

Healthcare System Types: A Conceptual Framework for Comparison

Claus Wendt, Lorraine Frisina and Heinz Rothgang

Abstract

This article addresses the need to establish a comprehensive conceptual framework for analysing healthcare systems and their transformations. It begins by offering an overview of the current state of the art in the field, pointing to the literature's absence of conceptual robustness in the definition of system types. By exploring the dimensions 'financing', 'provision' and 'regulation' of healthcare, the article then proceeds deductively in line with the 'Weberian method of ideal-types' to establish a taxonomy of 27 healthcare systems, of which three can be identified as 'ideal-types'. When applying this concept, not only can differences between healthcare systems be analysed, but also changes over time. The article concludes by identifying three forms of healthcare system transformation.

Keywords

Healthcare systems; Health policy; Typology; Transformation; Comparative analysis

Introduction

Hitherto, studies on *healthcare systems* have not arrived at a robust conceptual basis upon which comparative analysis can be carried out. This shortcoming is partly related to the absence of a coherent taxonomy of healthcare system *types* that may serve as a first step in categorizing healthcare systems. Indeed, such a classificatory scheme has already proven an invaluable tool in the comparative research of *welfare regimes*, rooted in the Weberian method of *ideal-types*. According to Max Weber, an ideal-type 'is formed by the one-sided *accentuation* of one or more points of view and by the synthesis of a great many diffuse, discrete, more or less present and occasionally absent *concrete individual* phenomena, which are arranged according to those one-sidedly emphasized viewpoints into a unified *analytical* construct [*Gedankenbild*]' (Weber 1949: 90; italics in original).

Address for correspondence: Claus Wendt, Mannheim Centre for European Social Research (MZES), University of Mannheim, A5, 6, 68159 Mannheim, Germany. Email: claus.wendt@mzes.uni-mannheim.de (until August 2009: Center for European Studies, Harvard University, 27 Kirkland Street, Cambridge, MA 02138, USA. Email: wendt@fas.harvard.edu)

Of the various applications of the ideal-typical method, perhaps of greatest prominence at present is the typology of welfare regimes established by Gøsta Esping-Andersen. Although Esping-Andersen does not explicitly refer to Weber in his 1990 volume, in earlier work he clearly states that the 'three worlds of welfare capitalism' he identifies are based upon Weber's methodology: 'The objective of such "regime analyses" is not to provide exhaustive comparisons across either time or societies, but rather to identify "ideal-typical" cases (in the Weberian sense)' (Esping-Andersen 1987: 7). As Esping-Andersen's work demonstrates, the aims and virtues of using this method lie especially in its ability to illustrate – by way of comparison between ideal-types and real-historical cases – the various differences existing between cases, as well as the assortment of changes taking place within them over time (Kohl 1993). As such, the ideal-typical method is a central starting point for the measurement of change and has therefore continued to be applied to the study of welfare systems. What is lacking in the literature, however, is a conceptual framework specifically devised for defining *healthcare systems*.

The present article serves as an attempt at addressing this shortcoming by establishing a conceptual model that differentiates several ideal healthcare system types. Building on classifications described in greater detail below (see e.g. Field 1973; Frenk and Donabedian 1987; OECD 1987; Moran 1999, 2000; Blank and Burau 2004), we distinguish three major dimensions of healthcare systems: *financing*, *health service provision* and *regulation* (or *governance*). It is, however, not the level or degree of these dimensions alone that best describes the respective system type, but the question as to *who* is financing, providing and regulating healthcare services. In healthcare systems it is not only the state that is responsible for these tasks but also societal-based and/or private actors. In other words, the *state*, *non-governmental actors* and the *market* are involved in the field of healthcare (Marmor and Okma 1998; Giaimo and Manow 1999; Moran 1999, 2000; Rothgang *et al.* 2005; Powell 2007). Although various studies have focused on financing, service provision, and/or regulation, we aim at contributing to the comparative health policy debate by combining these dimensions in a systematic fashion with the presence or absence of three groups of actors in each dimension. Since all three dimensions are open to quite dynamic developments, this focus also helps us to capture changes over time.

When connecting state, non-governmental and market influences with the dimensions of financing, service provision and regulation, 27 combinations emerge ($3 \times 3 \times 3$); three of which can be identified as ideal-types. This is the case when financing, provision and regulation are all dominated by either (a) the state, (b) non-governmental actors, or (c) the market. In line with Moran (1999, 2000), we argue that one dimension does not necessarily determine the other two, and that non-uniformity across dimensions can also arise: it is quite possible, for instance, for private funding to combine with public service provision and a high level of state control. Indeed, it is capturing the wide variety of uniform or ideal, as well as mixed types that the present article sets out to achieve.

The conceptual framework set forth here is designed to support research with a special focus on the nature of actors involved in the financing, provision

and regulation of healthcare services. In doing so, the present article establishes a comprehensive classification of healthcare system types and transformation that rests on the differentiation between state, non-governmental or societal, and market-based actors. Moreover, by choosing to adopt the ideal-typical method of arriving at classifications, our approach makes it possible to disentangle rationally based conceptual categories of healthcare systems from empirical instances which often represent mixed system types at best. Such an exercise in comparison allows us to uncover the potential disconnect between the ideal and the real, thereby affording us the opportunity, as social scientists, to examine the validity of our classificatory labels.

Our argument proceeds as follows: first, a brief overview of the theoretical background in the field of comparative welfare state and healthcare analysis is given. This review highlights the need for greater attention to the particularities of healthcare systems as a distinct area for the development of typologies and empirical research. Second, to that end, the article delineates three dimensions along which state involvement in healthcare can be assessed in relation to the role of societal-based and private actors. Next, on the basis of these dimensions, a typology of systems is derived, with a special view to following their internal developments. On this basis, the fourth section provides three broad categories of transformation: *system change*, *internal system change* and an *internal change of levels*.

The applicability of our typology will be illustrated by describing changes in selected countries. However, it should be recalled that throughout the article the aim remains *not* the empirical analysis of healthcare systems, but rather the establishment of a conceptual framework for comparison that may better serve future empirical work. The framework could, for instance, be used for selecting (most similar or most different) healthcare systems for case studies or for comparative studies with smaller *n* sizes (Giaimo and Manow 1999; Tuohy 1999; Freeman and Moran 2000), for analysing the distance between 'ideal-types' and 'real' cases (Kohl 1993; Burau and Blank 2006), or for investigating more subtle changes over time and thus processes of convergence or divergence (Rico *et al.* 2003; Wendt *et al.* 2005). While other typologies allow one to measure whether a healthcare system approximates a specific ideal-type, the framework set out in what follows also makes it possible to distinguish healthcare systems that are grouped under the same ideal-typical constellation.

A Typology of Healthcare Systems and Transformation: Background and Literature

A starting point for the development of a typology for categorizing healthcare systems can be found in Esping-Andersen's concept of *welfare regimes*, which extracts the various features potentially located in ideal formulations of welfare systems in order to arrive at three specific ideal-types: the 'social democratic', the 'conservative-corporatist' and the 'liberal' welfare regime (Esping-Andersen 1990, 1999; Kohl 1993; Leibfried 1993; Alber 1995). What Esping-Andersen's work does is exemplify a methodological means of arriving at a taxonomy of types that is ultimately rooted in processes of

abstraction also applicable to the study of healthcare systems of interest here. Methodology aside, however, as concerns a conceptual approach that is specific to the definition of healthcare systems, the welfare typology is largely inapplicable. That is, the actual dimensions that Esping-Andersen employs to distinguish among system types – ‘decommodification’, ‘stratification’ and ‘interaction between market, state and family’ – fail to establish an adequate basis for differentiating between the key features of healthcare systems. More generally, the point made is that in a given country the overall ‘welfare regime type’ can (and often does) differ from more specific sectors of social policy. Thus, it is not sufficient to characterize the welfare regime in general when discussing healthcare systems. Rather, a separate and specific typology for healthcare systems is needed.

What is particularly lacking in Esping-Andersen’s approach, when applied to healthcare systems, is a concern for social and healthcare *services* (Alber 1995; Moran 2000; Bambra 2005a; Wendt 2009). While other areas of the welfare state such as pensions or unemployment schemes mainly concentrate on monetary transfers, the major task of healthcare systems is the provision of healthcare services. As such, the creation of healthcare system types within the framework of the ideal-typical method requires recourse to dimensions other than those more generally applied to welfare systems. This holds true also in the case of available data that are used for the analysis of welfare states (Korpi 2003; Korpi and Palme 2003; Scruggs and Allen 2006), which, with the exception of sickness benefits, do not offer sufficient insight into the critical aspects of healthcare provision that are part and parcel of the larger healthcare puzzle.

Interestingly, in a series of recent publications, Bambra (2004, 2005a, 2005b) seeks to close this analytical gap by adapting Esping-Andersen’s concept of decommodification to the study of healthcare systems. According to Bambra, ‘health decommodification’ may be defined in terms of the extent to which an individual’s access to healthcare is dependent upon their market position and the extent to which a country’s provision of health services is independent from the market. She draws on three measures in particular: the *extent of private financing*; the *extent of private provision*; and the *general access provided by the public healthcare system* (Bambra 2005a). With this focus on provision it has been possible to identify internal inconsistencies within countries regarding the provision of cash benefits and service provision, respectively. The indicators and range of cases selected by Bambra, however, are not sufficient (and not intended) to establish a robust typology of healthcare systems.¹

Some earlier typologies are instructive for the selection of criteria that cover the main characteristics of healthcare systems. Already in 1973, Field had suggested four ‘ideal types’: the *pluralist* health system, with a high degree of private health service provision and a great deal of autonomy for the medical profession; the health *insurance* system, with a high share of funding by third-party payers and a strong autonomy for medical doctors; the *health service* system, where most facilities are owned by the state in combination with a high degree of professional autonomy; and the *socialized* health system, where all facilities are owned and controlled by the state. While Field’s (1973) typology is, even if only inconsistently, based on two main dimensions

(ownership and doctors' autonomy), a later differentiation by Terris (1978) between *public assistance*, *health insurance* and *national health service* is based on the main organizational unit only, with the effect that the United States, for instance, was clustered in the same group as Austria or Spain.

About ten years later two further typologies with an emphasis on the 'basis of entitlement' and the 'role of the state' entered into discussion. Frenk and Donabedian (1987) suggested a typology of state intervention in medical care that is based on two dimensions: first, the form of state control over the production of medical care (measured as a percentage of all expenditures in medical care that are incurred through state ownership), and second, the basis for eligibility of the population (citizenship, contributions or poverty). The first dimension indicates the relationship of the state to healthcare providers, and the second, the relationship of the state to (potential) beneficiaries. While Frenk and Donabedian (1987: 22) use their typology to 'disaggregate and classify the various modalities of state intervention that might coexist in a given country' (which is especially the case in the United States), the present study seeks to develop a framework for comparing healthcare systems of different countries. This has also been the focus of the OECD study on *Financing and Delivering Health Care* prepared by George J. Schieber in 1987, which, on the basis of three dimensions (coverage, funding and ownership), proposes three basic models: the *national health service* model with universal coverage, funding out of general taxes, and public ownership of healthcare provision; the *social insurance* model with universal coverage, funding by social insurance contributions, and with healthcare provision in public or private ownership or both; and the *private insurance* model with private insurance coverage, private insurance funding, and private ownership of healthcare provision (OECD 1987: 24). Although this typology was to prove quite influential in the years to follow (Burau and Blank 2006), some aspects deserve closer attention. It is, for instance, questionable why the social insurance type is necessarily characterized by private and/or public ownership of the factors of production. It seems to be the case that the OECD classification is strongly related to selected 'paradigmatic' cases: the UK, Germany, and the USA. The orientation of 'real' cases, however, makes it difficult to use the model as an analytical tool for cross-country comparison and for analysing change over time.

In most of the typologies discussed above (more or less explicitly) two dimensions seem to be relevant: funding and ownership. While the funding side is differentiated in terms of taxes, social insurance contributions and private insurance contributions, the health service provision side is separated into public and private ownership only. It has to be kept in mind, however, that ownership by non-governmental (or societal-based) actors is also possible and therefore the trichotomous structure used for funding can also be applied to provision (Powell 2007).

In more recent comparative studies of healthcare systems, further criteria for classifying healthcare systems, for instance with regard to 'professional autonomy' (Field 1973) or 'the basis for eligibility' and the related question of 'coverage' (Frenk and Donabedian 1987; OECD 1987), have been discussed within the more general context of regulation and governance. Concepts

based on different modes of regulation or governance have been introduced by Marmor and Okma (1998), who focus, alongside funding and service provision, on 'administrative arrangements' and 'financial conditions' (or 'access barriers'). With regard to 'administrative arrangements', they ask in what respect governments share responsibilities with interest groups and the market. This indicates that in regulation also a differentiation between state, non-governmental and market influences is considered to be relevant. Further authors also emphasize the importance of different forms of governance for the construction of healthcare system types. Rico and colleagues (2003) compare healthcare systems with regard to the relative importance of 'market', 'hierarchy' and 'networks' that differ in the way they address the two governance functions of 'coordination' and 'control'. This concept is nearly identical to the components of the 'institutional mix' in healthcare systems ('hierarchy', 'market' and 'collegiality') as defined by Tuohy (forthcoming) or to the 'state-led', 'corporate-governed' and 'market-driven' systems suggested by Giaimo and Manow (1999).

While these and other influential comparative studies mainly concentrate on different modes of governance, Moran's (1999, 2000) work can be considered as one of the few attempts that systematically combines the dimensions of funding, service provision and governance. His concept of the 'healthcare state' consists of the three governing arenas 'consumption', 'provision' and 'production'. Institutions governing the consumption of healthcare cover the basis of eligibility for patients' access to healthcare, as well as the mechanisms that decide on resources allocated to the healthcare system; institutions governing provision are concerned with the control of hospitals and doctors; finally, institutions governing production include mechanisms for regulating medical innovations (Moran 1999, 2000; Burau and Blank 2006). Based on these criteria, Moran (2000) constructs four families of healthcare states: the 'entrenched command and control state', the 'supply state', the 'corporatist state' and the 'insecure command and control state'. In 'command and control states' (e.g. Scandinavian countries and the UK), the state is distinctive in all three governing areas. In 'corporate healthcare states' (e.g. Germany), in contrast, consumption is dominated by public law bodies and the field of ambulatory care provision is dominated by panel doctors' associations. 'Supply states' (e.g. the USA) are dominated by provider interests, and 'insecure command and control states' (e.g. Greece, Portugal) differ from other national health service type countries through their formally nationalized hospital sector that 'in practice coexists with a large institutional private sector' (Moran 2000: 143).

The framework developed by Moran (1999, 2000) is the most comprehensive of the typologies discussed above (see table 1). It also offers the highest level of abstraction, which is to say, generalizability, and as such the suggested (ideal) types mirror to a lesser extent real instances of 'national health services', 'social insurance' or 'private insurance' type countries. Moreover, the applicability of Moran's concept has been demonstrated in detailed case studies (Moran 1999). Yet for the purposes of meaningfully comparing a larger number of countries, the concept of the healthcare state seems to require some specification. With regard to 'governing consumption', for instance,

Table 1
Typologies of healthcare systems

Study	Dimensions	Types of healthcare systems
Field (1973)	<ul style="list-style-type: none">• ownership• doctors' autonomy	<ul style="list-style-type: none">• pluralist health system• health insurance system• health service system• socialized health system
Terris (1978)	<ul style="list-style-type: none">• main organizational unit	<ul style="list-style-type: none">• public assistance• health insurance• national health service
Frenk and Donabedian (1987)	<ul style="list-style-type: none">• state control over production of medical care• basis for eligibility	<ul style="list-style-type: none">• 10 types of healthcare systems covering, for example, national health service in socialist countries, national health insurance in Germany, or Medicaid in the USA
OECD (1987)	<ul style="list-style-type: none">• coverage• funding• ownership	<ul style="list-style-type: none">• national health service model• social insurance model• private insurance model
Blank and Bureau (2004)	State involvement in: <ul style="list-style-type: none">• funding• provision	<ul style="list-style-type: none">• national health service model• social insurance model• private insurance model
Various authors; see for instance Hassenteufel & Palier (2007), Moran (1999)	<ul style="list-style-type: none">• coverage• funding• main organizational unit• consumption• provision• production	<ul style="list-style-type: none">• Bismarckian health insurance system• Beveridgean national health service• entrenched command and control state• supply state• corporatist state• insecure command and control state

one could differentiate between the share of financing and the question of who is regulating the funding side. Also, with regard to 'governing provision' a differentiation between ownership in healthcare provision and the regulation of healthcare services is possible. The main difference between our typology and Moran's 'health care state', however, is that Moran (1999: 8) focuses on 'the way the institutions of the state and of the health care system pervade each other', while in the present study, besides the state the (partly autonomous) role of non-governmental and private actors is included in the analysis. It is argued here that it is necessary to treat these actors as conceptually distinct, as they represent independent sources of actions and interests in healthcare policy. Accordingly, this study builds upon dimensions used by Moran and combines these dimensions with three groups of actors: state, non-governmental and private (see also Powell 2007). When discussing the importance of 'public law institutions' as a distinguishing factor with regard to healthcare systems, Moran recognizes the importance of self-regulation, especially for the 'corporatist health-care state' but without considering societal or corporatist actors in all three dimensions simultaneously.

In what follows, we will set out a conceptual framework in which the dimensions of financing and service provision (that are considered to be crucial to most typologies) are combined with the dimension of regulation. As noted by Powell (2007), it would be misleading to look at one dimension in isolation. For all three dimensions the distinguishing factor is whether they are dominated by the state, non-governmental actors or the market. While the first two dimensions allow for quantitative analysis, the regulation dimension requires qualitative analysis, as we ask whether the relations between financing agencies, service providers, and (potential) beneficiaries are primarily regulated by governmental, societal-based or market actors. This concept includes, for instance, aspects of 'eligibility' (Frenk and Donabedian 1987; OECD 1987), 'access barriers' (Marmor and Okma 1998), and the relation between the state and the medical profession (Field 1973; Moran 1999, 2000). However, although the medical profession is the single most important actor in healthcare provision, and in most countries it is the state which is the main regulator with regard to doctors, we have decided for a more general concept that takes into account the existence of other provider groups and also of further regulators in the field of healthcare.

Dimensions of Healthcare Systems

As Pierson (2001) points out, the development of analytical dimensions and their application to comparative research is a highly time- and resource-consuming endeavour:

[T]here is probably no substitute for investigations that pay attention to fairly detailed dimensions of policy change . . . Rigorously applying consistent criteria to even a small subset of affluent democracies is a time-consuming and expertise-taxing enterprise. Carrying out such research for the affluent democracies as a whole would require the efforts of a large and well-funded team. So far no one has carried it out. (Pierson 2001: 421)

Indeed, also in the present work, a detailed comparison of healthcare systems that elaborates the direction and strength of their transformation for all developed countries cannot be offered. What is more modestly pursued here instead is a first step at developing a conceptual approach to distinguishing healthcare system types which can later guide empirical work in the field. In doing so, it is necessary to derive deductively a set of criteria for individual types on the basis of the potential role of state, non-governmental and market actors in healthcare, which is to say, the basis of our formulation of ideal types.

Essentially, there are three responsibilities in healthcare: first, the financing of health services through taxation, social insurance contributions or private means; second, the provision of healthcare which can be carried out in state-run facilities respectively by state-based actors, in societal-based facilities, or in private for-profit facilities respectively by private actors; and third, the regulation by these actors of the various aspects of financing and provision (Hsiao 1995; Chinitz *et al.* 1998; Moran 1999, 2000; Blank and Burau 2004; Rothgang *et al.* 2005; Powell 2007). Taken together, the financing, service provision and regulation of healthcare are key dimensions along which different groups of actors may exhibit numerous roles and levels of engagement. However, in 'real' healthcare systems, the elements 'state', 'societal' and 'private' tend to coexist along all three dimensions, and especially when analysing changes over time the *mix within categories* must be taken into consideration.

Financing

The question of financing has always played a prominent part in the classification of healthcare systems (Field 1973; OECD 1987; Culyer 1990; Schieber and Poullier 1990; Jönsson and Musgrove 1997; Chinitz *et al.* 1998; Moran 1999, 2000; Blank and Burau 2004). Whether in the comparison of the Bismarck and Beveridge models, or of legal health insurance and national health services, the funding dimension has repeatedly served as a central distinguishing factor among systems (see again table 1), not least of all because it is their most readily observable feature. The significance of taxation, social insurance contributions and private contributions all come to the fore as hallmark forms of healthcare financing (Chinitz *et al.* 1998; Marmor and Okma 1998). Of the three, it should be noted that social insurance is viewed here as a form of societal-based funding emerging somewhere between state taxation on the one hand, and the financing of private health insurance contributions, as well as private out-of-pocket payments on the other. Seeing as the state has no direct access to social insurance revenues, a line can clearly be drawn between taxation and this type of funding. Furthermore, because social insurance is non-profit oriented, does not give entitlements based on citizenship alone but based on a specific contribution, is mandatory, and tends to contain some element of *ex ante* redistribution, it also fails to fall under the heading of the private sector. It can therefore be concluded that taxation, social insurance contributions, and private sources are three distinct forms of financing; although, in general, combinations of the three arise, healthcare systems nevertheless demonstrate a leaning in one direction or another, making it possible to distinguish among predominant funding types.

Service provision

Although the main function of healthcare systems is that of caring for patients, health service provision has yet to be systematically addressed as a key dimension in comparative healthcare system research (Hsiao 1995; Freeman 2000; Wendt and Thompson 2004; Wendt and Kohl 2009). As concerns the differentiation between state, societal or private providers, this can be made chiefly on the basis of ownership criteria and profit orientation (Field 1973; Frenk and Donabedian 1987; OECD 1987; Moran 2000; Blank and Burau 2004), according to which, state (public non-profit) and private (non-profit and for-profit) actors are readily distinguishable. Such hard and fast distinctions cannot always be made, however. In the case of individual categories of provision, it is possible to label, for instance, resident doctors and freelance workers in ambulatory care as private for-profit providers. Indeed, with the exception of hospitals, there are only rare instances in which an explicit case of state-based employees can be found in provision. And where they do appear, they remain only a small portion of all providers.

In contrast, one finds far greater variety in the case of hospital care. Alongside state hospitals, which provide, on average, the vast majority of all available hospital beds in OECD countries, there also exist private for-profit and private non-profit facilities. In Germany, for example, the role of non-profit organizations in hospital healthcare is deeply intertwined with welfare organizations and facilities. Historically, also conceivable have been facilities provided by social insurance agencies: both in the German health insurance system of 1883, as well as in the British social health insurance programme established in 1911, doctors worked in part as employees of health insurance agencies. Today, in Austria a limited number of non-profit health insurance facilities still exist alongside welfare agencies as societal-based pooled healthcare providers (Wendt 2009). In some respects also, some present-day private Health Maintenance Organizations (HMOs) in the USA follow in this tradition, as their provision is furnished partially by salaried doctors. In contrast to the European examples, however, for-profit HMOs remain rooted in the private sector (White 2007). Even if in most countries public providers are dominant in inpatient healthcare and private for-profit providers in outpatient healthcare, due to the existence of private non-profit hospitals in a number of countries the categories 'state', 'societal-based' and 'private' are also relevant to the healthcare provision dimension.

Regulation

The concept of regulation can be applied not only to state regulation (Majone 1997; Moran 2002), but also to self-regulation by non-governmental actors and to regulation by market mechanisms. This is especially the case with regard to healthcare systems which might predominantly be 'state-led', 'corporate-governed' or 'market-driven' (Giaimo and Manow 1999). One finds instances of societal and private actors emerging alongside the state in the assumption of regulatory duties (Marmor and Okma 1998; Giaimo and Manow 1999; Freeman 2000; Rothgang *et al.* 2005; Powell 2007; Tuohy

forthcoming). However, the boundaries of these responsibilities are defined by the state, and their results are subject to state control (Moran 1999, 2000). This is especially the case with regard to self-regulation within social insurance schemes where, in relation to the state, stakeholders of the social insurance system have been characterized as 'arm's length' bodies (Tuohy 2003). As such, the state's influence is decidedly higher in the case of social insurance than in private healthcare schemes. With regard to private healthcare systems the market emerges as the key force in assuming healthcare responsibilities. However, as White (2007) argues on the basis of the US scheme, a purely market-style system in medical care does not exist in OECD countries.

While other typologies have concentrated on the form of state control over the production of medical care (Frenk and Donabedian 1987) or, more specifically, on the relation between the state and the medical profession (Field 1973; Moran 1999, 2000) as well as on the relationship between the state and (potential) beneficiaries (Frenk and Donabedian 1987), the concept proposed here focuses more broadly on the relations between *financing agencies*, *service providers* and *beneficiaries* (Hsiao 1995; Jönsson and Musgrove 1997; Chinitz *et al.* 1998; Freeman 2000; Freeman and Moran 2000; Rothgang *et al.* 2005).

As outlined in table 2, with regard to the interaction between beneficiaries and financing agencies, it is both the targeted recipients (a) as well as the respective mode of funding (b) that are of chief interest. Concerning the relationship between financing agencies and service providers, the regulation of remuneration systems (c) and the control of market access for service providers to the healthcare system (d) come to the fore. Finally, regarding the service provider and beneficiary relationship, of particular relevance are the questions as to how access to healthcare services works (e) and who defines the catalogue of services (f).

The regulation dimension is clearly the most complex of the three dimensions in our analytical framework, and for a distinction between

Table 2

Relations between financing agencies, service providers and (potential) beneficiaries

Between (potential) beneficiaries and financing agencies:

- (a) coverage: the inclusion of (parts of) the population in public and/or private healthcare systems
- (b) system of financing: the financing of healthcare by public (taxes, social insurance contributions) and/or private (private insurance contributions, out-of-pocket payments) sources

Between financing agencies and service providers:

- (c) remuneration of service providers: the specific system of provider compensation
- (d) access of (potential) providers to healthcare markets: access to financing agencies

Between service providers and (potential) beneficiaries:

- (e) access of patients to service providers
 - (f) benefit package: the content and range of services offered to patients
-

state, non-governmental and private influences careful qualitative judgement is needed. However, questions as to *who* is predominantly regulating remuneration, patient access or the benefit package allow one to capture modes of regulation with regard to different areas of the healthcare system and not, as often the case, by looking at coverage and/or funding alone.

By following this analytical raster (see also Marmor and Okma 1998; Giaimo and Manow 1999; Freeman 2000; Freeman and Moran 2000; Rothgang *et al.* 2005), the pertinent question asked is *who* is in charge of regulating and controlling these relationships. Are contribution rates (b), for instance, decided upon within the self-regulatory social insurance scheme, as is still the case in Germany, or are they rather set by state agencies, as in Austria (both are in general considered as social insurance-type countries)? Are decisions about the remuneration of service providers (c) part of the responsibility of autonomous actors (doctors' and social health insurance funds' associations), or is this task the responsibility of the state, or, rather, is it left to market mechanisms? These examples demonstrate that an analysis of the question of *who* is regulating the healthcare system is more difficult to answer than in the case of the financing and service provision dimensions, and can therefore not be based on quantitative indicators alone. To classify as state, societal-based or private regulation, the majority of the relationships listed in table 2 have to be predominantly regulated either by state, societal-based or private actors. Such details, however, cannot be discussed in this article. In what follows, we will concentrate first on the analytical framework and the classification scheme resulting from this and, second, provide selected examples that illustrate how healthcare system *change* can be analysed on the basis of this concept.

Classifying Healthcare System Types

Having arrived at three dimensions along which the involvement of state, societal-based, and private actors in healthcare can be located, it is now possible to delineate the classification of 27 distinct types of healthcare systems based upon the potential range of variations that may emerge under financing, service provision and regulation.

Of these 27 types, three instances of *ideal-types* can be identified on the basis of uniform features across all dimensions of healthcare. These types comprise *state healthcare systems*, in which financing, service provision and regulation are carried out by state actors and institutions (see table 3, row 1); *societal healthcare systems*, in which societal actors take on the responsibility of healthcare financing, provision and regulation (row 11); and finally *private healthcare systems*, in which all three dimensions fall under the auspices of market actors (row 21).

Alongside each category of ideal-type, six combinations of *mixed-types* respectively emerge in which identical features can be seen along two of the three healthcare dimensions, thereby closely approximating an ideal-type with the predominance of a particular set of actors or institutions (table 3, rows 2–7, 8–10, 12–14 and 15–20). Additionally, in six other combinations of mixed-types, one finds no uniformity with regard to financing, service provision

Table 3

Classification of healthcare systems

	Healthcare system type	Regulation	Financing	Provision
1	<i>Ideal-type: State Healthcare System</i>	<i>State</i>	<i>State</i>	<i>State</i>
2	State-based mixed-type	State	State	Societal
3	State-based mixed-type	State	State	Private
4	State-based mixed-type	State	Societal	State
5	State-based mixed-type	State	Private	State
6	State-based mixed-type	Societal	State	State
7	State-based mixed-type	Private	State	State
8	Societal-based mixed-type	State	Societal	Societal
9	Societal-based mixed-type	Societal	State	Societal
10	Societal-based mixed-type	Societal	Societal	State
11	<i>Ideal-type: Societal Healthcare System</i>	<i>Societal</i>	<i>Societal</i>	<i>Societal</i>
12	Societal-based mixed-type	Societal	Societal	Private
13	Societal-based mixed-type	Societal	Private	Societal
14	Societal-based mixed-type	Private	Societal	Societal
15	Private-based mixed-type	State	Private	Private
16	Private-based mixed-type	Private	State	Private
17	Private-based mixed-type	Private	Private	State
18	Private-based mixed-type	Societal	Private	Private
19	Private-based mixed-type	Private	Societal	Private
20	Private-based mixed-type	Private	Private	Societal
21	<i>Ideal-type: Private Healthcare System</i>	<i>Private</i>	<i>Private</i>	<i>Private</i>
22	Pure mixed-type	State	Private	Societal
23	Pure mixed-type	State	Societal	Private
24	Pure mixed-type	Private	State	Societal
25	Pure mixed-type	Private	Societal	State
26	Pure mixed-type	Societal	State	Private
27	Pure mixed-type	Societal	Private	State

and regulation, and, as such, no likeness to an ideal-type. These types are referred to here as *pure mixed-types* (rows 22–27):

Casting an eye on the six mixed-types falling under each instance of ideal healthcare systems (e.g. rows 2–7), here a wide variety of combinations provide a rich basis against which real cases can be evaluated and also point to the differences in real world representation that exist. However, as already emphasized by Frenk and Donabedian (1987: 21) on the basis of their typology, ‘not all modalities are equally likely in practice’. For example, whereas the combination of state regulation, state financing and private provision is relatively common, the emergence of private regulation in conjunction with state-based financing and provision is rather unlikely. The possibility in pinpointing those cases which are of greatest real world relevance can help guide the case selection of researchers that do not conduct large *n* studies. As for the remaining system types, they provide an ideal compass for assessing both the strength and direction of system change over time.

When concentrating on current healthcare systems in the OECD world, one could even exclude all types with societal-based service provision. Even a social health insurance system that is in general taken as an 'ideal-type', the German one, is according to the classification scheme in table 3 characterized as a 'societal-based mixed-type' with predominantly private healthcare provision. Due to the key role of the state in regulation, other social insurance systems, as for instance Austria, might even fall in the category 'pure mixed-type' with predominantly state regulation, social insurance funding, and with health services mainly offered by private providers (Wendt 2009). However, although current OECD countries provide no example for predominantly societal-based provision, this category should not be excluded from the analytical raster since there are historical (e.g. friendly societies in Britain; Ham 2004) or global (in developing countries) examples of non-governmental non-profit healthcare provision.

Healthcare System Transformation

Arriving finally at a discussion of healthcare system *transformation*, here too the taxonomy presented above provides a useful means of identifying a potential range of system change. More specifically, in line with the classification of 27 healthcare system types according to ideal-, mixed- and pure mixed-types, the following three forms of transformation can be derived: first, the most extreme can be said to take place when a system moves from one quarter of table 3 to another, as, for example, when a state-based type develops into a private type. Seeing as such change results in the development of an entirely new system, this transformation is referred to here as *system change*, which is expected to arise only in exceptional instances in which drastic turns in policy goals meet high public acceptance (see also Hall 1993; Marmor and Okma 1998; Giaimo and Manow 1999; Rico *et al.* 2003).

More commonly anticipated is a second form of transformation that unfolds along a system's three dimensions but which does not culminate in a larger system change. Such a development we refer to as *internal system change* and it may happen, for example, when the provision of healthcare shifts from state-based to private actors, whereas financing and regulation remain in state hands. Under such circumstances, the system witnesses a significant alteration, but nevertheless remains predominantly state-based.

Finally, a third, still milder form of transformation that can be derived is that of an *internal change of levels*, in which a shift *within* one or more dimensions takes place without leading to any exchange in the system's respective features. For instance, in the case of a pure private-based system, should a number of public healthcare initiatives be introduced to meet the coverage needs of those living beneath the poverty line, the dimension of financing may witness an internal shift in levels such that an increased presence of the state is felt. However, unless public programming is significant and far-reaching enough to generate a change in the system's key form of funding, the dimension will remain predominantly private. Accordingly, this species of system transformation does not exceed the sub-dimensional level, and therefore fails to result in either a change in the specific dimension(s) at hand, or the system itself.

While an *internal change of levels* does not embody the same degree of transformation as other forms discussed here, it nevertheless reflects a highly significant development within healthcare systems. This is true for at least two reasons: first, by virtue of its modest nature, an internal change of levels is the most likely transformation to be observed – particularly over short periods of time, which are the typical horizons of researchers and politicians alike. Second, despite its modest nature, an *internal change of levels* may indeed be the precursor to the more graduated forms of transformation seen in a *system change* or an *internal system change*, especially if ‘state’, ‘societal’ or ‘private’ features are close to losing their dominant position within a given dimension. As such, the ability to identify and subsequently trace back to even the subtlest shift in *niveau* within a dimension may serve as a first step in explaining more expansive system developments to follow.

This concept has some similarities with Peter Hall’s (1993) first-, second- and third-order change (see also Rothgang *et al.* 2006). An internal shift of levels, for instance, falls under the first-order change category, which is defined by Hall (1993) as a ‘simple change’ of settings and levels. Second-order change, however, relates to the ‘techniques or policy instruments’ used to attain certain goals. The regulation dimension can partly be grouped under this category but concentrates not on policy instruments *per se* but on the question of *who* is in charge of using these instruments. Third-order change, finally, focuses on ‘the overarching goals that guide policy in a particular field’ (Hall 1993). We also expect that a ‘big change’ like a *system change* will in general follow a redefinition of the overarching goals of the system. But instead of trying to capture (the impact of) changing ideas in the field of health policy for a number of countries, we focus on dimensions which are presumably more easy to measure.² The identification of a *system change*, however, might provide the empirical basis for studies with a focus on the role of ideas in (de-)institutionalization processes (Hall 1993, 1997; Ebbinghaus 2005).

By way of explication, we will now point to a number of specific country cases in which different levels of changes have taken place. Denmark, for instance, moved from a (predominantly) social insurance-type country to a national health services system in the early 1970s (Vranbaek and Christiansen 2005). However, since this former social insurance system was already heavily state-regulated, and healthcare provision was (and still is) dominated by public hospitals, it is not a shift from one to another ideal-type which has taken place but, rather, from a state-based mixed-type to an ideal-type state healthcare system.

The British National Health Service has been traditionally cast as a state-based system, with financing, provision and regulation resting largely in the hands of public institutions. At closer look, however, it can be observed that although the system retains the bulk of these features, significant changes have taken place intra-dimensionally such that an internal shift of levels can be spoken of: the introduction of an internal market in Britain has not led to a replacement of the state as the main regulator; however, it has created some space for self-regulation by NHS trusts. Interestingly, what one sees in this case is a counter-balancing of the introduction of internal market mechanisms

with a parallel reinforcement of state regulatory functions (Klein 2001). 'In health care we encounter the wider paradox of public policies that try to strengthen market forces: markets need states, and strong markets need strong states' (Freeman and Moran 2000: 56).

Meanwhile, countries of Central and Eastern Europe (CEE) that have changed from socialist healthcare systems to social health insurance systems (Dubois and McKee 2004; Österle 2007) are currently characterized by comparatively weak actors of the social insurance systems and a high proportion of healthcare provided in public hospitals. Despite the low level of tax funding, some CEE countries might still be classified as state-based mixed types and only a strengthening of corporate social insurance actors would lead to a real *system change*.

Southern European countries, differently, changed from a social insurance type to a national health service type in the late 1970s and early 1980s (Guillén and Matsaganis 2000; Cabiedes and Guillén 2001; Davaki and Mossialos 2005). Especially Greece and Portugal, however, maintained elements of the former social health insurance scheme and are characterized by weak public authorities (Cabiedes and Guillén 2001). Despite the weakness of state authorities, the changes of the 1970s and 1980s seem to represent a *system shift* from a societal-based mixed type towards a state-based mixed type. Due to the reduction of private out-of-pocket payments (OECD 2007) this process was followed by an *internal change of levels* from the 1990s onwards.

The US healthcare system, finally, has often been taken as an ideal-type private model. However, today it is mainly financed out of public funds since it is heavily tax-subsidized (Moran 2000). According to our analytic raster, it has therefore experienced an *internal system change* and today can be described as a private-based mixed type.

Conclusions and Next Steps for Research

In an effort to redress the absence of conceptual clarification surrounding the comparative study of healthcare systems, the present article follows in the tradition of the Weberian method of ideal-types to arrive at a taxonomy of 27 healthcare systems and three categories of healthcare system transformation. Underpinning this classificatory scheme is an interest in the changing role of state, societal and private actors in the financing, service provision and regulation of healthcare (Marmor and Okma 1998; Giaimo and Manow 1999; Moran 1999, 2000; Freeman 2000; Freeman and Moran 2000; Rothgang *et al.* 2005). It is along these policy dimensions that the potential range of system types is delineated to include the distinction of three ideal systems in particular – namely, state healthcare systems, societal healthcare systems, and private healthcare systems; as well as various permutations of mixed systems thereof. Taken together, this extensive cataloguing of types provides a conceptual compass with which the definition and comparison of healthcare systems may be better pursued in empirical work.

The practical applications of the study's classification system lie primarily in its ability to provide unambiguous concepts and dimensions against which real-historical cases can be measured in a systematic fashion (Esping-

Andersen 1990, 1999; Kohl 1993; Korpi 2003; Korpi and Palme 2003; Scruggs and Allen 2006). In doing so, not only is the process of identifying individual cases facilitated, but also the very means of pursuing cross-national, as well as cross-temporal comparisons. With regard to the former, it is argued that different healthcare systems are more easily contradistinguished if a single analytical raster is employed, assuring the coherency of conceptual meanings necessary for sound comparative research. With respect to the latter – the analysis of healthcare system developments across time – here, too, system transformations can be said to be more readily apparent if they are observed in relation to a pre-established constant from which they proceed. Moreover, such changes to healthcare systems may be further qualified in terms of their direction and degree – aspects which are reflected in the study's three categories of system transformation: *system change*, *internal system change* and *internal change of levels*.

Selected examples provided on the basis of the conceptual framework demonstrate that today an ideal-type societal-based healthcare system does not exist. The German case, for instance, can be characterized by predominantly social insurance-based regulation and financing combined with a high and increasing share of private healthcare provision. The current growth of state intervention in Germany even enlarges the distance to the societal-based ideal-type. The present framework may also help in identifying certain weaknesses of corporate actors in the healthcare systems of CEE countries after 1990, which continue to display a strong departure from the ideal societal-based model. In recognizing this departure, the increased vulnerability of these systems to market forces (compared to West European health insurance systems) may also be acknowledged. With regard to the private ideal-type, the US healthcare system can be considered to be still the closest approximation. However, due to the great importance of tax exemptions and the increase of tax financing (especially for Medicaid), it can today be characterized as a private-based mixed-type. National Health Service systems in Great Britain and the Scandinavian countries, finally, still represent ideal-type state healthcare systems. However, an *internal change of levels* has occurred under all three dimensions.

To speak finally of the limitations of the present work, it should be duly noted that in attempting to arrive at a comprehensive understanding of the state's role and its relation to further actors in healthcare, the dimensions of financing, service provision, and regulation are taken to be the core activities within this policy domain. Indeed, this assumption is supported both deductively and by recourse to extant literature in the field (e.g. Hsiao 1995; Jönsson and Musgrove 1997; Chinitz *et al.* 1998; Marmor and Okma 1998; Giaimo and Manow 1999; Freeman and Moran 2000; Blank and Burau 2004; Rothgang *et al.* 2005). However, should empirical studies make use of the present classificatory framework, potential refinements or adaptations may necessarily arise, particularly with regard to the study of regulation, which has hitherto remained a largely under-explored aspect of healthcare (Powell 2007). This said, what the current work does provide is an essential first step in distinguishing the key features of healthcare systems, rendering their identification, comparison and observed transformation a greatly facilitated empirical undertaking.

Acknowledgements

The research reported here has received financial support from the German Research Foundation. We would also like to thank Martin Powell, Richard Freeman, Bruno Palier, Nadine Reibling and two anonymous referees for their helpful comments.

Notes

1. Access to public health systems in Europe, for instance, is in general high (in most countries the total population is covered) and therefore the variance across countries is particularly low. Also, the indicator used to measure the extent of private provision – the share of private hospital beds – can be viewed as unreliable, since in some countries private non-profit beds have been categorized as private, and in other countries as public (OECD 2002). Due to these and further inconsistencies the differentiation between public and private inpatient beds is not included in more recent OECD health data sets (OECD 2007).
2. For a related examination of the role of values, for example, in healthcare policy, see Frisina (2008).

References

- Alber, J. (1995), A framework for the comparative study of social services, *Journal of European Social Policy*, 5, 2: 131–49.
- Bambra, C. (2004), The worlds of welfare: illusory and gender blind? *Social Policy and Society*, 3, 3: 201–11.
- Bambra, C. (2005a), Cash versus services: ‘worlds of welfare’ and the decommodification of cash benefits and health care services, *Journal of Social Policy*, 34, 2: 195–213.
- Bambra, C. (2005b), Health status and the worlds of welfare, *Social Policy and Society*, 5, 1: 53–62.
- Blank, R. H. and Burau, V. (2004), *Comparative Health Policy*, London: Palgrave.
- Burau, V. and Blank, R. H. (2006), Comparing health policy: an assessment of typologies of health systems, *Journal of Comparative Policy Analysis*, 8, 1: 63–76.
- Cabiedes, L. and Guillén, A. (2001), Adopting and adapting managed competition: health care reform in Southern Europe, *Social Science and Medicine*, 52: 1205–17.
- Chinitz, D., Preker, A. and Wasem, J. (1998), Balancing competition and solidarity in health care financing. In R. B. Saltman, J. Figueras and C. Sakellariades (eds), *Critical Challenges for Health Care Reform in Europe*, Buckingham: Open University Press, pp. 55–77.
- Culyer, A. J. (1990), Cost containment in Europe. In OECD (ed.), *Health Care Systems in Transition: The Search for Efficiency*, Paris: OECD, pp. 29–40.
- Davaki, K. and Mossialos, E. (2005), Plus ça change: health sector reforms in Greece, *Journal of Health Politics, Policy and Law*, 30, 1/2: 143–67.
- Dubois, C.-A. and McKee, M. (2004), Health and health care in the candidate countries of the European Union: common challenges, different circumstances, diverse policies. In M. McKee, L. MacLehose and E. Nolte (eds), *Health Policy and European Union Enlargement*, Maidenhead: Open University Press, pp. 43–63.
- Ebbinghaus, B. (2005), *Can Path Dependence Explain Institutional Change? Two Approaches Applied to Welfare State Reform*, MPIfG Discussion Paper 05/2, Cologne: MPIfG.
- Esping-Andersen, G. (1987), The comparison of policy regimes: an introduction. In M. Rein, G. Esping-Andersen and L. Rainwater (eds), *Stagnation and Renewal in Social Policy*, New York: M. E. Sharpe, pp. 3–12.

- Esping-Andersen, G. (1990), *The Three Worlds of Welfare Capitalism*, Cambridge: Polity Press.
- Esping-Andersen, G. (1999), *Social Foundations of Postindustrial Economies*, Oxford: Oxford University Press.
- Field, M. G. (1973), The concept of the 'health system' at the macrosociological level, *Social Science and Medicine*, 7: 763–85.
- Freeman, R. (2000), *The Politics of Health in Europe*, Manchester: Manchester University Press.
- Freeman, R. and Moran, M. (2000), Reforming health care in Europe, *West European Politics*, 23, 2: 35–59.
- Frenk, J. and Donabedian, A. (1987), State intervention in medical care: types, trends and variables, *Health Policy and Planning*, 2, 1: 17–31.
- Frisina, L. (2008), Policy values and policy change in different healthcare systems: a comparative analysis of the British NHS and US private insurance system, *Harvard Health Policy Review*, 9, 1: 88–99.
- Giaimo, S. and Manow, P. (1999), Adapting the welfare state: the case of health care reform in Britain, Germany, and the United States, *Comparative Political Studies*, 32, 8: 967–1000.
- Guillén, A. M. and Matsaganis, M. (2000), Testing the 'social dumping' hypothesis in southern Europe: welfare policies in Greece and Spain during the last 20 years, *Journal of European Social Policy*, 10, 2: 120–45.
- Hall, P. A. (1993), Policy paradigms, social learning, and the state: the case of economic policymaking in Britain, *Comparative Politics*, 25, 3: 275–96.
- Hall, P. A. (1997), The role of interests, institutions, and ideas in the comparative political economy of the industrialized nations. In M. I. Lichbach and A. S. Zuckerman (eds), *Comparative Politics: Rationality, Culture, and Structure*, Cambridge: Cambridge University Press, pp. 174–207.
- Ham, C. (2004), *Health Policy in Britain: The Politics of Organisation of the National Health Service*, London: Palgrave.
- Hassenteufel, P. and Palier, B. (2007), Towards neo-Bismarckian health care states? Comparing health insurance reforms in Bismarckian welfare systems, *Social Policy & Administration*, 41, 6: 574–96.
- Hsiao, W. C. (1995), A framework for assessing health financing strategies and the role of health insurance. In D. W. Dunlop and J. M. Martins (eds), *An International Assessment of Health Care Financing: Lessons for Developing Countries*, Washington, DC: World Bank, pp. 15–30.
- Jönsson, B. and Musgrove, P. (1997), Government financing of health care. In B. Jönsson (ed.), *Innovations in Health Care Financing*, Washington, DC: World Bank, pp. 41–65.
- Klein, R. (2001), *The New Politics of the NHS*, London: Prentice Hall.
- Kohl, J. (1993), Der Wohlfahrtsstaat in vergleichender Perspektive. Anmerkungen zu Esping-Andersen's 'The three worlds of welfare capitalism', *Zeitschrift für Sozialreform*, 39, 2: 65–82.
- Korpi, W. (2003), Welfare-state regress in Western Europe: politics, institutions, globalization, and Europeanization, *Annual Review of Sociology*, 29: 589–609.
- Korpi, W. and Palme, J. (2003), New politics and class politics in the context of austerity and globalisation: welfare state regress in 18 countries, 1975–95, *American Political Science Review*, 97, 3: 425–46.
- Leibfried, S. (1993), Towards a European welfare state? On integrating poverty regimes into the European community. In C. Jones (ed.), *New Perspectives on the Welfare State in Europe*, London and New York: Routledge, pp. 133–56.
- Majone, G. (1997), From the positive to the regulatory state: causes and consequences of changes in the mode of governance, *Journal of Public Policy*, 17, 2: 139–67.

- Marmor, T. R. and Okma, K. G. H. (1998), Cautionary lessons from the West: what (not) to learn from other countries' experience in the financing and delivery of health care. In P. Flora, P. R. de Jong, J. Le Grand and J.-Y. Kim (eds), *The State of Social Welfare, 1997: International Studies on Social Insurance and Retirement, Employment, Family Policy and Health Care*, Aldershot: Ashgate, pp. 327–50.
- Moran, M. (1999), *Governing the Health Care State: A Comparative Study of the United Kingdom, the United States and Germany*, Manchester: Manchester University Press.
- Moran, M. (2000), Understanding the welfare state: the case of health care, *British Journal of Politics and International Relations*, 2, 2: 135–60.
- Moran, M. (2002), Review article: understanding the regulatory state, *British Journal of Political Science*, 32: 391–413.
- OECD (1987), *Financing and Delivering Health Care: A Comparative Analysis of OECD Countries*, Paris: OECD.
- OECD (2002), *OECD Health Data: Comparative Analysis of 30 Countries*, Paris: OECD.
- OECD (2007), *OECD Health Data: Comparative Analysis of 30 Countries*, Paris: OECD.
- Österle, A. (2007), Health care across borders: Austria and its new EU neighbours, *Journal of European Social Policy*, 17, 2: 112–24.
- Pierson, P. (2001), Coping with permanent austerity: welfare state restructuring in affluent democracies. In P. Pierson (ed.), *The New Politics of the Welfare State*, Oxford: Oxford University Press, pp. 410–56.
- Powell, M. (2007), The mixed economy of welfare and the social division of welfare. In M. Powell (ed.), *Understanding the Mixed Economy of Welfare*, Bristol: Policy Press, pp. 1–21.
- Rico, A., Saltman, R. B. and Boerma, W. G. W. (2003), Organizational restructuring in European health systems: the role of primary care, *Social Policy & Administration*, 37, 6: 592–608.
- Rothgang, H., Cacace, M., Grimmeisen, S. and Wendt, C. (2005), The changing role of the state in health care systems, *European Review*, 13, 1: 187–212.
- Rothgang, H., Obinger, H. and Leibfried, S. (2006), The state and its welfare state: how do welfare state changes affect the make-up of the nation-state? *Social Policy & Administration*, 40, 3: 250–66.
- Schieber, G. J. and Poullier, J.-P. (1990), Overview of international comparisons of health care expenditure. In OECD (ed.), *Health Care Systems in Transition: The Search for Efficiency*, Paris: OECD, pp. 9–15.
- Scruggs, L. and Allen, J. (2006), Welfare-state decommodification in 18 OECD countries: a replication and revision, *Journal of European Social Policy*, 16, 1: 55–72.
- Terris, M. (1978), The three world systems of medical care: trends and prospects, *American Journal of Public Health*, 68, 11: 1125–31.
- Tuohy, C. (1999), *Accidental Logics: The Dynamics of Change in the Health Care Arena in the United States, Britain, and Canada*, New York: Oxford University Press.
- Tuohy, C. (2003), Agency, contract, and governance: shifting shapes of accountability in the health care arena, *Journal of Health Politics, Policy and Law*, 28, 2–3: 195–215.
- Tuohy, C. (forthcoming), Health care reform, health care policy: Canada in comparative perspective. In T. R. Marmor, R. Freeman and K. G. H. Okma (eds), *Comparative Studies and the Politics of Modern Medical Care*, New Haven, CT: Yale University Press.
- Vranbaek, K. and Christiansen, T. (2005), Health policy in Denmark: leaving the decentralized welfare path? *Journal of Health Politics, Policy and Law*, 30, 1–2: 29–52.
- Weber, M. (1949), *The Methodology of the Social Sciences*, New York: Free Press.
- Wendt, C. (2009), *Krankenversicherung oder Gesundheitsversorgung? Gesundheitssysteme im Vergleich* (2nd edn), Wiesbaden: VS-Verlag.

- Wendt, C. and Kohl, J. (2009), Translating monetary inputs into healthcare provision: a comparative analysis of the impact of different modes of public policy, *Journal of Comparative Policy Analysis*, 11, 3 (forthcoming).
- Wendt, C. and Thompson, T. (2004), Social austerity versus structural reform in European health systems: a four-country comparison of health reforms, *International Journal of Health Services*, 34, 3: 415–33.
- Wendt, C., Grimmeisen, S. and Rothgang, H. (2005), Convergence or divergence in OECD health care systems? In B. Cantillon and I. Marx (eds), *International Cooperation in Social Security: How to Cope with Globalisation*, Antwerp: Intersentia, pp. 15–45.
- White, J. (2007), Markets and medical care: the United States, 1993–2005, *Millbank Quarterly*, 85, 3: 395–448.