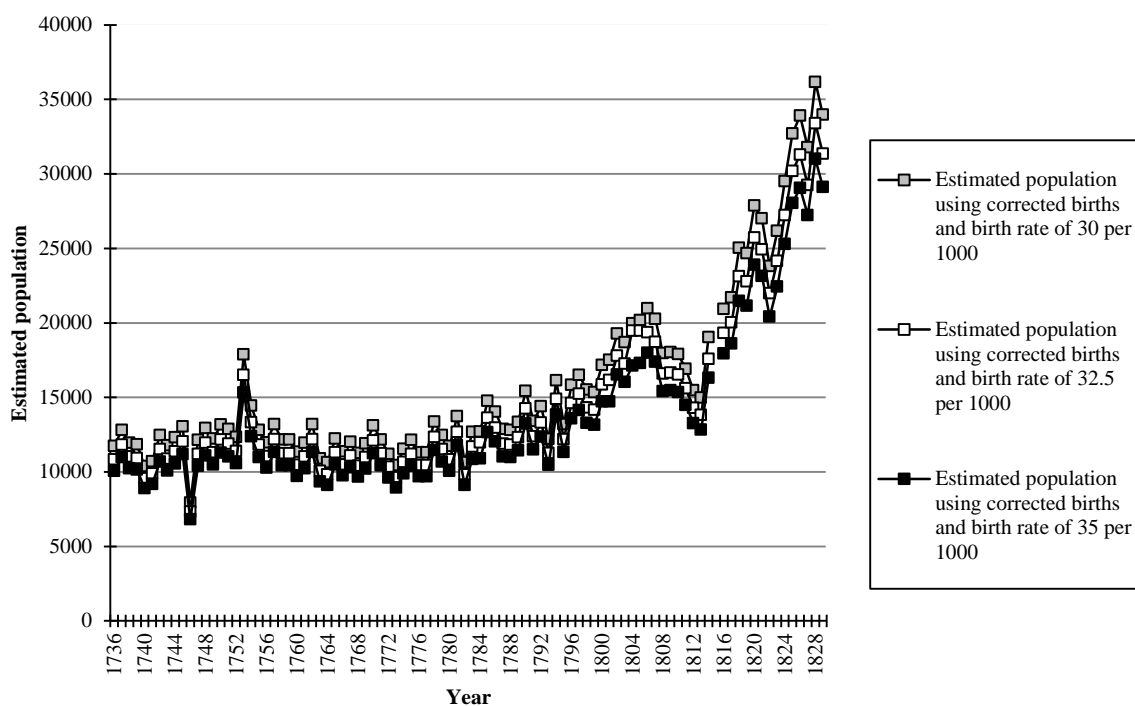
population'.⁵⁵⁹ Although this method is defensible, it should also be stressed that there are no definitive birth rates for eighteenth-century Newcastle, although it is 'thought that this range of estimates provides reasonable approximations'.⁵⁶⁰

The parish seems to have experienced rather sluggish growth during the latter half of the eighteenth-century, with a population ranging between 12,000 and 15,000. The parish appears to have grown very modestly during the latter years of the 1790s and the first decade of the nineteenth-century, then it declined during the first few years of the 1810s. Half way through the second decade of the nineteenth-century, All Saints seems to have experienced rapid population growth, from something between 15,000-16,000 in 1810, to something closer to 33,000-36,000 in 1829. These figures are probably within the right general scope, with the estimates in 1801 ranging between 14,714 and 17,500, and the mid-point population being 16,153. The 1801 census population was 14,396, suggesting that higher end birth rates are to be preferred.

⁵⁵⁹ Boulton *et al.* 'The Comforts of a Private Fireside', 225.

⁵⁶⁰ *Ibid.*, 225.

Figure 5.1 *Estimates of the population of All Saints parish, Newcastle, 1736-1830*



Source: Bills of Mortality database. No data exist for 1815.

What proportion of Newcastle’s population resided in All Saints? As discussed in Chapter 1, Newcastle had a population of approximately 30,000 in 1770, but by 1801 it was 28,366.⁵⁶¹ All Saints parish made up a huge proportion of the city’s overall population. By 1750, it had an estimated population of around 14,000, constituting about 50% of the total population of the town. At the time of the first census in 1801 it was 14,396.⁵⁶² By 1811, in terms of population size, All Saints parish outranked 16 other provincial towns in that year.⁵⁶³ In 1815, Newcastle’s annual poor relief expenditure was about £15,000, over 40% of which came

⁵⁶¹ Barke. ‘The People of Newcastle’, 133-66; Barke. ‘The Pre-Civil Registration Population of Newcastle’, unpaginated.

⁵⁶² For an important study of Newcastle’s parish register, see: Basten. ‘Registration Practices in Anglican and Dissenting Groups in Northern England, 1770-1840’ (Unpublished PhD Thesis, University of Cambridge, 2008). For a recent discussion of All Saints population in the seventeenth and early eighteenth-century, see: P. Wright. ‘Water Trades in the Lower River Tyne in the Seventeenth and Eighteenth Centuries’ (Unpublished PhD Thesis, Newcastle University, 2011).

⁵⁶³ B.R Mitchell & P. Deane. *An Abstract of British Historical Statistics* (Cambridge, 1962), 25-26. By 1831 the parish had a population was about 10% greater than that of the townships of Northampton, Wakefield and Walsall, see: Mitchell et al. *An Abstract of British Historical*, 26.

from All Saints parish alone.⁵⁶⁴ The sheer size of All Saints parish is reason enough to use it as a case study.

5.4 A Poorhouse, a Workhouse or a General Hospital?

If we are to assess the part played by the parish and its workhouse in the treatment of Newcastle's sick pauper population we need to have a clear understanding of the actual origin and running of the workhouse itself. The first references to a 'Poorhouse' in Newcastle were made in the mid-seventeenth century, when 'Newcastle had established a 'Charity House' ... also the site of a projected House of Correction' in Manors' in the east end of the city.⁵⁶⁵ Rushton, in his pioneering regional study, has already pointed out that by the early eighteenth-century, 'the Newcastle House, echoing the early institution in Amsterdam, was known as a Spin House, and the master appointed had to run it in addition to looking after whores'.⁵⁶⁶ The monthly accounts of All Saints parish suggest that at least in the late eighteenth-century, the House was known locally as a 'General Hospital'. In 1826, Mackenzie noted that the 'house' 'formerly ... was the general hospital for the reception of the poor in the several parishes' of Newcastle.⁵⁶⁷ The building seems to have been used to house a collective population from all the Newcastle parishes. A 'memorandum and stock book' of the 'Hospital' reveals some direct evidence about the actual parishes that used this institution. The Overseers in All Saints recorded the following observation in 1785.⁵⁶⁸

⁵⁶⁴ E. Mackenzie. *Historical Account of Newcastle-upon-Tyne and the Borough of Gateshead* (Newcastle, 1827), 540.

⁵⁶⁵ Rushton. 'The Poor Law, the Parish and the Community', 147. Also see: E. Mackenzie & M. Ross. *An Historical, Topographical and Descriptive View of the County Palatine of Durham, II* (Newcastle upon Tyne, 1834), 403.

⁵⁶⁶ Rushton. 'The Poor Law, the Parish and the Community', 147.

⁵⁶⁷ Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 541.

⁵⁶⁸ It is unfortunate that there is no surviving evidence prior to the early nineteenth century that would suggest that the Parish of St John had some sort of workhouse. However, a parliamentary return dated 1777 suggests that such an institution did exist, albeit of a very modest size: <http://www.workhouses.org.uk/index.html?NewcastleUponTyne/NewcastleUponTyne.shtml> DATE ACCESSED?

Feb. 13. 1785

At a meeting held at the General Hospital it is agreed unanimously by the Officers of the several Parishes to advance the undermention'd sums for the necessary Expenses of the said Hospital...

The Parish of St Nicholas	£7. 10.-.
The Parish of All Saints	£7. 10.-.
The Parish of St Andrews	£5. -.-
	£20. -.-. ⁵⁶⁹

The building itself formed a quadrangle and the site was that of a former Augustinian convent (see Figure 5.2).⁵⁷⁰ In 1785, the building was extended at the expense of All Saints parish and an inscription decorated the new section, noting that:

This addition to the General Hospital was built at the expense of the parish of All Saints, with the assistance of the corporation, and for the larger reception of the poor of the said parish: James Rudman Esq. Mayor; Edward dale, Esq. Sheriff. Wardens: Thomas Barkas, Peter Paxton, William Lloyd, Joseph Straker. Overseers, Thomas Guthrie, Joseph Liddell, George Hunter, Thomas Smith. 1785.⁵⁷¹

This addition marked the ending of the joint venture and by the closing decade of the eighteenth-century the parishes of St Nicholas and St Andrews had separate workhouses, each with populations of around 40 and 50 respectively.⁵⁷² Was the House in Manors a workhouse as opposed to a 'more ubiquitous poorhouse'?⁵⁷³

⁵⁶⁹ TWAM 545/64.

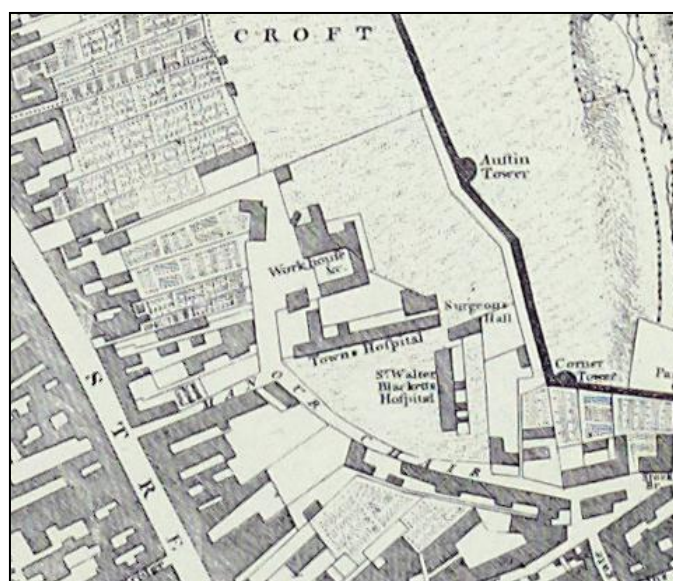
⁵⁷⁰ Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 540-45.

⁵⁷¹ *Ibid*, 541.

⁵⁷² <http://www.workhouses.org.uk/index.html?NewcastleUponTyne/NewcastleUponTyne.shtml> [accessed 20/06/2009].

⁵⁷³ S. King. *Poverty and Welfare in England, 1700-1850: A Regional Perspective* (Manchester, 2000), 160.

Figure 5.2 *All Saints parish workhouse in Manors, 1770*



Source: C. Hutton. 'A Plan of Newcastle-upon-Tyne and Gateshead 1770', in F. Graham. *Maps of Newcastle* (Newcastle, 1984), unpaginated.

The admission register for the House occasionally tells us something about the type of work which was undertaken by the inmates, for example. On the 11 November 1779 the total number of inmates was 33, and the book records that of these, 28 were 'put to business making stockings'.⁵⁷⁴ Further to this, on 2 April 1780, for example, the register records that 5 paupers were put to business 'To sow yarn' as well as 'making shoes', a common practice for workhouses in this period.⁵⁷⁵ Moreover, Mackenzie noted that in the early nineteenth-century, the poor in the workhouse were also 'employed teasing oakum and hair'.⁵⁷⁶ The most concrete evidence we have, however, is gleaned from Eden's important study. He noted that 'in All Saints, 150 Paupers (of whom 55 are children under 12 years of age,) are relieved in the poor-house. The children are chiefly employed in a pin manufactory and earn 1s a week; the others (who are mostly old people, or prostitutes,) pick oakum, and earn, weekly, 4d or 5d

⁵⁷⁴ TWAM. 465/38. There are no references to the remaining inmates, although one might assume that the number of inmates put to business did not include two infants, namely William Callam aged 6 years and Eleanor Callam aged 3 months. One might even go so far as to assume that the very elderly within the House were also not included in the 28. There are only three inmates recorded to have been aged over 70 years, and these might account for the number of inmates missing from those 'put to business'.

⁵⁷⁵ King. *Poverty and Welfare in England*, 160-65.

⁵⁷⁶ Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 541.

per head'.⁵⁷⁷ Thus one might conclude that the House in Manors appears to have been a workhouse.

5.5 The workhouse in Newcastle's east-end: the demographic context

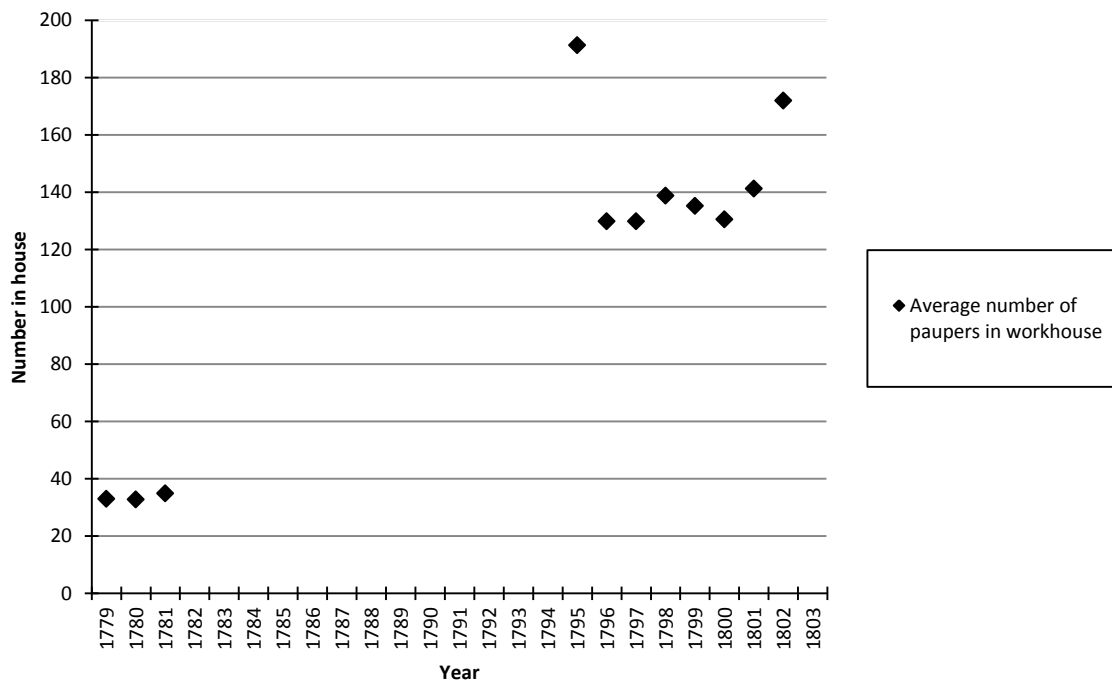
By the late eighteenth century, the House in Manors was predominantly being utilised by the poor of the parish of All Saints, the other parishes having established their own institutions. We now need to have some basic understanding of how many people were actually housed in the parish workhouse. By 1803, the average workhouse in England housed between 20 and 50 persons, although this did hide a wide range, for instance the average workhouse in London housed about 257 individuals, with the largest metropolitan workhouse being that of St Marylebone with a population of just over 1000.⁵⁷⁸ King has already pointed out that provincial 'workhouse populations were generally small-scale'.⁵⁷⁹ We are therefore fortunate that the Vestry were keen to know the exact number of paupers who were incarcerated, and thus kept a detailed weekly register. This has been presented graphically in Figure 5.3, which shows the average number of paupers in the workhouse, and Figure 5.4 which plots the total number of paupers *in house* from 20 April 1795 to 20 April 1802 – a five-point moving average has been included to show the resulting trend over time.

⁵⁷⁷ F.M. Eden. *The State of the Poor: Or an History of the Labouring Classes in England, from the Conquest to the Present Period* (London, 1797), 551-52.

⁵⁷⁸ J.S. Taylor. 'The Unreformed Workhouse, 1776-1834' in, E.W. Martin ed., *Comparative Development in Social Welfare* (London, 1972), 63; *Abstract of Answers and Returns Under Act for Procuring Returns to Expense and Maintenance of the Poor in England*, P.P. 1804-04 XIII, 717-727.

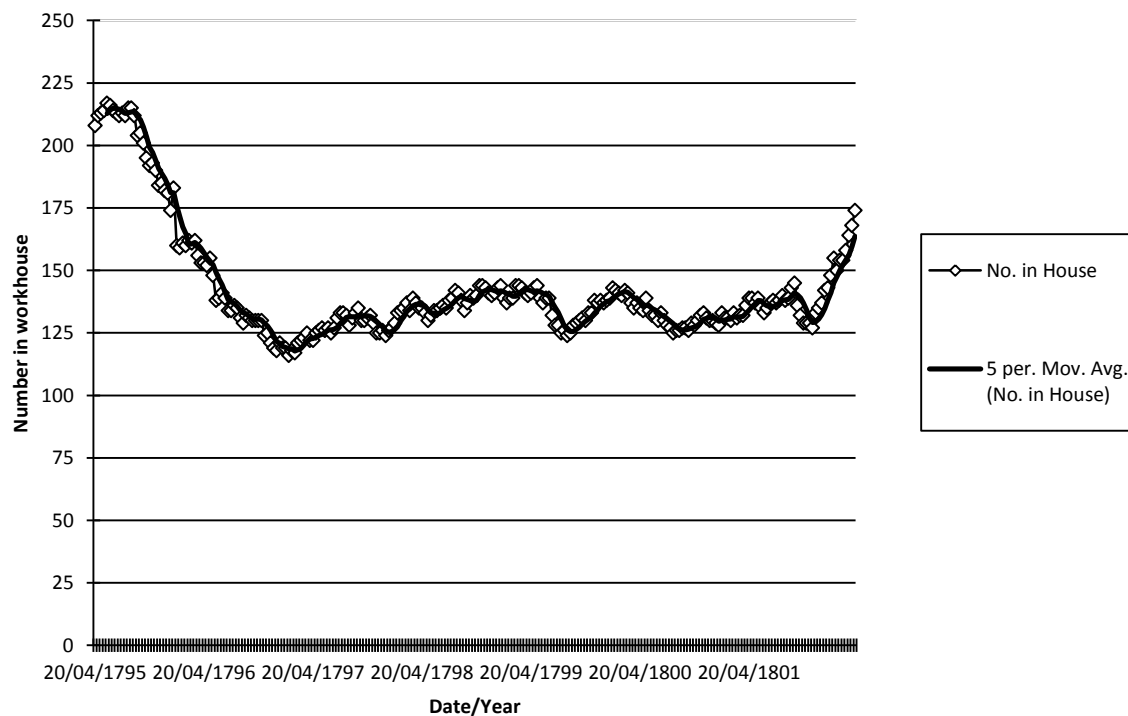
⁵⁷⁹ King. *Poverty and Welfare in England, 1700-1850*, 166-65.

Figure 5.3 Average number of paupers relieved in All Saints workhouse per year, 1779-1803



Source: TWAM 465/37; 465/38

Figure 5.4 Number of paupers housed in All Saints parish workhouse and five-point moving average, 1795-1802



Source: Same as Figure 5.3

Both Figures 5.3 and 5.4 suggest that the workhouse operated on a substantial scale.⁵⁸⁰ The average number of paupers indoors was about 150 across the entire period. This was three times more than the national average, and significantly, more than three to four times greater than all of the other workhouses in Newcastle by 1810. The total number in the house peaked in 1795 at over 200, thereafter showing a moderate decline until 1797, and levelling out thereafter.⁵⁸¹ The graph also suggests that the number of paupers in the house began to increase steadily in the first and second year of the nineteenth-century, this was a feature of Poor Law provision experienced widely in these years, and commonly known as the ‘crisis of the old poor law’.⁵⁸² Clearly this institution operated on a substantial scale in comparison to the other workhouse in Newcastle that collectively had a population which was virtually less than half of the capacity of the All Saints workhouse. But who lived in the workhouse? How typical were the characteristics of the poor in All Saints workhouse? Was the house dominated by particular genders? Alternatively, was the population dominated by specific age groups?

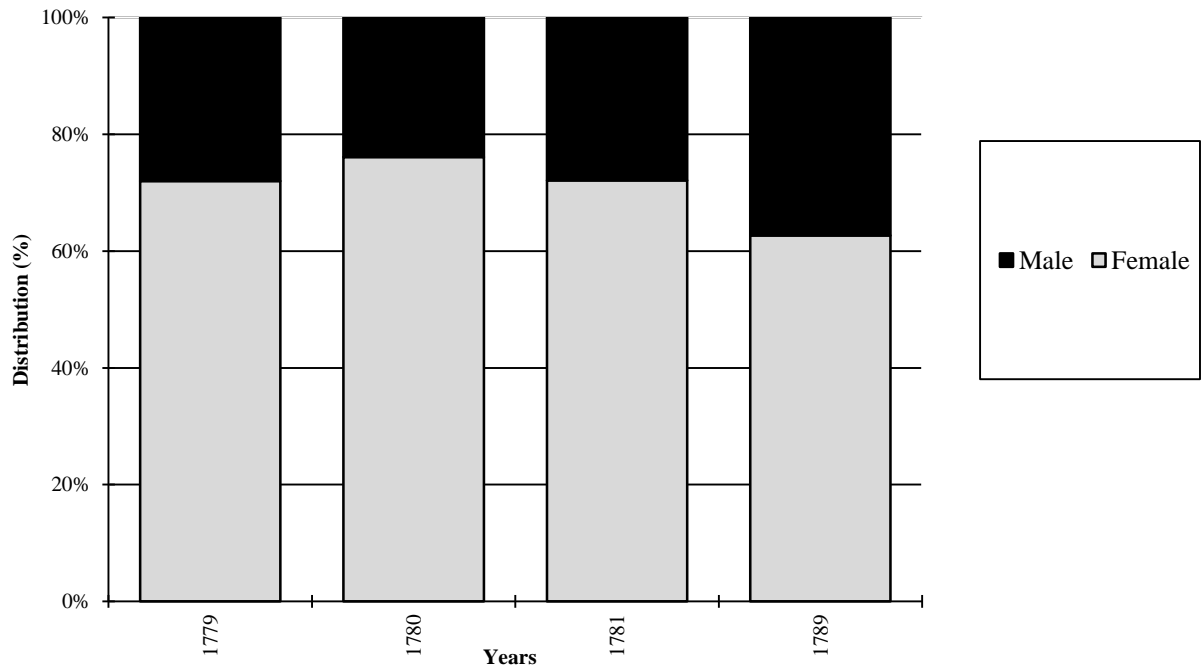
Providing answers to these sorts of questions should allow us to place the workhouse population in both a regional and national context. Hence, it is to the individual characteristics of paupers in All Saints workhouse that this study will now turn. The most promising sources which tell us about the characteristics of the inmates are two surviving admission registers from 1779 to 1789. Additional evidence is provided by a more detailed list of the inmates who were admitted to the workhouse from 1795 until 1804. The former has been presented in Figure 5.5 and the latter in Figure 5.6. Both of these graphs suggest that this institution was dominated for the most part, by a strong female inmate population. Although the data in Figure 5.6 suggests that in some years over 20% of the inmate population is unknown to us, this does not underestimate the dominant presence of women within the overall inmate population.

⁵⁸⁰ Taylor, ‘The Unreformed Workhouse’, 63.

⁵⁸¹ Rushton. ‘The Poor Law, the Parish and the Community’, 35-52.

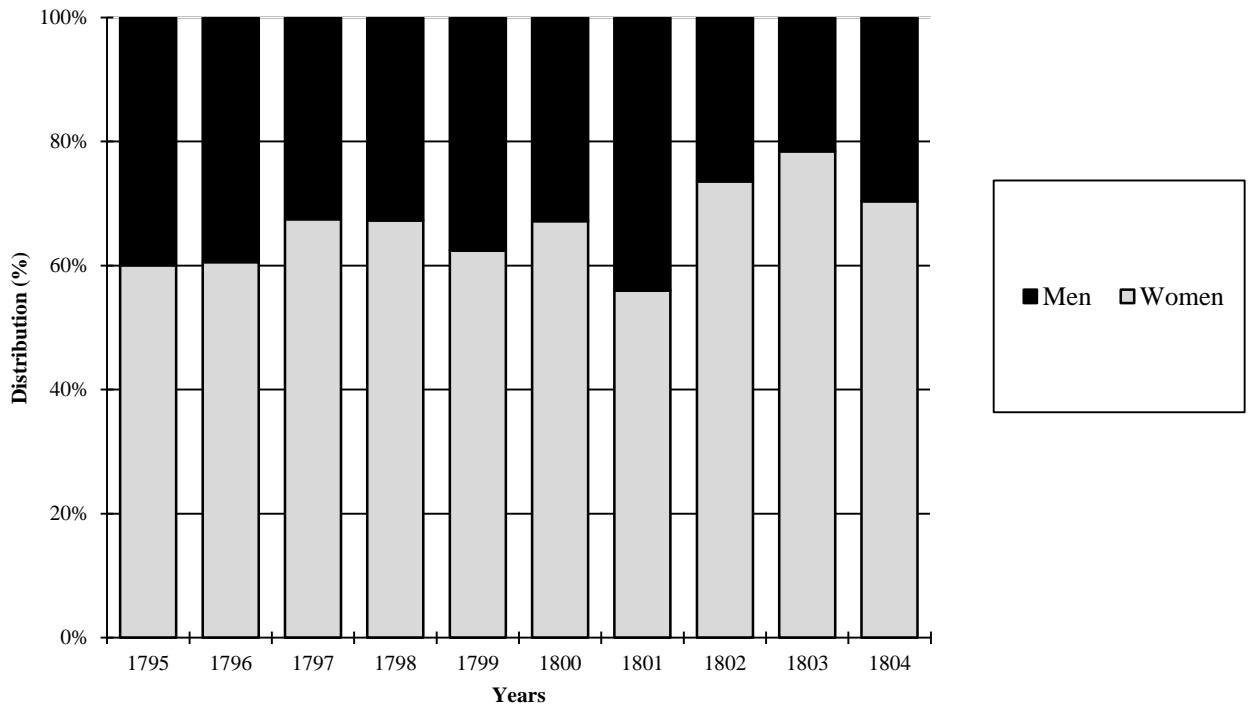
⁵⁸² King. *Poverty and Welfare in England, 1700-1850*, 166.

Figure 5.5 *The sex distribution of All Saints parish workhouse inmates, 1779-89*



Source: TWAM 465/38

Figure 5.6 *The Sex Distribution of All Saints workhouse inmates, 1795-1804*



Source: TWAM 465/37

In the 1780's, well over half of the workhouse population were female, a distribution which is observable throughout the 1790s and the first five years of the nineteenth-century. This supports the notion put forward in King, that in the north, 'groups which we might label the 'traditional' poor – continued to have a central place in communal relief culture'.⁵⁸³ It has also been suggested that men in the north were commonly refused relief. For example, the male inhabitants of the village of Whickham, in County Durham, 'were effectively excluded from ... relief lists and obliged to rely on charity'.⁵⁸⁴ While the evidence gleaned from Figures 6.2 and 6.3 suggest that the population of the All Saints workhouse had a disproportionately large female population, it is also clear that in some years, male inmates could increase or decrease significantly.

A more lucid point demonstrated in Figure 5.6 is the sex distribution of the inmates in 1801. Clearly there were more males *in house* in that year than in any other. This is a feature of poor relief which is comparable to other workhouses throughout England. For instance, King found an increase in the number of male recipients of both indoor and outdoor relief in the immediate years after 1800 in both southern and eastern parishes, as well as in the north and the west.⁵⁸⁵ Snell has also found that these years saw increased expenditure on poor relief generally, which peaked between 1800 and 1803 in southern rural parishes.⁵⁸⁶ However, while these differences are observable, it was demonstrably the case that the increases in male inmates were minimal, and if anything can be drawn from this data, it is that the proportion of female paupers indoors increased over time.

Crudely then, the workhouse in Manors appears to have operated on large scale, both locally and nationally and was dominated by female inmates. The characteristics of the inmate population were, at least in terms of sex profiles, typical of workhouses in both urban and rural settings of the period.⁵⁸⁷ We now need to look more closely at the individual

⁵⁸³ King. *Poverty and Welfare in England, 1700-1850*, 210.

⁵⁸⁴ *Ibid*, 210. For a detailed examination of life and death in Whickham in the late sixteenth, seventeenth and eighteenth-centuries, see: Levine and Wrightson's expert study: Levine et al. *The Making of an Industrial Society*. Also, see: K. Wrightson & D. Levine. 'Death in Whickham' in J. Walter & R. Schofield eds. *Famine, Disease and the Social Order in Early Modern Society* (Cambridge, 1989), 129-66.

⁵⁸⁵ King. *Poverty and Welfare in England, 1700-1850*. 141-80, 181-216.

⁵⁸⁶ K.D.M. Snell. *Annals of the Labouring Poor: Social Change and Agrarian England, 1660-1900* (Cambridge, 1985), 85.

⁵⁸⁷ See, for example: A. Levene. 'Children, Childhood and the Workhouse: St Marylebone, 1769-1781', *London Journal*, 33 (2008), 45. For a discussion of workhouse populations in the nineteenth-century, see: N. Goose. 'Workhouse Populations in the Mid Nineteenth-Century: The Case of Hertfordshire', *Local Population Studies*, 62 (1999), 52-69.

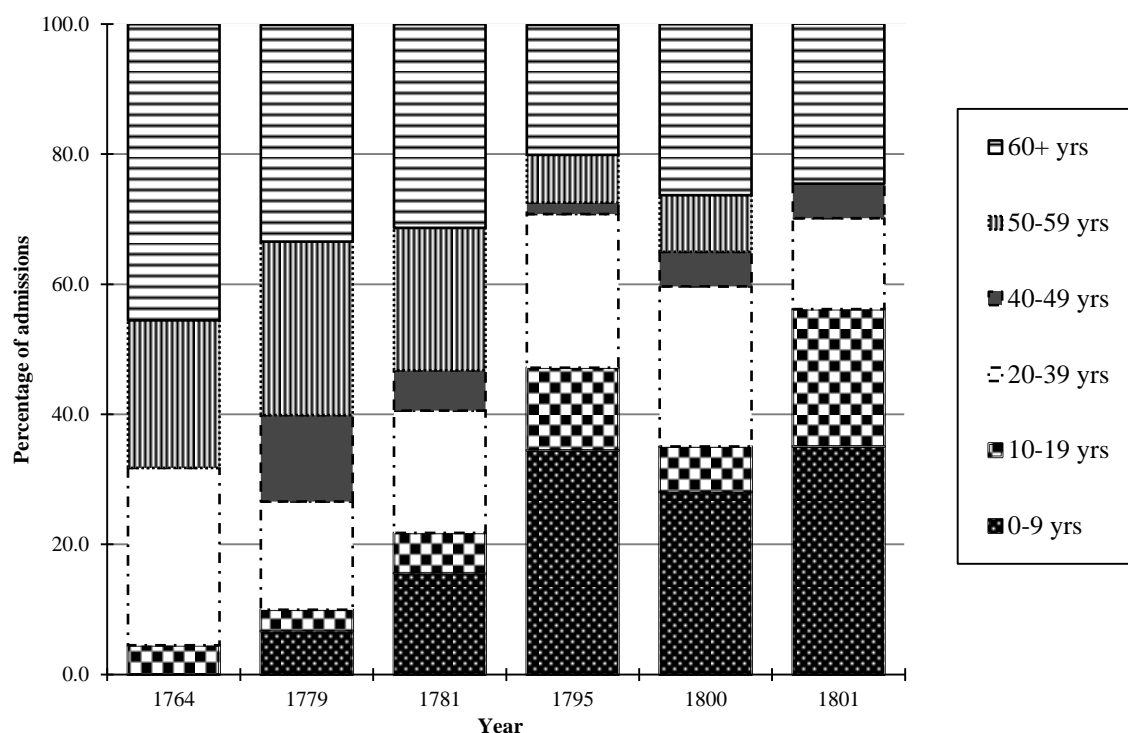
characteristics of the male and female inmates. What was the age structure of the workhouse inmates? Understanding the age structure of the population is important because age would have had a direct impact upon the type of medical care which was delivered to the sick indoors.

Figure 5.7 shows the age structure of the inmates in All Saints for the years 1764, 1779, 1781, 1795, 1800 and 1801. Data of this type is, of course, subject to some margin of error given that the figure represents the number of paupers who were being admitted rather than the number who were actually housed in the workhouse. Another problem with data of this type is that it hides the fact that many individuals could actually have been *serial* users of the workhouse, using the accommodation flexibly as their circumstances required.⁵⁸⁸ However, although the evidence is suggestive, these figures provide little more than a snapshot. Several aspects of the age structure of the All Saints workhouse population comes to the fore upon first perusal of Figure 5.7. First and foremost, the growing dominance of children in the house is observable. It is the case that the workhouse population was dominated by those individuals aged above sixty, which one might broadly define as being ‘aged’.⁵⁸⁹ But it also highlights that in some years the workhouse population housed many whom could be described as in the ‘prime of life’, between the ages of 10-19 years and 20-39 years. While this category did make up a significant proportion of the workhouse population in the earlier years, those inmates aged between 50-59, were to some extent, declining over time, so this age group was clearly being out ranked by an increase in the number of young children entering the house in the 1790s and the first years of the nineteenth-century. It is likely that the change in the age structure owed something to new admission policies regarding children, perhaps a pauper school was in operation. How typical was the age structure of All Saints workhouse?

⁵⁸⁸ See Boulton and Schwarz for a recent discussion of this: Boulton *et al.* ‘The Comforts of a Private Fireside’, 227.

⁵⁸⁹ For a detailed discussion of categories of ‘old age’ in the eighteenth-century, see: S.R. Ottaway. *The Decline of Life: Old Age in Eighteenth-Century England* (Cambridge, 2004), 16-64.

Figure 5.7 *Estimated age distribution of workhouse population (admissions), 1764-1801*



Source: TWAS 595/54, 465/37.

In answering this question ‘it is important to realise that there were important differences in the incidence of workhouses and ... their use’ in our period.⁵⁹⁰ However, the evidence shown in Figure 5.7 is comparable to workhouses in England. Ottaway’s detailed study of the workhouse in the village of Terling (Essex) in the late eighteenth-century, found that over time, the workhouse there became dominated by elderly inmates, accounting for around 20% of the total workhouse population in the 1780s, increasing to around 80% by the late 1790s.⁵⁹¹ The workhouse in the village of Ovenden, also examined by Ottaway, showed a similar distribution to All Saints workhouse in terms of the proportion of elderly inmates and the strong presence of female inmates.⁵⁹² Although, these comparisons are interesting, the most striking, however, comes to the fore if the data here is compared to that presented in King’s study of the ‘north’. Using workhouses in Calverley, Horsforth and Leigh (broadly defined as the north and the west), King found that the elderly, mainly those who were above the age of 60 made up a relatively small proportion of the overall population of those institutions. The ‘aged’ examined by King’s were ‘clearly, then ... either maintaining their

⁵⁹⁰ King, *Poverty and Welfare in England, 1700-1850*, 160.

⁵⁹¹ Ottaway, *The Decline of Life: Old Age in Eighteenth-Century England*, 251-53.

⁵⁹² *Ibid*, 260.

independence longer ... or ... poor law authorities were consciously avoiding taking them into the workhouse'.⁵⁹³ Thus, All Saints parish displayed a very different pattern in terms of the elderly inmates, but the comparison between King's data on children in the workhouse is striking and Figure 5.7 supports the notion that the very young made up a reasonable proportion of workhouse populations in our period.⁵⁹⁴ In fact, the increase in children in the workhouse is probably the most remarkable feature of the graph. In the first year for which we have data there were no children in the workhouse aged between 0-9 years, but by 1801 over 35% of the paupers indoors were children, which suggests that a pauper school had opened in these years, or these children may have just been a result of the parish's demographic regime.

To what extent did the parish rely upon the workhouse for relieving the poor in All Saints? To answer this question we need to look at another source: the 1803 census. Table 5.1 shows the proportion of the incarcerated poor in all the Newcastle parishes, compared to those who were relieved outdoors. Clearly the indoor poor in Newcastle were only a relatively small proportion of the total number of relieved persons in all of the parishes in Newcastle; the data also suggests that All Saints parish relieved a greater proportion of the poor than the other parishes, although the differences are not particularly large. It is also worth pointing out that the count in 1801 supports the admissions data previously discussed. We are therefore compelled to ask: What proportion of Newcastle's poor were in workhouses?

Part two of Table 5.1 also shows the relationship between those paupers who were being maintained indoors as opposed to those who were maintained outside of the workhouse. Firstly, it was clearly the case that only a small fraction of the population of the city was maintained in a workhouse in the early nineteenth-century. However, of all of the parishes in the city, All Saints maintained more of its poor in the workhouse than any other, with about a quarter of the poor maintained there. The workhouse in All Saints then seems to have played a significant part in the relief culture of the parish. But it should be remembered that only a small proportion of the population of the parish were incarcerated within these institutions at any one period in time.

⁵⁹³ King. *Poverty and Welfare in England, 1700-1850*, 205.

⁵⁹⁴ For discussion of the elderly in the period, see: N. Goose. 'Poverty, Old Age and Gender in Nineteenth-Century England: The Case of Hertfordshire', *Continuity and Change*, 20 (2005), 379. Boulton *et al.* 'The Comforts of a Private Fireside', 223-45.

Table 5.1 *Impact and relationship between the outdoor and indoor relief in Newcastle, 1801*

Part 1. Impact of the workhouse, Newcastle 1803: population					
	1801 Census population	No. persons relieved in the workhouse		% of population in the workhouse	
All Saints*	14,396	155		0.01%	
St Andrews	4,460	30		0.67%	
St John's	4,707	19		0.40%	
St Nicholas	4,281	35		0.81%	
Total	27,844	239		0.85%	

Part 2. Relationship between indoor and out-door relief in Newcastle's parishes					
	No. persons relieved outdoors	% of parish poor relieved outdoors	No. persons relieved in workhouse	% of parish poor relieved workhouse	
All Saints*	491	76%	155	24%	646
St Andrews	116	79%	30	21%	146
St John's	94	83%	19	17%	113
St Nicholas	203	85%	35	15%	238
Total	904	100%	239	100%	1,347

*Note: The townships of Heaton and Byker are not included in this total.

Source: *Abstract of Answers and Returns Under Act for Procuring Returns Relative to Expense of Maintenance of the Poor in England*, P.P. 1803-04 XIII, PP. 361-420.

Having established that All Saints workhouse operated on a fairly large scale, and that the population which were incarcerated there were predominantly female, the elderly and the very young, we now need to turn to the actual 'housed environment' in which these individuals lived, worked and died.⁵⁹⁵

5.6 Life within the walls: the 'housed' environment of the parish workhouse

What can we say about the living conditions in All Saints parish workhouse? The image of the English workhouse 'has lurked darkly in the imagination of the English people for

⁵⁹⁵ It should of course, be remembered that the indoor poor made up a relatively small proportion of the total poor population in our period; the majority of the urban poor were normally in receipt of outdoor relief. See for discussion: D. Green. 'Medical Relief and the New Poor Law in London', in P. Grell, A. Cunningham & R. Jutte ed., *Health Care and Poor Relief in Eighteenth and Nineteenth Century Northern Europe* (Aldershot, 2002), 220-25. Also, see the recent paper by J.P. Boulton & L. Schwarz. "These Ante-Chambers of the Grave': The London Workhouse as a Diagnostic Space", *SSHM Conference*, July 2010, Durham University.

centuries ... an object of fear and loathing ... associated with Dickensian cruelty' of the poor and needy.⁵⁹⁶ This image was typified in Crabbe's, much quoted poem:

Thus groan the old, till, by disease oppressed,
They taste a final woe, and then they rest
Theirs is yon house, that holds the parish poor,
Whose walls of mud scarce bear a broken door,
There, where putrid vapours, flagging, play,
And dull wheel hums doleful through the day –
The children dwell, who know no parents' care:
Parents who know no children's love dwell there!
Heartbroken matrons on their joyless beds,
Forsaken wives, and mothers never wed;
Deserted widows with unheeded tear,
And crippled age with more than childhood fears;
The lame, the blind, and, far the happiest they!
The moping idiot and the mad man gay...
Here sorrowing, they each kindred sorrow scan,
And the cold charities of man to man,
Whose laws indeed for ruined age provide,
And strong compulsion plucks the scrap from pride:
But still that scrap is bought with many a sigh,
And pride embitters, what it can deny.⁵⁹⁷

However, several analyses of workhouses under the old Poor Law in England have painted a far more 'nuanced understanding of the nature and role of these institutions'.⁵⁹⁸ Revisionist historians such as Digby, Taylor, Barker-Read and Hitchcock claim that life for the inmates of workhouses under the old Poor Law was 'monotonous, if not unkind'.⁵⁹⁹ What were the living conditions like in All Saints parish workhouse?

The evidence we have suggests several things about life within the workhouse walls. We are fortunate that the All Saints Vestry ordered that an inventory be taken of the all of the goods

⁵⁹⁶ Ottaway. *The Decline of Life: Old Age in Eighteenth-Century England*, 247.

⁵⁹⁷ G. Crabbe, 'The Village (1783)' in M.H. Abrams et al ed., *The Norton Anthology of English Literature* (New York, 1979), p. 2487, cited in Ottaway. *The Decline of Life: Old Age in Eighteenth-Century England*, 248.

⁵⁹⁸ Ottaway. *The Decline of Life: Old Age in Eighteenth-Century England*, 248.

⁵⁹⁹ S. Webb. *The Parish and the County* (London, 1906), 593, cited in J.S. Taylor. 'The Unreformed Workhouse, 1776-1834', in E.W. Martin ed., *Comparative Development in Social Welfare* (London, 1972), 57; A. Digby. *Pauper Palaces* (London, 1978), 46-47; Taylor. 'The Unreformed Workhouse', 74; M. Barker-Read. 'The Treatment of the Aged Poor in Five Selected West Kent Parishes from Settlement to Speenhamland' (1662-1797)' (Unpublished PhD Thesis, Open University, 1988), 256; T.V. Hitchcock. 'The English Workhouse: A Study of Institutional Poor Relief in Selected Counties, 1696-1750' (DPhil Thesis, University of Oxford, 1985), 173-74. For a similar introductory discussion regarding the historiography of this subject, see: Ottaway. *The Decline of Life: Old Age in Eighteenth-Century England*, 247-248.

within the workhouse, which also lists the estimated value of each particular item. The inventory has been presented in Table 5.2.

This table is important for several reasons. Firstly, it is possible to some extent to compare the number of beds recorded in the inventory to some of the demographic evidence previously examined. In the early 1790s, the number in the workhouse was approximately 200 individuals – this, when compared to the total number of beds recorded in the inventory, suggests that if the number of beds had not been increased, then there was about 3.5 individuals for every bed in the workhouse. Although this is a high estimate for the early 1790s, by the mid 1790s the number in the house had fallen to around about 120 paupers, which suggest that there were about 2 paupers for each bed. Of course these estimates are based upon the assumption that the number of beds within the house had not increased greatly between 1785 and 1790.⁶⁰⁰ Bed sharing is not an uncommon feature of workhouse provision in our period, indeed bed sharing was not only a feature of institutionalised life. It is certainly not unfeasible to state that this was a common feature of everyday life for the urban poor in the period, this ‘being an era when it was not uncommon for the poor to share a bed among an entire family’.⁶⁰¹ Moreover, Tomkins’ detailed examination of Oxford and Shrewsbury found that workhouse inmates were normally all expected to share beds.⁶⁰² More importantly however, the appearance of items such as blankets, happens and bolsters, and in some instances more than two for each bed, suggests that the inmates in All Saints did not live in complete misery.⁶⁰³ Although this seems the case after 1785, there are good reasons to think that the situation prior to this had been worse. Early in 1785, the vestry noted that:

‘Mr John Weaver, in Gateshead having proposed to find the poor without sufficient meat, drink, clothing, beds, bedding, fire, candles, washing, tobacco and shaving according to the articles of agreement signed this day at the rate of two shillings & a penny, per head, per week, to commence on the 7th day of March next, the said proposals are accepted’.⁶⁰⁴

⁶⁰⁰ Unfortunately, there are no population estimates for 1785.

⁶⁰¹ Ottaway. *The Decline of Life: Old Age in Eighteenth-Century England*, 256.

⁶⁰² A. Tomkins. ‘The Experience of Urban Poverty: A Comparison of Oxford and Shrewsbury, 1740 to 1770’ (Oxford University, DPhil Thesis, 1994), 124-28.

⁶⁰³ Ottaway found that in Terling, the workhouse inmates lived in much better circumstances, for example, she found items such as: feather beds, curtains, armchairs and cupboards listed in the workhouse inventory. See Ottaway. *The Decline of Life: Old Age in Eighteenth-Century England*, 256-57.

⁶⁰⁴ TWAM 595/54.

What else can we say about life within the workhouse? What do we know about what inmates ate on a daily basis? This is an inevitably important point to consider in a study concerned with the *health conditions* of the poor in this parish.

Table 5.2 *Inventory of goods and estimated value in All Saints parish workhouse, 9th-10th March 1785*

All Saints Ward, 1785	Estimated Value £ - s - d
1 Bed, 1 sheet, 1 happen, 1 blanket, 1 bed & bolster	0 - 7 - 0
1 Bed, 1 happen, 1 bed & bolster	0 - 5 - 0
1 Bed, 1 sheet, 2 happens, 2 blankets, 1 bed	0 - 12 - 0
1 Bed, 2 happens, bed & bolster	0 - 4 - 0
1 Bed, 1 sheet, 1 blanket, 2 happens, bed & bolster	0 - 12 - 0
1 Bed, 1 sheet, 2 blankets, 1 happen, bed & bolster	0 - 10 - 0
1 Bed, 2 blankets, 2 happens, 1 bed & bolster	0 - 4 - 0
1 Bed, 1 happens, 2 blankets, 1 bed & bolster	0 - 6 - 0
1 Bed, 1 sheet, 2 blankets, 1 happens, bed & bolster	0 - 10 - 0
1 Bed, 1 sheet, 1 happen, 1 blanket, bed & bolster	0 - 10 - 0
1 Bed, 1 sheet, 1 blankets, 2 happens, bed & bolster	0 - 7 - 0
1 Bed, 1 happen, 1 blanket, 1 bed & bolster	0 - 4 - 0
1 Bed, 2 blankets, 1 happens, 1 bed & bolster	0 - 12 - 0
1 Bed, 1 sheet, 2 blankets, 1 happen, 1 bed & bolster	0 - 14 - 0
1 Bed, 1 sheet, 2 blankets, 2 happens, 1 bed & bolster	0 - 14 - 0
1 Bed, 2 sheets, 1 blanket, 2 happens, bed & bolster	0 - 12 - 0
1 Bed, 2 sheets, 1 blanket, 2 happens, bed & bolster	0 - 10 - 0
1 Bed, 1 sheet, 1 blanket, 2 happens, bed & bolster	0 - 10 - 0
1 Bed, 1 sheets, 2 blankets, 1 happen, 1 bed	0 - 8 - 0
1 Bed, 1 sheets, 2 blankets, 1 happen, 1 bed	0 - 9 - 0
1 Bed, 1 sheet, 2 happens, bed & bolster	0 - 7 - 0
1 Bed, 2 blankets, 1 happen, 1 bed and bolster	0 - 10 - 0
1 Bed, 2 blankets, 1 happen, bed & bolster	0 - 7 - 0
1 Bed, 1 blanket, 2 happen, bed & bolster	0 - 9 - 0
1 Bed, 1 sheet, 1 happen, 2 blankets, bed & bolster	0 - 8 - 0
1 Bed, 1 sheet, 1 happen, bed & bolster	0 - 11 - 0
1 Bed, 1 sheet, 2 blankets, 1 happen, bed & bolster	0 - 12 - 0
1 Bed, 1 sheet, 1 blanket, 2 happen, bed & bolster	0 - 11 - 0
1 Bed, 2 blankets, 2 happens, bed & bolster	0 - 10 - 0
1 Bed, 1 sheet, 2 blankets, 1 happen, bed & bolster	0 - 10 - 0
1 Bed, 1 sheet, 1 blanket, 1 happen, bed & bolster	0 - 8 - 0
1 Bed, 1 sheet, 2 blankets, 1 happen, bed & bolster	0 - 14 - 0
1 Happen	0 - 4 - 0
St Nicholas Ward, 1785	
1 Bed, 2 sheets, 2 blankets, 2 happens, 1 quilt – all rags	0 - 4 - 0
1 Bed, 2 sheets, 2 happens, 1 blanket bed and bolster	0 - 6 - 6
1 Bed 2 sheets, 1 happen, 1 blanket, bed and bolster	0 - 7 - 0
1 bed, 1 sheet, 1 blanket, 1 happen, 1 bolster – all old	0 - 4 - 0
1 Bed, 1 sheet, 1 blanket, 1 happen, 1 bolster, 1 pillow	0 - 6 - 0
1 Bed, 1 sheet, 2 blankets, 1 happen, bed and bolster	0 - 5 - 0
1 Bed, 1 sheet, 1 blanket, 1 happen, 1 bed and 2 bolsters	0 - 7 - 6
1 Bed, 1 blanket, 1 happen, 1 bed & bolster	0 - 6 - 0
1 Bed, 1 happen, 1 bed & bolster	0 - 4 - 0
1 Bed, 1 sheet, 1 happen, 1 bed & bolster	0 - 4 - 0
1 Bed – 2 beds	0 - 4 - 0
1 Bed, 1 blanket, 1 happen, 1 bed & bolster	0 - 4 - 0
1 Bed, 2 sheets, 2 happen, 1 bed & bolster	0 - 9 - 0
1 Bed, 1 sheet, 2 happens, 1 bed & bolster	0 - 8 - 0
1 Bed, 2 sheets, 1 happen, 1 bed & bolster	0 - 7 - 0
1 Bed – 3 beds	0 - 6 - 0
St John's Ward, 1785	
1 Bed, 1 sheet, 3 blankets, 2 happens (2 old beds)	0 - 8 - 0
1 Bed, 2 happens, 2 blankets, 1 bed & bolster	0 - 8 - 0
1 Bed, 1 old sheet, 2 blankets, 3 happens, bed & bolster	0 - 6 - 6
1 Bed, 1 sheet, 1 blanket, 2 happens, bed & bolster	0 - 6 - 0
1 Bed, 1 blanket, bed & bolster	0 - 9 - 0
1 bed, 2 old blankets, 1 old happen, 1 bed & bolster	0 - 6 - 0
1 Bed, 1 sheet, 2 blankets, 1 old happen, 1 bed & bolster	0 - 8 - 0
1 Bed, 1 blanket, 1 happen, bed & bolster	0 - 5 - 0
1 Bed, 1 sheet, 2 blankets, 2 happens, 1 bed & bolster	0 - 14 - 0

Source: TWAM 595/54

Due to the observation brought forward by John Weaver, the vestry also ordered that a weekly Bill of Fare be drawn up, as shown in Table 5.3, which gives us some insight into the dietary regimen of the inmates. Of course it is possible that the contents of this bill were not given on a regular basis; Bills of Fare are not necessarily a reliable guide to what actually reached inmates' tables. Moreover, comparison with other sources encourages an assessment of it as a meagre example of the standard fare provided for contemporary workhouse inmates. Barker-Read's study of Kent concluded that it was normal for workhouses to feed their inmates 'bread, cheese, gruel and suet with meat three to seven times per week'.⁶⁰⁵ All Saints workhouse fared quite badly when compared to the case studies in those parishes. Further-to-this, Ottaway's detailed examination of Terling and Ovenden, found similar levels of generosity when it came to the dietary habits of the workhouse inmates, which included meat at least three days per week in the latter and items such as, cheese, beer and meat (beef, chicken, and pork) in the former. Frederick Eden's, *State of the Poor*, furthermore supports the notion that All Saint dietary regimen was basic, emphasising that 'Ovenden's meal plan fell well inside the normal range of workhouse fare'.⁶⁰⁶ King has also found in southern and eastern parishes that meat made up a reasonable proportion of workhouse diets.⁶⁰⁷ A similar observation was concluded by Tomkins, who is only one of a small number of historians who have attempted to calculate inmate caloric values from workhouse diets. She concluded briefly that 'workhouse inmates not only subsisted throughout the year but were occasionally treated generously'.⁶⁰⁸ Thus, the inmates in All Saints appear not to have been as well fed as their southern and midland counterparts, but what can we say about the diet of All Saints workhouse population in a *local* context?

⁶⁰⁵ Barker-Read. 'Treatment of the Aged Poor', p. 253, cited in Ottaway. *The Decline of Life: Old Age in Eighteenth-Century England*, 264.

⁶⁰⁶ Eden. *The State of the Poor: Or an History of the Labouring Classes*; Ottaway. *The Decline of Life: Old Age in Eighteenth-Century England*, 264.

⁶⁰⁷ King. *Poverty and Welfare in England, 1700-1850*, 162.

⁶⁰⁸ Tomkins. 'Experience of Urban Poverty', 109-23. For other work on this subject, see, for example: C. Shamma. 'The Eighteenth-Century English Diet and Economic Change', *Explorations in Economic History*, 21 (1984), 254-69; C. Shamma. 'Food Expenditure and Economic Well-Being in Early Modern England', *The Journal of Economic History*, 43 (1983), 89-100; C. Shamma. 'The Food Budget of English Workers: A Reply to Komlos', *The Journal of Economic History*, 48 (1988), 673-76.

Table 5.3 *Weekly bill of fare of All Saints Parish Workhouse, 1785*

Day		Breakfast	Dinner	Supper
Sunday	Men	One pint of Hasty Pudding. Milk ½ Pint	Hash 8oz, Pease Pudd 7oz, Broth ¾ pint & Bread 8oz	Broth 1 Pint, Bread 10oz
	Women	One pint of Hasty Pudding. Milk ½ Pint	Hash 6oz, Pease Pudd 7oz, Broth ¾ pint & Bread 6 oz	Broth 1 Pint, Bread 10oz
	Children	¾ Pint of Hasty Pudd. Milk ½ Pint	Hash 4 oz, Pease Pudd 6oz. ½ Pint Broth & Bread 4 oz	Broth ¾ Pint, Bread 7oz
		Bones included and more broth if the product allows		
Monday	Men	Broth 1 Pint & 10 oz Bread	Milk boiled or Cold 1 Pint, White bread	Milk 1 Pint & White Bread 8 oz
	Women	Broth 1 Pint & 10 oz Bread	Milk boiled or Cold 1 Pint, White bread	Milk 1 Pint & White Bread 8oz
	Children	Broth ¾ Pint & 7 oz Bread	Milk boiled or cold ¾ pint, white bread	Milk ¾ Pint & 7oz bread
Tuesday	Men	Hasty Pudd 1 pint; Milk ½ Pint	Boiled Barley, Sugar Milk 1 Pint & White Bread 10oz	
	Women	Hasty Pudd 1 pint; Milk ½ Pint	Boiled Barley, Sugar Milk 1 Pint & White Bread 10oz	
	Children	Hasty Pudd ¾ Pint; Milk ½ Pint	Boiled Barley, Sugar Milk ¾ Pint, White Bread 7oz	
Wednesday	Men	The same as Sunday	The same as Sunday	The same as Sunday
	Women	The same as Sunday	The same as Sunday	The same as Sunday
	Children	The same as Sunday	The same as Sunday	The same as Sunday
Thursday	Men	The same as Monday	The same as Monday	The same as Monday
	Women	The same as Monday	The same as Monday	The same as Monday
	Children	The same as Monday	The same as Monday	The same as Monday
Friday	Men	Hasty Pudd 1 pint; Milk ½ Pint	Pease Soup 1 Pint, Bread 10oz	Milk 1 Pint, Bread 10oz
	Women	Hasty Pudd 1 pint; Milk ½ Pint	Pease Soup 1 Pint, Bread 10oz	Milk 1 Pint, Bread 10oz
	Children	Hasty Pudd ¾ Pint; Milk ½ Pint	Pease Soup ¾ Pint, Bread 7oz	Milk ¾ Pint, Bread 7oz
		More Soup if the product allows		
Saturday	Men	Hasty Pudd 1 pint; Milk ½ Pint	Hasty Pudd 1 Pint, Milk ¾ Pint	Milk Pint, Bread 10oz
	Women	Hasty Pudd 1 pint; Milk ½ Pint	Hasty Pudd 1 Pint, Milk ¾ Pint	Milk Pint, Bread 10oz
	Children	Hasty Pudd ¾ Pint; Milk ½ Pint	Hasty Pudd ¾ Pint, Milk ¾ pint	¾ Pint Milk, Bread 7oz

Source: TWAM 595/54

Eden's study provides us with some important comparative material which enables us to examine the conditions of life within All Saints workhouse more locally, comparing it with conditions outside the walls as well as within the other parochial institutions of the city. Thus Tables 5.4 and 5.5 tabulates two *Bills of Fare* recorded in Eden's study, the former for the parish of St Nicholas (population c. 4000 in 1801) and the latter for Gateshead (population c. 9,000 in 1801).

Table 6.4 *The Usual Diet in the Poor-House in St Nicholas Parish*

	Breakfast	Dinner	Supper
Sunday	Hasty-pudding, and milk	Beef & potatoes	Bread & broth
Monday	Ditto.	White bread & milk	Milk, boiled with oat-meal
Tuesday	Ditto.	Cold milk & bread	Ditto.
Wednesday	Ditto.	Same as Sunday	Same as Sunday
Thursday	Ditto.	Same as Monday	Same as Monday
Friday	Ditto.	Cold milk & bread	Ditto.
Saturday	Ditto.	Same as Monday	Ditto

Source: Eden. *The State of the Poor*, 552

Table 6.5 *The Bill of Fare Observed in the Gateshead Poor-House*

	Breakfast	Dinner	Supper
Sunday	Bread, & Frumenty	Beef with pease-pudding; or mutton, and potatoes	Bread and broth
Monday	Bread and broth	Wheaten bread & Milk boiled	Bread and milk pottage
Tuesday	Cowdie & Milk	Rye bread and cold milk	Frumenty and bread
Wednesday	Same as Sunday	Same as Sunday	Same as Sunday
Thursday	Same as Monday	Same as Monday	Same as Monday
Friday	Same as Tuesday	White pease-pottage and bread	Milk pottage and bread
Saturday	Same as Tuesday	Same as Monday	Frumenty and bread

Source: Eden. *The State of the Poor*, 554

Again, the picture portrayed by this evidence suggests that, at least locally, the inmates in All Saints did not fare particularly well in comparison to the workhouses in St Nicholas's and Gateshead. Does this mean that the dietary regimen of the inmates in All Saints workhouse was unfair? This can only be answered if we discuss the dietary habits of the wider population in the city. Eden noted that: 'the usual diet for miners, Keelmen and other

labourers, in and near Newcastle, is hasty pudding and crowdie for breakfast; butchers meat (whenever they can purchase it, much butter, bread made of wheat, and rye, barley, and malt liquor, for dinner, and supper'.⁶⁰⁹ Clearly then, the diet regimen of All Saints was certainly not something which could be described as being unfair or much different.⁶¹⁰ Moreover, the inclusion of meat in the diets of the inmates in St Nicholas and Gateshead, may be seen to have been quite generous, given that, outside of the workhouse walls the labouring sort would:

Earn from 1s 6d to 3s 6d a day; on average about 12s a week; besides which, they are allowed rye from their masters, at 4s the bushel. Notwithstanding these high wages, they are seldom richer than their neighbours. They use a great deal of butchers meat, during the three of four first days of the week; but towards the close of it, as their earnings of the preceding week become nearly exhausted, they are generally required to live more frugally abstemiously.⁶¹¹

However, there are also good reasons to think the parish could sometimes be even more generous towards the inmates when it came to their dietary regime. For example, we find more concrete evidence that the workhouse inmates were actually treated quite generously by the parish when it came to their diet. Table 5.6 implies that the vestry did not follow the Bill of Fare entirely, as the Table suggests the diet of the inmates may well have included meat more regularly.

Table 5.6 *Workhouse expenditure 1st October-19th October 1801*

By 6 Stone Rye Meal at 1/6, by 1 boll Peas 2/4, Salt 12/6, 3 Quarts Mint Water 3/, by 19 of Beef at 7/6, by 6 stone of flour 15/6, Yeast 6/, Barley 16/, Flour 7/6, Yeast 6/, 8 Bolls of Rye 11/, By 18 of Beef at 7/6, Tobacco Money 8/6, 6 stone of Flour and Yeast 15/, 8 Bolls of Rye 4/8, 4 stone of Salt, Barley 14/6, 1 Boll Peas 16/, 3 Stone Rye 1/6, By White Bread 4/, Potatoes 2/6, 15 Pair Stockings, By Wine, Beer & c. for Sick 10/5, Milk for 4 weeks 14/14/2, By Barber 8/, Taylor 28/ By Cook ... 4 weeks 18/4, 21 of Beef 7/6, Oat Meal Bill 10/5/4, By Beadle 7/6, By Salary 3/10/0

Source: Workhouse account books database, TWAS 183/172

⁶⁰⁹ Eden. *The State of the Poor*, 560.

⁶¹⁰ For a detailed discussion of what the poor ate in the early modern period, which also looks at the diet of novocastrians, see: Muldrew. *Food, Energy and the Creation of Industriousness*, 57-61.

⁶¹¹ Eden. *The State of the Poor*, 551.

Table 6.5 also suggests that there were some paupers in the workhouse who were sick and receiving a supplemented diet which included ‘wine and beer’.⁶¹² It is to the *sick poor* in All Saints that we must now turn.

5.6 The sick poor in late Georgian and early Victorian Newcastle.

If we are to understand the part played by the parish workhouse in the provision of medical relief, it seems essential to have some understanding of the types of diseases and conditions which assailed the pauper population of All Saints. This is not as straightforward a task as one might assume. Unlike the other institutions examined in this thesis, it was relatively rare for the administrators of All Saints Poor Law to record the reasons for payments made to the poor in the parish. It was also avowedly rarer for parish authorities to record reasons for pauper admissions and discharges to and from the parish workhouse. It is, of course, entirely possible, that those suffering from an infectious malady or disease may well have been refused admission, as was the case in many hospitals in eighteenth-century England.⁶¹³ ‘For such reasons alone it is not an easy exercise ... to estimate the part that sickness played in pushing individuals and households into an application for poor relief’.⁶¹⁴

Notwithstanding these problems, the levels of sickness within the surrounding population in All Saints must have varied over time, and would have been subject to considerable seasonal variation. Landers’ study of the London Bills of Mortality suggests that the diseases and conditions which commonly *killed* Londoners were subject to seasonal fluctuations, so one might assume that the diseases which *killed* novocastrians were likewise subject to such seasonal rhythms.⁶¹⁵ However, as discussed in the previous chapter, *mortality* is not

⁶¹² TWAM 183/172. This was a common practice in our period, see: Ottaway. *The Decline of Life: Old Age in Eighteenth-Century England*, 250-51, 266.

⁶¹³ For a discussion of this, see, for example: J. Lane. *A Social History of Medicine: Health, Healing and Disease in England, 1750-1950* (London, 2001), 82-95; J. Woodward. *To do the Sick No Harm: A Study of the British Voluntary Hospital System to 1875* (London & Boston, 1974), 1-5, 36-44, 61-74.

⁶¹⁴ Boulton *et al.* ‘The Parish Workhouse, The Parish and Parochial Medical Provision’, forthcoming.

⁶¹⁵ Landers. *Death and the Metropolis*, 203-41; J. Landers & A. Mouzas. ‘Burial Seasonality and Causes of Death in London’, *Population Studies*, 42 (1988), 59-83. For morbidity studies see: G.A. Butler. ‘The Newcastle Dispensary, 1780-1851: Towards and Assessment of the Common Disease Experience of Britain’s Northern Metropolis’, *Economic History Society Annual Conference*, University of Durham, 2010; J.C. Riley. *Sick, Not Dead: The Health of British Working Men during the Mortality Decline* (Baltimore, 1997); Levene. *Childcare, Health and Mortality*, 145-74; J. Padiak. ‘The Role of Morbidity in the Mortality Decline of the Nineteenth Century: Evidence from the Military Population of Gibraltar, 1818-1899’, *Journal of the History of Medicine and Allied Sciences*, 60 (2005), 73-95; Riley. ‘Frailty, Sickness and Death’, 25-45; B. Harris. ‘Morbidity and

morbidity, that is, there ‘is no necessary link between the level of *morbidity* and the level of *mortality* in a population’.⁶¹⁶ It is also worth mentioning that it was probably not the diseases which were *killing* most individuals that prompted an application to the parish, as ‘the course of many lethal diseases was very rapid ... [and] it might well be argued that, for the poor, the most economically devastating diseases were not lethal diseases such as smallpox, but conditions which were chronic, debilitating, incurable or caused illness for a long period’.⁶¹⁷ However, we should not underestimate the important part played by mortality ‘in the creation of poverty, by removing breadwinners and sometimes through hefty funeral costs’.⁶¹⁸ Thus, it should be borne in mind that the types of diseases and complaints which prompted an application for poor relief may not have been broadly representative of those which were *experienced* by the wider population. What sorts of diseases afflicted the pauper population of this large parish?

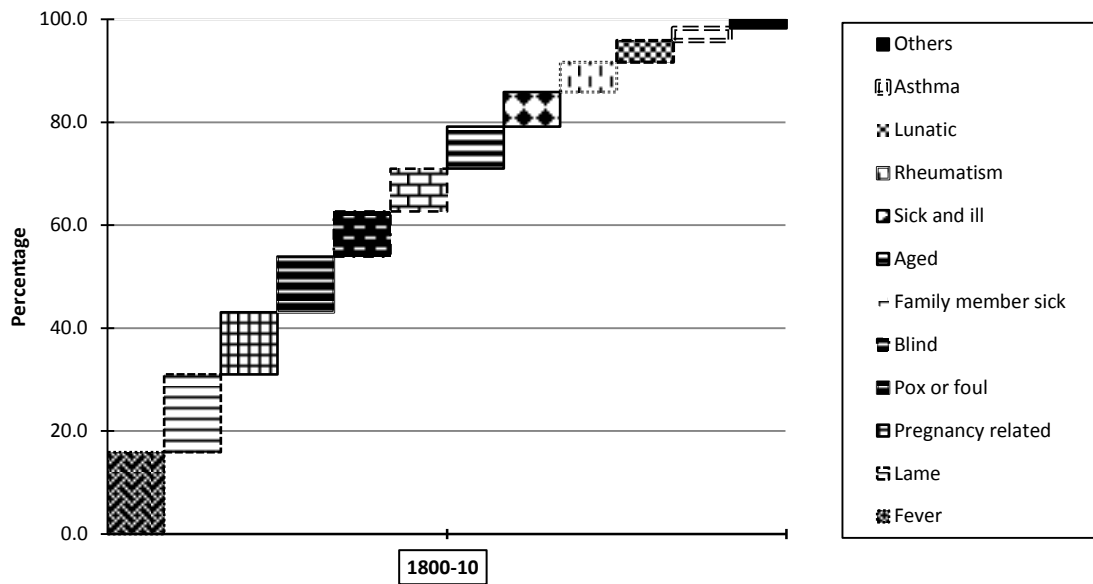
Mortality during the Health Transition’, 125-31; Woods. ‘Sickness is a Baffling Matter’, 157-63; M. Pelling. *The Common Lot: Sickness, Medical Occupations and the Urban Poor in Early Modern England* (London, 1998), 63-78; Loudon. *Medical Care and the General Practitioner*, 54-72. More recently, see: D. Postles. ‘Morbidity in and Early Modern Small Town: Loughborough in the Seventeenth Century’, *Local Population Studies*, 82 (2009), 30-43.

⁶¹⁶ Boulton *et al.* ‘The Parish Workhouse, The Parish and Parochial Medical Provision’, *forthcoming*. My italics.

⁶¹⁷ *Ibid.*

⁶¹⁸ *Ibid.*

Figure 5.8 ‘Medicinal’ reasons given in the Overseers’ payments to the poor in All Saints, 1801-1810 (cumulative percentages)



Source: Select Vestry minute book, TWAM 183/186

A promising source of ours which tells us about the disease and conditions which the parish poor brought before the parish authorities, are the minutes of the select vestry committee (that being the committee which ran the parish workhouse and who examined the settlement claims in the parish).⁶¹⁹ Figure 5.8 plots the medicinal reasons recorded in the vestry minute book for payments delivered to outdoor paupers from 1801 until 1810. Although the table does not do full justice to the total number of relief applications made to the vestry, it does however suggest something about the types of disease and conditions which the poor brought before it. Firstly, the types of medical conditions which were brought before the Overseers from this sample suggest that they were quite wide ranging. The foregoing chapter showed that the types of diseases which assailed the poor varied on a massive scale, but the evidence in Figure 5.8 suggests that it was chronic and debilitating conditions which were more likely to be brought before parish officials. But these were not the only types of ailments. One interesting observation here is the number of applications which recorded Fever (probably a mixture of Typhoid or Typhus) as a reason for relief. As shown in the previous chapter, ‘Fever’ was one of the major causes of admission to the Dispensary. Interestingly, Boulton and Schwarz have found in their recent examination of the detailed records of the London

⁶¹⁹ For a very useful study of the mechanisms of the Poor Law in England see: A. Brundage. *The English Poor Laws, 1700-1930* (Basingstoke, 2002), 9-29.

Westminster parish of St Martin-in-the-Fields, out of nearly 5000 payments made to paupers between 1726 and 1727, less than 1% of payments was prompted by 'Fever' as a cause for relief.⁶²⁰ Fissell's examination of the sick poor in eighteenth-century Bristol, also found, like in Newcastle, that 'Fever' appeared to have been particularly rife among the patients who were admitted to the Bristol Infirmary.⁶²¹

Another point which is worth noting from Figure 5.8 is the presence of the 'Foul Disease' amongst All Saints paupers. Venereal disease was one of the major causes of admission to the Dispensary, and its presence within the surrounding population clearly demonstrated when the Infirmary was *forced* to open a separate wing for sufferers after the closure of the Lock Hospital in 1827.⁶²² The references to the 'foul disease' made here probably under represent its presence within the local population as the stigma attached to this condition – one which was associated with immorality and sin - normally prohibited sufferers from applying for assistance and could have led to marked under reporting.⁶²³ Moreover, the administrators of the Newcastle Lock Hospital passed comment that the disease was rife within the city, also noting that it was treated by the local workhouses:

[N]either the Infirmary, the Dispensary nor the Parochial Poor Houses, can remedy of this evil be administered effectually, even with the proportionately augmented subscription which would in the two former of these institutions, and the additional Poor Rate in the latter.⁶²⁴

The cause was assigned to the maritime nature of the city's economy, which contemporaries were well aware of. In the report on the Lock Hospital it was recorded that:

In all large and provincial towns, especially those having a sea-faring and manufacturing population, there is a certain number of unfortunate females, for whose diseases and distresses very inadequate provision is made by the public. Proscribed from all intercourse with the virtuous part of society, and consigned to that contempt and infamy which their misconduct happily provokes, it too often happens that their destitute condition fails to excite even the sympathy due to human beings. Against them every tongue is loud, every hand is raised, and every friendly door shut ... when suffering under the destructive malady which attends

⁶²⁰ Boulton *et al.* 'The Parish Workhouse, The Parish and Parochial Medical Provision', *forthcoming*.

⁶²¹ Fissell. *Patients, Power and the Poor in Eighteenth Century*, 105-107.

⁶²² E. Hume. *The Infirmary, Newcastle-upon-Tyne, 1751-1951: A Brief Sketch* (Newcastle, 1951); F.J. Miller. 'The Infirmary on the Forth', 1753-1906', *Archaeologia Aeilana*, 14 (1986), 143-65.

⁶²³ For a discussion of this, see: K. Siena. 'The 'Foul Disease' and Privacy: the Effects of Venereal Disease and the Patient Demand on the Medical Marketplace in Early Modern London', *Bulletin of the History of Medicine*, 71 (2001), 199-224; K. Siena. 'Pollution, Promiscuity and the Pox: English Venereaology and the Early Modern Discourse of Social and Sexual Danger', *Journal of the History of Sexuality*, 8 (1998), 553-74; Siena. *Venereal Disease, Hospitals and the Urban Poor*, 30-61, 136-181.

⁶²⁴ Anon. *Report into the State of the Lock Hospital in Newcastle upon Tyne* (Newcastle, 1827), 8.

a vicious life, are, for the most part, without remedy, comfort, or resource of any kind ... In regard to Newcastle, there are circumstances believed to have an influence in aggravating the hardships, or rather increasing the numbers of this unhappy race. The population of the town and neighbourhood is very dense, and from its seafaring, mining, and manufacturing character, there is at all time and abundant work for the male part of the labouring classes; while there prevails a corresponding scantiness of the employment of young females. To such a degree is this inconvenience felt, that the respected judge who preside in our municipal court, has, much to his honour, been heard to declare that the consideration of it often weighed with him when apportioning the punishment for petty crimes committed by this class of female offenders.⁶²⁵

In many respects this supports Siena's conclusion with regard to London – the country's largest port city, which had direct trading links with Newcastle: 'there is no denying that the foul disease was omnipresent ... or that foul patients represented a major proportion of the early modern ill'.⁶²⁶ Applying to the Overseers for relief suffering from the foul disease may well have been a common occurrence. 'The Parish it is true must in the last resort, afford them the necessary relief, but this could never be till after they had passed through a lengthened course of misery, and had spread disease in every direction'.⁶²⁷ It is also worth recapitulating that some of the other *causes* for relief listed in Figure 5.8 may well have been related to the 'Foul Disease', for example. 'Lameness', 'Rheumatism', 'Ulcers' and 'Sores' may have all been in reality the 'Foul Disease'.⁶²⁸

Despite the presence of Fevers and the Foul Disease, another striking feature of Table 5.8 is the sheer absence of conditions such as Smallpox, Consumption, Whooping Cough and Scarlet Fever, or more specifically, those conditions which both commonly assailed the poor and which also commonly killed them, as discussed in the previous chapters.⁶²⁹ The *life-course* of these diseases was rapid, besides Consumption, diseases such as Smallpox and

⁶²⁵ Anon. *Report into the State of the Lock Hospital*, 5-6.

⁶²⁶ Siena. *Venereal Disease, Hospitals and the Urban Poor*, 265. Boulton and Schwarz have found recently that the 'foul disease' was one of the biggest cases of hospitalisation in their study of the workhouse in the parish of St Martin-in-the-Fields, Westminster, see: Boulton *et al.* 'The Parish Workhouse, The Parish and Parochial Medical Provision', *forthcoming*.

⁶²⁷ Anon. *Report into the State of the Lock Hospital*, 7.

⁶²⁸ It is also worth noting that some of the very broad medical *reasons* given in the Table may have also been the 'Foul Disease', for example: 'Ill' (2), 'Illness' (2), 'Ill of Pox' (7), 'Sick' (5) and 'Husband Ill' (1). TWAM 183/186.

⁶²⁹ These conditions were not only rife in Newcastle, but were probably some of the most the most lethal diseases in both eighteenth and nineteenth century England; for two detailed studies on this topic, see: Hardy. *The Epidemic Streets: Infectious Disease and the Rise of Preventative Medicine, 1856-1900* (Oxford, 1993); A. Mercer. *Disease, Mortality and Population in Transition: Epidemiological-Demographic Change in England since the Eighteenth Century as Part of a Global Phenomenon* (London, 1990), 134-48.

Whooping Cough are normally associated with childhood, and might not have been the most economically devastating.⁶³⁰ Thus the diseases and conditions which the poor in All Saints brought before the vestry were not those which may be considered to be the most lethal, but instead were conditions which were debilitating, chronic and long lasting. It would however be a mistake to conclude that these were the only conditions which were brought before the vestry. It should be remembered that all of the cases recorded in Figure 5.8 relate to *successful* applications only, and do not therefore include a proportion of the poor who were refused assistance.

Although it has been possible to trace the nature of the serious, debilitating and economically devastating diseases and conditions which the poor brought before the vestry, it should be acknowledged that the evidence examined thus far only relates to *successful* applications and to paupers who received outdoor relief. There are cases like that of individuals such as John Baines, who applied to the vestry on 16 June 1822, claiming that ‘his wife had a broken arm falling down four or five stairs’ and was now ‘lame’. In these circumstances, the vestry ordered that he be relieved with 2s and 3d ‘during [her] lameness’.⁶³¹ Another example is the case of Elizabeth Farmer, who presented her case to the Overseers on 26 June 1822. The clerk recorded that she was the ‘wife of Anthony Farmer, whose husband is in the Infirmary, he is a labouring man age 43’ and she was given 1s 6d until her husband was discharged.⁶³² The experience of these recipients provides an understanding of the types of conditions which were brought before the vestry, but we need to know more about the role that sickness played in the parish.

What else can actually be said about sickness and ill health in All Saints? To what extent did sickness and disease prompt an application for relief in the parish? In order to answer these questions, we need to look at another source, the extraordinary payments made to paupers by the Overseers. Table 5.7 categorizes over 1,000 separate payments made to the poor according to the details given in the Overseers’ accounts between 1828 and 1831.⁶³³ The typical experience was for a pauper to receive a single one off payment, in some instances the Overseers made it *explicit* that those receiving these payments were ‘not to trouble the parish

⁶³⁰ Schwarz notes that it takes approximately two years to die from consumption, which in the eighteenth-century probably included Pneumonia, see: Schwarz. *London in the Age of Industrialisation*, 140.

⁶³¹ TWAM 466/10.

⁶³² TWAM 466/10.

⁶³³ These years were not chosen because they co-existed with a change in parish policy regarding the treatment of outdoor paupers, but instead were chosen because of the intricate level of detail in the reasons recorded in the payments made by the Overseers to the poor.

again' once they had been relieved.⁶³⁴ It was also common, but not always entirely distinguishable, for a pauper to receive one payment where a reason for that payment was given, and then to receive supplemental payments where no reason at all was given. William Levison, resident in the Quayside Ward, applied to the Overseers for additional relief on the 29th June 1831 'being confined to bed from bad health'.⁶³⁵ His application for additional relief was successful and the Overseers 'ordered that in future they shall be allowed 3/ weekly'.⁶³⁶ Levison first appears in the Overseers' books in 1811 and received a weekly handout thereafter, a period of some twenty years. But throughout these two decades no reason was ever assigned to his application until he received an additional sum on account of his 'bad health'.⁶³⁷ Although his application was successful, the Overseers continued to relieve him with 3/ weekly though no other 'causes' was given in any of the subsequent payments.⁶³⁸ The case of William Levison may go some way to explain the high number of *unknown* reasons for payments given in the account, which amounts to just over 20% of the total examined here.⁶³⁹

⁶³⁴ TWAM 466/11.

⁶³⁵ TWAM 466/11.

⁶³⁶ The fact that the Overseers noted that 'they be allowed 3/ weekly' may well suggest that the dole was meant to supplement Levison and his wife or family, though none of these other individuals are mentioned in the accounts. It is also unfortunate that no age was given for this particular pauper: TWAS 466/11.

⁶³⁷ TWAM 466/10.

⁶³⁸ TWAS 466/11.

⁶³⁹ TWAS 466/11. Similar findings have recently been found by Boulton and Schwarz, see: Boulton *et al.* 'The Parish Workhouse, the Parish and Parochial Medical Provision', forthcoming.

Table 5.6 *Details given in the Overseers' payments to the poor, 1828-31*

Category	No.	Percentage of total
Unknown	228	22.15%
Bad health	76	7.38%
Infirm	60	5.83%
Family mentioned	59	5.73%
Widow	59	5.73%
Not to trouble the parish again	49	4.76%
Aged	43	4.17%
Sick	37	3.59%
Blind	33	3.20%
Lame	26	2.52%
Weak	26	2.52%
Rheumatism	23	2.23%
Ill	22	2.13%
Infirmity	22	2.13%
Abandoned by husband	19	1.84%
Unable to work	17	1.65%
Bastard child	16	1.55%
Subject to fits	11	1.06%
Temporary	10	0.97%
Asthma	9	0.87%
Dead father	9	0.87%
Ill relative	9	0.87%
Pregnant	9	0.87%
Very Infirm	9	0.87%
Lunatic	7	0.68%
Was in the Infirmary	7	0.68%
Dropsy	6	0.58%
Ill of fall	6	0.58%
Sick Typhus fever	6	0.58%
Consumption	5	0.48%
Dying relative	5	0.48%
Ill of diarrhoea	5	0.48%
Paralytic stroke	5	0.48%
Parent dead	5	0.48%
Fever	4	0.38%
Ill of fever	4	0.38%
Lying-in	4	0.38%
Blind child	3	0.29%
Confined to bed	3	0.29%
Deaf	3	0.29%
Husband gone to London	3	0.29%
Husband in gaol	3	0.29%
Husband in Infirmary	3	0.29%
Lunatic son	3	0.29%
Refused	3	0.29%
Sick confined	3	0.29%
Father died in infirmary	2	0.19%
Helpless State	2	0.19%
Ill of fall in head	2	0.19%
Infirmary patient	2	0.19%
Lame leg	2	0.19%
Mother in Fever House	2	0.19%
Not in good health	2	0.19%
Palsy	2	0.19%
Rheumatic complaint	2	0.19%

Rheumatic fever	2	0.19%
Sick broken leg	2	0.19%
Takes fits	2	0.19%
Unwell	2	0.19%
Wife in gaol	2	0.19%
Cold, sick dropsical, fits of derangement, fractured hand, great infirmity, hand hurt, ill usage of wife, in Keelman's hospital, incurable, inflammation, injured arm, lame arm, lost boat, lost leg, lunatic husband, mother in hospital, nearly blind, ill of pox, rheumatic pains, sick and infirm, sick bowel complaint, sick husband, sick wife, single women	24	2.33%
Total	1,029	100.00%

Source: All Saints Overseers accounts database, TWAM 466/11.

The most important aspect of Table 5.7 is that it suggests that sickness played a huge role in applications for relief in the parish. If one was to exclude pregnancy-related categories, the 'aged' and the number of 'unknown categories', there were 484 out of 1,029 payments made where some form of sickness or disability was mentioned explicitly.⁶⁴⁰ That is, that 47% of all payments made by the Overseers were prompted by some form of 'sickness'. It is also worth stressing that this figure would be a minimum, given that some of the 'unknown details' for which there was no reason attached to payments, would have almost certainly been sickness-related. Moreover, if one excluded the unknown payments from the total in the table, then at least 60% of payments with a known cause were related to some form of sickness or disability. Hitchcock's study of the parish of St Luke's, Chelsea found some comparable data for the paupers who were admitted into the parish workhouse there, between 1743 and 1750. He estimated that over 55% of all of those who were admitted were labouring under some sort of 'disease', 'mental disorder' or physical ailment.⁶⁴¹ More importantly, however, the data presented here is highly comparable to that which has recently been

⁶⁴⁰ Asthma (9), Bad health (76), Blind (33), Blind Child (4), Cold (1), Confined to bed (3), Deaf (3), Dropsical (1), Dropsy (6), Father died in Infirmary (2), Fever (4), Fits of derangement (1), Fractured hand (1), Great infirmity (1), Hand hurt (1), Helpless state (4), Husband in Infirmary (3), Ill (22), Ill of diarrhoea (5), Ill of Fall (6), Ill of Fall in Head (2), Ill of Fever (4), Ill of pox (1), Ill relative (9), Incurable, Inflammation (1) (1) Infirm (60), Infirmary patient (2), Infirmity (22), Injured arm (1), Lame (26), Lame arm (1), Lame leg (2), Lost leg (1), Lunatic (7), Lunatic husband (1), Lunatic son (3), Mother in fever house (2), Mother in hospital (1), Nearly blind (1), Not in good health (2), Palsy (2), Paralytic stroke (5), Rheumatic complaint (2), Rheumatic fever (2), Rheumatic pains (1), Rheumatism (23), Sick (37), Sick and infirm (1), Sick bowel complaint (1), Sick broken leg (2), Sick confined (3), Sick husband (1), Sick wife (1), Sick Typhus fever (6), Subject to fits (11), Takes fits (2), Unwell (2), Very infirm (9), Was in infirmary (7), Weak (26).

⁶⁴¹ Hitchcock found that 35.9% were sick at the point of admission, with another 15.5% being 'infirm', 2.7% were lunatics and 2.5% were suffering from the 'foul disease', see: T.V. Hitchcock. 'The English Workhouse: A Study in Institutional Poor Relief in Selected Counties, 1696-1750', (Oxford University: Unpublished DPhil Thesis, 1985), 194-202.

presented by Boulton and Schwarz, in their detailed examination of the records of one of London's largest parishes, that of St Martin-in-the-Fields. They found that of nearly 5,000 payments made to paupers in the parish's extraordinary accounts, '30% of all of the payments made by the overseers were prompted by sickness'.⁶⁴² The evidence presented here, therefore, surely adds weight to the 'common sense notion that sickness was a very significant cause of poor relief ... in urban environments'.⁶⁴³ Fissell's pioneering study of the country parish of Abson and Wick near Bristol, in the eighteenth-century, found that '17 percent of all ... relief recipients were injured or sick' or needed care or medical attendance.⁶⁴⁴ Expenditure in this latter parish grew rapidly in the 1780s during 'a wave of smallpox ... typhus and ague' epidemics.⁶⁴⁵ Thus in Fissell's rural parish, expenditure on the sick only reached 'what might have been more typical 'urban' levels in epidemic years'.⁶⁴⁶

Table 5.7 suggests that the types of disease and conditions which the poor brought before the vestry were wide ranging. But the diseases and conditions in the table relate only to those paupers who were receiving outdoor relief as opposed to those who were admitted into the parish workhouse. What sorts of sicknesses and disabilities prompted admission into the parish workhouse? In answering this question it should, of course, be remembered that some workhouse inmates may well have contracted some type of ailment, disability or disease once they had been admitted, but it is instructive to have some understanding of the types of conditions which were commonly being admitted into the house in Manors. This however, is not straightforward. It was extremely rare for the vestry to record the reasons behind admission into, and discharge from, the parish workhouse.

⁶⁴² Boulton *et al.* 'The Parish Workhouse, the Parish and Parochial Medical Provision', 16.

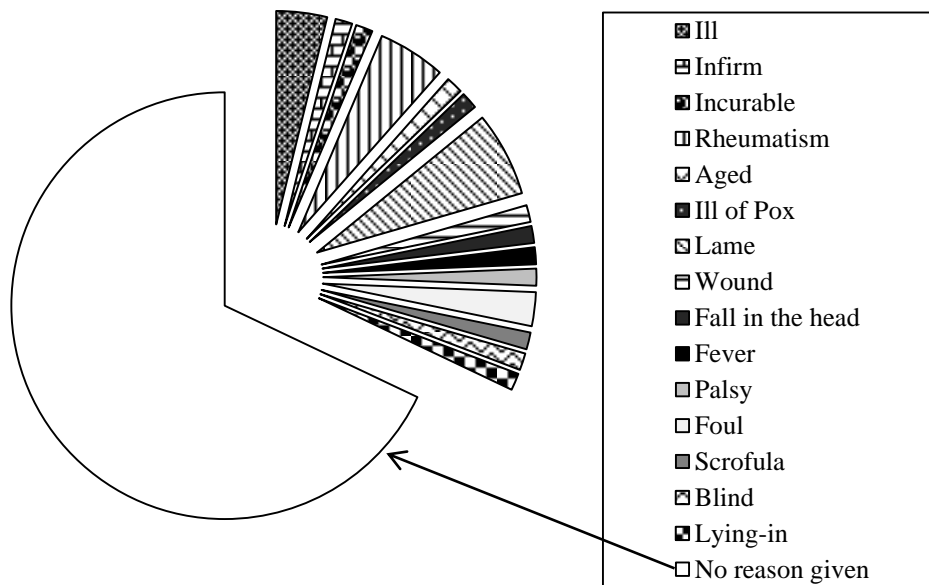
⁶⁴³ Hitchcock. 'The English Workhouse: A Study of Institutional Poor Relief', 206; Boulton *et al.* 'The Parish Workhouse, the Parish and Parochial Medical Provision', *forthcoming*.

⁶⁴⁴ Fissell. *Patients, Power and the Poor in Eighteenth-Century*. 106.

⁶⁴⁵ *Ibid*, 106.

⁶⁴⁶ Fissell. *Patients, Power and the Poor in Eighteenth-Century* 105-107; Hitchcock. 'The English Workhouse: A Study of Institutional Poor Relief', 206; Boulton *et al.* 'The Parish Workhouse, the Parish and Parochial Medical Provision'.

Figure 5.9 *Workhouse admissions by the sick in All Saints, 1821-22*



Source: TWAM 466/10

Figure 5.9 sets out five month's worth of admissions to the workhouse, which included some reference to a specific cause of admission made by the parish Overseers between 1821 and 1822.⁶⁴⁷ The evidence suggests that there was very little difference between the types of conditions relieved by an outdoor payment compared to those which were admitted into the parish workhouse. Thus the parish seems to have been willing to relieve both outdoor and indoor paupers who were sick and ill. But how did the parish care for the sick and the ill? It is now to the developing medical role of the parish and of the workhouse that this study must now turn. There are three principal points which need to be considered in this next section, all of which relate to one another. The first is the extent to which the parish relied upon external institutions for the treatment of the sick and ill, such as public hospitals, charitable dispensaries or private mad houses. Second, to what extent did the parish cater for the sick and diseased in the parish workhouse? And third, what sort of provisions did the parish provide to the sick and the ill?

⁶⁴⁷ Accident (1), Aged (1), Blind (1), Broken arm and lameness (2), 'Fall in the head' (1), Fever (1), Foul (2), Ill (2), Ill child (1), Ill of pox (1), Incurable (1), Infirm (1), Lame (4), Lying-in (1), No reason given (53), Palsy (1), Rheumatism (4), Scrofula (1), Sick (1), Very Ill (2), Wound (1); TWAM 466/10.

5.7 *The parish, the workhouse, and parochial medical care*

It would take a substantial study to do full justice to the extent and range of provisions afforded to the poor in All Saints over the century long period that this thesis is concerned with.⁶⁴⁸ This section seeks to describe some of the principal components of this relief. It is important however to stress that it is virtually impossible to produce any sort of chronological narrative of the medical care delivered to the sick in the parish and ‘it cannot be assumed that any form of medical provision remained constant over time’.⁶⁴⁹ However, rather than rehearse these problems, this section will begin by stating that by the first and second decades of the nineteenth-century, a significant proportion of the outgoings of this large parish was actually being spent on both external medical care and internal medical provisions delivered in the parish workhouse, so much so that the vestry seems to have been constantly dealing with the sick, the disabled and the mentally ill.

We should begin this section by looking at the extent to which the parish relieved the sick poor externally, that is, medical care that could not be delivered locally. One of the most common forms of external care delivered by the Old Poor Law, and frequently recognised by historians, is the treatment of parish lunatics. As will be shown, the care of the insane within All Saints formed the most significant part of the ‘bought in’ professional medical care that was delivered to the poor of the parish.⁶⁵⁰

The first references to the treatment of the insane within Newcastle were made in the middle of the seventeenth-century and opening decades of the eighteenth, but these were not pauper lunatics.⁶⁵¹ At the beginning of our period, All Saints parish appears to have utilised a single

⁶⁴⁸ The author is currently working on a more systematic study surveying poverty and poor relief in Newcastle more generally, see: G.A. Butler. ‘The Poor, the Parish and the Poor Law in Newcastle-upon-Tyne, 1730-1830: a New Perspective’, *in preparation*.

⁶⁴⁹ Boulton *et al.* ‘The Parish Workhouse, The Parish and Parochial Medical Provision’, 20.

⁶⁵⁰ For previous works on this subject in Newcastle and Tyneside, see: W. Parry-Jones. *The Trade in Lunacy: A Study of Private Madhouses in England in the Eighteenth and Nineteenth Centuries* (London, 1972), 61-62, 183; J. Le Gassicke. ‘Early History of Psychiatry in Newcastle upon Tyne’, *The British Journal of Psychiatry*, 120 (1972), 419-22; P. Rushton. ‘Lunatics and Idiots: Mental Disability, the Community, and the Poor Law in North East England, 1600-1800’, *Medical History*, 32 (1988), 34-50; J. Le Gassicke. ‘History of Psychiatry on Tyneside’, in D. Gardner-Medwin, A. Hargraves & E. Lazenby eds., *Medicine in Northumbria: Essays in the History of Medicine* (Newcastle, 1993), 277-85.

⁶⁵¹ One of the earliest references we have relating to the treatment of a ‘lunatic’ in Newcastle was made in the mid seventeenth-century, when the ‘common council made an *ex gratia* payment to a ‘poor distracted women that dwells in Alan Giplin’s house’.⁶⁵¹ Few others exist from then, until the early eighteenth-century, when a reference was made to a lunatic residing in the Newcastle Holy Jesus hospital, known locally as ‘Chicken – a lunatic’ who received ‘£1-5s’ from the hospital ‘for eleven years from 1723’, see Rushton’s expert study: Rushton. ‘Lunatics and Idiots: Mental Disability, the Community and the Poor Law’, p. 43. The fact that one of these individuals resided in the Holy Jesus Hospital, suggests that he or she was not a pauper, given that the admission policy of this institution strictly forbade their admission, which was limited to Freemen, their widows

private madhouse for the treatment of parish lunatics. For example, on 15 February 1782, the parish paid £15 12s ‘cash to Dr Hall for the Lunatics in his House’ for one month.⁶⁵² This was most certainly Dr John Hall. Hall was a prominent physician in Newcastle, who had been appointed to run the first public Asylum, which had been ‘built with funds raised from a public subscription, including an annual payment from the Newcastle Common Council’.⁶⁵³ Hall was a controversial figure and ‘quarrelled with the governors of the Lunatic Hospital, prior to its inauguration, over the question of the provision for private patients’.⁶⁵⁴ Thus in 1766, Dr Hall opened his own private madhouse in Newcastle, called St Luke’s named after the London institution.⁶⁵⁵ It was most probably this former institution which the vestry used for the care of the parish’s lunatics. The parish appears to have utilised this madhouse heavily throughout the period with which our study is concerned, indeed, the payment made in February 1782 was just one of twelve payments made that year. Of course, it might well have been the case that it was only the *most violent or difficult to manage* lunatics who were sent to Dr Hall’s Asylum.⁶⁵⁶ For example, on 24 of June 1806, the Bruce family made a plea to the vestry claiming that Giles Bruce, a lunatic member of the family, had ‘frequently attempted to ... harm to himself’, and the vestry ordered that he ‘was to be taken to the lunatic hospital’.⁶⁵⁷ In fact one might argue that the evidence we have, which comes from the accounts of the select vestry, may underestimate the extent to which the parish and the workhouse relied upon Hall’s Asylum for maintaining parish lunatics. Moreover, it may well have been the case that the vestry sent lunatics directly to Hall’s establishment without

and their children. For a useful discussion of the rules of Newcastle early ‘hospitals, see: E. Mackenzie. *Historical Account of Newcastle-upon-Tyne: Including the Borough of Gateshead* (Newcastle, 1827), 501-45

⁶⁵² TWAM MF349.

⁶⁵³ Parry-Jones. *The Trade in Lunacy: A Study of Private Madhouses*, 61. Unfortunately very few records have survived relating to the actual size and scale of this hospital. Parry-Jones’ study noted that: ‘At Newcastle upon Tyne Lunatic Asylum, which received up to eighty patients who were largely paupers, the staff comprised the superintendent, three male keepers and five ‘matrons’, who were assisted by convalescent women patients’, see Parry-Jones. *The Trade in Lunacy: A Study of Private Madhouses*, 186.

⁶⁵⁴ *Ibid*, 186.

⁶⁵⁵ Hall’s actions were ill received by his colleagues within the city, which led to him publish an account of his actions, see: Le-Gassicke. ‘Early History of Psychiatry’, 420; J. Hall. *A Narrative of the Proceedings Relative to the Establishment of St Luke’s House* (Newcastle, 1767). It should also be stressed that this was not the first private mad-house in Newcastle. In 1686 ‘there is a conveyance between Dr William Luck and the Newcastle Corporation for a room in a place called Shoulder of Mutton Close, in close proximity to the place where the New Lunatic Hospital came to be built’, see: Le-Gassicke. ‘Early History of Pyschiatry’, p. 419 and Parry-Jones. *The Trade in Lunacy: A Study of Private Madhouses*, 61.

⁶⁵⁶ There are good reasons to think that some of the inmates held in Hall’s Mad-House were *difficult* and measures of restraint were clearly implemented to cope with such individuals. An Inquiry was launched against St Luke’s in 1824, which found the house to be ‘grossly overcrowded and ill-ventilated ... chains were in use, there were iron bars on the windows, and the cells resembled dungeons’, Le-Gassicke. ‘Early History of Psychiatry’, 420.

⁶⁵⁷ TWAM 183/186. It is unfortunate that the committee minutes do no record the age of this pauper.

admitting them to the workhouse or relieving them via an outdoor payment, as Suzuki found occurring in London.⁶⁵⁸

We get a direct reference to the external care of parish lunatics in 1831, when a brief note appears in the Overseer's accounts, which recorded the following observation:

23rd February 1831,

Dr Smith's Bill for the maintenance of pauper lunatics for the last three months having been submitted to this meeting and it have been stated that the paupers in previous Asylums were maintained at less expense it was resolved that the other parishes in Newcastle should be requested to conern in an application to the magistrates for the purpose of obtaining a reduction of such expenditure and it was also resolved that a committee should be appointed be appointed to wait upon the overseers of the other parishes and in conjunction with them to make such an application and adopt such other measures as might be thought necessary for promoting the views of this meeting and the W. Temple, W. Hay and W. Salmon be such committee.⁶⁵⁹

John Forster, Chairman

This was most definitely Dr Noel Thomas Smith who became the physician at the Newcastle Lunatic Asylum in 1824, the same establishment which had been run by Dr Hall until his death in 1793.⁶⁶⁰ Smith, once in control, immediately began to reform the living conditions in which the inmates of the asylum were accustomed, as well as the treatments which they received.⁶⁶¹ This is an interesting point because it is the first reference we have to any change in the actual fees which were charged to the parish for the treatment of pauper lunatics in the Asylum. This probably occurred because Smith had rather different approaches to the medical treatment of the insane. Under Dr Hall and later Dr Glenton, the Asylum was supposedly crowded 'frequently ... to excess and little attention [had been] paid to free ventilation and cleanliness ... chains, iron bars, and dungeon-like cells' had all been in use and 'many of the cells were close, dark' with both male and female inmates mixed together, 'while the medical treatment [was the] old and exploded system of restraint and coercion'.⁶⁶² In 1827, Mackenzie observed that when Dr Smith 'took charge of this house, six miserable

⁶⁵⁸ A. Suzuki. 'The Household and the Care of Lunatics in Eighteenth-Century London', in P. Holden & R. Smith ed., *The Locus of Care: Families, Communities, Institutions, and the Provision of Welfare Since Antiquity* (London, 1998), 153-75; Boulton *et al.* 'The Parish, the Parish Workhouse and Parochial Medical Provision', 24-26.

⁶⁵⁹ TWAM 466/11.

⁶⁶⁰ G.H. Hume. *The History of the Newcastle Infirmary* (Newcastle, 1906), 142.

⁶⁶¹ Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 524-25.

⁶⁶² *Ibid*, 525.

wretches were found chained down in their ... cells'.⁶⁶³Smith's more reformed practices inevitably led to increased costs for the parish. A normal parish bill incurred by Smith's reformed establishment was '9s 6d per week for males, and 9s for females'. If we speculate on this a little further using the payment of £15 12s made to Dr Hall previously discussed, it suggests – not taking inflation in account - that on the 15th February, the parish paid for the care of approximately 40-45 pauper lunatics in that month, which is quite considerable as this was a time when the size of the workhouse was rather modest.⁶⁶⁴

Clearly then, the parish seems to have made use of external institutions for the care of parish lunatics. From the evidence we have, the parish was either reluctant to send parish lunatics to the workhouse, or more probably, it was the large number of lunatics in All Saints which made it impossible for the parish to maintain them all indoors. It should of course be remembered that some of the parish poor may well have gone *mad* once they had already been admitted to the workhouse.⁶⁶⁵On 20 December 1796, the parish 'paid two soldiers for taking up a poor man in fits to Mr Lawton' from the workhouse.⁶⁶⁶ Moreover, the external treatment of pauper lunatics was not a practice strictly confined to All Saints parish. In 1827, St Nicholas parish paid a weekly bill of 9s 6d per lunatic for three individuals at the Asylum, run by Dr Smith.⁶⁶⁷ But what is interesting and different about St Nicholas parish is that it maintained lunatics within its workhouse. For instance, in 1827, the same year that the St Nicholas paid Dr Smith for the care of three lunatics in the Asylum, there were also 'two young idiots' in the workhouse.⁶⁶⁸ It was probably the greater number of 'lunatics' in All Saints which forced the Overseers to rely so heavily upon external Asylums. For example, in 1827 there were only 4 lunatics being maintained in St John's parish, only 4 in St Andrews and only 3 in St Nicholas, as opposed to 24 lunatics in All Saints.⁶⁶⁹ Thus it appears that All Saints parish continued to use external Asylums throughout our period. Even after Dr Hall's death and the subsequent inquiry made into the state of the Asylum, private establishments

⁶⁶³ *Ibid*, 525.

⁶⁶⁴ The available documentary evidence suggests that in the 1780s, the workhouse in Manors housed a collective population from All Saints, St John's and St Nicholas parishes – All Saints had an estimated population of around 40-55 inmates: TWAM 465/38.

⁶⁶⁵ The admission register makes no reference to pauper lunatics, further to this, the vestry committee minutes, which survive virtually unbroken from 1801-11 and between 1820-30, make no reference to the admission of parish lunatics into the workhouse: TWAS 465/37; TWAS 465/38; TWAS 466/10; TWAS 466/11; TWAS 183/1-187.

⁶⁶⁶ TWAM 183/172.

⁶⁶⁷ Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 524-25.

⁶⁶⁸ *Ibid*. 524-25.

⁶⁶⁹ *Ibid*, 524-25.

‘accommodated the Newcastle pauper lunatics until 1855’.⁶⁷⁰ What other forms of external medical care did the parish provide to the sick in All Saints?

In Chapter 5, it was shown that the most extensively utilised medical institution in Newcastle was the Dispensary, which, by the middle of the nineteenth-century, was delivering a significant level of medical care to the city’s population. The parish seems to have made use of this institution from its opening in 1778. During the early years of the Dispensary’s operation, the vestry subscribed 10 guineas to the dispensary until 1834, which meant that if the Overseers had wished to, they could have relieved the sick poor in the parish via a letter of recommendation so that the poor could either attend the Dispensary or be visited by one of the physicians or surgeons. The amount of 10 guineas meant that up to 40 paupers per year could be relieved via this method.⁶⁷¹ The parish seems to have relied heavily upon the Dispensary when it came to relieving the outdoor poor of the parish. The extensive role played by the Dispensary in the treatment of the sick in the parish is probably underestimated here, given that by the end of the eighteenth-century, a significant level of healthcare was being delivered to the poor by the Dispensary *gratis*. Even after the implementation of the New Poor Law, the Dispensary still appears to have played a significant role in relieving sick paupers in All Saints. The committee noted this problem in 1838, after the Overseers in All Saints had withdrawn their annual subscriptions. The committee noted:

... a very considerable number of paupers have actually still been attended by the medical gentlemen of this institution, for, on being applied to by any person with a letter of recommendation from a subscriber, they esteem in their duty to attend to it.

This is doing injustice, not only to the charity itself, but to the industrious poor, who are utterly un-provided for, as far as regards medical attendance; the committee, therefore, would recommend subscribers to enquire of the applicant of the letters if they are in receipt of parish allowance, and, in that case, to direct them to apply to the medical gentlemen appointed by the guardians of the poor to attend the paupers of the parish to which they belong.⁶⁷²

⁶⁷⁰ Parry-Jones. *The Trade in Lunacy: A Study of Private Madhouses*, 61-62.

⁶⁷¹ Anon. *Account of the Newcastle Dispensary for the Year Ending Michaelmas 1800* (Newcastle, 1800), 15. All Saints may have been unique in this respect, for the accounts of the Dispensary suggest that All Saints was the only Newcastle parish which had an annual subscription. The only other parish which subscribed locally was in Gateshead, which ceased when a Dispensary was founded there in 1832.

⁶⁷² Dispensary committee minutes published in the Annual report for 1838, see: Anon. *Account of the Newcastle Dispensary* (Newcastle, 1838), un-paginated. For a discussion of the implementation of the new Poor Law on Tyneside see: N. McCord. ‘The Implementation of the 1834 Poor Law Amendment Act of Tyneside’, *International Review of Social History*, 14 (1969), 90-108.

There are also good reasons why the parish sent some of the sick in All Saints to the city's Infirmary and these have been previously discussed. Again, the parish subscribed annually to the Infirmary, although the type of patients who could be admitted there was limited.⁶⁷³ Infants were refused admission as well as those cases which were too far advanced or if the patient was in the last stages of decline.⁶⁷⁴ The parish seems to have followed these rules and only sent patients who fell into the institution criteria. To take just one example, on 22 January 1805, Mary Kirk applied to the Overseers in All Saints claiming that she was sick, and it was ordered that she was 'to have a note for the Infirmary'.⁶⁷⁵ What is revealing about the case of Mary Kirk is that on the same day that her application was made, one Rachael Brown presented her case to the Overseers claiming that she was sick. Unlike Kirk, however, Brown was not sent to the Infirmary but instead received 6s 'till better'.⁶⁷⁶ The only key difference between Kirk and Brown seems to have been the difference in their reported ages. Kirk was aged 18 years old when she made her application, whereas Brown was 62 years old. This might suggest that the parish may have preferred to send paupers who were in the 'prime of life' to the Infirmary, or more precisely, those who made up the 'deserving poor'.⁶⁷⁷ It must also be emphasised that pauper admissions to hospitals could have been an expensive venture for the parish, a venture which could stretch well beyond the cost of a letter of recommendation. Depending on the actual condition of the pauper, it was certainly not uncommon for the parish to pay for the conveyance of paupers to and from hospitals.⁶⁷⁸ This also applied to removing paupers to and from the parish workhouse. For example, on 20 January 1796, the Overseers paid 1s 6d for a 'chair to the infirmary for Hannah Dobson' from the workhouse.⁶⁷⁹ Expenses incurred from a hospital admission did not necessarily end there. Upon admission, overheads could be built up for maintenance, moreover, if a pauper died

⁶⁷³ TWAM HO/RVI/72/1. For the provision of clothing to the poor, see King's recent paper: S. King. "I Fear You Will Think Me Too Presumptuous Presumptuous? in My Demands but Necessity Has No Law": Clothing in English Pauper Letters, 1800-1834', *International Review of Social History*, 54 (2009), 207-36.

⁶⁷⁴ For a discussion of hospital admission policies, see: K. Waddington. 'The Debate Over Outpatient Admissions, the Medical Profession and the Late Victorian London Hospitals', *Medical History*, 42 (1998), 26-46. Also for the admission of paupers, see: Tomkins. 'Paupers and the Infirmary in Mid-Eighteenth Century', 208-27.

⁶⁷⁵ TWAM 183/186.

⁶⁷⁶ TWAM 183/186.

⁶⁷⁷ There are no references to infants or child paupers being sent to the Infirmary. This was probably because they were refused admission, although, as discussed in Chapter 4, this policy was not always carried out. For a discussion of the Newcastle Infirmary's admission rulings, see: Hume. *The History of the Newcastle Infirmary*, 1-13.

⁶⁷⁸ H.W. Hart. 'The Conveyance of Patients to and from Hospital, 1720-1850', *Medical History*, 22 (1978), 397-404.

⁶⁷⁹ TWAM 183/172. Another note appears in the vestry minutes of 1806 which suggests that the parish paid two soldiers for carrying a pauper to the workhouse, TWAM 465/11.

whilst in care it was not uncommon for the parish to have to pay for the pauper's funeral. It might well be argued that the cost of maintaining a pauper once he or she had been discharged 'incurable' could have hefty and long lasting repercussions for the parish.⁶⁸⁰ Francis Lawes and his wife Mary appealed to the vestry on 29 May 1822, and the Overseers recorded that they had both been in the Infirmary 'in a scant of rheumatism and claims he cannot work'. It was ordered that they be allowed temporary relief.⁶⁸¹ Ann Atkinson, resident in the 'Head of the Side' appealed to the vestry on the same day as the Lawes, having been 'in the Infirmary for 18 weeks' and discharged as 'incurable'. It was then ordered that she be sent to the workhouse.⁶⁸² Thus for the parish, sending the sick to voluntary hospitals may not have been an attractive incentive for the Overseers.

If the parish was willing to pay for domiciliary maintenance of the mentally ill and sick in the 'prime of life', what can be said of those paupers who were lodged in the parish workhouse, and appear to have been generally regarded as inappropriate for outdoor relief? It is lastly to the medical role of the parish workhouse that this study will now turn.

5.8 Healthcare in All Saints parish workhouse, 1780-1830

It is now established that some workhouses in England operating under the old Poor Law specifically catered for the sick, the ill and the infirm.⁶⁸³ With the exception of supplemented diets, we still know very little about how the incarcerated sick were treated, particularly outside of the metropolis. We are fortunate however in having remarkably detailed evidence about the medical care delivered in All Saints workhouse, which can be extracted from the itemised accounts. To begin this section it is sensible to try and ascertain the overall expenditure of the parish workhouse.

Figure 5.10 shows the annual expenditure of All Saints parish workhouse. The thinking here is that the annual expenditure of the workhouse might well reflect an increase in usage. The first thing which comes to the fore upon perusal of this graph is the eruption in expenditure at the turn of the century, broadly corresponding with the admission statistics examined at the beginning of this chapter. Expenditure levelled out thereafter. Across the whole of the period for which the data survives, the average amount spent on the parish workhouse per year was £400. This is quite a considerable sum if we consider that in 1815, for example, the parish

⁶⁸⁰ Boulton *et al.* 'The Parish Workhouse, the Parish and Parochial Medical Provision', forthcoming.

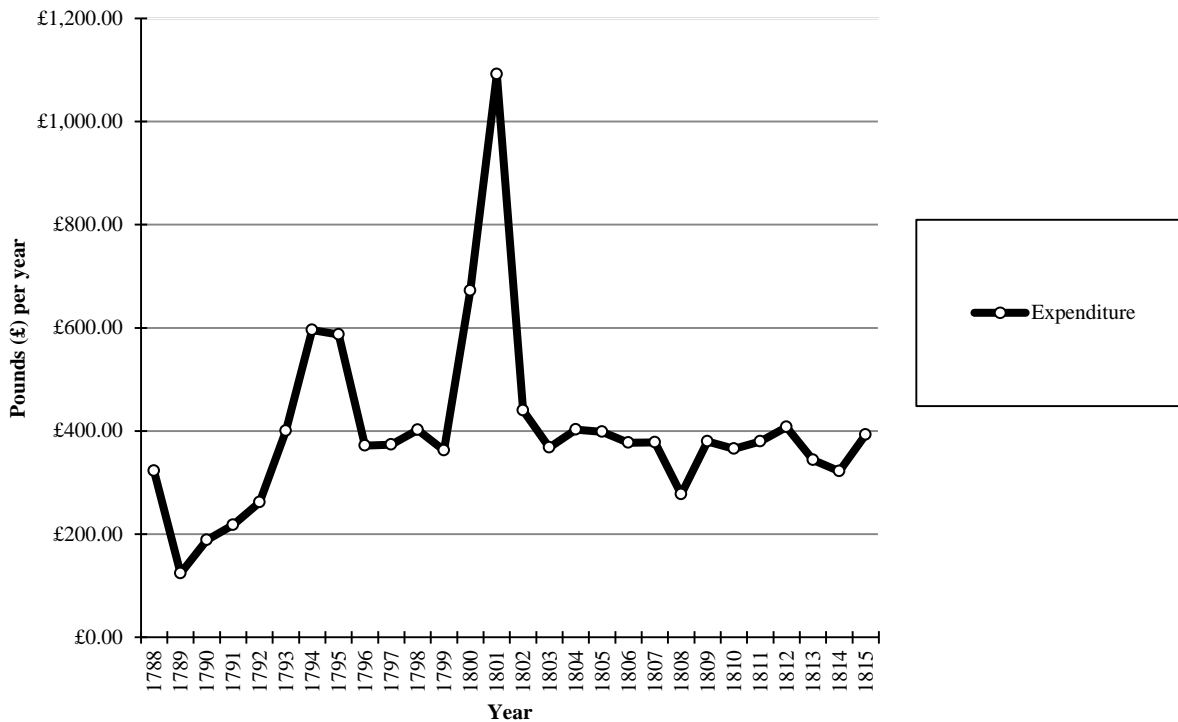
⁶⁸¹ TWAM 466/10.

⁶⁸² TWAM 183/172.

⁶⁸³ Ottaway. *The Decline of Life: Old Age in Eighteenth-Century*, 250-51, 266.

had a total annual relief expenditure of £6000, which suggests that nearly 7% of the total outgoings of the parish were actually being spent on those in the workhouse alone.⁶⁸⁴ To what extent did the workhouse spend its money on the sick and the ill?

Figure 5.10 Annual expenditure of All Saints parish workhouse, 1788-1815



Source: All Saints workhouse accounts database, TWAM 183/172.

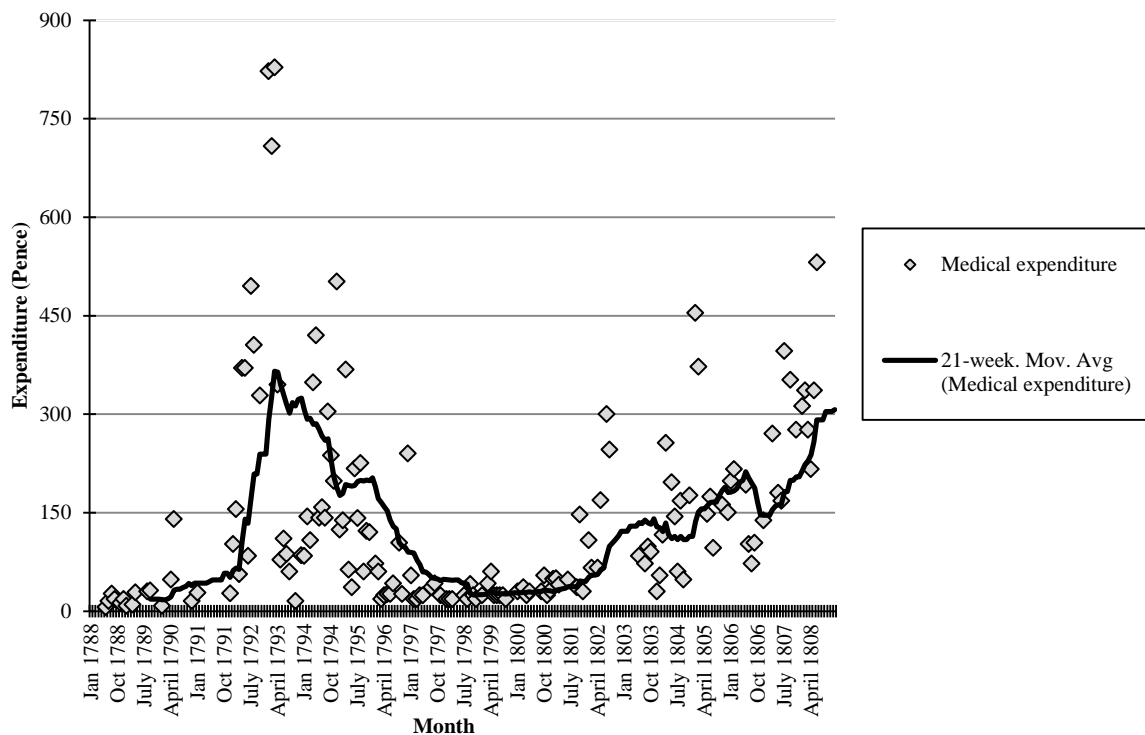
In order to try and ascertain the extent to which the workhouse authorities were willing to pay for medical treatment in the workhouse, it is essential to try and differentiate ‘medical’ expenditure from the overall expenditure of the workhouse. This is, however, not without its interpretive problems. Fissell has already argued that ‘there is little reason to separate out ‘medical’ relief from the rest’.⁶⁸⁵ However, in order to understand the ‘medical’ aspects of the parish workhouse, it seems feasible to separate out payments where some reference is made

⁶⁸⁴ Although this estimate seems quite small on the face of it, it is worth noting that the population of the workhouse in 1808 was 144, which suggests that, using the average of £400 per year, each pauper in the workhouse was receiving over £2 per year. It is also worth noting the fact that the graph does not appear to take inflation into account.

⁶⁸⁵ M.E. Fissell. ‘The ‘Sick and Drooping Poor’ in Eighteenth-Century Bristol and its Region’, *Social History of Medicine*, 2 (1989), 40, 38-45.

to ‘sickness’, ‘the sick’, ‘items for the sick and the ill’ or monies spent on medical personnel for the sick in the workhouse. Figure 5.11 therefore shows the monthly expenditure of the workhouse where specific references were made stating that the monies paid were specifically for the sick, the disabled or for pregnancy related cases.⁶⁸⁶

Figure 5.11 *All Saints parish workhouse monthly expenditure on the sick, 1788-1808*



Source: Same as Figure 6.4

The graph is essentially one of four parts. First, during the first four years in which the accounts survive, the workhouse seems to have spent little on the sick indoors, or did not make specific reference to such expenditure. The second period in the graph reveals a very different picture, with ‘medical’ expenditure reaching an all time high in January, February and March of 1793. Medicinal expenditure shows much variation until around about the end of 1797. What is interesting after this period is the lack of spending on the sick during the period when the overall expenditure of the workhouse peaked, as revealed in Figure 6.4, most notably during what is known as the crisis years of the old Poor Law. There may be a simple

⁶⁸⁶ References to the sick in the workhouse accounts include the following examples: ‘cord for sick woman, 1/3’ ‘sick nurses 12/11’; ‘Salve sick 1/6’; ‘lying-in women’; ‘beer for the sick’; ‘Flax dresses for sick women 1/13/0’ and ‘mint water for the sick’, TWAM 183/172.

but difficult to measure explanation for this: expenditure on ‘medicinal’ resources may have ceased quite simply because of increased expenditure on other items. Most notably, the parish bought more beds for the workhouse in the late 1790s and the first two years of the nineteenth-century, than in any other, probably a result of increased admissions. It is also observable that expenditure on items for the sick and the ill recovered between 1802 and 1808. The average amount spent on the sick in the workhouse, was, if we only include the payments where some form of sickness was mentioned, 137d per month, while the model payment was 26d per month, which suggests that medical expenditure was subject to certain levels of volatility. However, it should of course be remembered that these payments are a minimum, given that some of the other items included in the accounts would have been bought for both the sick as well as the able bodied indoors.

What did the parish buy for the sick and ill in the workhouse? In terms of healthcare, the parish made quite extensive payments for a variety of things for them. The parish employed four nurses at a rate of 2s each week, for ‘attending the sick’ in the workhouse.⁶⁸⁷ While being nursed, the sick were also provided with extra allowances of beer, wine and gin. The sick were also, as was common elsewhere, provided with a supplemented diet which included extra allowances of meat, butter and in some instances the sick were even given ‘tobacco’.⁶⁸⁸ In addition to receiving a supplemented diet, the inmates were also shaved on a regular basis at the expense of the parish.⁶⁸⁹ The workhouse was also regularly whitewashed at a further expense of ‘£1 5s 11d’.⁶⁹⁰ Not only nurses, but midwives were also employed to care for pregnant inmates at a cost of 5s per visit. Indeed, midwives formed the most common form of *medical* care delivered to paupers both in and outside the workhouse. It might well have been the case that pregnant women used the workhouse for short term maternity care, as was the case in Hitchcock’s study.⁶⁹¹ It should be noted that lying-in inmates were also provided with supplemented diets, including extra amounts of ‘butter, meat and gin’.⁶⁹²

⁶⁸⁷ TWAM 183/172. For a recent study of the importance of the parish nurse in the early modern period, see: J. Boulton. ‘Welfare Systems and the Parish Nurse in Early Modern London’, *Family and Community History*, 10 (2007), 127-51.

⁶⁸⁸ TWAM 183/172.

⁶⁸⁹ TWAM 183/172.

⁶⁹⁰ TWAM 183/172. This suggests that the ‘housed environment’ in All Saints was probably better than in much of the poorer dwellings, where the majority of the population lived. as discussed in Chapter 1.

⁶⁹¹ Hitchcock. ‘The English Workhouse: A Study of Institutional Poor Relief’. All Saints paid 5s for midwifery care for both indoor and outdoor paupers, TWAM 465/11.

⁶⁹² TWAM 183/172.

The parish was also willing to buy specific medicines and remedies for the sick. The workhouse accounts reveal that on a weekly basis the parish bought large quantities of ‘mint water’, a tonic which could supposedly ‘cure’ a range of conditions from stomach complaints to rheumatism.⁶⁹³ On 20 May 1795, the parish paid 11 ½d for a quantity of the *infamous* ‘cure all’ ‘Godfrey’s cordial’, a patent medicine commonly given to children to ‘cure’ a range of conditions such as ‘colic’ and ‘diarrhoea’, amongst others.⁶⁹⁴ The workhouse also bought monthly quantities of ‘Batemans drops’ on a monthly basis, at a cost of 3s 4 ½d. On 20 July 1792, the parish paid 4s 4d for leeches, which suggests that *leech therapy* was being carried out in the workhouse.⁶⁹⁵ It is also notable that the workhouse paid to ‘Salve the sick’, which might suggest that ‘salivation’ of inmates suffering from the ‘foul disease’ was also taking place.⁶⁹⁶

The parish was not only keen to employ parish nurses and midwives, but it also employed a range of *professional* medical personnel to attend the sick in the workhouse. The workhouse accounts suggest that the parish made extensive payments to local surgeons and doctors to treat the sick and the injured in the workhouse. For example, on 20 December 1806, the workhouse authorities paid one Dr Maxwell £21 7s 4d for one month’s salary. When compared to the total expenditure in the workhouse that month, this accounts for over 33% of its expenditure. Dr Maxwell is most probably William Maxwell, a surgeon who held a practice at the ‘foot’ of Pilgrim Street in Newcastle. The workhouse authorities also seem to have brought in medical attendants to ‘heal’ inmates who had suffered injuries while in house. On 19 January 1802, the parish paid 5s 6d to one Mr Storey for ‘setting Edward Gladstone arm’ in the workhouse. In 1827, the parish employed one Mr Baird to attend the sick. This was most definitely Mr John Baird, a surgeon whose practice was in Northumberland Street. The extent to which the parish utilised his services is revealed by the fact that he appears to have had a *flexible* salary as opposed to a fixed one. His annual *Bill* normally amounted ‘to £70 or £80 in a year’.⁶⁹⁷ In 1822, one Mr Tulloch was employed to act

⁶⁹³ TWAM 183/172. It is very difficult to ascertain what this mixture actually was, but for a discussion of the use of mint in medicine, see: J.K. Crellin & J. Philpott. *A Reference Guide to Medicinal Plants: Herbal Medicine Past and Present* (Durham NC, 1989), 302-04.

⁶⁹⁴ TWAM 183/172. T.E.C. ‘What were Godfrey’s Cordial and Dalby’s Carminative?’, *Pediatrics*, 45 (1970), 1011.

⁶⁹⁵ For a brief discussion, see: J.M. Hyson. ‘Leech Therapy: a History’, *Journal of the History of Dentistry*, 53 (2005), 25-27; J. Lane. ‘A Little Purging and Bleeding: Poverty and Disease in Eighteenth-Century Stratford’, in R. Bearman eds. *The History of an English Borough: Stratford-upon-Avon, 1196-1996* (Stroud, 1997), 126-38.

⁶⁹⁶ Siena found this occurring frequently in London workhouses in the early modern period, see: Siena. ‘Venereal Disease, Hospitals and the Urban Poor’, 135-218.

⁶⁹⁷ Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 524-25.

as parish surgeon to treat the sick and the ill in the workhouse. We get a direct reference to this surgeon in the minutes of the Overseers, where it was noted that: ‘Peter James, if appearing that who attended the pauper in the workhouse has in the opinion of Mr Tulloch healed’. This was probably Benjamin Tulloch, a surgeon who practiced in a building close to St Nicholas Church Yard. Despite these specific references to bought in medical ‘specialists’, it should of course be remembered that the parish also subscribed to the Dispensary which entitled parish members to receive visits from the resident apothecary surgeon and physicians, something which almost certainly took place in other parishes of the city.⁶⁹⁸ It should of course be remembered that some physicians may well have given their services to the poor in the workhouse *gratis* as has been found in urban parishes elsewhere.

This evidence clearly suggests that All Saints parish workhouse provided a significant level of healthcare to the sick in the workhouse. What is most striking is that despite the *medicalisation* of Tyneside across the period, as discussed in Chapter 2, the parish workhouse still seemed to be providing a significant level of healthcare to the sick poor and was clearly supplementing that which was provided by the new city institutions. Although extremely hard to assess by the end of the period, there seems to have been an increasing concern about the health of the inmates in the parish workhouse, with an emphasis on cleanliness and ventilation. That is, the workhouse was whitewashed annually and sometimes bi-annually.⁶⁹⁹ In 1822, the parish ordered that a room be erected for corpses who had died in the workhouse that was separate from the living quarters. It was recorded:

Workhouse: It appearing to the vestry desirable that the workhouse should be provided with a room for the depositing of inmate bodies of deceased paupers until interment. Ordered that a re-committee be appoint to survey the house and purpose the incurrent needful for such a room.⁷⁰⁰

Although nothing now remains of the workhouse building today, Mackenzie, writing in the late 1820s, wrote of the house with much praise, it:

... possesses every requisite convenience. The rooms, in general are lofty, and well ventilated, by the upper sash of the windows being made to turn up on pivots. The dining room is a large airy apartment, above which is another room, very commodious and well lighted and ventilated by a row of windows on each

⁶⁹⁸ This was occurring in St John’s workhouse: Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 524-25.

⁶⁹⁹ TWAM 183/172.

⁷⁰⁰ TWAM 183/172.

side, here the poor are paid, and the local parochial school is kept. Adjoining is a neat apartment, where the parish-officers hold their monthly meetings.⁷⁰¹

In the early eighteenth-century, the house in Manors had been known locally as a general hospital, and from the evidence presented here this may have been a well founded title. Dorothy George wrote of the London workhouses with much praise, claiming that ‘in the best managed parishes ... the workhouse became in practice a subsidiary hospital’.⁷⁰² In All Saints in Newcastle, the evidence discussed adds much weight to her statement, but in a provincial context. The medicinal role of All Saints workhouse seems to have developed rather than declined across the period so much so that by the third decade of the nineteenth-century All Saints parish workhouse was providing medical services to paupers who did not have a settlement within the parish.⁷⁰³

5.9 Conclusion

To conclude, what has this parish based micro-history revealed about the medical services delivered to the poor in Newcastle in the period in question? Firstly, All Saints parish workhouse operated on a large scale, and the demographic characteristics of the indoor poor were reasonably representative of what might be deemed the ‘traditional poor’. Secondly, ‘life’ within the workhouse itself seems to compare well with what we know of other workhouses examined both in the north and elsewhere in urban and rural English parishes. Thirdly, unlike more rural areas, it has been found that sickness and ill health made up a massive proportion of the applications made to parish Overseers, to such an extent that the parish seems to have been constantly dealing with the sick, the disabled and the mentally ill. Moreover, it was probably this factor which meant that the Overseers in All Saints had little option but to provide their own locally-based medical services to paupers as opposed to relying extensively upon external institutions. Fourthly, this study suggests that the local parish workhouse in All Saints played a significant part in the medical landscape of Newcastle, which has until now, been completely ignored by historians interested in the

⁷⁰¹ Mackenzie. *Historical Account of Newcastle-upon-Tyne*, 524-25.

⁷⁰² M.D. George. *London Life in the Eighteenth Century* (London, 1966 edition), 10-11.

⁷⁰³ The parish seems to have increased its medical services to the poor in the All Saints workhouse to such an extent that paupers from outside of Newcastle parishes were being relieved there medically. For example, David Taylor, an Irish migrant who did not have a settlement in Newcastle, applied for relief in 1822 and was ‘refused’, he eventually appeared before the vestry with a letter of recommendation from the Dispensary signed by the apothecary James Wilkie stating that he laboured under a ‘paralytic rheumatism’ and he was subsequently sent to the workhouse: TWAM 466/10.

city's history. Moreover, the suggestion has been made that other workhouses in the city may well have provided similar types of services to the poor.

We have also seen that All Saints workhouse housed a disproportionately large population who were unable to turn to other institutions in the city, namely the very young and the elderly. This is an observation which strongly suggests that Poor Law medical services in the parish were an important aspect of the relief culture in the city, which is something that is becoming increasingly acknowledged by welfare and demographic historians. Moreover, this chapter has also gone some way to provide a more individual context to the medical care delivered to the sick poor in Newcastle's east-end. Lastly, the chapter suggests that an analysis of more workhouses and poor relief in our period, and not only in the north, would produce a much more nuanced understanding of the parochial responses to sickness and disease in Georgian and early Victorian England.

6.1 Conclusion

The object of this thesis has been to explore the medical and institutional responses to sickness and disease in Newcastle between 1750 and 1850, the period conventionally ascribed to England's first industrial revolution. Previous work on this subject has been limited and restricted to a narrow range of primary material.⁷⁰⁴ Such studies have also tended to focus primarily upon the history of medical institutions in isolation rather than in the context of the community. Most have also neglected important aspects of social welfare in the city such as Poor Law medicine. As is the case in histories of other cities, disproportionate attention has also been paid to leading medical figures and those who founded hospitals.⁷⁰⁵ This thesis in contrast, has engaged closely with an extensive range of primary sources, some of which have only become available in recent years, such a comprehensive analysis has enabled one to examine medicine and healthcare at ground level or as some historians term from a bottom-up perspective.⁷⁰⁶

The thesis began by examining the demography of Newcastle between 1736 and 1850. The importance of the city as the region's 'metropolis' was clearly demonstrated. During the seventeenth- and eighteenth-centuries Newcastle contained approximately 15-20% of the population of Northumberland. By the very end of our period it had something like 40% of the population of that county. Analysis of the city's Bills of Mortality revealed a number of important findings. Firstly, Newcastle and its component parts did not share in the rapid population growth which was being experienced by the rest of the county during the course of the eighteenth and early nineteenth-centuries.⁷⁰⁷ The city appears to have suffered high levels of mortality in the closing years of the eighteenth and first decade of the nineteenth-century. In this period, Newcastle's population must have been fuelled by a stream of incoming migrants which helped counterbalance its demographic books. For most of the eighteenth century Newcastle's population was dominated by the parish of All Saints in the east-end of the city which accounted for 50% of the total population over the entire century. However, while All Saints shared in the demographic expansion of the city as a whole, it was

⁷⁰⁴ See for example, the collection of essays published by the Pybus society: D. Gardner-Medwin, A. Hargreaves and E. Lazenby eds. *Medicine in Northumbria: Essays in the History of Medicine* (Newcastle, 1993).

⁷⁰⁵ Miller. 'Dr John Clark, 1744-1805: The Forgotten Physician', 104-36; Car michael. 'Thomas Trotter, 1760-1832: Physician to the Fleet', 164-92; Menzies. 'Thomas Masterman Winterbottom MD 1766-1859', 193-210; Johnson. *Diary of a Doctor: Surgeon's Assistant in Newcastle*, 7-95.

⁷⁰⁶ For a discussion of the benefits of this type of analysis see: Wrightson. *Ralph Taylor's Summer*, xi-xiii.

⁷⁰⁷ Wrigley and Schofield. *The Population History of England*, 531-35.

St John's and St Andrew's parishes which experienced particularly rapid growth in the nineteenth-century. One other aspect of the city's population history was the increasing use of extra-parochial burial grounds in the city, particularly at the Ballast Hills site. This burial ground witnessed between 1780 and 1840 the interment of over 36,000 corpses from the city, a total of around 30% of all of the burials which took place over the century. Newcastle's parochial burial grounds were overcrowded in the nineteenth-century and together with high levels of religious dissent led to a vigorous export of corpses to Ballast Hills.

Examination of the determinants of health and mortality within the city and the suburbs found that Newcastle's epidemiological regime fitted well with McNeill's 'High Potential Model'.⁷⁰⁸ Migration was clearly a key component in Newcastle demographic record which implies that there were large numbers of individuals in the city who may not have acquired immunity to the types of diseases which thrived in the city's disease environment. The accounts of the Corporation and the contemporary engravings and surveys of the city revealed that little physical expansion of the city occurred until the fourth decade of the nineteenth-century. In the eighteenth-century Newcastle was already densely populated and by the first decades of the nineteenth-century it was overcrowded to excess. Although there remained some open spaces in the northern wards in St Andrews parish, the bulk of the population resided in the southern and eastern parts. Lack of effective building regulation and indeed a lack of buildings led to the majority of the population being crammed in tenements and lodging houses in the narrow chares of the Quayside, Wall Knoll and most of all in Sandgate. These areas which were inhabited by both Newcastle resident population and contained a large floating population of migrant workers engaged in the coal trade and transport industries.

There is some evidence which suggested that Newcastle felt some of the wider economic pressures of the eighteenth-century such as falling real wages as well as increasing bread prices leading to local grievances and short food supplies.⁷⁰⁹ It has also been demonstrated that this 'metropolis of the North' possessed a dynamic economy with large numbers of people employed in the secondary sector. There was also evidence of occupational zoning within the city's parishes, with the poorer inhabitants residing in All Saints parish who were

⁷⁰⁸ McNeill. *Plagues and Peoples*, 185-216, 217-68.

⁷⁰⁹ Feinstein. 'Pessimism Perpetuated: Real Wages and the Standard of Living', 625-58; Floud *et al.* *The Changing Body: Health, Nutrition and Human Development*, 6-14.

primarily engaged in shipping and transport – mainly of coal. Unsurprisingly, too, poverty levels in the city were not equally distributed between the ancient parishes. The extent to which the inhabitants experienced unemployment and poverty was also subject to a marked degree of seasonality. The volume of hardship was low in the warmer summer months when trade was at its peak and rose sharply in the winter months during the ‘dead season’ of the coal trade.⁷¹⁰ Moreover, there also seems to have been little or no improvement in the city’s water supply. Thus the inhabitants of Newcastle were therefore subject to high levels of exposure to disease and infections which would have been easily transferred in the city’s densely populated alleyways and back yards.

The annual reports and admission registers of the Newcastle Infirmary shed new light on the treatment of the sick and injured poor in the city and its surrounding hinterland. The huge growth in patient numbers demonstrated that, however unpleasant the care provided was, it was something for which there was a strong demand.⁷¹¹ The characteristics of these patients revealed that the hospital tended to treat a disproportionate number of males in the ‘prime of life’. This fits well with what we know of other voluntary hospitals in cities such as Bristol and Bath in the period. An examination of the morbidity of its patients revealed that for the most part the Infirmary was not an institution which catered for the diseases and conditions which commonly killed large numbers in the city such as consumption, smallpox or whooping cough.⁷¹² Instead, it was chronic and debilitating conditions that assailed the poor who were admitted, along with significant numbers of patients suffering from accidents and wounds. This was essentially why many of the patients who were given a letter of recommendation did not stay in the hospital for a great deal of time. More importantly, the conditions which were treated in large numbers were the types of ailments which would have greatly impacted on the ‘fragile economy’ of the working poor, who lived within a society where men and women were required to work long hours or, as Humphries has recently put it, those who were ‘burdened with bread winning’.⁷¹³ This in mind it seems hardly surprising to find the Infirmary providing a type of repair service to the poor, restoring able men (and women) back to health and returning them to their ‘economic lives’.⁷¹⁴

⁷¹⁰ Levine & Wrightson. *The Making of an Industrial Society*.

⁷¹¹ Sigsworth. ‘Gateways to Death?’, 97-110.

⁷¹² Hardy. *The Epidemic Streets: Infectious Disease and the Rise of Preventative*, 9-27, 151-90, 191-210.

⁷¹³ J. Humphries. *Childhood and Child Labour in the British Industrial Revolution* (Cambridge, 2010), 127.

⁷¹⁴ Wrightson. *Earthly Necessities: Economic Lives*, 307-25.

The investigation of the Dispensary revealed that this institution played a very different role in the ‘medical landscape’ of early industrialising Newcastle. The most significant difference to the Infirmary was the sheer scale at which the Dispensary operated after the ‘free admission’ of casual patients was implemented in 1790. This change in policy led to a huge surge in the number of people who received medical attention when they were sick or injured in the city. During its peak it can be estimated that around 10% of the city’s population could expect to come into contact with the Dispensary and its staff in any one year. Like the Infirmary, the Dispensary clearly provided a service which was in great demand in its own right. However, the demographic profile of the latter’s patients was very different from the former. Analysis of the characteristics of patients found striking results. Rather than there being a surplus of male patients, the Dispensary patients had a demographic profile similar to that of the wider population of the city something which medical historians have completely overlooked.⁷¹⁵ In Newcastle, Dispensary medicine was an important aspect of healthcare to people of all ages. This was especially the case for infants and young children. These children and infants were treated for a wide array of conditions: everything from fevers, smallpox, consumption, measles, whooping cough, scarlet fever and even venereal diseases. The majority of these conditions were diseases which could thrive within the disease environment of the city and were those diseases which the urban poor were most susceptible too. The types of ailments which killed the Dispensary patients were representative of those which carried-off the wider population with the majority of patients dying from consumption, dropsy, water in the head and smallpox. The mortality levels of the patients fluctuated from year to year, and often reflected the incidence of local epidemics. We have also been able to demonstrate that admissions to the Dispensary, like those at the Infirmary, also appear to have been heavily seasonal, for much of the same reasons.

Another vital aspect of this thesis is that it has unearthed an important, but much neglected source of healthcare experienced by the poor, namely that which was provided under the Poor Law. This is an important aspect of welfare history in the period which has only recently been recognised by welfare historians. The workhouse in All Saints parish operated on a large scale in comparison to what we know of other workhouses in provincial England in the eighteenth-century. In All Saints parish the workhouse was an important institution with regard to its impact upon the relief system in the parish. It housed some 25% of all parish

⁷¹⁵ There are only two real exceptions to this, see: Marland. ‘Lay and Medical Conceptions of Medical Charity during the Nineteenth-century’, 142-71; Hardy. ‘The Medical Responses to Epidemic Disease’, 65-70.

paupers in the early nineteenth-century. Everyday life within the house in the city's east-end fits well with what we know of other workhouses under the old Poor Law. The inmates were relatively well fed, they were provided with beds, blankets and clothing.⁷¹⁶

The very poor in the parish suffered from many highly debilitating diseases and conditions which they brought before the overseers. Indeed, there seems to have been so much sickness and disease in the All Saints that the overseers of the poor were constantly dealing with relief applications where some form of illness, disease or disability was made explicit. What is most interesting here is as King has already pointed out: '[b]efore 1834 there was no explicit legal justification ... for overseers to provide medical relief' to the poor in England. This thesis has shown that in Newcastle, the Overseers did so, and they did so extensively.⁷¹⁷ In All Saints the overseers sent paupers who were sick or injured to the Infirmary and subscribed to the Dispensary, they also paid large sums of money for the care of pauper lunatics in private mad-houses and asylums. Extensive medical services were also delivered to paupers in the workhouse. Besides supplemented diets, the sick indoors were attended to by parish nurses. They were also treated by bought-in medical specialists in the form of parish surgeons, apothecaries and physicians. The poor in the workhouse were also provided with patent medicines and tonics which seem to have been aimed at pauper children whose presence in the workhouse was increasing over time. We have also seen that workhouse medicine was complex, but was clearly an important aspect of the relief culture in the early industrialising city. Indeed, what is truly remarkable is the continuity in poor law medical services over the century. Even with the development of specialist hospitals and related charities, the parish still provided out-door and indoor medical relief to the poor in All Saints. This is something which is still largely uncharted by historians of medicine. We have shown that the workhouse in All Saints acted as a subsidiary hospital for the very poor in the parish, utilised mainly by those whose demographic profiles did not match the criteria for the other hospitals in city, namely the young and elderly.

The fundamental importance of the proceeding chapters is that they have managed to trace the development of an urban healthcare system over a century long period (Figure 6.1 sets out an impression of this system). This was a system of healthcare which developed

⁷¹⁶ The author is currently working on two separate publications, the first of which looks at the relief culture in the city more generally and the second on how the poor in the city were clothed. See: G. Butler. 'The Poor, the Parish Workhouse and the Poor Law in Eighteenth-Century England: The Case of Newcastle-upon-Tyne, 1736-1830', *in-preparation*; G. Butler. 'Clothing the Poor in Georgian Newcastle, 1750-1800', *in-preparation*.

⁷¹⁷ King. *Poverty and Welfare in England, 1700-1850*, 33.

approximately two centuries before the creation of the Welfare State and the founding of the National Health Service. We began this thesis with the discussion of the John Groke and his family and it seems fitting to turn our attention back to their experience. They went through this system of healthcare when Groke and his family fell ill while lodging in Sandgate. Two of Groke's daughters, Catherine and Bridget, were visited and received medicines from the Dispensary. Groke's wife Ellen appealed to get her husband into the Infirmary and their youngest daughter Ellen was sent into All Saints workhouse suffering from catarrh. The family received extra-ordinary payments from the Overseers in the All Saints. People in the parish knew of Groke's unfortunate situation and one senses that some of their peers tried to do what they could to help them. Indeed, Groke commented after his two children had died that they had:

nothing in the house, [but] some of the neighbours got something for us. I could not eat anything ... but the family had some potatoes ... we had a noggin of rum ... about half a gill, which we gave to a women ... [we] would have been badly off if it had not been for the neighbours'.⁷¹⁸

When 'Joseph Wilkinson, a grocer at the foot of the Quayside' heard of the family's situation and that one of the girls was already dead he went to see the family in Sandgate. He commented on his arrival at the family's lodgings that 'I found a dead child lying amongst a few shavings ... I saw other two children ... lying amongst a few shavings [with] a ragged blanket ... [his] impression was they were dying'.⁷¹⁹ Wilkinson returned to his shop and 'provided the family some bread and tea'. When two of Groke's children had died the parish provided coffins and shrouds for the girls corpses, both of whom were then buried at the expense of the parish (probably in Ballast Hills).⁷²⁰

⁷¹⁸ Coroner's Inquest on Bridget Groke', The Newcastle Courant (January 3rd, 1840).

⁷¹⁹ *Ibid.*

⁷²⁰ All Saints parish burial register make no mention of the two girls.

INSERT FIGURE 6.1 HERE

Though, the case of the Groke family is one of sadness and loss, it is important because within it we can see at a microscopic level, the workings of an urban healthcare system. This was system which clearly interacted in the lives of the poor and must have played an important part in the ‘mixed economies of social welfare’ in the city.⁷²¹ The poor of eighteenth and early nineteenth-century Newcastle must have known individuals who circulated in this system. People must have had friends and family who were in the Infirmary. The men and women of early industrialising Newcastle must have seen their neighbours and neighbours children being visited by one of the Dispensary physicians. They themselves, along with many of their peers must have at some point, waited outside of the Dispensary to be seen by one of the surgeons or physicians or to get advice and medicines from the resident apothecary. Parents in the city would have known that they could take their children to be inoculated against smallpox – although whether they chose to do this or not is of course a different story.⁷²² The very poor within the city may have known that they could rely upon the parish for medical services when they were sick or injured while others, as Wrightson and Levine have stressed, may have wanted to avoid the personal shame or ‘prejudices ... of the parish in order to preserve to themselves a measure of freedom of action’ and not be branded with a workhouse badge.⁷²³ For these people, the development of the healthcare system we have traced must have been an important aspect of urban life in eighteenth and early nineteenth-century Newcastle.⁷²⁴ Moreover, however bad or ineffective these services were, they were something which the population seems to have wanted, and are thus important in their own right.⁷²⁵

Newcastle has its own history. How far was its experience shared with the rest of England in the period? We know that city’s booming coal trade played a vital role in what Wrigley called England’s ‘transition from an advanced organic economy’ to a ‘mineral based energy economy’.⁷²⁶ Was it the wealth of Newcastle’s merchants and coal owners which generated the healthcare system available to the poor?⁷²⁷ Did this make Newcastle’s experience unique?

⁷²¹ S. Williams. *Poverty, Gender and Life-Cycle in the English Poor Law, 1760-1834* (Woodbridge, 2011), 163

⁷²² Davenport et al. ‘The Decline of Adult Smallpox in Eighteenth-Century’, 1289-314; Razzell. ‘The Decline of Adult Smallpox in Eighteenth-Century London: A Commentary’, 1315-81.

⁷²³ Butler. ‘Clothing the Poor in Georgian Newcastle, 1750-1800’, *in preparation*.

⁷²⁴ Wrightson & Levine. *Poverty and Piety*, 184.

⁷²⁵ D. Wootton. *Bad Medicine: Doctors Doing Harm Since Hippocrates* (Oxford, 2006), 71-139, 151-250, 283-87

⁷²⁶ Wrigley. *Continuity, Chance and Change*, cited in Levine et al. *The Making of an Industrial Society*, viii-ix.

⁷²⁷ In a European context, this point was raised by Jones and Barry several years ago. They stressed ‘there is enough evidence to suggest ... that it was the richest areas and communities (notably the great cities) of pre-

These are important questions which can only be answered with further research. What we can say however, is that Newcastle seems to have shared in some of the more general influences which shaped the development of welfare and healthcare in the city – demographic growth, industrialisation, political radicalism, philanthropy and even religious change were at work in Newcastle over the course of the century.⁷²⁸ For sure, these were important in the development of the city's healthcare system.

In sum, it has been the poor who have been the principle concern of this thesis, and from our discussions we now know much more about the healthcare and medical assistance which was afforded to these people over a century. The discussions in the foregoing chapters means that we know a lot more about thousands of individuals, men women and children who were sick, injured or even dying. We have looked at individual case studies, and we have quantified the experience of thousands more. In essence, the thesis has been about individuals, people who had voices and shared the experience of sickness and disease in a period before penicillin and welfare state.⁷²⁹ These are people who are not easily traceable from historical records. They are people who, as one historian has wonderfully put it, that 'have become remote in time'.⁷³⁰ We have looked at the sad experience of John Groke and his family. Others of their class were Elizabeth Dickman, Mary Montgomery and her 'filthy' home in Sandgate, Margaret Greggs, John Turner, Isabella Collins, John Mitchison, William Levison and Giles Bruce, the list could go on.⁷³¹ All of these people shared at least one thing in common: they were unable to afford medical assistance when they were sick, disabled or mentally ill. Their individual experiences provide the context or 'human face' in our understanding of the ways in which disease impacted the lives of ordinary people in the past.⁷³² But above all what is especially striking, surely, is Newcastle's relatively generous institutional response to their plight.

industrial Europe which sustained the greatest range of charities', see: Barry et al. 'Introduction', in Barry et al eds., *Medicine and Charity*, 4.

⁷²⁸ For the best discussion of the political atmosphere in nineteenth-century Tyneside see: J. Hugman. 'Print and Preach: The Entrepreneurial Spirit of Nineteenth-Century Newcastle', in R. Colls & B. Lancaster eds., *Newcastle-upon-Tyne: A Modern History* (Chichester, 2001), 113-32; J. Allen. *Joseph Cowen and Popular Radicalism on Tyneside, 1829-1900* (London, 2007).

⁷²⁹ For a pioneering collection of essays on this subject see, J. Barry & C. Jones eds. *Medicine and Charity before the Welfare State* (London, 1991), 1-13.

⁷³⁰ Wrightson. *Ralph Taylor's Summer*, 155.

⁷³¹ Such a holistic methodology is based upon Peter Laslett's emphasis on the importance of what he termed 'understanding ourselves in time', see: P. Laslett. *The World we have Lost: Further Explored* (Cambridge, 1971), 274-86.

⁷³² For discussion see: E.P. Thompson's emphasis on the importance of context in history, see: E.P. Thompson. 'Anthropology and the Discipline of Historical Context', *Midland History*, 1 (1972), 45. Also see: Wrightson. *Ralph Taylor's Summer*, xi-xiv.

Appendices

Appendix One

Table 7.1 presents some rough estimates of the population of Tyneside using the methods discussed in Chapter 1.

Table 7.1 *Estimates of the population of Tyneside, 1736-1840*

	(1)	(2)	(3)
1736	22,066	20,369	18,914
1737	21,033	19,415	18,028
1738	21,533	19,876	18,457
1739	22,866	21,107	19,600
1740	21,200	19,569	18,171
1741	18,700	17,261	16,028
1742	20,533	18,953	17,600
1743	21,500	19,846	18,428
1744	22,300	20,584	19,114
1745	22,766	21,015	19,514
1746	17,866	16,492	15,314
1747	23,666	21,846	20,285
1748	22,700	20,953	19,457
1749	22,533	20,800	19,314
1750	23,500	21,692	20,142
1751	21,400	19,753	18,342
1752	22,400	20,676	19,200
1753	27,066	24,984	23,200
1754	24,833	22,923	21,285
1755	22,433	20,707	19,228
1756	22,466	19,907	18,485
1757	22,500	20,769	19,285
1758	19,933	18,400	17,085
1759	20,666	19,076	17,114
1760	16,066	14,830	13,771
1761	22,833	21,076	19,571
1762	19,133	17,661	16,400
1763	26,066	24,061	22,342
1764	28,133	25,969	24,114
1765	26,700	25,261	22,885
1766	30,033	27,723	25,742
1767	22,433	20,707	19,228
1768	26,433	24,400	22,657
1769	29,266	27,015	25,085
1770	28,366	26,184	24,314
1771	27,900	25,753	23,914
1772	25,300	23,353	21,685
1773	28,133	25,969	24,114
1774	28,400	26,215	24,342
1775	27,400	25,292	23,485
1776	27,400	25,292	23,485
1777	31,100	28,707	26,657
1778	30,166	27,846	25,857
1779	28,833	26,615	24,714
1780	30,500	28,153	26,142
1781	28,500	26,307	24,428
1782	30,866	28,492	26,457
1783	30,733	28,369	26,342

1784	39,466	36,430	33,828
1785	40,766	37,630	34,942
1786	32,133	29,661	27,028
1787	31,600	29,169	27,085
1788	41,933	38,707	35,942
1789	36,066	33,292	30,914
1790	32,700	30,184	28,028
1791	30,233	27,907	25,914
1792	37,166	34,307	31,857
1793	36,233	33,446	31,057
1794	32,600	30,092	27,942
1795	35,066	32,369	30,057
1796	31,366	28,953	26,885
1797	37,766	34,861	32,371
1798	35,066	32,369	30,057
1799	34,800	32,123	29,828
1800	35,666	32,923	30,571
1801	38,366	35,415	32,885
1802	41,766	38,553	35,800
1803	44,500	41,076	38,142
1804	44,433	41,015	38,085
1805	43,366	40,030	37,171
1806	44,600	41,169	38,228
1807	46,600	43,015	39,942
1808	45,000	41,538	38,571
1809	47,433	43,784	40,657
1810	46,900	43,292	40,200
1811	44,533	41,107	38,171
1812	48,500	44,769	41,571
1813	45,633	42,123	39,114
1814	49,200	45,415	42,171
1815	No Data	No Data	No Data
1816	50,633	46,738	43,400
1817	54,466	50,276	46,685
1818	76,766	70,861	65,800
1819	70,766	65,323	60,657
1820	61,466	56,738	52,685
1821	84,033	77,569	72,028
1822	78,833	72,769	67,571
1823	92,966	85,815	79,685
1824	70,366	64,953	60,314
1825	68,533	63,261	58,742
1826	70,500	65,076	60,428
1827	75,266	69,476	64,514
1828	75,133	69,353	64,400
1829	75,000	69,230	64,285
1830	89,200	82,338	76,457
1831	75,566	69,753	64,771
1832	72,666	67,076	67,076
1833	72,033	66,492	61,742
1834	76,133	70,276	65,257
1835	77,933	71,938	66,800
1836	82,100	75,784	70,371
1837	84,933	79,507	72,800
1838	79,900	73,753	68,485
1839	80,600	74,400	69,085
1840	83,800	77,353	71,828

(1) Estimated population using corrected births and birth rate of 30 per 1000

(2) Estimated population using corrected births and birth rate of 32.5 per 1000

(3) Estimated population using corrected births and birth rate of 35 per 1000

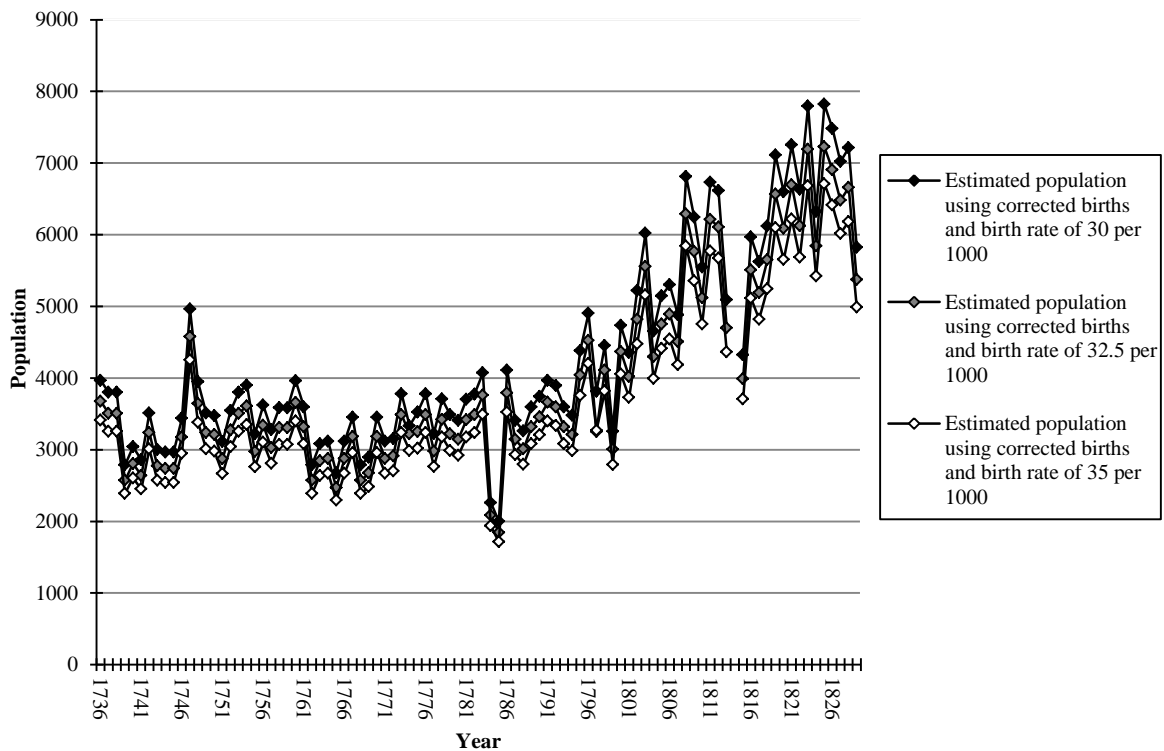
Source: Bills of Mortality database. The population estimates are based upon all of the parishes included in the Bills of Mortality, the overall estimates also therefore, include the parishes in Gateshead.

Appendix Two

7.2 New population estimates for Newcastle and Gateshead parishes

Once having corrected the totals of baptism in the Bills of Mortality, using Wrigley and Schofield's correction factors to take into account the growth of religious dissent, delayed baptism and other factors Figures 7.1-7.5 presents three rough estimates of the population of each parish included in the Bills of Mortality using notional birth rates of between 30 and 35 per 1000.⁷³³ 'The lower the birth rate the higher the estimated population'.⁷³⁴

Figure 7.1 *Estimates of the Population of St Nicholas Parish, Newcastle, 1736-1829*

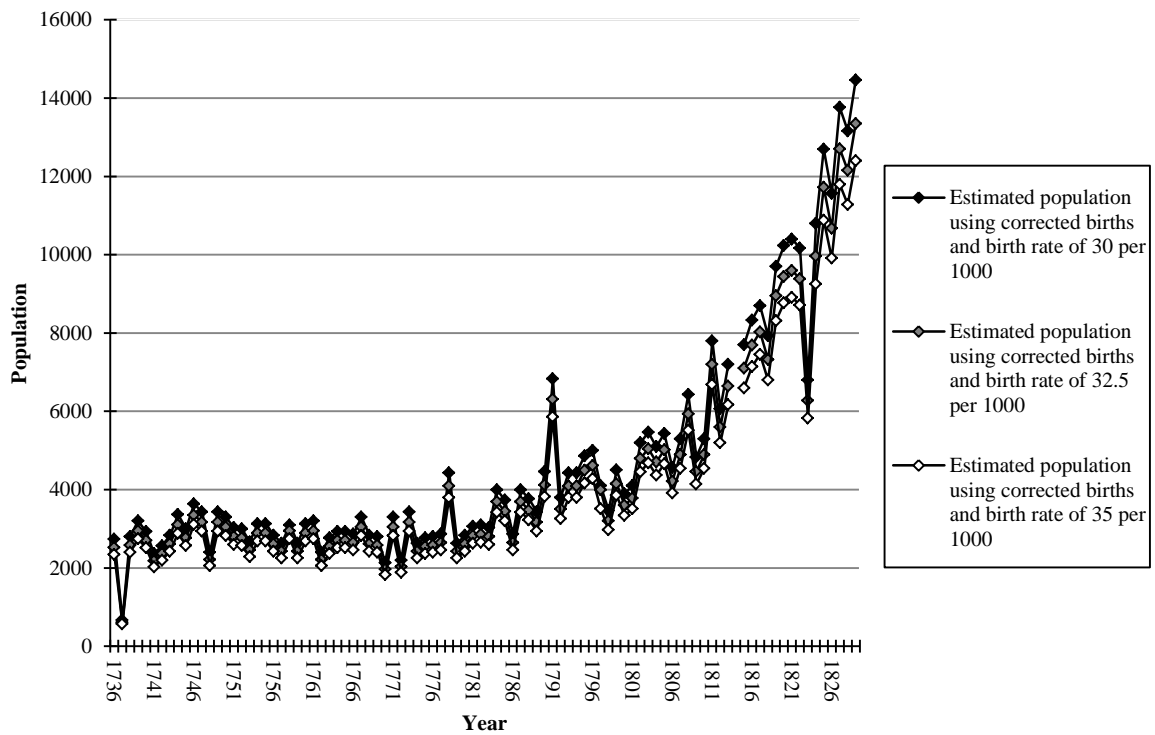


Source: Bills of Mortality database.

⁷³³ For discussion see: Wrigley et al. *The Population History of England, 1541-1871*, p. 89-102

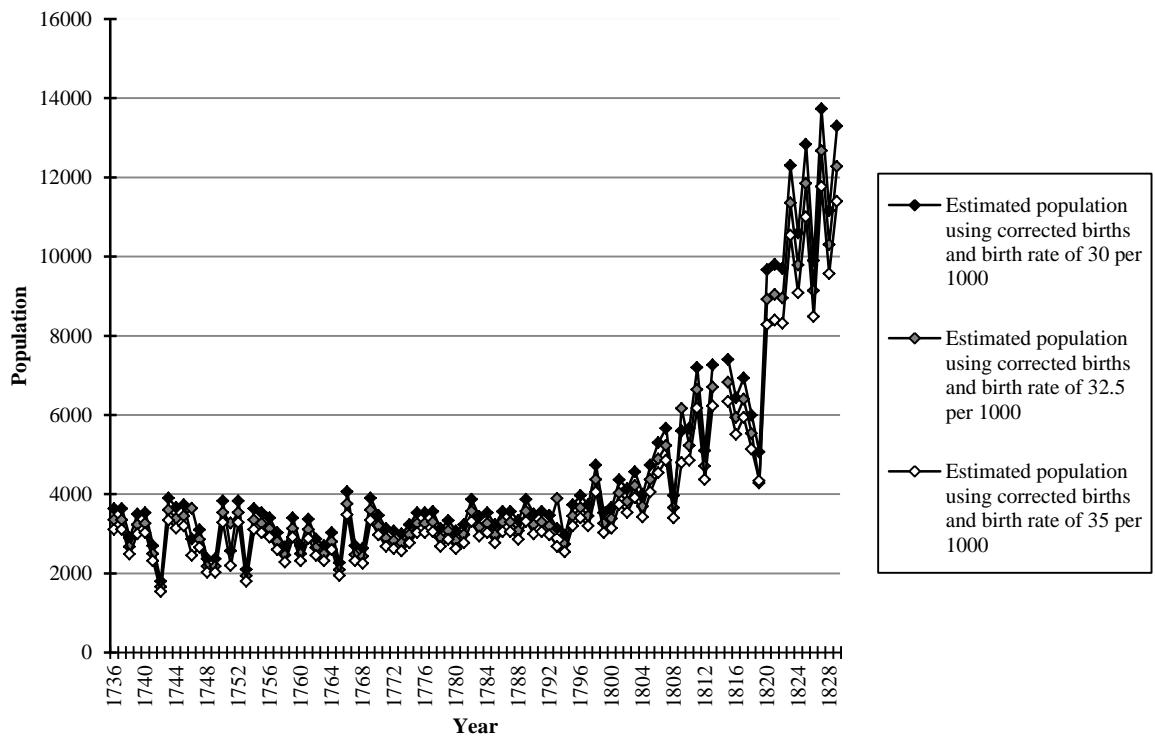
⁷³⁴ Boulton et al. 'The Comforts of a Private Fireside', p. 225

Figure 7.2 *Estimates of the Population of St John's Parish, Newcastle, 1736-1829*



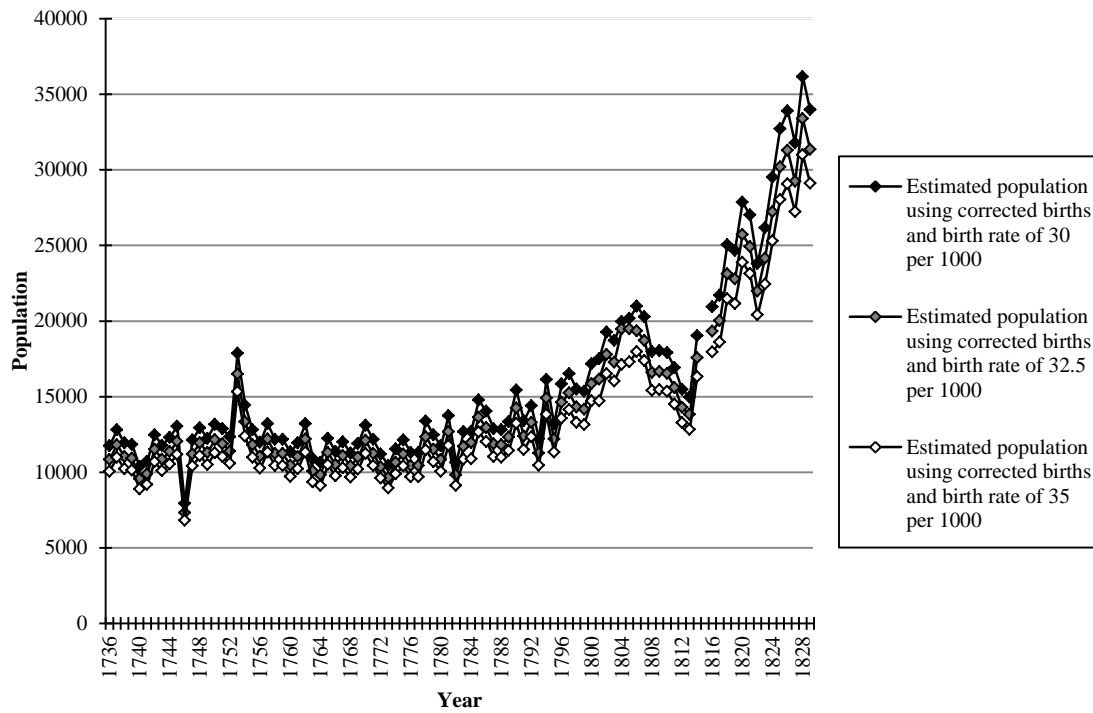
Source: Same as Figure 1.9.

Figure 7.3 *Estimates of the Population of St Andrew's Parish, Newcastle, 1736-1829*



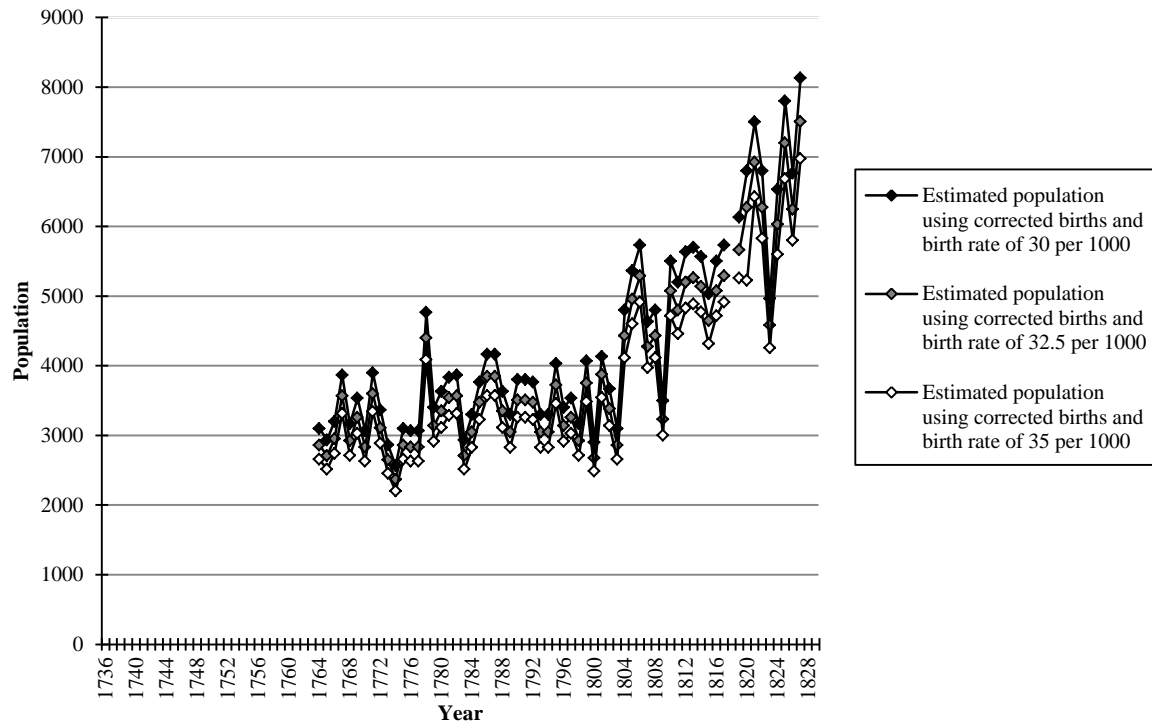
Source: Same as Figure 1.9.

Figure 7.4 *Estimates of the Population of All Saints Parish, Newcastle, 1736-1829*



Source: Same as Figure 1.9.

Figure 7.5 *Estimates of the total population of Gateshead, 1736-1830*



Source: Same as Figure 1.9.

These estimates suggest all of the parishes in the Newcastle and Gateshead experienced rather slow growth during the course of the eighteenth-century and that it was not until the nineteenth-century when the population of Tyneside truly began to grow.

Appendix Three

Table 7.2 *The male occupational structure of Newcastle and Gateshead from occupations listed in legitimate baptisms, 1813-1820*

Sector	Group	Gateshead 1813-20 Parish Registers legitimate baptisms	%	Newcastle 1813-20 Parish Registers legitimate baptisms	%	
PRIMARY	Agriculture	206	4.9%	759	6.1%	
	Estate work	0	0.0%	0	0.0%	
	Fishing	0	0.0%	2	0.0%	
	Forestry	2	0.0%	0	0.0%	
	Mining and quarrying	683	16.2%	814	6.5%	
PRIMARY Total		890		1,575		
SECONDARY	Boat and ship building	114	2.7%	309	2.5%	
	Brick and tile manufacture	7	0.2%	45	0.4%	
	Building and construction	310	7.4%	1,013	8.1%	
	Chemical, soap, adhesives, manufacture	6	0.1%	6	0.0%	
	Clothing	59	1.4%	358	2.9%	
	Drink industries	28	0.7%	85	0.7%	
	Earthenware, pottery manufacture	75	1.8%	130	1.0%	
	Food industries	133	3.2%	428	3.4%	
	Footwear	227	5.4%	726	5.8%	
	Fuel industries	0	0.0%	0	0.0%	
	Furnishing	0	0.0%	1	0.0%	
	Glass industries	128	3.0%	363	2.9%	
	Industries producing products from fibres	67	1.6%	64	0.5%	
	Industries using leather, bone etc.	25	0.6%	175	1.4%	
	Instrument making	20	0.5%	71	0.6%	
	Iron and steel manufacture and products	583	13.9%	427	3.4%	
	Machines and tools, making and operation	101	2.4%	178	1.4%	
	Metal working	0	0.0%	4	0.0%	
	Minor manufactures and trades	25	0.6%	7	0.1%	
	Non-ferrous metal manufacture and products	46	1.1%	102	0.8%	
	Paper industries	6	0.1%	15	0.1%	
	Precious metals and jewelry	2	0.0%	28	0.2%	
	Printing	14	0.3%	64	0.5%	
	Public Works	0	0.0%	14	0.1%	
	Road transport vehicles	14	0.3%	95	0.8%	
	Stone and mineral processing industries	0	0.0%	7	0.1%	
	Textiles	74	1.7%	271	2.2%	
	Tobacco industries	0	0.0%	2	0.0%	
	Wood industries	114	2.7%	416	3.3%	
	Unspecified SECONDARY	2	0.0%	3	0.0%	
	SECONDARY Total		2,178		5,406	
	TERTIARY dealers	Dealers in chemicals and chemical products	0	0.0%	2	0.0%
		Dealers in drink	6	0.1%	26	0.2%
Dealers in earthenware, pottery		0	0.0%	3	0.0%	
Dealers in food		5	0.1%	11	0.1%	
Dealers in glass and glass products		0	0.0%	0	0.0%	
Dealers in iron and steel, and iron and steel products		4	0.1%	1	0.0%	
Dealers in instruments		0	0.0%	0	0.0%	
Dealers in leather, hair and related animal products		0	0.0%	1	0.0%	
Dealers in live animals		0	0.0%	0	0.0%	
Dealers in machines, tools		0	0.0%	0	0.0%	
Dealers in precious metals and jewelry		0	0.0%	0	0.0%	
Dealers in textiles and products		6	0.1%	20	0.2%	
Dealers in wood and wood products		2	0.0%	2	0.0%	
Fuel dealers		0	0.0%	28	0.2%	
Unspecified Dealers		36	0.9%	174	1.4%	
TERTIARY dealers Total			58	1.4%	268	2.1%
TERTIARY sellers		Sellers of chemical products	9	0.2%	28	0.2%
	Sellers of clothing and clothing accessories	2	0.0%	9	0.1%	
	Sellers of food	13	0.3%	91	0.7%	

	Sellers of fuel	0	0.0%	0	0.0%
	Sellers of paper products	2	0.0%	12	0.1%
	Sellers of precious metal products and jewelry	2	0.0%	6	0.0%
	Sellers of printed products	4	0.1%	7	0.1%
	Sellers of textiles and products	8	0.2%	34	0.3%
	Sellers of tobacco	0	0.0%	34	0.3%
	Sellers of wood products	0	0.0%	4	0.0%
	Small traders	4	0.1%	13	0.1%
	Unspecified Sellers	5	0.1%	32	0.3%
TERTIARY sellers Total		48	1.1%	270	2.2%
TERTIARY services and professions	Armed forces	55	1.3%	424	3.4%
	Commercial and administrative services	62	1.5%	173	1.4%
	Distinguished, titled, gentleman	8	0.2%	90	0.7%
	Domestic service	14	0.3%	71	0.6%
	Entertainment	2	0.0%	19	0.2%
	Financial services and professions	4	0.1%	46	0.4%
	Food, drink and accommodation services	19	0.4%	168	1.3%
	Local government service	0	0.0%	15	0.1%
	Media	0	0.0%	0	0.0%
	Miscellaneous service industries	34	0.8%	112	0.9%
	National government service	17	0.4%	92	0.7%
	Owners, possessors of capital	0	0.0%	14	0.1%
	Professional support	0	0.0%	18	0.1%
	Professions	32	0.8%	175	1.4%
	Storage	6	0.1%	1	0.0%
TERTIARY services and professions Total		252		1,419	
Transport and Communications	Communications	0	0.0%	0	0.0%
	Inland navigation	109	2.6%	1,336	10.7%
	Rail transport	0	0.0%	0	0.0%
	Road transport (animal power)	124	2.9%	245	2.0%
	Road transport (motorised)	0	0.0%	0	0.0%
	Sea transport	288	6.9%	1,025	8.2%
	Unspecified Transport	10	0.2%	17	0.1%
Transport and Communications Total		532		2,624	
Without occupation or unstated	No stated occupation	13	0.3%	72	0.6%
	Uncertain status	2	0.0%	7	0.1%
	Sectorally unspecific occupations	235	5.6%	874	7.0%
Without occupation, unstated, or unspecified total		15	0.4%	79	0.6%
Grand Total		4,209	100.0%	12,515	100.0%

Note: I am extremely grateful to Dr Leigh Shaw-Taylor, Prof Tony Wrigley and Dr Peter Kitson for generously sharing their data on Newcastle's and Gateshead occupational structure.

Source: Male Occupational Structure Project, Cambridge Group for the History of Population and Social Change.

Table 7.3 *The male occupational structure of Newcastle and Gateshead recorded in the 1851 Census*

Sector	Group	1851 Census Gateshead No. of men aged 20+	%	1851 Census Newcastle- upon-Tyne No. of men aged 20+	%
PRIMARY	Agriculture	854	6.2%	619	2.2%
	Estate work	2	0.0%	2	0.0%
	Fishing	6	0.0%	7	0.0%
	Forestry	41	0.3%	3	0.0%
	Mining and quarrying	2,023	14.6%	560	2.0%
PRIMARY Total		2,926	21.1%	1,191	4.3%
SECONDARY	Boat and ship building	510	3.7%	599	2.2%
	Brick and tile manufacture	98	0.7%	90	0.3%
	Building and construction	1,308	9.4%	3,779	13.6%
	Chemical, soap, adhesives, manufacture	623	4.5%	130	0.5%
	Clothing	246	1.8%	931	3.3%
	Drink industries	72	0.5%	274	1.0%
	Earthenware, pottery manufacture	44	0.3%	321	1.2%
	Food industries	245	1.8%	773	2.8%
	Footwear	334	2.4%	1,114	4.0%
	Fuel industries	9	0.1%	28	0.1%
	Furnishing	0	0.0%	1	0.0%
	Glass industries	307	2.2%	353	1.3%
	Industries producing products from fibres	45	0.3%	96	0.3%
	Industries using leather, bone etc.	70	0.5%	370	1.3%
	Instrument making	22	0.2%	131	0.5%
	Iron and steel manufacture and products	1,610	11.6%	1,490	5.3%
	Machines and tools, making and operation	363	2.6%	1,087	3.9%
	Metal working	0	0.0%	0	0.0%
	Minor manufactures and trades	37	0.3%	23	0.1%
	Non-ferrous metal manufacture and products	148	1.1%	398	1.4%
	Paper industries	44	0.3%	79	0.3%
	Precious metals and jewelry	2	0.0%	57	0.2%
	Printing	46	0.3%	276	1.0%
	Public Works	380	2.7%	719	2.6%
	Road transport vehicles	61	0.4%	169	0.6%
	Stone and mineral processing industries	78	0.6%	65	0.2%
	Textiles	66	0.5%	349	1.3%
	Tobacco industries	0	0.0%	0	0.0%
	Wood industries	306	2.2%	1,405	5.0%
SECONDARY Total	Unspecified SECONDARY	5	0.0%	18	0.1%
TERTIARY dealers		7,079	51.1%	15,125	54.3%
	Dealers in chemicals and chemical products	0	0.0%	2	0.0%
	Dealers in drink	31	0.2%	127	0.5%
	Dealers in earthenware, pottery	2	0.0%	18	0.1%
	Dealers in food	19	0.1%	113	0.4%
	Dealers in glass and glass products	2	0.0%	18	0.1%
	Dealers in iron and steel, and iron and steel products	0	0.0%	0	0.0%
	Dealers in instruments	3	0.0%	20	0.1%
	Dealers in leather, hair and related animal products	0	0.0%	9	0.0%
	Dealers in live animals	11	0.1%	71	0.3%
	Dealers in machines, tools	0	0.0%	4	0.0%
	Dealers in precious metals and jewelry	0	0.0%	1	0.0%
	Dealers in textiles and products	42	0.3%	90	0.3%
	Dealers in wood and wood products	15	0.1%	26	0.1%
	Fuel dealers	0	0.0%	0	0.0%
	Unspecified Dealers	39	0.3%	196	0.7%
TERTIARY dealers Total		164	1.2%	695	2.5%
TERTIARY sellers	Sellers of chemical products	39	0.3%	139	0.5%
	Sellers of clothing and clothing accessories	9	0.1%	26	0.1%
	Sellers of food	162	1.2%	553	2.0%
	Sellers of fuel	11	0.1%	24	0.1%
	Sellers of paper products	11	0.1%	46	0.2%
	Sellers of precious metal products and jewelry	0	0.0%	0	0.0%
	Sellers of printed products	6	0.0%	89	0.3%
	Sellers of textiles and products	4	0.0%	317	1.1%
	Sellers of tobacco	7	0.1%	48	0.2%
	Sellers of wood products	0	0.0%	0	0.0%

	Small traders	60	0.4%	193	0.7%
	Unspecified Sellers	28	0.2%	103	0.4%
TERTIARY sellers Total		337	2.4%	1,538	5.5%
TERTIARY services and professions	Armed forces	8	0.1%	447	1.6%
	Commercial and administrative services	127	0.9%	409	1.5%
	Distinguished, titled, gentleman	7	0.1%	29	0.1%
	Domestic service	78	0.6%	167	0.6%
	Entertainment	36	0.3%	155	0.6%
	Financial services and professions	15	0.1%	63	0.2%
	Food, drink and accommodation services	127	0.9%	471	1.7%
	Local government service	42	0.3%	186	0.7%
	Media	10	0.1%	120	0.4%
	Miscellaneous service industries	21	0.2%	77	0.3%
	National government service	31	0.2%	117	0.4%
	Owners, possessors of capital	41	0.3%	101	0.4%
	Professional support	28	0.2%	110	0.4%
	Professions	166	1.2%	492	1.8%
	Storage	8	0.1%	71	0.3%
TERTIARY services and professions Total		745	5.4%	3,015	10.8%
Transport and Communications	Communications	25	0.2%	146	0.5%
	Inland navigation	430	3.1%	434	1.6%
	Rail transport	336	2.4%	439	1.6%
	Road transport (animal power)	232	1.7%	696	2.5%
	Road transport (motorised)	0	0.0%	1	0.0%
	Sea transport	154	1.1%	1,678	6.0%
	Unspecified Transport	13	0.1%	116	0.4%
Transport and Communications Total		1,190	8.6%	3,510	12.6%
Without occupation or unstated	No stated occupation	101	0.7%	334	1.2%
	Uncertain status	257	1.9%	258	0.9%
	Sectorally unspecific occupations	1,060	7.6%	2,190	7.9%
Without occupation, unstated, or unspecified total		1,418	10.2%	2,782	10.0%
Grand Total		13,859	100.0%	27,856	100.0%

Source: Male Occupational Structure Project, Cambridge Group for the History of Population and Social Change.

Appendix four

The following appendix is extracted from the minutes of the Select Vestry of All Saints parish held on Monday 7th November 1831. The original minute book is held in Tyne and Wear Archives, reference: TWAM 566/10.

Select Vestry men	Overseers	Churchwardens
Mr Forster	Mr Orminston	Mr Harrison
Mr Oliver	Mr Elliot	
Mr Crawhall	Mr Baker	
Mr Atkinsworth		
Mr Hall		
Mr Teasdale		
Mr Spence		
Mr Temple		

Mr Baker having stated that it was the opinion of the mayor and other members of the Board of Health that the Cholera Morbus at present raging in Sunderland was Continental Cholera.

It was unanimously resolved.

That ... the Select Vestry and other Officers of this parish to use every means in their powers to prevent its introduction into this parish and also to put the parish into such a state as to render the probability of its spreading less likely to take place in the weeks of its unfortunate introduction for which purpose it was determined to survey the houses streets and to order such precautionary measures as might seem likely to attain the object in view.

It was also unanimously resolved:

That the following classification should be adopted and that the survey should take place forthwith.⁷³⁵

(1) Pilgrim Ward	(2) Quayside Ward	(3) Pandon Ward	(4) Sandgate
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Pilgrim Ward

Mr Temple reported that the committee had visited part of Pilgrim Ward – that they found 17 cases of intermitting fever – more of which appeared dangerous and all with the exception of one case (an infant) under medical care.

It also reported the following nuisances which ought to be removed forthwith.

Bells Court – a sink belonging to Mr Bainbridge and Mr Brunton and a number of ash holes in the same neighbourhood which ought to be cleaned out.

⁷³⁵ TWAM 466/10

A midden at the steam soup kitchen which shl'd be taken away

A midden at the Pack Horse Pilgrim Street which ought also to be removed. Another midden at the Fox and Lamb a very great nuisance which ought to be removed without the utmost disposal.

Another midden which belongs to Messrs Richardson which is to be removed

Mrs Hulbert at the Head of Painter Hough to clean away the midden at her premises

The pavement at the Head of Georges Stairs to the Pant full of holes which hold the water – should be repaired.

Richardson Entry, another midden which should be removed.

Pollack's property in Silver Street – a most obnoxious midden shl'd be removed

Meeting House Lane – midden to be removed and pavement to be repaired.

Galloway and Embelton's property near Meeting House – a midden a very great nuisance and a drain is much wanted and at the back of these premises there is a space of about 3 feet wide filled with filth of every description which should be cleaned out without a moments delay.

Ann Wesley in the same neighbourhood – she and her family are disgustingly filthy and her house is abominably so.

Burney's property – a midden to be removed

Mason's property Silver Street – 2 middens to be removed

The pavement of Silver Street bad – a drain is also much wanted.

Foot of Manor Chare – Town's Butcher – midden to be removed.

Richardson's property near Manor Chare- midden to be removed.

Taylor's property – midden to be removed.

'The magistrates be requested to recommend to the Owners of property in the narrow lanes on the Quayside, Pandon & Sandgate the propriety of their washing the outsides of their houses with quick lime'.

Resolved unanimously. That the above request be approved of and a copy thereof be presented to the magistrates.

A. Teasdale, Chairman

Continued

The committee of Pilgrim Ward having finished their survey, made the following additional report:

That the midden behind the Three Tonnes Inn at the Head of Manor Chare was most offensive and ought without loss of time to be removed. – That it is the convenience used by numerous workmen in the employment of Wm. Grainger and the accumulation of soil is such as to impact the neighbourhood for a considerable time and it grossly offensive to those in the immediate vicinity.

Baker's passage – a midden down this passage is to be taken away and the inhabitants complain that for the want of a common sewer they are obliged to throw the whole of their dirty water into this midden.

Bind and Bush Yard – several middens should be taken away.

Property belonging to Miss Robson a little way below the Bind and Bush Yard – in a very filthy state and the tenants that the sewer is stopped.

Heaths Yard – several sewers should be removed.

Hutchinson Tallow Chandler – the necessary in a most offensive state'

Lambert's Attorney Yard – a very filthy state, should be cleaned out.

Four cases of fever, most surprisingly dangerous and all under medical care.

Quayside Ward

The committee for Quayside Ward reported:

That the Chares were much cleaner than usual – that there were some dirty people in Grinding Chare who had very dirty rooms – that in particular the rooms of Dunlop and Taylor were excessively filthy – in Blair Chare the tenements were dirty but upon the recommendation of the committee they seemed disposed to clean – an extremely offensive midden belonging to Mr Hall, Butcher and a request that it be removed.

Pepper Corn Chare – On evident appearance on attention to our favour to the general cleanliness with the same few exemptions – yet we hope they will emulate their neighbours.

Colview Chare – Same dirty rooms which we hope will be attended too.

Plummers Chare – Tenants and rooms all clean – but they complain heavily of a privy belonging to Robert Laws house – ordered to be cleaned out.

Broad Garth – Tenements and tenant clean with the exception of a filthy pig sty belonging to James Robinson.

Newcastle Chare – Majority dirty people in many dirty rooms.

Brown Bank – the entrance to the conduit without a gate – very dangerous for Children.

Byker Chare – One dirty room.

Cox Chare – Same rooms recently cleaned – others get very dirty.

Pandon Street – in a dirty state – pavement bad – dirty houses and filthy inhabitants is a nuisance of a bad kind in premises belonging to Miss Bell. Several tenements immediately adjoining in a filthy condition.

Blyth's Nook in general occupied by the lowest grade of persons in the most filthy constitution.

Only four cases of fever met us and they were all of a mild character. Throughout the district the necessity of cleanliness and free ventilation has been strongly recommended, & Lime has also been freely offered to all who chose to apply at the Poor House.

Pandon Ward

The committee reported that a drain opposite Marshall's the Chimney Sweep in Pandon – required to be cleaned.

That a very bad smell issued from the Barn Loft in Pandon belonging to Geo Willkie, that W. Bell property in Wall Knoll and Pandon Dean ought to be removed.

That Mr McKenzie's Dunghill on the New Road and John Cawthornes at New Road Cottages should be removed- Also that Mr Libbetts midden on New Road be taken away.

That the Yard in Sandgate belonging to Mr Jones was filthy - to be cleaned out.

That the Dunghill in Maggot Lane belonging to Cath Jordon – be removed.

That W. Johnsons property was in a filthy state – be cleaned.

Sandgate Ward

The committee reported that in Pothouse Lane they found that Henry Carr was in the habit of keeping pigs in a very improper situation – which he promised to remove forthwith.

That owing to the faulty state of the roof of a house belonging to Luke Scaif of Summer Hill the tenants Renwick and Others were under the necessity of laying ashes rubbish etc to absorb the moisture which rendered the room moist and damp consequently un-healthy – and an adjoining house occupied by McKay and others was in a very dirty condition and should be washed with quick lime.

That in James Chare, Galloway's property occupied by Mary Montgomery was extremely dirty and should also be washed with quick lime.

That in Blue Bells Entry Jams Robertson's house was in the same state and should also be washed over with quick lime.

That a large deposit for ashes and filth of every kind ... behind Proctors Lane, North Shore belonging to the Gas Company to be removed.

That if possible to wholesale deposit called Sandgate Midden where Butchers offal, blood and other animal matter from the slaughter houses, often in a high state of futurity are laid – ought to be removed.

That the pavement of Sandgate in several places but particularly opposite Gibley's Public House where it has cut into deep rutts so as to throw past scavengers – ought to be repaired.

That the sewers at Wide Open – one behind Bruce’s Building the others near the Smith’s Shops was stopped up and ought at once to be opened up.

That the whole of the pavement of the North Shore but particularly opposite Mr Taylor’s Sail Shop is in a bad state and should be repaired.

That the east entrance to Sandgate the middle of the street is lower than the water courses on the side, which renders it constantly dirty and that although not strictly within the province of the Committee they take the liberty to say that the steps there leading down to the Banks are so worn as to render them dangerous and that in fact several persons have fallen and received serious injury.

That at the Head of the Tyne that near Scott the shoe maker the Gate is stopped and the water stagnant – that in the same street 3 middens belonging to Master, Coastmann and one belonging to Walker shld be removed.

That the Sewer in St Lawrence Square is out of use – that the middens belonging to Alderman Smith and the one at the Green Tree ought to be removed.

That the Sewer at Fighting Cocks Row is stopped and ought to be cleaned out.

That a paved drain is much wanted behind French and Smiths and that the midden ought to be removed from the back of the Wall for both of these premises.

That a paved drain at the north end ... of Sandgate where the water is at present stagnant would be conducive to health.

That a room in Mrs Brown’s premises occupied by Jopling is in a most wretched state – that a very filthy and offensive midden in Butchers Yard should be casted away.

That in Mill Hill, paved water course are much wanted.

That there were only four cases of fever more of which appeared dangerous.

The committee were not able in many cases to ascertain who were the proprietors of the underground drains.

---- ENDS.

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Figure 6.1 A Model of healthcare for the Urban Poor in Newcastle c. 1750-1850

