Chapter 8

New Citizens

East Germans in a United Germany

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Introduction

In 1989, the fall of the Berlin Wall ended the post-war division of Germany. In a decade during which Europe was characterized by immense social and political transition, the experience of the people of the former German Democratic Republic (GDR) was unique. Within a few months it became a fully fledged market economy: part of the west German monetary system on 1 July 1990, and part of the Federal Republic of Germany (FRG) on 3 October 1990. With unification east Germany also became part of the European Union (Blacksell 1995). While other eastern European countries in transition were engaged in a major process of state building, enacting new constitutions and establishing new institutions and laws on health care and safety, these already existed in the Federal Republic and were simply extended to the territory of the former GDR when they became the new *Länder* of the FRG. Within this context of a 'ready-made state' (Rose and Haerpfer 1997) the Soviet-style health care system was replaced by a pluralist insurance-based system of medical care of high technological standard.

This chapter revisits the process of transforming health care in East Germany in the course of political transition. It specifically looks at the context within which this process took place, explores reasons for the policy decision to adopt the west German model of health care and analyses the events that followed. Its importance for the topic of this book is that it raises some questions about how a country deals with the existence of two different health systems, each reflecting different sets of inherited traditions and institutional frameworks.

The east German health care system

After 1945 the three western allied forces maintained the health care system as it existed in their zones of occupation, adding only some pre-1933 features,

often with the same personnel, leading to the re-establishment of a social health insurance (SHI)-based system with a high degree of decision-making powers for both sickness funds and health care providers. In contrast, the Soviets adopted a strong interventionist role within their zone from the beginning. They took an authoritarian approach, initially in order to control infectious diseases, and despite the protests of physicians gradually introduced a centralized state-operated health care system. They called together 60 health experts to advise them on the design for a new model, which came to be influenced by the traditions of social hygiene in the community health care services of the Weimar period, and by emigrants who had returned from Britain, Sweden and the Soviet Union (Busse 2000).

The resulting health care system in the GDR differed from its Soviet counterpart, however, by establishing a structural division between ambulatory and hospital services, although in practice they often operated from the same premises. In addition, the principle of social insurance was *de jure* maintained, with workers and employers sharing premium costs, but with administration concentrated in only two large sickness funds, one for workers (89 per cent) and one for professionals, members of agricultural cooperatives, artists and the self-employed (11 per cent). De facto, however, the role of the social insurance system was extremely limited and the system was funded mainly through general government revenues.

As in most socialist countries, the majority of health care personnel in the GDR were employed by the state, with a few delivering ambulatory care in solo practices but mostly through community-based or company-based health care centres, which usually were staffed by a range of medical specialists and other health care professionals. Unlike the neighbouring Soviet bloc countries, not all health care institutions were formally nationalized. Instead, independent institutions could continue to exist but faced increasing difficulties when exercising their role as health care providers. As a result, the number of not-for-profit hospitals decreased from 88 to 75 between 1960 and 1989, and the number of private hospitals fell from 55 to 2 in the same period (Deutsche Krankenhaus-Gesellschaft 2000). However, in 1989 about 7 per cent of all hospital beds were still not state-owned and a few physicians were still in private practice.

Local communities provided preventive services, encompassing health education, child and maternity health and specialist care for chronic diseases such as diabetes or psychiatric disorders. These health care services were complemented by comprehensive social support provided by the state, such as housing, child day-care and crèches, which also contributed to the policy imperatives of increasing the population and so the active workforce. Thus, they soon

achieved a type of health care system to which the political left in West Germany and many other western countries aspired until at least the 1960s (Deutsche Krankenhaus-Gesellschaft 2000).

However, due to under-financing and under-investment, a shortage of personnel and lack of access to modern technologies, the GDR health care system gradually began to fall behind the standards of western industrialized countries, beginning in the 1970s but becoming visibly worse in the second half of the 1980s. In the hospital sector, East Germany had about a quarter fewer hospital cases per 1000 population than in the west, yet hospital occupancy fell below 75 per cent in the 1980s (Table 8.1).

This lack of modern medical care has been associated with poor population health. Available evidence suggests that, for example, shortages in surgical capacity may have been related to higher infant death rates due to congenital anomalies of the heart and cardiovascular diseases in the GDR compared to the west in the 1980s (Bundesminister für Gesundheit 1993). Other data indicate under-treatment or less effective treatment of hypertension as the prevalence of recognized but untreated hypertension was lower, while rates of treated but uncontrolled hypertension were higher than in the old FRG (Heinemann and Greiser 1993). Further evidence suggests possible under-treatment of elderly stroke patients in the former GDR, which was reflected in a high case fatality, especially among those over 65 (Eisenblätter *et al.* 1994). A recent study of fatal outcomes after hip fractures in 1989 in the former GDR reported a case-fatality rate of about 20 per cent, considerably higher than in the west (Wildner *et al.* 1998). Although other factors such as case mix have to be considered, these findings point to the possible contribution differences in medical care may have made to the widening mortality gap between the two parts of Germany pre-unification (Nolte *et al.* 2000). However, this relative disadvantage in the east had only developed since the mid-1970s. Before this, life expectancy had improved almost equally, with even a slight advantage for men in the east during the 1960s and early 1970s (Figure 8.1).

In 1989, a National Health Conference had decided to introduce major health care reforms and to increase investment, but shortly afterwards the opening of the Berlin Wall in November that year brought an end to the entity of East Germany.

Transforming health care

The events following the fall of the Berlin Wall unfolded at a tremendous speed, with the ten-point plan 'for overcoming the division of Germany and Europe' announced by the west German Chancellor Helmut Kohl by the end of November 1989 leading, eventually, to unification. It is within this context

Table 8.1 Inpatient structure and utilization: general and psychiatric hospitals in western and eastern parts of Germany 1970–1998

	Beds/1000			Cases/1000			Length of stay (days)			Ooccupancy rate (%)		
	West	East	E/W ratio	West	East	E/W ratio	West	East	E/W ratio	West	East	E/W ratio
1970	11.20	11.13	0.99	146.3	135.6	0.93	24.9	23.3	0.94	88.5	81.2	0.92
1980	11.48	10.27	0.89	181.6	140.9	0.76	19.7	19.1	0.97	84.9	74.8	0.88
1989	10.69	9.94	0.93	208.6	152.9	0.73	16.2	17.3	1.07	86.0	74.6	0.87
1991	8.19	8.89	1.09	179.3	151.1	0.84	14.3	16.1	1.09	86.0	74.9	0.87
1992	8.02	8.08	1.01	180.4	159.4	0.88	13.9	14.2	1.02	85.3	76.0	0.89
1993	7.80	7.50	0.96	180.3	162.9	0.90	13.2	13.0	0.98	83.9	77.4	0.92
1994	7.68	7.16	0.93	181.9	169.0	0.93	12.7	12.2	0.96	82.7	79.0	0.95
1995	7.55	7.03	0.93	185.4	175.9	0.95	12.2	11.7	0.96	82.0	80.1	0.98
1996	7.30	6.98	0.96	186.8	181.9	0.97	11.5	11.2	0.97	80.3	79.6	0.99
1997	7.12	6.87	0.96	189.4	187.5	0.99	11.1	10.8	0.97	80.7	80.5	1.00
1998	7.01	6.78	0.97	194.4	194.9	1.00	10.8	10.5	0.97	81.8	82.3	1.01

Source: authors' calculations based on data from the Federal Statistical Office.

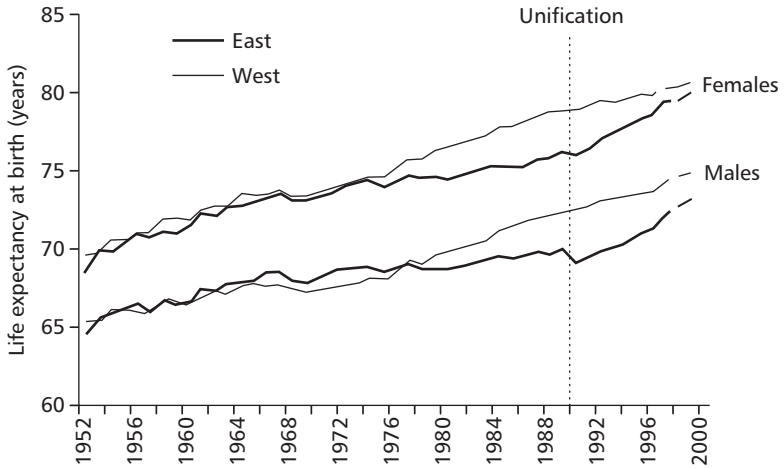

Figure 8.1 Life expectancy at birth in east and west Germany, 1952–1999 [from 1998, data for east Berlin are included in 'west'].
Source: Nolte *et al*. (2000); Statistisches Bundesamt (2001).

of strong dynamics of political unification that health care reform in east Germany was to be achieved (Manow 1994, 1997; Nolte 2002; Wasem 1997).

> In the first phase after the autumn of 1989, health politicians and corporatist actors in the health field assumed that their task would be to reform the East German health system with the perspective of an independent East German state in mind. Then it became apparent that a reformed East German health care system would have to be integrated into the West German sector later. Finally the actors realised that most parts of an East German health reform would not occur before the accession to West Germany.
>
> Wasem 1997

The decision to adopt the west German statutory insurance system

The speed with which the unification of the two states was driven required 'pragmatic solutions' (Stone 1994) with virtually no space for innovations or experiments in reforming east Germany's health care sector. The pace of political developments following the resignation of the GDR's former leader Erich Honecker in October 1989 rapidly led to disintegration of political authority with a breakdown of order, which in turn placed the east in a very weak bargaining position compared with the west (Lehmbruch 1994; Manow 1994). The almost complete discrediting of the GDR administrative (civil) service during this process also contributed to the weak negotiating role of east

Germany (Lehmbruch 1994). The previously rigid hierarchy and party discipline meant that institutions in almost all sectors of GDR society were seen as politically contaminated, causing deep mistrust in the administrative bodies. The continuing loss of legitimacy of the GDR bureaucracy also affected the health care sector in such a way that it was almost impossible for them to be involved in the negotiation process (Manow 1994). Thus, in the negotiations leading to the Unification Treaty, GDR politicians were of only secondary importance (Wasem 1997), and the resulting, more or less complete, transfer to the east of the west German model seemed almost inevitable (Freudenstein and Borgwardt 1992; Manow 1994).

In this context of change, there was consensus amongst actors in the field of social and health policy in both east and west Germany that the social insurance system of the former GDR was in need of reform. Thus, Lothar de Maizière, Prime Minister of the first (and last) democratic government of the GDR declared in the first government statement in spring 1990 that the 'centralized administration of the social insurance run by the FDGB (Free German Trade Union Association) does not meet the demands of a democratic welfare state' (Spree 1994). Whilst reorganization was perceived as essential, the structure and content of this reorganization, especially in relation to health care, were less clear. In fact, there was much controversy among west German governmental and non-governmental actors, interest groups and even the administration itself. The main areas of conflict concerned the structure of the new health insurance system, funding mechanisms and the survival of the outpatient policlinic system (Wasem 1997).

Importantly, however, although the proposed reorganization was of the east German health care system, those shaping the reform were exclusively west German (Manow 1997). Initially, the Social Democratic Party and the Federal Association of General Regional Sickness Funds (*AOK Bundesverband*) were very successful in introducing their proposals into the coalition agreement of the newly elected GDR government in spring 1990 (Robischon *et al.* 1994). However, their suggestions to preserve some basic features of east Germany's health care sector, namely some form of unified health insurance (in the form of one insurance fund for each of the 15 regions of the GDR), and retaining the policlinic system as the main institutional setting for providing outpatient care, faced strong opposition. The associations of substitute funds lobbied hard to transfer the highly fragmented west German health insurance system to east Germany (not the least out of fear that monopolistic funds would strengthen the position of the AOK in a united Germany), an effort supported by the chambers of physicians, who traditionally favour a pluralistic health insurance structure (Lehmbruch 1994). This alliance gained decisive support

not only from the governing coalition party but also from the Federal Republic's Chancellor Helmut Kohl, who then had strong negotiating power (Wasem 1997). As a result of the negotiations on the Unification Treaty, the east German health care system was to be put on the same financial and organizational basis as that of the west from 1 January 1991 (Bundesrepublik Deutschland and Deutschen Demokratischen Republik 1990).

Once substitute sickness funds were given free rein to compete in the east they began intensive marketing campaigns to persuade east German citizens to leave their regional sickness funds. Both regional and substitute sickness funds put a great deal of effort into training staff and offering ongoing technical support for their 'adopted' area in the east. Regional as well as substitute sickness funds soon established offices in the east and were able to start work by January 1991 (Spree 1994).

The fight to dismantle the policlinics

> Even more fiercely disputed was the 'policlinic issue'. Initially, there was consensus among the east German actors that this particular aspect of ambulatory care provision should remain in parallel with private practices. It was argued that,
>
> [d]espite chronic financing shortfalls, incomplete reforms, spreading environmental hazards, and mounting personnel shortages, East Germany's policlinic system delivered a quality of care that compared favourably with West Germany on some health indicators. Because most shortcomings were identified as financial rather than structural, a post-unity increase in capital outlays promised significantly improved results. Consequently, East German officials and some West German Social Democrats urged that the policlinics be retained as part of a 'pluralistic' approach to health care delivery in the new *Länder*.
>
> Scharf 1999

This, however, was perceived as a substantial threat by west German physician organizations to their monopoly in ambulatory care (*Sicherstellungsauftrag*) (Stone 1994; Wasem 1997) and they decided to lobby hard against policlinics, declaring the free exercise of private medical practice as a 'basic right'.

In the negotiations leading to the State Treaty on Monetary, Economic and Social Union in July 1990, the organizational aspects of medical care provision were left relatively imprecise although 'those in favour of radical change managed to insert a clause' (Wasem 1997) requiring the east German government to transform ambulatory care provision towards private practice. Eventually, a compromise was found that, first, granted every east German physician the freedom of establishment in private practice, and second, authorized policlinics and related facilities to provide services at least until the end of 1995 (Stone 1994; Wasem 1997). This time limit was removed later through the Health Care Reform Structure Act (GSG) in 1992.

However, despite this compromise 'corporatist power coalesced to conquer the policlinic challenge' (Robischon *et al.* 1994). The most vigorous opposition to a continuing role for the policlinics came from the Federal Association of SHI Physicians (*Kassenärztliche Bundesvereinigung*) which regarded them as a potential threat both to medical autonomy and to the system of fee-for-service reimbursement that was the basis of their relatively high incomes.

'The frontal assault on the policlinics took the form of publicly ridiculing their lack of modern equipment and their 'outmoded' forms of treatment. The more extreme view condemned them as a Soviet invention' (Robischon *et al.* 1994), although policlinics had begun to emerge before 1933. A more devastating blow to the policlinics resulted from their ambiguous financial situation, which was deliberately planned by the physicians associations. Given the mammoth infrastructure needs and uncertain revenues of local government, public investment plans for policlinics were slow and, in any case, hospitals took priority. Of course, private financing was available in principle, but because of the five-year transition period (and possibly also for ideological reasons) banks were reluctant to grant long-term credits. On the other hand, for a physician willing to set up an independent practice, the regional physicians' association could assure the bank of the applicant's creditworthiness. The federal government supported establishment of private practices through special loans (Bundesministerium für Gesundheit 1998).

The time limit imposed on the survival of policlinics and, more importantly, the remuneration method negotiated between the sickness funds and the Federal Association of Social Health Insurance Physicians that favoured private practice, put substantial pressure on physicians to become self-employed (Freudenstein and Borgwardt 1992; Robischon *et al.* 1994). The major discrepancy in physicians' incomes resulted from the fact that fee-for-service was used to remunerate services delivered in private practice while the capitation method was used to compensate policlinics. Regional and local governments in the east, now owning the majority of policlinics and fearing substantial deficits in their budgets, placed additional pressure on physicians to set up private practices.

As a consequence, more than 80 per cent of outpatient physicians had become office-based by the end of 1991. While on 31 December 1990, only 12.6 per cent of physicians in ambulatory care worked in private practice, this figure jumped to 35.5 per cent on 1 January 1991, reached 56.8 per cent on 1 April, 66.2 per cent on 1 July and 83.6 per cent by 31 December, i.e. within one year the vast majority had moved to private practice. Initially, the speed differed between the six regions (including the eastern part of Berlin) with Berlin lagging behind and Saxony-Anhalt and Thuringia in the lead. In the end,

however, the change was almost complete, independent of the governing party in the respective Land or the initial intention of the physicians to stay with the policlinics (Wasem 1997).

Almost two years after unification, around 70 per cent of the former policlinic facilities were either removed or transferred into other forms of health care provision. By 1998 about 96 per cent of all physicians in east Germany were established in private practice while only 4 per cent were still based in policlinics (Bundesministerium für Gesundheit 1998).

Continuing adaptation to western standards

The health care system in the new *Länder* was not only legally put on a completely new financial and organizational basis, but converged quite rapidly in terms of infrastructure, utilization and spending patterns with the western part of Germany.

In the hospital sector, the need to overhaul the infrastructure facilitated a rapid decrease in the number of hospital beds. Between 1991 and 1994, more than 20 per cent of all acute care beds were closed while in the west the respective figure was only 6 per cent. By the late 1990s, figures were, however, quite similar (Table 8.1). While bed numbers were reduced, the east experienced a rapid increase in hospital cases of almost 30 per cent between 1991 and 1998, resulting in the same per capita level as in the west. Length of stay and occupancy rates also converged. These trends led to drastically increasing costs per hospital day, case and bed, though overall expenditure remained somewhat below the western figures until the end of 1990s due to the lower wages in the east (Table 8.2).

In ambulatory care, the income of the office-based physicians had reached, on average, 85 per cent of that of their western colleagues. Their persisting lower income was due mainly to having fewer privately insured patients. The average figure of 85 per cent hides huge variation between specialties, with radiologists and surgeons doing even better than in the west mainly because of the continuing lower numbers in relation to the population (Table 8.3).

While total sickness fund expenditure per capita was only 57 per cent of that in the west in 1991, it rapidly increased to 74 per cent in 1992 and 87 per cent in 1994. By the end of the 1990s, it almost equalled that in the west (Table 8.4). Costs for pharmaceuticals (which are not influenced by the lower wages in the east) have been higher in the east since 1993, due to both higher prescription rates and a more liberal use of newer and more expensive drugs (Table 8.4).

As the gross domestic product (GDP) has remained considerably lower in the east, health care expenditure as a percentage of GDP in east Germany was, at least according to one calculation (Schneider 1999), higher than in the

Table 8.2 Expenditure data for general and psychiatric hospitals in western and eastern parts of Germany 1991–2000

	Expenditure/bed			Expenditure/day			Expenditure/case		
	West (€)	East (€)	E/W ratio	West (€)	East (€)	E/W ratio	West (€)	East (€)	E/W ratio
1991	62 309	31 160	0.50	199	114	0.60	2 849	1 833	0.64
1992	68 232 +9.5%	43 571 +39.8%	0.64	219 +10.0%	157 +37.3%	0.72	3 032 +6.5%	2 210 +20.5%	0.73
1993	72 158 +5.8%	52 708 +21.0%	0.73	236 +7.8%	187 +19.2%	0.79	3 120 +2.9%	2 429 +9.9%	0.78
1994	75 477 +4.6%	61 672 +17.0%	0.82	250 +6.1%	214 +14.6%	0.85	3 188 +2.2%	2 614+7 6%	0.82
1995	80 569 +6.7	68 249 +10.7%	0.85	269 +7.6%	233 +9.2%	0.87	3 281 +2.9%	2 729 +4.4%	0.83
1996	83 368 +3.5%	71 834 +5.3%	0.86	284 +5.4%	246 +5.6%	0.87	3 260 −0.7%	2 758 +1.1%	0.85
1997	85 624 +2.7%	75 174 +4.7%	0.88	291 +2.5%	256 +3.8%	0.88	3 218 −1.3%	2 755 −0.1%	0.86
1998	88 395 +3.2%	78 955 +5.0%	0.89	296 +1.8%	263 +2.7%	0.89	3 187 −1.0%	2 747 −0.3%	0.86
1999	91 181 +3.2%	81 218 +2.9%	0.89	306 +3.3%	269 +2.4%	0.88	3 191 +0.1%	2 731 −0.6%	0.86
2000	93 769 +2.8%	84 343 +3.9%	0.90	315% +3.1%	278 +3.3%	0.88	3 207 +0.5%	2 762 +1.1%	0.86

Source: authors' calculations based on data from the Federal Statistical Office.

United States. As health care in Germany is largely funded through statutory health insurance, which in turn is financed almost exclusively through wage- or social benefits-related contributions, this high expenditure increased the contribution rate (i.e. the percentage to be paid for health insurance) in the east above the level in the west after the mid-1990s. This contributed to a downturn in economic growth in the east. In response to these developments the Act to Equalise the Law in Statutory Health Insurance (*Gesetz zur Rechtsangleichung in der gesetzlichen Krankenversicherung*) was introduced to put the Risk Structure Compensation Mechanism (*Risikostrukturausgleich*), which redistributes money among sickness funds to compensate for different income and, to some extent, expenditure levels of their members (Busse 2001), on a uniform basis for the whole of Germany from 2000.

Table 8.3 Remuneration/income of SHI-affiliated physicians in private practice in 1998 (partly averaged for 1996–98)

	Ratio (East/West)			
	SHI remuneration	**Total remuneration (incl. private patients etc.)**	**Costs for personnel and equipment**	**Surplus = income before tax**
Dermatologists	0.81	0.63	0.58	0.72
ENT physicians	0.80	0.65	0.68	0.62
Gynaecologists	0.84	0.75	0.76	0.75
Internists (general and subspecialists)	1.02	0.88	0.84	0.93
Neurologists	0.98	0.85	0.93	0.77
Ophthalmologists	0.91	0.80	0.74	0.88
Orthopaedists	0.88	0.80	0.73	0.91
Paediatricians	0.71	0.67	0.64	0.71
Radiologists	1.21	1.24	1.22	1.32
Surgeons	0.93	0.98	0.95	1.03
Urologists	1.08	0.89	0.91	0.86
All specialists (incl. other)	0.94	0.85	0.83	0.87
General practitioners	0.88	0.80	0.76	0.85
TOTAL	**0.90**	**0.81**	**0.78**	**0.85**

Source: authors' calculations based on data from the Federal Association of SHI Physicians.

In spite of this considerable financial burden borne by Germany as a whole, east Germans feel left behind: in 1998, 44 per cent of east Germans were not satisfied with their social protection in case of illness – compared with only 34 per cent in the west (Statistisches Bundesamt 1999). The physicians themselves emphasize how they continue to receive less remuneration for work in ambulatory care, which has remained at around 77 per cent of that in the west (Table 8.4). They claim that this also makes it difficult for retiring general practitioners to find successors, especially in rural areas. Since 1998, east German physicians in ambulatory care have conducted their own separate *Ärztetage* (physicians' congregation) four times, an event that is otherwise

Table 8.4 Per capita expenditure in eastern areas of Germany compared to western areas, 1991–1999

	East/West ratio per SHI-insured person								
	1991	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Hospitals	0.64	0.74	0.79	0.86	0.89	0.96	0.97	0.98	1.02
Ambulatory physicians	0.49	0.59	0.68	0.75	0.79	0.76	0.78	0.78	0.77
Pharmaceuticals	0.64	0.78	1.02	1.10	1.14	1.13	1.10	1.07	1.07
Devices and services by other health professions	0.43	0.63	0.74	0.77	0.79	0.82	0.80	0.82	0.84
Dentists	0.68	0.90	0.94	0.98	1.03	1.01	1.01	1.00	1.01
Maternity	0.41	0.43	0.44	0.46	0.52	0.52	0.56	0.59	0.61
TOTAL	**0.57**	**0.73**	**0.80**	**0.87**	**0.91**	**0.92**	**0.93**	**0.92**	**0.94**

Source: authors' calculations based on data from the Federal Ministry of Health.

reserved for the annual meetings of the representatives of all physicians in Germany. An indication that some physicians may well have regretted their initial support for opening a private practice can be found in the highly surprising, and quite positive, cover story of the *Deutsches Ärzteblatt* (German Medical Journal', published jointly by the Federal Physicians' Chamber and the Federal Association of SHI Physicians) on policlinics with the title *Vom Auslaufmodell zur Alternative* ('From an obsolescent model to an alternative') (Richter 2001).

The changing pattern of population health

Considering the substantial transformation of the east German health care system since unification, one might expect some impact on changing mortality in the former GDR. For example, Becker and Boyle noted a fall in mortality from testicular cancer among east German men of 50 per cent between 1990 and 1995, suggesting that the rapid increase in the availability of modern pharmaceuticals may be the most likely explanation for this decline (Becker and Boyle 1997). Nolte *et al.* reported that since unification there was a substantial decline in neonatal mortality despite a slight worsening of the birth weight distribution with an increasing proportion of very low-birth weight infants in both east and west (Nolte *et al.* 2000). They further demonstrated that, in the east, the net effect of the change in the birth weight distribution would, in the absence of other factors, have led to an increase in neonatal mortality or, at least, kept mortality at the 1991 level. Instead, neonatal mortality

fell markedly by over 30 per cent. This was due to an improvement in survival at all birth weights, but in particular, among those with low and very low birth weight. Differences in survival in this group are closely linked to effective medical interventions.

Subsequent analyses showed that, in terms of mortality, medical care did not only benefit infants but also adults. A study on the potential impact of medical care on changes in mortality in east Germany estimated that of an increase in life expectancy between birth and age 75 of 1.4 years in men and 0.9 years in women between 1992 and 1997 (west Germany: 0.6 and 0.3 years), 14–23 per cent was accounted for by declining mortality from conditions amenable to medical intervention (Nolte *et al.* 2002). Falling death rates from hypertension and cerebrovascular diseases and, among women, from cervical cancer and breast cancer have been important contributors. Along with the finding of a substantial decline in birth weight specific neonatal mortality, this identifies medical care as one important component in the post-unification mortality decline in east Germany.

These findings are in line with other, albeit indirect, evidence of improved medical care in east Germany. For example, a study on provision of dialysis demonstrated that between 1989 and 1994 there was a two- to three-fold increase in dialysis facilities in east Germany, which was accompanied by a 2.5 fold increase in the number of patients receiving regular treatment (Thieler *et al.* 1994, 1995). This was due, largely, to increased treatment of elderly and diabetic patients who had been given lower priority because of shortage of funds in the former GDR (Knox 1993). Other evidence suggests that in the 1990s there was a also substantial increase in indicators reflecting intensified treatment of cardiovascular disease in east Germany, for example, an increase in ischaemic heart disease-related surgery, by 530 per cent between 1993 and 1997 (Brenne *et al.* 2000). The number of coronary catheterization units increased from 7 in 1990 to 42 in 1997 (Bundesrepublik Deutschland and Deutschen Demokratischen Republik 1990). There was also a considerable increase in the number of primary pacemaker implantations after unification, from 220 per million population in 1986/87 to 450–490 in 1993/95 (Spitzer 1999).

Yet while life expectancy at birth in east Germany improved substantially after unification, by about 2.4 years between 1992 and 1997 (Nolte *et al.* 2000), by the end of the 1990s there was still a mortality differential between the two parts of Germany (see Figure 8.1). Looking specifically at the potential role of medical care it was estimated that about 16 per cent of the gap in male life expectancy between birth and age 75 was attributable to higher mortality from conditions amenable to medical care in the east (Table 8.5) (Nolte *et al.* 2002).

Table 8.5 Cause specific contribution to differences in temporary life expectancy (e_{0-75}), in years by cause group between East and West Germany: 1992 and 1997

	Contribution in years to differences in life expectancy by age group											
	0		1–14		15–39		40–64		65–74		All	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1992												
Conditions amenable to medical care	0.055	0.047	0.004	0.011	0.060	0.033	0.146	0.069	0.056	0.060	0.321	0.220
Conditions amenable to health policy measures	0.003	0.003	0.016	0.031	0.405	0.081	0.348	0.063	0.012	−0.004	0.784	0.174
Ischaemic heart disease	0.000	0.000	0.000	0.000	0.023	0.007	0.266	0.091	0.086	0.071	0.375	0.168
Non-amenable conditions	−0.025	−0.003	0.014	0.011	0.133	0.020	0.412	0.186	0.032	0.059	0.566	0.273
Total	0.033	0.048	0.034	0.053	0.621	0.140	1.173	0.409	0.186	0.187	2.046	0.836
1997												
Conditions amenable to medical care	0.054	0.030	−0.008	0.002	0.021	0.014	0.084	−0.013	0.050	0.022	0.201	0.055
Conditions amenable to health policy measures	0.001	0.005	0.022	0.012	0.287	0.076	0.235	0.023	0.031	0.003	0.577	0.120
Ischaemic heart disease	0.000	0.000	0.000	0.000	0.015	0.002	0.170	0.040	0.075	0.060	0.260	0.101
Non-amenable conditions	−0.032	−0.048	0.030	0.011	0.098	−0.021	0.170	0.011	−0.036	0.010	0.231	−0.037
Total	0.023	20.014	0.045	0.026	0.421	0.071	0.659	0.061	0.120	0.095	1.268	0.239

Among women, the corresponding figure was 25 per cent. Importantly, although the overall differential became smaller during the 1990s, the relative contribution of these conditions to the remaining gap remained fairly stable. It would thus appear that, despite the major achievements in rebuilding the health care system in the former GDR, health outcomes continue to lag behind those in west Germany. This is also illustrated by the finding that, despite a considerable improvement since 1991, neonatal mortality in east Germany in 1996 could have been lowered by a further 15 per cent if birth weight specific neonatal mortality rates seen in the west had applied (Nolte *et al.* 2000).

There are several possible explanations for these findings, such as data artefacts, differences in underlying morbidity and differences in access to and/or quality of health care. Whilst a possible bias due to variation in data quality or comparability may be assumed to be of minor importance, available evidence suggests that some conditions where premature death is 'avoidable' by timely and effective medical care are higher in the adult east German population, such as hypertension and diabetes (Thamm 1999; Thefeld 1999). Thus, the burden of cardiovascular and endocrine morbidity appears to be higher in the east, which in turn could explain some of the higher mortality from these diseases. However, limited evidence also suggests a possible undersupply of some health services in east Germany. Thus it was noted that the higher prevalence of hypertension partly reflects a true east–west difference, but may also indicate possible undertreatment of this condition in the east (Bundesregierung 2001). There is also some evidence of east-west variation in certain diagnostic and therapeutic interventions for ischaemic heart disease (Perleth *et al.* 1999). However, how these differences impact on population health remains to be investigated.

Conclusions

Since unification, both the health care system in the former GDR and the health status of the population in this part of unified Germany has changed dramatically. The eastern part of the country has experienced one of the most remarkable increases in life expectancy in recent years. While many factors have contributed to this success, health care is definitely one of the major factors. Yet neither the improvement in health status for East Germans or the role of the health care system have really been appreciated as a success story within Germany. Rather, the high costs of unification and the disappointment that the economic situation has not improved as much as initially promised have tended to be the focus of debate.

There may, however, be a reluctance to address these issues because of the negative connotations among the population (at least in the east) of how the reform of the health care system (as in most aspects of life) was dominated by

west German actors and west German interests. Any acceptance of the uniform health insurance or the policlinic system in east Germany would have posed a considerable threat to the interests and corporatist identities of west German actors (Stone 1994; Wasem 1997). Consequently, the east German model was never given a serious chance. We therefore do not know whether it might have produced outcomes as good – or even better – than those achieved under the current system. However, the fact that east German actors were of so little importance in shaping the reform because of their weak position might be a factor contributing to the limited sense of public ownership of the new system, despite its considerable successes.

However, the circle continues to turn and current German discussions on health policy and, in particular, how to provide 'integrated care', or 'disease management programmes', which have been found to be difficult to implement in the existing model of delivery, raises the interesting question of whether a policlinic or dispensary-type structures might be (re-) established, and whether such a development would produce some satisfaction in the east that not every characteristic of the GDR health care system was as bad as it was made out to be.

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