There were two prevalent views about mineworkers’ bodies in Victorian Britain. On the one hand, miners were represented as a distinctive class of workmen, prey to numerous diseases ‘induced by the very unwholesome nature of [their] occupation’.1 On the other, coalmining was represented as healthy work and miners were admired for their physical robustness.2 These contrasting ideas about the health effects of coalmining shaped public perceptions of the industry as well as miners’ view of themselves. As a contributor to the Miner and Workmen’s Advocate wrote in 1863, miners were ‘strong and active men’, but ‘pallid in complexion and bent in form, by reason of excessive labour, heat, and foul air, which they are constantly obliged to breathe’.3 From the late eighteenth century onwards, the physical characteristics of coalminers and the particular health problems associated with underground work, came under increasing scrutiny. The ‘habits and diseases’ of miners were increasingly captured in a net of professional narratives by doctors, policymakers and social reformers which revealed the ways in which the health and occupational illnesses of colliers compared with those working in other sectors of the industrial economy. This work drew attention to the manifold causes of illness and incapacity in mine work beyond the accidents that prompted government inspection, suggesting a much wider experience of disablement in the coal industry.

This chapter charts and explains this growing interest in the bodies of mineworkers, placing it in the context of broader campaigns for public health and industrial reform. Focusing in particular on the services provided through workplace ‘sick clubs’, the chapter examines the development of medical responses to sickness and injury in and around coalmining communities in late eighteenth- and nineteenth-century Britain and shows how the coal industry was innovative both in the extent of medical provision available to workers
and in a variety of responses to workplace injury from first aid to specialist convalescent homes. The expansion of medical services made mineworkers, like other industrial workers, increasingly subject to medical surveillance. Yet the history of medical intervention in the lives of Britain’s nineteenth-century coalminers is not simply one of increasing professional authority over the bodies of industrial workers. Like other working people, sick and disabled miners and their families might demonstrate agency and independence in their dealings with doctors.

Mining bodies

The different working conditions within coalfields and between them made the overall physical health and appearance of miners difficult to generalise. When parliamentary commissioners gathered information on a pit-by-pit basis as part of the great inquiry into the employment of children in the early 1840s they discovered a good deal of variation in the incidence of disease, deformity and perceptions of good or ill health between mines. Mr Atkinson, a surgeon employed by Wylam Colliery in Northumberland, reported that ‘pitmen have more sickness here perhaps than at many other collieries’ on account of its low position near the river Tyne and the smoke coming from the adjacent ironworks and coke ovens.4 As we saw in the previous chapter, conditions underground varied considerably and factors such as the thickness of coal seams were deemed to have a decisive effect on the physical characteristics of those who worked them. Those men who worked in seams of ‘sufficient thickness to permit the free use of muscular action’ were ‘erect and of good figures’, but those cutting coal in narrower seams ‘have the spine permanently curved, and the legs frequently bowed’.5 The variety of risks associated with working in different seams, the differing qualities of the coal mined and the varying degrees of exertion required to extract it meant, as J. T. Arlidge wrote in 1892, that ‘data respecting the health of colliers for one district, or even one pit, compared with another, are not of general application’.6

The variation in conditions was reflected in differing experiences of occupational mortality in nineteenth-century mining. As Anthony S. Wohl has noted, whereas the death rate among men aged 45–55 among the south Wales miners at the end of the nineteenth century was 24.47 per 1000 living compared with a national average of 21.37, in north-east England it was only 16.35.7 Setting aside the high mortality in mining caused by accidents, experts on occupational diseases such as Arlidge regarded conditions in coalmining as relatively favourable to health. Miners, he wrote, ‘escape the evils of sedentary work; their hours of labour are shorter than those of many indoor
occupations’ and the ‘circumstances of their employment is a bar to riotous living’. Working underground preserved miners from inclement weather, providing a more ‘equable climate than outdoor workers’. Many miners received allowances of free or cheap coal from their employers to heat their homes and these were also seen as contributing to the ‘healthy’ environment in which colliers and their families lived. The dirty nature of underground labour furthermore made it necessary for miners to adopt regimes of hygiene and cleanliness, which were seen as improving their overall health. Although opinions on miners’ hygiene varied, evidence supplied by medical officers of the Merthyr Tydfil Poor Law Union for Edwin Chadwick’s Sanitary Report of 1842 suggested that the ‘health of the colliery population was very good – a circumstance which is ascribed to their habitual cleanliness’. Washing in a tub on return from work made miners less liable to ‘cutaneous disease’ than other workmen who ‘do not wash so completely or thoroughly’.

Above all, the arduous nature of mine work, from hewing coal to hauling it through underground passages and winching it to the surface, contributed to the idea that those who entered the pits were selected on the basis of their physical strength, making them more resilient to disease or constitutional weakness than others. James Essex, a surgeon from Pontypool echoed the view of many other medical witnesses to the 1842 Children’s Employment Commission when he stated that coalminers were ‘superior’ in ‘physical strength’ to those employed in agriculture. They were also ‘capable of enduring more fatigue’, since labour was apportioned to a worker’s strength.

By the end of the nineteenth century, the idea of colliers as ‘picked men physically’ was commonplace. ‘As the work of a collier requires considerable bodily vigour’ explained Arlidge, ‘it will be taken up by the stronger members of a community’. However, although ‘extraordinary muscular development’ was regarded as one of several physical characteristics that distinguished miners from the general population, miners’ ‘muscularity’ was not necessarily regarded as a source of health or general able-bodiedness. In his pioneering study, The Effects of the Principal Arts, Trades and Professions ... on Health and Longevity (1831), Charles Turner Thackrah described ways in which hard physical work done by coalminers around his native Leeds caused ‘deformity’ since ‘one set of muscles is immoderately and almost constantly exerted, while another wastes for want of action’, causing other defects such as spinal curvature.

As the coal industry expanded, the physical distinctiveness of miners became a matter of public discussion. The human scenery of a ‘northern coal district’ was, according to a Penny Magazine article of 1835, as notable as its physical geography. Pitmen, ‘black as sweeps’, were ‘in a great measure
[set] apart from other classes of the community’, a ‘distinct race from the neighbouring peasantry’. For all miners, working in darkness meant that their complexions, when visible beneath the grime, were ‘generally sallow and unhealthy’, their eyelids often ‘swollen’ and their eyes ‘diminutive’ in appearance. The article contended that the ‘physiognomy of miners’ was not ‘of a very intellectual cast’ and was distinguished by high cheekbones, ‘great width of the middle part of the face, and an angular form of its lower portions’.15 The description of miners as a specific ‘race of men’ grew in popularity during the nineteenth century, reflecting a growing tendency to elide discourses of race and class in commentaries on British workers in general and anxieties about the ways in which underground work brutalised miners and permanently altered their bodies in particular.16 ‘Small bulk of body, paleness and angularity of visage, and their general appearance, which is far from robust, would lead to the conviction that they are a somewhat deteriorated race,’ remarked John Roby Leifchild in his report presented to the Children’s Employment Commission of 1842. Living in close-knit communities with a tendency to intermarriage meant that ‘natural and accidental defects’ were passed on by inheritance to miners’ offspring.17 Disease and ‘deformity’ were therefore not simply a matter of working conditions; they were increasingly viewed as having a hereditary basis.

The distinct physiological characteristics of miners’ bodies were also inextricably linked to their mental attributes. ‘The nervous system, including various parts of the brain,’ wrote Dr S. Scott Alison in his remarks on Scottish miners, ‘are comparatively little exercised, while that of the muscles is inordinately overworked.’ Consequently, ‘the collier becomes more a mining or working animal than a thinking being – more a machine than a rational creature’.18 Mine work, therefore, not only had a detrimental effect on the physical health of miners, it also degraded their mental faculties and sensitivity and effectively turned them into brutes. ‘When we consider the mode in which hour after hour of the miner’s gloom and monotonous existence is spent, in darkness ... frequently pursuing their working in silence and solitude,’ wrote G. Mallett in the Association Medical Journal in 1855, the effect on the miners’ physical and mental faculties was bound to be damaging:

A life so spent must exhibit few opportunities of calling out and cultivating the sensibilities of the nervous system; on the contrary, the tendency must be to depress its natural activity, and to render it less sensitive, in short, apathetic.19

The effect, according to this author, was not only that the majority of miners were ‘very low in the scale of intellectual culture’, but also that miners lacked nervous sensibility to pain. Miners, argued Mallett, were capable of recovering
from ‘such an amount of injury as would in all human probability have proved fatal if it had occurred to individuals occupying a higher social position’, or to those whose ‘intellects [were] more highly developed’. Among the examples he cited to support this argument was the case of John Isherwood whose right leg had to be amputated after being run over by a railway coal wagon – an operation he bore ‘without any expression of pain’. The hierarchical nature of sentience, what Joanna Bourke describes as the ‘great chain of feeling’, was a powerful idea in nineteenth-century Britain. Differing sensitivity to pain distinguished humans from animals, and more ‘civilised’ human beings from others. Exposure to the ‘brutish’ nature of hard manual labour distinguished the feelings of the working man from those of his social ‘superiors’. Insensibility to pain also had a marked racial element, differentiating ‘savages’ from ‘cultured’ Europeans. Significantly, Mallett likened colliers to North American ‘Red’ Indians who were also known for their ‘calmness’ in times of physical hardship on account of their ‘nervous systems being less developed’. By doing so, he implied that miners similarly constituted a ‘race’ delineated by their special physiological characteristics whose capacity for endurance in the face of the traumatic and disabling effects of their work denoted their bodily ‘otherness’.20

Miners’ diseases and the production of medical knowledge

Professional interest in the effects of mine work on the minds and bodies of those employed in it grew as the industry expanded during the nineteenth century. However, European men of science and letters had long identified miners as a class of workmen susceptible to special kinds of occupational disease and injury – a theme that can be traced from antiquity through the pioneering work on the diseases of mineral miners written by Paracelsus and Agricola in the sixteenth century.21 Between 1600 and 1800 more than twenty-five authors wrote observations on mining diseases, most notably Bernardino Ramazzini, who devoted an entire chapter to miners’ diseases in his De Morbis Artificium Diatriba (1700).22 Ramazzini’s theory that the position and motion of workers’ bodies was a principal cause of occupational illness or deformity was especially influential on assessments of the deleterious effects of industrial work in the eighteenth and early nineteenth centuries.23 In relation to mining, Thackrah argued that the tendency of coal hewers to spend a long time in a bent sitting position, damaged circulation, causing ill health and impairment.24 Several medical witnesses to the 1842 Children’s Employment Commission likewise attributed some degree of deformity in coalminers to their working posture and often linked this to other medical conditions. For example, T. M.
Greenhow, surgeon of Walker Colliery, Newcastle-upon-Tyne, noted that colliers had a ‘bent and cramped character’ of body caused by their working environment, while others noted that miners’ ‘prevalent deformity’, a curved spine caused by their working position, could lead to chronic diseases of the stomach and liver. Later on renal diseases were also associated with the ‘doubled up’ posture in which those cutting coal worked. By linking physical deformity to susceptibility to illness in such ways, the postural theories informing nineteenth-century discussions of miners’ health blurred the distinction between ‘disease’ and physical impairment.

Early works on occupational health may have focused on the diseases associated with mineral mining, but, by the end of the eighteenth century, coal mining’s increasing economic importance meant that studies of miners’ diseases began to concentrate more fully on the health of colliers specifically. The first full-length study devoted to the injuries of colliers was Edward Kentish’s Essay on Burns (1797), which inquired into the best means of treating coalminers burnt in the mining explosions that were becoming more common in the deeper mines of north-east England at this time. Kentish’s work addressed what he saw as neglect by the medical faculty of coal workers that stemmed from their feelings of ‘disgust’ about mining as a dirty and unpleasant occupation, hidden from sight underground. He addressed his work to the ‘Proprietors of Collieries Upon the River Tyne’, whom he regarded as the ‘natural guardians of the health and comforts’ of their workers, situating the medical treatment of miners’ injuries within a nexus of paternalistic duty of care. Recognition of coal as an industry ‘of the first-rate importance’ also motivated Robert Bald’s study of the Scottish coal trade published in 1812, which included a section on the medical consequences of women’s involvement in underground work as coal bearers, an activity he saw as ‘prejudicial to their health’ and to that of their neglected infant children. By the 1830s and 1840s the growing employment of medical professionals by coalmining companies, discussed in more detail later, had produced new experts in the diseases and disabilities of coalminers. These medical professionals were given a voice through their contributions to government inquiries such as Chadwick’s Sanitary Commission and the Children’s Employment Commission, both of which reported in 1842.

The ways in which medical men’s increasingly close involvement in the lives of diseased and disabled miners stimulated the production of medical knowledge is evident above all in the expanding nineteenth-century literature on lung diseases. While the influence of dust in causing respiratory illness had been noted by writers in the sixteenth century, it was during the 1820s and 1830s that the influence of working conditions on the incidence of ‘miner’s
asthma’ or ‘black lung’ came under increasing scrutiny. No doubt the interest of the medical profession in the respiratory illnesses of miners was piqued by the expansion of the industry and the growth of deep mining, which increased occupational morbidity. But the fact that the notoriously dry and dusty Scottish coalfield was adjacent to the universities of Edinburgh and Glasgow, two of nineteenth-century Britain’s most influential centres of medical learning, also helped ensure that sick and disabled miners became compelling objects of medical investigation.33

Historians of medicine have documented the ways in which pioneers such as James Gregory, Matthew Gibson, William Thomson and George Steele sought to extend the practice of pathological anatomy developed in the medical schools of Paris at the turn of the century to the investigation of conditions such as melanosis in the lungs. But while these accounts have presented these pathological advances in terms of medical progress, what is interesting from a disability perspective is the ways in which medical research increasingly targeted the chronically ill coalminer as a source of knowledge.34

In his 1837 article, ‘On Black Expectoration, and the Deposition of Black Matter in the Lungs, Particularly as Occurring in Coal Miners etc’, that reviewed the medical progress of the previous decade, Dr William Thomson of the Royal College of Physicians and Surgeons in Edinburgh described how he and his father had spent many years studying local coalminers and iron moulders and initiated calls to ‘professional gentlemen in different parts of the country’ to supply evidence based on their own treatment and observations of colliers.35

Thomson’s account documented vividly the progressively disabling effects of lung disease. For example, the case of George Hogg, a miner at Collinshiel Colliery near Bathgate, was brought to Thomson’s attention by Dr James Y. Simpson. Despite being ‘tall and of a very athletic form’, Hogg had become ‘unable to follow any active employment’ due to problems with his breathing which, ‘even when he is at rest is somewhat laborious and sonorous’. He was able to undertake ‘some slight work in his garden’ but this led to fits of coughing in which he would bring up ‘2 or 3 profuse sputa’ the colour of ‘black ink’. During one such attack prior to his death he had spat up a ‘Scotch mutchkin, or nearly fifteen fluid ounces’ of mucus. Thomson did not mention what treatment, if any, Simpson was able to give Hogg, but noted with interest that upon receiving news of the collier’s death Simpson had ‘obtained permission of the relatives to inspect the chest’.36 Cases such as this, where the observed progressive degenerative symptoms of lung disease could be followed with dissection, were of most value to the advancement of medical knowledge. In 1835 Simpson had been able to send part of the lungs of another miner,
Robert Leishman, which exhibited black membrane, to the Museum of Guy’s Hospital in London as a significant medical specimen.37

Yet Thomson’s report also revealed the difficulties faced by medical men in obtaining specimens caused by the resistance of families of the deceased. Those who in their own estimation stood for medical progress in the identification of the causes of lung disease found themselves opposed by what they described as the ‘deep-rooted prejudices against anatomical examinations entertained by the coal-miners’. As one Dr Dewar wrote in a letter to Thomson about diseased miners at Hallbeath Colliery in Fifeshire, ‘To dissect a collier is periculosae plenum opus aleae’ (a work full of dangerous risks).38 Dissection’s historical association with the punishment of criminals, combined with recent memories of scandals such as the Burke and Hare murders of 1828 that had provided cadavers for the Edinburgh Medical School, made dissection unpopular and cast suspicion on the motives of anatomists. Set against the backdrop of the 1832 Anatomy Act, which increased the supply of bodies for dissection from workhouses and other institutions and bolstered the power of medical men over the bodies of the poor, pathological investigation held potential to bring doctors into conflict with families.39 While doctors dismissed the opposition of some mining communities to having the bodies of the diseased anatomised as deriving from their ‘prejudice’, this resistance might conversely indicate respect for the dead, love for disabled family members, refusal to see them simply as objects of medical curiosity and a desire to protect their bodily integrity.

The growing attention to respiratory illnesses in miners may also be seen as symptomatic of a shift away from humoralism that explained illness or injury in terms of ‘vitiated constitutions’ to new modes of thinking that located the origins of disease and deformity in specific organs of the body.40 Although medical witnesses still relied heavily on general notions of workers’ constitutions when discussing the health effects of factory work during the intense debates over industrial reform in the 1830s, by the time of the publication of the 1842 Children’s Employment Commission the focus was shifting towards localised medical conditions.41 The commissioners amassed significant medical evidence on the effects of mining on workers’ bodies, documenting alongside the manifold accidents that robbed miners of their eyes and limbs many diseases that had a disabling effect on coal workers. ‘Bad breath’ – a term that captured colloquially a number of lung diseases – was frequently reported among Scottish miners.42 Inflammatory diseases of the lungs and rheumatic fever were deemed common, and attributed not just to dust, but also to perspiration.43 Some witnesses, such as R. P. Edger the salaried surgeon at Hetton Colliery in County Durham, believed pre-existing chronic conditions such as
asthma to be exacerbated by underground working, although much depended on the quality of ventilation in particular mines.44 ‘Bad air’ in collieries was also linked to a variety of problems including sickness, vomiting, headaches and breathlessness.45 Working in heated conditions could lead to painful boils, attributed to excessive consumption of water.46 Some medical witnesses pointed to the increased risk of hernia caused by lifting heavy weights.47

The report provided much evidence of the harmful effects of mine work on children’s physical and mental development. It was claimed that child trappers working in the dark ‘become almost idiotic from the long, dark, solitary confinement’, while many others suffered from fatigue, aching bodies and nausea. Physical exertion produced numerous complaints harmful to growing bodies, from the risk of rupture to heart disease.48 All suggested, as S. Scott Alison reported to the commission, that the ‘physical condition of the boys and girls engaged in the collieries is much inferior to that of children of the same age engaged in farming operations, in most other trades or who remain at home unemployed’.49

Witnesses also testified to the damage of working underground on women’s health. In Scotland, many reported miscarriages and premature labours caused by the arduous tasks performed by women hauling coal, and some articulated a distinctly female concept of disability related to underground labour based on women’s inability to bear healthy children. Jane Peacock Watson told east Scotland Sub-Commissioner Robert Franks that during the thirty-three years she had worked underground two of her nine children had been ‘dead born’, which she attributed to the ‘oppressive work’. She claimed that a ‘vast [number] of women have dead children and false births’, for it was common for women to ‘work below till forced to go home to bear the bairn’. Minework, she said, ‘ruins the women; it crushes their haunches, bends their ankles and makes them old women at 40’.50

However, not all medical witnesses were equally convinced of the dangers of underground work to women’s reproductive health. William Brownlee, surgeon to Shotts Pits and Collieries in the west of Scotland, recalled the case of a ‘young married woman who had a premature birth from an accident, and was some time out of health from it’. However, he did not think mine work ‘injurious to [women’s] health’.51 Furthermore, as Frank Jowin, surgeon to the Ebbw Vale Iron-Works Company in south Wales, reported, the work given to women at the mines in his region was not likely to ‘produce distortion of spine or deformity of pelvis’, and out of an estimated ‘1400 or 1500’ childbirths he had been asked to perform he had ‘never been called upon to deliver a woman with instruments whose labour was retarded by a deformed pelvis’.52

Indeed, despite the conclusion drawn by one critic of the conditions in
Britain’s collieries that ‘the evidence collected in almost all the districts proves too often that the collier is a disabled man’ by nature of his exposure to chronic disease, accident and the progressive deformity brought on by hard labour, the medical evidence presented to the 1842 Commission was often contradictory, reflecting fully the opposing views of miners’ bodies as both healthy and diseased prevalent in nineteenth-century Britain. For example, for all those who highlighted the dangers of dust and poor ventilation to the health of miners’ lungs, there were others such as George Eliot, the head viewer at Monkwearmouth Colliery in South Shields, who regarded his colliery as ‘quite an asylum for asthmatic people; and an asthmatic man who cannot possibly work at bank can work well below’, due to the constant temperature in this exceptionally deep mine.

While the 1842 Commission’s report provided the most extensive account of mining disease and disability published to date and presaged the system of government inspection of safety in mines to reduce accidents, policymakers remained uninterested in the fatal or disabling effects of diseases – a point recognised by J. B. Thomson in a paper published in the Edinburgh Medical Journal in 1858. The evidence of official reports ‘setting forth that miners were short-lived, and subject to frequent and fatal maladies peculiar to their calling’, had not led to much in the way of greater ‘protection and sympathy’ for this ‘long neglected class’. It was, he argued, in accord with the ‘principles of a sound economy, and the dictates of our common humanity’ that a medical inspectorate should be established to work with mining engineers to ‘apply the most enlightened rules of hygiene for the safety and health of this numerous and important class of work-people’. Thomson was a rare voice in calling for official intervention to improve the health and well-being of colliers in ways that tackled their propensity to chronic disease in addition to their susceptibility to accidents. However, if policymakers were unwilling to introduce medical surveillance of miners, at a local level colliers came into contact with medical services in a variety of ways. The remainder of this chapter examines relationships between doctors and coalminers within coalfield communities and asks what medical treatments were available to those who worked in the coal industry.

**Accessing medical services**

Like other workers in industrialising Britain, mineworkers accessed healthcare within a mixed economy of medicine, which included timeworn family remedies and unorthodox healers as well as contact with medical professionals provided by both the state (via the Poor Law) and voluntary agencies. Self-
help organisations such as friendly societies were part of this mixed economy of care. Even though most were initially concerned primarily with workers’ financial well-being, many friendly societies also offered medical attendance to their members and this function grew as the nineteenth century progressed. Perhaps the most striking feature of the mixed economy of care, however, was the provision of medical assistance for coalminers via workplace schemes. Mineworkers were one of the first sections of the British working class to become accustomed to the services of physicians and surgeons. Coal owners were major employers of doctors at a time when the medical profession was still trying to establish itself and this helps explain why Kentish dedicated his treatise on burns to them. Fifty years later, Mines Inspector Herbert Mackworth told an audience at the Bristol Mining School that it was axiomatic that colliery managers should employ specialised surgical expertise, informed by an understanding of ‘the proper treatment of the diseases to which colliers are liable’. Within the coal communities of Britain, doctors built up close relationships with patients. These, however, were not always harmonious, as we shall see.

The establishment of specialist medical practice associated with collieries developed in an ad hoc manner as the coal industry expanded over the late eighteenth and nineteenth centuries. Kentish’s work as a surgeon at coal mines in the late eighteenth-century Tyne and Wear district is an early example of the employment of medical practitioners as the industry expanded. Similarly, in parts of the Rhondda Valley in Wales medical practitioners were attached to collieries soon after coal was discovered there in 1809. Evidence presented to the Children’s Employment Commission in the early 1840s provides the most complete overview of how medical services had evolved by the middle of our period. Thomas Alexander Cockin, manager of a colliery called Pease’s Deanery or Adelaide Wallsend in the Auckland area of Durham, explained that the mining company employed a surgeon ‘in case of accident’ who was contracted at a salary to the mine. Some medical men were employed by a variety of collieries at the same time – the Newcastle surgeon Mr Heath reported that he was employed by four collieries in that district. Sometimes, colliery doctors also served the wider community as Poor Law Medical Officers or combined their colliery appointments with work for other industries or railway companies.

Salaried surgeons were employed primarily to deal with accidents, for which the expenses were ‘defrayed by the [mine] owners’. Other medical complaints were dealt with by doctors funded out of miners’ wages through workplace sick clubs. As the surgeon of Monkwearmouth Colliery, W. J. Dodd, explained, he was employed ‘by the owners for colliery accidents’ but he also
‘attends in ordinary cases of sickness on the principle and payment of the sick fund prevailing through the colliery districts’, for which men had sixpence per fortnight deducted from their wages. Workplace sick clubs were established under the 1831 Truck Act. This ‘gave certain employers the right to provide medical attendance and medicine for their employees and empowered them to make deductions’ from workers’ wages to do so, provided their employees consented. While some mine owners may have pressured miners to join clubs, others seem to have allowed workers a truly free choice in the matter. As Dodd explained, the fortnightly medical deduction was ‘quite an optional arrangement on the part of the men’. He blamed the improvidence of miners for necessitating such a ‘plan’. Furthermore, the sense of ‘ownership’ of the medical attendant’s services might be seen differently from pit to pit. For example, at Willington (County Durham), a surgeon ‘resides at the colliery, who is employed by the men exclusively’. Miners contributed towards his services at the rate of about sixpence a week for a family, or four pence for single men, giving him an annual income of around £80. In contrast ‘the proprietors employ a surgeon for all accidents, who resides at Newcastle, and is paid by his visits at accidents’.

In south Wales, miners paid for medical care via the ‘poundage’ system whereby employers took a levy from every pound earned to pay towards a surgeon. At Loughor Colliery, which employed 50 people at the time of the Children’s Employment Commission, there was a surgeon ‘appointed to attend both the men and their families in cases of accidents or sickness’. The surgeon’s contract included wives and children as well as the men who worked at the pit, but excluded midwifery cases, and was funded by payments of sixpence a month levied on the wages of men and boys alike, except for the ‘door-boys’ who paid three pence each. While sick clubs were established in response to high levels of injury and disease, some struggled to cope in times of high demand. At Risca Colliery in Monmouthshire, so many men were in receipt of medical assistance that the club was in debt to the employer who underwrote the scheme. In parts of south Wales, workplace ‘sick clubs’ did not merely provide access to medical services. In Merthyr Tydfil, for example, the sick fund paid for by workers at the Dowlais Company contributed to ‘paying the surgeon who attends the men, for supporting the sick workmen, and for paying the schoolmaster’. Indeed, the fact that the school at Dowlais was attended by ‘about 12 boys maimed and crippled’, otherwise ‘incapable of labour’, shows how funded medical care might go beyond the injured or sick body itself and extend to welfare and education, helping to fund services that would ultimately aid the rehabilitation of those ‘crippled’ in accidents by helping them find alternative employment.
By the middle of the nineteenth century, miners across Britain were accustomed to paying into workplace schemes that provided access to a surgeon as well as (in some cases) funding other services such as schooling or the provision of a reading room. Such provision was part of the reciprocity between workers and employers in coalmining and demonstrated a strong paternalistic ethos. The ‘exceptional’ services enjoyed by colliers through workplace ‘sick clubs’ and the ‘generosity’ of colliery owners was praised in the press. ‘The Collier at Home’, an article published in *Household Words* in 1857 supposedly written by a surgeon, presented an idealised view of miners’ medical care in which they could always trust in the ‘liberality’ of the company sick fund to care for their needs and rely not just on the attention of doctors, but also on the ‘sympathy’ of their employers:

I have never seen anywhere so distinctly as among the mines, the rich helping the poor, knowing them all personally, visiting them when sick, and sorry without ostentation or intrusion – looked upon them as helpers and friends without any mean or cringing flattery.

Nevertheless, the expansion of sick clubs also demonstrated the power of medicine as a tool of workplace discipline, extending the employers’ control over their employees both by obliging them to subscribe to a compulsory fund and in determining their entitlement to care.

**Medical treatment**

If the employment of surgeons by coal owners to treat bodies burnt, crushed, dismembered or lamed in the mines shows a recognition both of the dangers of mining and of a paternalistic duty of care, medical responses to accidents developed in a haphazard manner during the nineteenth century. Special rescue equipment or teams of trained personnel (with the exception of surgeons) did not appear as a regular feature on the mining landscape until the closing decades of the century. Prior to that time, victims of accidents were often brought up to the surface by their workmates, using rudimentary apparatus such as coal corves or baskets to transport the wounded. Mines Inspector Herbert Mackworth delivered a scathing verdict on the emergency facilities and procedures at the mines he had visited in a lecture given to Bristol Mining School in 1857. He called on mine owners to ensure that medical equipment and supplies were ‘always on hand’, particularly ‘restoratives’ and ‘properly constructed litters and bandages’. He was especially concerned for the comfort of injured mineworkers. ‘Too often’, he claimed,
may the rude, jolting, clumsy cart be seen wending its way through a mining village, containing some unfortunate miner with broken limbs, on a bed of rough straw or of the work clothes of some of his more humane fellow-workmen, every stiff jarring motion of the cart producing fresh agonies to the sufferer.\textsuperscript{76}

In Mackworth’s opinion, moreover, such scenes were not isolated incidents, but the norm, ‘allowed and followed in nearly every colliery district in the country’.\textsuperscript{77}

Before the 1870s, it was rare to find ambulance services or equipment at collieries. Rescuers improvised with what was at hand. Carts, wagons or doors as makeshift stretchers were often used to convey wounded miners to their homes or hospitals. At around the same time Mackworth made his comments in Bristol, others were also highlighting the suffering of miners hurt in accidents and calling for more comfortable and dignified means of conveying the wounded from pithead to sickbed. For example, in June 1858 the Colliery Guardian endorsed the recommendation of another mines inspector, Matthias Dunn, for ‘spring palanquins for the conveyance of wounded men either to their own homes or to an infirmary’. By reducing jolting, these ‘palanquins’ or hammocks, carried at shoulder height by four men, would minimise the pain of injured miners and were preferable to carts, which were little more than ‘instrument[s] of abominable torture’ when used to transport a ‘man with a broken limb or scorched skin’. The pain suffered in this way, and risk of further damage to the injured body that might hinder full recovery or lead to permanent disability, provided compelling reasons for the adoption of such methods of conveyance.\textsuperscript{78}

However, the issues went beyond medical efficacy or patient care. The transportation of the injured or dead from the pithead was a pivotal scene in the emotional drama of nineteenth-century mining accidents.\textsuperscript{79} They were public spectacles that simultaneously displayed the horrors of mining and the self-sacrifice of miners. Provision of palanquins would, Dunn argued, demonstrate ‘foresight and sympathy’ on the part of coal owners and would ‘do much towards establishing a friendly feeling between the employers and their servants’. They would have a ‘happy effect on public opinion’ since there were ‘few things more revolting than the sight of a clumsy cart jolting through the streets, which is known to contain the mangled remains or the suffering body of some poor collier’. Effective emergency provision was essential to the dignity of the miner as well as the preservation of his life or limbs.\textsuperscript{80}

Mines inspectors’ calls for better equipment in emergency care were eventually taken up by the St John Ambulance movement in the 1870s, which made suggestions for improved ‘litters’ to carry injured miners based on those
used on the battlefield. That military methods of conveying the wounded were thought appropriate for use in colliery accidents indicates both the practical and rhetorical links between warfare and mining in the popular imagination of Victorian Britain. Given the considerable dangers of mine work it was an easy and apt association to make and one the ambulance movement was happy to exploit to further its goals. As war promoted innovations in emergency care and equipment, mining provided a suitably hazardous environment for the continued testing, development and application of new, military inspired, medical technologies and methods in the civilian world. Given this, mining in nineteenth-century Britain deserves to be regarded, as it was at the time, as an important bridge between military and industrial health and safety regimes. By facilitating the transfer of approaches to injury derived in wartime to the industrial workplace, mining helped shape civilian responses to accidents in peacetime.  

As calls for the provision of stretchers and other equipment at mines increased during the nineteenth century, so too did appeals for first-aid training for colliery staff. The value of practical knowledge of first aid and accident management had been espoused by eighteenth-century physicians such as William Buchan and Samuel Tissot, and by the Humane Society, established in 1774. From this period, surgeons attending mining accidents started to become renowned for their expertise in providing emergency responses to trauma. For example, after an underground fire at a colliery in Llansamlet near Swansea in 1787, two surgeons – one of them ‘a pupil of the benevolent founder of the Humane Society’ – managed to revive eight mineworkers who were brought to the pithead presumed dead. By the mid-Victorian period the heroic exploits of some colliery doctors attending to the victims of disasters earned national admiration. ‘Colliery surgeon’ Dr Davidson ‘scarcely left the pit’s mouth night or day for the first four days’ after a catastrophic accident at Hartley Colliery in 1862 left many men trapped underground. Despite their best efforts, however, it was rare for medical men to arrive immediately. Mackworth drew attention to this situation in his Bristol Mining School lecture and urged colliery managers to study ‘the diseases and accidents to which miners are subject, and the best mode of treating them until professional medical assistance can be obtained’. Before the campaigns of the St John’s Ambulance movement in the 1870s, which, alongside its calls for better emergency equipment at mines, called for first-aid training for miners, few mineworkers received any formal instruction in how to treat injured colleagues. Throughout the nineteenth century, then, the quality and effectiveness of the emergency treatment injured miners received from first responders, who were usually their workmates, was highly varied and largely a matter of luck.
Diseased and injured miners and their families drew on a patchwork of care incorporating elements of both formal and informal medicine. In the late eighteenth century, lay healers skilled in humoral therapies such as purging and bloodletting were an important part of the medical landscape of coal communities. In his autobiography, Anthony Errington remembered his schoolmistress as a ‘good Doctriss, scield [sic] in Leting Bleed’. The expansion of formal medical provision in the coalfields during the nineteenth century did not fully displace this reliance on unorthodox healers. On the one hand, some miners embraced their access to medical professionals via sick clubs enthusiastically, anxious not to see their subscriptions go to waste. As Edward Robatham, surgeon of Risca in south Wales, told the 1842 Children’s Employment Commission, since the colliers ‘have a doctor to apply to in every instance of necessity, they are also in the constant habit of taking aperient medicines, whether they require it or not, imagining that they must have something for the money they monthly pay to the doctor’. Robatham himself was in the ‘habit of supplying [medicines] freely, feeling assured it has a tendency to ward off disease’. On the other hand, colliery doctors and others frequently complained of miners’ enduring ‘superstition’ in medical matters. William Morison, who provided medical services to the Countess of Durham’s collieries in the 1840s, described the pitmen of north-east England as ‘persons whose minds are singularly warped by prejudices’. He argued that in coalfield areas doctors spent more time trying to ‘ward off the pestiferous influence of old women’s nostrums and crochets’ than tackling diseases themselves. He cited the example of a ‘medical gentleman in the county of Durham’ who attended a boy wounded by a pick. The boy’s family kept the bloodied implement next to his bed in order to see whether the blood on the point would rust – an apparent sign that ‘the wound in that boy’s back will canker and he will die’.

Pits situated near to larger towns such as Newcastle were better served by formally trained medical practitioners than those in more remote areas where bonesetters, charmers and irregular healers were quick to move in where doctors were thin on the ground. Attempts to stamp out irregular practice, such as the 1858 Medical Act, which required registration of medical professionals, did little to deter unorthodox medicine in mining areas. Miner Edmund Stonelake described the situation in south Wales at the turn of the twentieth century, where ‘every village and town’ was visited by confidence tricksters claiming to be able to ‘set bones, draw teeth, remove corns and bunions, cure deafness, rheumatism and almost every complaint that human flesh is heir to’. With the development of publications aimed at coal workers such as *The Miner and Workmen’s Advocate* came opportunities to advertise medicines and self-help guides offering cures for perceived common afflic-
tions of colliers, including those which caused ‘debility’ or impairment. The issue for Saturday 13 June 1863, for example, contained advertisements for ‘Grimstone’s Celebrated Eye Snuff’ and for various products aimed at reducing ‘debility’ and the ‘premature decline of man’ – the result in this case not of disabling mine work in particular, but rather the more universal ‘secret sins of youth’. Thus, as interest in the peculiar ‘habits and diseases’ of mineworkers grew, stimulating new medical knowledge and practices, so too did the realisation that miners constituted a valuable market for the services and products medical practitioners and innovators were offering.

There were clearly quite serious limits to what orthodox and folk medicine throughout the period could realistically achieve despite the claims of optimistic healers. Beyond minor surgical procedures, dressing and cleaning wounds and palliative care, expectations that medical practitioners could effect cures, in the modern sense of the word, were low. Indeed, the recurrent cases documented in official enquiries of mineworkers returning to work when ‘lamed’ may be seen not just as evidence of people ‘working through’ their impairments or ill health, as discussed in the previous chapter, but also as recognition that ‘curing’ someone was more about relieving their symptoms sufficiently to enable them to return to work than restoring them to full function. Even the management of pain was challenging. Until the emergence of modern analgesics, laudanum and morphine were the main means of controlling pain. Kentish documented the widespread use of opiates to relieve pain in mining communities during the late eighteenth century. How frequently mining families could access, or indeed afford, these drugs, however, is difficult to ascertain. It seems likely, though, that few working-class Britons who experienced chronic pain would have enjoyed a ready and uninterrupted supply of opiates. The belief, then, that miners were impervious to pain may have proved a serviceable myth in an era when pain management was basic.

The physical trauma of accidents and injuries was easy for nineteenth-century Britons to perceive. Although the limits of medicine were clear, those treating ill health and injury in the coal industry had an idea about how to respond to physical trauma and an expectation of some success. When it came to the psychological consequences of mining accidents, however, coalfield communities seem to have been less certain about what to do. Among several survivors of the infamous Wallsend disaster, which killed more than 100 men and boys in 1835, at least two were described by eye-witness James Everett as ‘delirious’ and ‘incoherent’. While Everett’s account gives details of the treatment of survivors’ physical injuries, there is no mention of how these two mineworkers’ presumably psychological traumas were addressed. Such
silence suggests no medical intervention was offered to help heal survivors’ apparent mental scars.

Locations of care

There were two main sites of treatment for sick or injured mineworkers in the nineteenth century: the home and hospitals. Of the two, the home was undoubtedly the most significant. Kentish reported that burns patients were nearly always treated in their ‘own houses’, often by a colliery surgeon. Family members, especially female relatives, or other female household members, usually carried out general nursing duties. In the 1850s, John Wilson worked at various Durham collieries and lodged with the Dove family. When he succumbed to a ‘raging fever’, Wilson was nursed by his landlady, Mrs Dove, who tenderly ‘watched over … [him] night and day’, and looked after him with a ‘pure mother’s heart’. Wilson recalled Mrs Dove with fondness many years after his sickness, but home care was not always necessarily a pleasant experience. In his Sanitary Commission report on Tranent (1842), Alison stated that he had visited severely injured men whose wives were in such ‘a state of intoxication’ that they were actually a danger to their husbands. He claimed to have personally known of cases, for example, ‘where the wife has injured the wounded husband by falling over him on the bed when she has come in’ drunk.

Mining families throughout Britain’s coalfields, moreover, often lived in cramped conditions, unsuitable for rest or recovery. Shift work placed pressure on resources. A witness to the 1847 Commission enquiring into the state of education in Wales noted that among the houses occupied by colliers and other workers employed by the Dowlais Company, the ‘sleeping-rooms are unhealthily and improperly crowded; so much so, that the beds are oftentimes occupied by relays of sleepers, who fill them two or three times successively in the 24 hours’. Getting adequate or uninterrupted rest in such conditions would have been difficult. Over-crowding was reported in other areas. As a boy in the 1850s, Thomas Burt and his family lived at his cousin’s house in Cramlington, Northumberland, which had only one room, but still accommodated seven to eight people while he was there. There were many reports of shoddily constructed, unsanitary homes and of bedridden and injured members of mining families having to sleep under leaking roofs. Other aspects of the built environment may have presented further challenges. While many miners’ homes consisted of one storey, in others the upper level could only be reached by a ladder. For people with mobility impairments, such a means of ascent may have made parts of their homes inaccessible.
support of family members was crucial, then, the home environment may have presented challenges to the sick and injured in coalfield communities.

Although the home remained the most important site for the medical care of sick and disabled mineworkers in this period, institutions outside the domestic sphere did become more significant over time. The first form of specialist hospital provision for workers in the coal industry had been established in the eighteenth century by the Keelmen’s Company in Newcastle, with the support of coal owners, to provide assistance for those who loaded coal onto boats on the Tyne. Established partly to address the problem of obtaining Poor Law medical services for a working population that included many migrants from Scotland who lacked legal settlement in the city, the Keelmen’s Hospital provided both institutional medical care and sickness benefits paid to members in their own homes.106 The Keelmen’s Hospital opened in 1701 as an almshouse to provide a ‘comfortable asylum’ and source of support for all the ‘aged and distressed among the keelmen’ of Newcastle.107 For others, the compulsory medical insurance schemes established by mine owners allowed access to hospital care. Mining companies and friendly societies subscribed to hospitals and used their rights as subscribers to obtain medical care for sick and injured mineworkers.108 The records of the Glasgow Royal Infirmary reveal, for example, that collier William Preston was treated there for a fractured leg in 1856, following a recommendation for admission by Carfin Colliery. He was just one of many mineworkers admitted that year on a ‘ticket’ from a subscribing mining company.109 Similar practices occurred in other British coalfields.110

The growing provision of specialist medical institutions, such as eye hospitals, was a feature of nineteenth-century medicine and these too accepted subscriptions from mining companies for the treatment of injured workers.111 The Glasgow Ophthalmic Institution admitted several miners during the 1870s, performing operations such as the removal of an eye as a result of disease and injury. The ethos of the institution, in common with others, was to restore the body to usefulness, and through clinical intervention avoid patients and their families ‘falling into a state of destitution and dependency’. Such institutions saw themselves as standing at the vanguard of medical efforts to prevent serious diseases or injuries becoming disabling. Without such careful interventions, the hospital’s annual report noted in 1871, ‘there is great danger of the patient falling into complete blindness’.112 Nevertheless, by and large hospitals were only interested in ‘curable’ cases, which meant that those with disabling injuries or chronic conditions not amenable to treatment were often excluded.113 The Glasgow Ophthalmic Institution’s report for 1872 boasted that 1946 cases had been cured, forty-one were ‘relieved’, one patient died
and ‘only 57 were dismissed incurable’, usually because their eyes had been ‘hopelessly torn by accident or otherwise injured beyond remedy before being presented at the Institution’. The telling inclusion of the word ‘only’ spoke volumes about the priorities of Victorian medicine: ‘incurables’ represented failure or lack of hope which sat awkwardly with the faith in scientific progress that specialist institutions such as this sought to embody.

Geography also affected miners’ access to institutional medical care. Although most sick and injured colliers were usually treated in their own homes in the eighteenth century, those working in close proximity to an established infirmary were more likely to receive institutional care. In the 1790s, collier James Cameron was admitted to the Glasgow Royal Infirmary with an ‘Ulcer’ on his legs. As the institution’s admission records list his parish as Glasgow, it seems Cameron lived fairly close by and was therefore able to get to the hospital relatively easily. For those further afield, the distance to the nearest hospital represented a practical barrier that many could not, or would not, surmount. The nearest hospital to the mining town of Tranent, reported Alison, was reckoned to be ten miles away and inhabitants were reluctant to go there because of the ‘expense and fatigue of travelling’. The hospital, moreover, apparently had a bad reputation ‘among the poor classes’ as it was believed patients there could not expect ‘good usage’ from nursing staff. In the south Wales valleys at the end of the century, Edmund Stonelake painted a vivid picture of mining communities in which operations were performed on kitchen tables, with limbs removed ‘just as a butcher saws a bone on his block’. There was, he wrote, ‘no alternative’ to this ‘crude way’ of practising medicine, ‘as hospitals were to be found only in large towns’. In spite of an expansion of hospitals and the passing of legislation in 1867 that acknowledged the duty of the state to provide hospital care for the poor, access to institutional medicine remained limited. According to one estimate of hospital capacity in the 1880s, there was one bed to every 980 inhabitants in England and one to 930 in Scotland. With an estimated ratio of one bed to every 2,340 of population, Wales fared much worse. Where a mineworker happened to live clearly affected his or her chances of finding a hospital bed. Moreover, during epidemics, it was not uncommon for coalfield-serving hospitals to prioritise fever patients at the expense of surgical cases.

In eighteenth- and nineteenth-century England and Wales, members of the labouring poor commonly sought sanctuary and treatment in workhouses when they were unable to work because of ill health or injury. The relatively high wages earned by mineworkers sometimes disqualified them from Poor Law medical assistance, but workhouse admission registers from the coalfields show that on occasion injured mineworkers may have sought help from
these institutions. On 15 May 1867, for example, forty-year-old collier Lewis Williams was admitted to the Pontypool workhouse with a broken thigh. His stay was a fairly short one, a workhouse official recording that Williams was ‘discharged at [his] own request’ less than three months later on 8 August. Sixteen-year-old Richard Moss was also admitted to the workhouse that year after being ‘burnt in a coal pit’, staying for two months, before requesting a discharge after he was ‘cured of his burns’. For most people, workhouse medical provision was a temporary measure and most left as soon as they were sufficiently recovered to resume life outside, often – as these cases and many more indicate – of their own volition. Despite the reputation of Victorian workhouses as places of severe discipline, sick and injured paupers were frequently able to exercise some control over the duration of their institutional medical care.

By the second half of the nineteenth century, many Victorians realised that the medical infrastructure in Britain’s coal-producing regions was struggling to cope with rapid urbanisation and the influx of new inhabitants to pit communities. With the exception of institutions like the Keelman’s Hospital, which provided long-term treatment for the disabled and elderly workers of the Newcastle coal trade, most hospital provision was geared towards acute care. The task of rehabilitating injured workers was not a medical priority for much of our period and tended to take place on an ad hoc basis with workers’ friends and family taking a prominent role. For example, when John Wilson fought to get back to normal life after his bout of incapacitating illness while living with the Dove family in north-east England in the 1850s, he did not call upon the services of medical professionals. The ‘first time’ he ‘ventured out’ after falling ill, Wilson recalled, ‘I was led to the door by my good old friend, and with hands pressed to the wall (as I was not able to go without support) I managed a few yards and back, increasing strength coming with every morning’s effort.’

The provision of prosthetic limbs or assistive technologies to help mine-workers recover from injury, or adapt to life after amputation, was similarly ad hoc. As Thomas Burt’s memory of the ‘many crutches’ and ‘wooden legs’ he noticed among workers at Murton Colliery in the 1850s indicates, mobility devices such as these were a common sight in coalfield communities, but for most of the nineteenth century injured mineworkers, their families or friends acquired or made these themselves with little, if any, help from outside agencies or organisations. Prosthetic limbs were often expensive to obtain and could be beyond the means of some amputee miners, particularly before the labour movement took up their plight in earnest in the early twentieth century. In such cases, injured workers sometimes turned to the Poor Law or friendly societies for help acquiring artificial limbs. These efforts met with
varying degrees of success and could depend on the circumstances of dismemberment or whether or not the impaired person was likely to be able to return to work and reimburse the authorities for her or his 'loan'.

Although injured industrial workers commonly used assistive devices throughout the nineteenth century, the provision of such technology can hardly be regarded as systematic before the twentieth century. While much rehabilitation work took place within families and communities, a step towards institutionalised rehabilitative medicine for workers in one of Britain’s most risk-prone coalfields was taken at the end of our period with the establishment of the Rest convalescent home on the south Wales coast. Founded in 1862 by Dr James Lewis, medical officer of the Bridgend and Cowbridge Poor Law Union, the Rest was originally intended for the ‘Invalid Poor’ of Glamorganshire and surrounding areas. Given the importance of mining to the local economy, however, the institution soon gained a reputation as a place primarily for ill or injured miners and they made up a majority of its residents. Offering patients a therapeutic regimen that made the most of its seaside location and the supposedly recuperative benefits of the coastal climate and sea bathing, the home initially operated out of three cottages but eventually moved to new purpose-built premises in Porthcawl in 1878. During its first year of operation there the Rest took in thirty-three patients. By the early twentieth century it was regularly housing more than 1000 a year.

Supporters of the Rest and its enlargement saw it as a ‘convalescent ward’ (or a ‘handmaid to the hospitals’, as one writer put it) designed to support the work of ‘local infirmaries’. The goal of the institution was to provide those ‘not sufficiently recovered to enter upon their daily labours’ with everything they needed to regain their health properly to enable a sustained return to work. Rush them back to ordinary life too early, it was argued, and recovering ill or injured workers might relapse into incapacity or, worse still, slip into permanent ‘debility’. The Rest, then, was not meant for permanently disabled workers, but rather those who were in a liminal state somewhere between health and illness or disability and ‘able-bodiedness’. Applicants for residence were only accepted if they had a doctor’s certificate testifying that there was a good chance ‘treatment’ in the home would significantly aid their recovery. Residents, moreover, were usually only allowed to stay for a few weeks at most. Those requiring longer-term care were generally not welcome. In the final analysis, the Rest was more about preventing long-term incapacity than managing it. Like all the medical interventions in miners’ lives described in this chapter, its fundamental goal was to help get injured workers back to work.
‘Medicalisation’, conflict and authority

While medical care remained patchy throughout the period in question, there can be no doubt that the expansion of medical services in response to the perceived health risks of coalmining was a significant feature of the industry’s expansion in the century after 1780. It is likely that some sick and injured miners benefitted significantly from access to medical professionals and that, ultimately, greater scientific interest in the ‘habits and diseases’ of miners, especially lung disease, would lead in the long run to improved therapies and interventions. Nevertheless, as we have seen, there was much scope for antagonism around sensitive issues such as dissection. While miners’ continued resort to unorthodox healers, or indeed local chemists and druggists, might have proceeded in some cases more from necessity than free choice, doctors’ criticism of mineworkers’ ‘superstition’ and their use of time-worn remedies suggests that sick and disabled mineworkers were willing to exercise some agency when it came to medical care. What, then, was the relationship between mineworkers and doctors?

Relations between doctors and patients in the eighteenth and nineteenth centuries have been a topic of considerable debate. Medical historians have seen the late eighteenth and early nineteenth centuries as marking a fundamental shift in medical knowledge and power which amounted to the growth of professional authority over medical matters and the gradual ‘de-skilling’ of lay people as interpreters of their own health and illness. Factors such as the rise of pathological anatomy, the increasing use of specialist diagnostic technology (epitomised by Laennec’s invention of the stethoscope) and the shift from viewing illness in holistic terms as a disruption to the individual patient’s constitution towards diagnosing it in terms of a series of universal symptoms, are all cited as evidence of the diminishing power of patients to challenge medical authority. And although the public health movement attracted relatively few doctors in its first stages, there can be no doubt that public investigations into the health of the industrial population increased the profile of medical men in public life as ‘experts’. The increasing importance of medical professionals and paradigms in the identification and treatment of physiological ‘disorders’ and in pressing for reform is often seen as evidence of the ‘medicalisation of society’. A similar analysis informs ideas about the ‘medical model’ of disability, which in disability studies is seen as gathering pace from the late eighteenth century. During this period, Paul Longmore has argued, there was a shift from a model of disability as an ‘immutable condition caused by supernatural agency’ to one which ‘redefined it as a biological insufficiency amenable to professional treatment’. Doctors thus came to wield
increasing power over disabled people because of their growing role in the classification, examination and treatment of disability. 135

Nevertheless, historians have challenged the view of nineteenth-century patients as ‘servile acceptors of medical orthodoxy’. 136 Studies of medical practice have shown how for much of the nineteenth century, professional authority was far from hegemonic. 137 From a disability perspective, recent work has also challenged a rapid and wholesale shift in the ‘medicalisation’ of impairment during the late eighteenth and nineteenth centuries. Hospitals’ widespread rejection of ‘incurable’ cases during the period, for example, indicates that medical practitioners were not especially interested in permanent disability from a professional standpoint. 138 Evidence from Britain’s coalfield communities supports this more complicated picture of conflict and negotiation in medical care.

James C. Riley has described a mutual distrust between doctors and working-class patients in nineteenth-century Britain. 139 Supporting the notion, explored in the previous chapter, that miners contributed to accidents through their ‘recklessness’ was an enduring belief that miners were responsible for their own ill health through their inappropriate behaviours and lifestyles. A moralistic model of sickness and disability co-existed with more objective diagnoses of symptoms and was reinforced by the rhetoric of ‘habits and diseases’ central to Victorian social and medical investigation. 140 In 1844 Dr James Black expressed a common opinion when he blamed miners’ ‘spasmodic complaints’ on their ‘intemperance’ rather than ‘from any special causes attending their employment’. 141 Such sentiments show how the corporeal objectives of medicine were often wedded to moral goals, just as they had been in earlier periods. 142 These attitudes could affect the treatment that injured miners received from doctors in quite profound ways. Nineteenth-century club doctors occupied a powerful position as ‘gatekeepers’ to medical services and were sometimes known to refuse treatment to miners if they suspected an injury had been caused by excessive drinking. In August 1863 William Edwards of Oakengates in Shropshire alerted readers of the *Miner and Workmen’s Advocate* to the case of a collier who had received a potentially disabling blow to his ankle at work. In spite of obtaining a note from the surgeon who attended the accident to prove that his ‘ankle had been crushed’, the club doctor refused to attend him because he said that it ‘came through drinking’, hence the man was left to go to the infirmary under his own volition. ‘So this poor man was swindled out of his due’, wrote Edwards, ‘after having paid 35 years, to be cast on the world without his pay or medical assistance to which he had a right.’ 143

Medical practitioners expected patients to defer to their expertise and
follow their advice without complaint. Working-class patients, however, often had other ideas and behaved in ways that fell far short of their doctors’ hopes, or even challenged practitioners and their methods outright. Medical men were evaluated by their patients according to their skill and attentiveness to their duties. While criticism of medical practitioners and their methods may have been most vocal in mid-Victorian friendly societies, where they often found their treatments and diagnoses challenged at meetings in which members ‘adopted an independent and sometimes insolent attitude towards their superiors’, the contesting of medical authority was evident in other contexts throughout our period. As Kentish made clear in his Essay on Burns, encounters between medical men and miners usually involved a process of negotiation between the two parties. Kentish believed burnt miners’ wounds should only be dressed once a day. More than this was unnecessary and potentially disturbed the patient from much needed rest. Kentish accepted, though, that implementing his recommendation was not always practically possible in mining communities because of the ‘prejudices of the patient and his friends’. In such circumstances, Kentish advised, it was probably better to give in to the wishes of miners and their families and dress the wound a second time. Compromise was at the heart of doctor–patient relations in the coalfields, especially before the mid-nineteenth century when the medical profession was still struggling to establish its authority. Although Kentish thought he knew best, he realised his patients often had a different opinion and that it was sometimes necessary to accede to their ‘prejudices’ if he was to remain their surgeon.

On issues of greater severity, such as amputation, the resistance of injured miners to the advice of their doctors could be even more determined, and understandably so given the risks of surgery at this time. During the late eighteenth century, amputation was a surgical procedure that demonstrated the power of hospital-trained surgeons over the bodies of their patients and one that aroused resistance. In 1794 the case of a collier who recovered from a compound fracture after he had ‘refused to be removed to the county infirmary or submit to an amputation’, provided ‘striking proof of the necessity there is for great deliberation in cases where amputation may be thought necessary’. The case was one of several well-publicised examples in which patients had successfully recovered after resisting surgical advice to amputate, illustrating the hastiness by which such operations were sometimes advised. The issue continued to prove controversial during the nineteenth century, especially in mining where fractures were common. Giving evidence to the 1842 Children’s Employment Commission, William Morison recalled the case of a sixteen-year-old boy at Newbottle Colliery who had died after suffering a compound
fracture of his thigh and leg because his parents had ‘resisted amputation’. A thirteen-year-old working at Sacristan Colliery had likewise died following amputation because the operation had been ‘resisted until too late’.150

For Morison, such resistance was further evidence of the ignorance of miners in the face of medical knowledge and chimed with his comments on miners’ ‘superstition’, but many feared a dangerous operation that, if they survived, would leave them with a permanent impairment. Improvements in techniques in the second half of the nineteenth century may have increased the pressure on patients to submit to surgical interventions, but did not eradicate the dangers of surgery.151 In September 1862 *The Merthyr Telegraph* reported the ‘Death under Chloroform’ of a young ‘cripple’ named Henry Davies, who had injured his knee at Middle Duffryn Colliery a few years previously. Following consultations with ‘several medical gentlemen’ who were of ‘unanimous opinion that a portion of the bone would have to be removed before the boy would recover the use of his leg’, Davies was anaesthetised and ‘prepared’ for surgery. Before the procedure could be performed, however, the unfortunate teenager ‘expired under their hands’.152 Such negative publicity ensured resistance to amputation among injured mineworkers continued to be noted into the twentieth century.153

On rare occasions, injured miners who believed they had been badly treated by doctors were prepared to seek legal redress. In August 1835, the *Cambrian* newspaper reported the case of twenty-three-year-old Michael Regan, a miner whose hip had been so badly damaged in an accident that he had become ‘a miserable cripple for life’, unable to support himself ‘by his own exertions’. After the accident, Regan was attended by surgeon ‘Mr Russell, his assistants, and [an] apprentice’. Despite Regan’s repeated complaints, his medical attendees dismissed the idea that he had seriously hurt his hip and left the injury untreated. In consequence of their incorrect assessment, Regan and his representatives argued, his long-term condition was worse than it would have been had he received proper treatment. In effect, Regan was blaming his disability on the incompetence of Russell and his assistants. That he did so suggests that notions about where responsibility for disability resided could vary quite considerably between patients and medical practitioners. Just as doctors were prepared to cite the actions of working people as a major cause of disability, workers like Regan instead blamed their impairments on doctors’ incompetence. Regan won his case and was awarded damages of £25.154 In a similar case in Lancashire in 1861, a miner left ‘crippled’ after his colliery surgeon had mistakenly diagnosed his fractured knee as merely dislocated was helped by his friends to bring a successful action for damages, leading to an award of £45.155
These cases, though uncommon, raised questions not just about the proper care an individual injured miner should have received, but about the broader expectations of those who subscribed to pit clubs and other workplace schemes for thorough and competent medical care. The defendant in the Regan case was described as a surgeon ‘of considerable standing at Merthyr, and the opulent incumbent of a medical benefice consisting of several Iron Works, having a population of 12,000 or 13,000 persons’ who each subscribed to a company medical scheme. In return for their subscriptions they felt entitled to a level of surgical and medical care whereby ‘the poorest of them’ should receive the ‘same kind of care, the same patient assiduity’ as that received by ‘wealthier persons, who would pay him for each visit’. Payment into a company scheme, whether compulsory or not, made some miners feel entitled to speak out against practitioner neglect. Writing under the pseudonym ‘Cumro Bach’, a correspondent to the *Miner and Workmen’s Advocate* complained that one of his fellow workers at Nantyglo Colliery in Monmouthshire had died following an accident, where he was struck by machinery, after the colliery doctor had neglected to visit him three times after being called. However, the story was fiercely refuted by J. H. Wood, assistant surgeon to the Nantyglo Ironworks Company, who instead blamed the man for waiting too long before calling the doctor and the paper was forced to condemn ‘Cumro Bach’ for his misinformation.

Although fiercely contested, Cumro Bach’s criticisms illustrate broader tensions between miners and company-appointed medical attendants. Miners in some collieries were balloted on the appointment of a doctor, which gave them some control over how their subscriptions to sick clubs were spent, but in many cases the appointment of doctors lay in the hands of mine owners. Ultimately dependent on the approval of owners for their positions, many colliery doctors seem to have felt a pressure to ensure injured miners returned to work as quickly as possible, so as to maintain a good relationship with owners. That at least was the impression many colliers had. Doctors were frequently suspected of a clash of interests between their own career ambitions and their duty of care to their patients that potentially put the welfare of sick or injured miners at risk. By the later part of the period, the matter was becoming increasingly politicised thanks to the National Association of Coal Miners. The union criticised pit clubs for creating a ‘large amount of capital for the use of the employer’, for which balance sheets were rarely made public. What was more, the men were obliged to have the ‘coalowners’ nominee for a medical attendant’, such that ‘the colliers are doctored by contract at their own expense for the benefit of their employers’. At South Dunraven Colliery near Treherbert in 1886, miners opposed the withholding of their poundage...
money ‘against their will’ to employ one Dr Warburton, a man ‘whose services the great majority of them do not want to retain’. The issue proved a test of the powers of employers, with one prominent barrister arguing that ‘every penny kept back from the men’s wages towards the payment of doctors without the men’s special written consent is illegal’.161

Conclusion

The histories of British coalmining and medicine are closely interwoven. During the century from 1780 to 1880, coalmining and mineworkers helped shape medicine and the emerging relationship between medical practitioners and working-class patients. The ‘habits and diseases’ of miners became a topic of increasing public scrutiny as the industry expanded, thanks to innovations in public health and evolving research into conditions such as lung diseases. The effects of mine work on different aspects of miners’ bodily health were documented by medical practitioners and by those who contributed to the great parliamentary investigations into mining, such as the 1842 Children’s Employment Commission, which revealed a plethora of illnesses and deformities related to underground work. While evidence of mineworkers’ diseases and disabilities helped propel the movement for industrial reform, the image of the miner’s body presented in the statements of witnesses to these parliamentary inquiries was contradictory, being simultaneously admired as the epitome of muscular able-bodiedness while also distinctive for its stunted growth, ‘crippled gait’ and sallow complexion.162 Likewise, colliers were distinguished for their physical prowess as a ‘picked body of men’, whose strength derived from a process of natural selection in coalfield communities in which the fittest were chosen for the hardest of tasks, yet simultaneously stigmatised as a ‘race of men’ recognisable by their presumed low intellectual capabilities and brutish insensibility to pain.

‘Disease’ and ‘disability’ overlapped in medical perceptions of the health of miners. Physical ‘deformity’ attributed to the posture in which colliers worked was believed not only to have produced lasting impairment, but also to have contributed to the incidence of diseases, from breathing difficulties to kidney problems. Conversely, medical case studies of those suffering from ‘black lung’ highlighted by medical investigators in the 1830s, reveal the progressively disabling consequences of respiratory illness, leading to a diminution of physical capabilities and increasing reliance on others. While some hospital care was provided for the long-term sick and disabled, in workhouses or through self-help schemes such as the innovative Keelmen’s Hospital in Newcastle, much medical provision was geared towards acute rather than chronic conditions.
There was little place for the ‘incurable’ in the celebratory narratives of medical progress and surgical authority in Victorian medicine. Yet the foundation of the Rest in Porthcawl to provide an alternative to home care for those in need of recuperation acknowledged at least that the journey from sickness to wellness had a number of distinctive stages that demanded different types of intervention. Recuperative medicine, like other medical fields, aimed to stop injuries and impairments becoming disabling, and the principles behind The Rest informed subsequent efforts to restore workers’ health that coalesced into the rehabilitation movement of the twentieth century.163

One important consequence of the expansion of coalmining in Britain after 1780 was the increasingly prominent role of the medical ‘expert’ in the daily lives of coal workers. Making medical provision for workers via the employment of surgeons to tend men in the wake of accidents, the provision of workplace ‘sick clubs’ and paying subscriptions to allow injured miners access to hospital care was praised as evidence of employer ‘liberality’ and sympathetic paternalism. However, it also served a political purpose by encouraging workers to remain loyal to their employers (having invested their wages in a compulsory sick club). Many miners and their families benefited from the expansion of medical attention. But this chapter has also highlighted areas where the authority of medical practitioners could be called into question. These included choosing unorthodox healers over learned practitioners, resisting dissection or refusing dangerous and disabling procedures such as amputation and even taking legal action where medical negligence had caused permanent impairment rather than cure. Subscribing to a colliery sick club made some members feel entitled to draw on services as they saw fit and to speak out against practitioners they felt were not performing their duties properly. Increasingly, this led to tensions between employers and workers over the appointment of colliery doctors.

Ultimately, concerns over the abuses of colliery sick clubs may have given powerful impetus to some miners, like other industrial workers, to seek alternative sources of medical aid, such as those provided through friendly societies.164 Mineworkers wanted greater control over the treatment they received as well as more say in who treated them. The famous mutualism of coalfield communities was driven, in large part, by this goal and is an indication of just how politicised workers’ healthcare was in industrialising Britain. The fusion of medical and financial aid in friendly society schemes also reminds us that the provision of medical treatment was bound up with broader questions of welfare. And it is to the non-medical assistance provided for sick and injured miners and their families that we now turn.
Notes


2 For example, Hansard, HC Deb, 22 June 1842, vol. 64, cols 423–8.


8 Arlidge, Hygiene, 271.

9 PP 1842 (381), 609.


11 PP 1842 (382), 622. See also PP 1842 (381), 143, 637.

12 Arlidge, Hygiene, 270, 64.


14 Charles Turner Thackrah, The Effects of the Principal Arts, Trades and Professions and of Civic States and Habits of Living, on Health and Longevity (London: Longman and others, 1831), 112.

15 ‘The Collieries’, 123.


17 PP 1842 (381), 525; J. R. Leifchild, Our Coal and our Coal Pits (1853; London: Frank Cass, 1968), 197.


25 PP 1842 (381), 665, 673.


30 Ibid., 4.

31 Ibid., 3.


34 Rosen, *History*, 244–401, presents an extensive history of medical progress made in the identification of lung diseases in miners; see also Andrew Meiklejohn, ‘History of Lung Diseases of Coal Miners in Great Britain: Part I, 1800–1875’, *British Journal of Industrial Medicine*, 8 (1951), 127–37; Arthur McIvor and


36 Ibid., 249–50.

37 Ibid., 258.

38 Ibid., 241, 273. We are grateful to Evelien Bracke for advice on translation.


43 PP 1842 (381), 153.

44 Ibid., 655.


46 Ibid., 643.

47 Ibid., 626.

48 Cobden, White Slaves of England, 39, 56, 60, 61, 62.

49 Cited in ibid., 80.

50 PP 1842 (381), 387.

51 Ibid., 366.

52 PP 1842 (382), 625.


54 PP 1842 (381), 642.


56 Rosen, History, 419.

57 James C. Riley, Sick, Not Dead: the Health of British Workingmen during the Mortality Decline (Baltimore: Johns Hopkins University Press, 1997), ch. 2; David G. Green, Working-Class Patients and the Medical Establishment: Self-Help in Britain from the Mid-Nineteenth Century to 1948 (Aldershot: Gower, 1985). The welfare role of friendly societies is discussed more fully in Chapter 3.


60 Ibid., 217.
61 PP 1842 (381), 150.
62 Ibid., 554.
63 Digby, Evolution of British General Practice, 272.
64 PP 1842 (381), 664.
65 Ibid., 645.
67 PP 1842 (381), 645.
68 Ibid., 568.
69 Earwicker, ‘Miners’ Medical Services’, 40.
70 PP 1842 (382), 710.
71 PP 1842 (382), 548.
72 Ibid., 640; Earwicker, ‘Miners’ Medical Services’, 42.
73 For example, Glasgow University Archives, UGD1/37/1, Govan Colliery Paybook November 1855; UGD/1/37/12 Govan Colliery Pay Book, June 1862–June 1863.
77 Ibid.
80 ‘Palanquins for the Wounded’, 372.
81 ‘South Staffordshire and East Worcestershire Institute of Mining Engineering. Important Communication upon the Treatment and Removal of Accident Cases’, Colliery Guardian and Journal of the Coal and Iron Trades, 11 June 1875, 855. See also ‘Portable Ambulance for Miners’, Colliery Guardian and Journal of the Coal and Iron Trades, 8 March 1878, 389; Roger Cooter, ‘The Moment of the


83 Digby, *Evolution of British General Practice*, 274.

84 *Sunday Chronicle*, 23 September 1787.


87 ‘South Staffordshire and East Worcestershire Institute of Mining Engineering’, 855.

88 Errington, *Coals on Rails*, 35. Shared belief in the efficacy of humoral treatments was common in both ‘orthodox’ and irregular healers treating mining cases, such as burns, in the eighteenth century: see Kentish, *Essay on Burns*, 82.

89 PP 1842 (382), 594.

90 PP 1842 (381), 728.

91 PP 1842 (381), 667.


94 *The Miner and Workmen’s Advocate*, no. 15, 13 June 1863.


101 PP 1842 (008), 99–100.


107 *Articles of the Keelmens’s Hospital Society; with Rules and Regulations for the Hospital* (Newcastle upon Tyne: John Marshall, 1829), 22.
110 For example, Gwent Archives, D3293/A/1, Newport and Monmouthshire Hospital Annual Reports, 1854, 7.
112 Ibid., Report by the Directors of the Glasgow Ophthalmic Institution … 6 March 1871.
114 NHS Greater Glasgow Health Board Archives, HB47/2/1, Glasgow Ophthalmic Institution, Annual Reports, Third Annual Report by the Directors of the Glasgow Ophthalmic Institution, 4 March 1872.
115 Greater Glasgow and Clyde NHS Archives, HH67/56/1A, Glasgow Royal Infirmary, Admission and Dismission Register, 1794–1800.
116 PP 1842 (008), 90.
120 Marguerite W. Dupree, ‘Family Care and Hospital Care: the ‘Sick Poor’, in Nineteenth-Century Glasgow’, *Social History of Medicine* 6 (1993), 195–211.
122 Marjorie Levine-Clark, ‘Engendering Relief: Women, Ablebodiedness, and the

123 For example, Gwent Archives, D3293/A/1, *Newport and Monmouthshire Hospital Annual Report*, 1854, 15.


125 Ben Curtis and Steven Thompson, “‘A Plentiful Crop of Cripples Made By All this Progress:’ Disability, Artificial Limbs and Working-Class Mutualism in the South Wales Coalfield, 1890–1948’, *Social History of Medicine*, 27 (2014), 708–27.

126 See, for example, Tyne and Wear Archives, PU.SS/1/1/19 South Shields Poor Law Union Board of Guardians Minute Book, 1863–65, correspondence concerning William Butler’s artificial leg, 34, 44, 50.


135 Paul K. Longmore, *Why I Burned My Book and Other Essays on Disability*


139 Riley, *Sick Not Dead*, 75.

140 For example, Durham University Library, Earl Grey Pamphlets Collection (1863), Robert Wilson, *The Coal Miners of Durham and Northumberland: their Habits and Diseases: A Paper Read before the British Association for the Advancement of Science, at Newcastle 1st of September, 1863*.


144 The expectation of deference from patients was so strong that it was not uncommon for doctors to insist on the expulsion of recalcitrant patients from hospital: Smith, *People’s Health*, 264.

145 For example, see the report on the skills of Dr Homfrey, surgeon of Tredegar Ironworks in *The Miner and Workman’s Advocate. A Publication Devoted to the Interests of the Working Classes of the United Kingdom*, no. 97, 7 January 1865.

146 Riley, *Sick Not Dead*, 107, 120.


149 David M. Turner, ‘Disability and Prosthetics in Late Eighteenth- and Early

150 PP 1842 (381), 664.
153 Digby, Evolution of British General Practice, 211.
155 ‘Action Against a Surgeon for Improper Treatment’, Paisley and Renfrewshire Advertiser, 30 March 1861.
156 The Cambrian, 1 August 1835.
157 The Miner and Workmen’s Advocate, no. 17, 27 June 1863; ibid., no. 20, 18 July 1863.
159 Benson, British Coalminers, 181.
160 National Association of Coal, Lime, and Iron-Stone Miners, Transactions and Results of the National Association of Coal, Lime and Iron-Stone Miners of Great Britain, Held at Leeds, November 9, 10, 11, 12, 13 and 14 1863 (London: Longman et al., 1864), 44.
162 PP 1842 (380), 185.
163 Borsay, Disability and Social Policy, 49–61; Julie Anderson, War, Disability and Rehabilitation in Britain: ‘Soul of a Nation’ (Manchester: Manchester University Press, 2011).
164 Benson, British Coalminers, ch. 7.