

## **Negotiating Authority:**

### **A Comparative Study of Reform in Medical Training Regimes**

*Iris Wallenburg, Jan-Kees Helderman, Antoinette de Bont, Fedde Scheele, Pauline Meurs*

#### **Abstract**

Recently the medical profession has faced increasing outside pressure to reform postgraduate medical training programs to better equip young doctors for changing health care needs and public expectations. In this paper, we explore the impact of reform on professional self-governance by conducting a comparative historical-institutional analysis of postgraduate medical training reform in Britain and the Netherlands. In both countries, the medical training regime has shifted from professional self-regulation to co-regulation. Yet, there are notable differences in each country that cannot be solely explained by diverging institutional contexts. They also result from the strategic actions by the actors involved. Based on an assessment of the recent literature on institutional transformation, this paper shows how strategic actions set negotiating authority processes into motion, producing new and sometimes surprising institutional arrangements that can have profound effects on the distribution and allocation of authority in the medical training regime. The paper stresses the need to study the interactions between political context, the properties of institutions and negotiating authority processes, as they are crucially important to understanding institutional transformation.

#### **1. Introduction**

As a professional group par excellence, the medical profession is often described in terms of its authority and capacity to govern its own members (e.g. Larson 1977, Freidson 2001). In the governance regime of medical professionals, professional training is considered a core institution, regulating both entry to the profession as well

---

#### **° Acknowledgements**

The authors would like to thank all respondents in the Netherlands and the UK for their willingness to share their experiences and thoughts on medical training reforms. An earlier draft of this paper has been presented at a meeting of the European Health Policy Group in London, September 2009. The authors want to thank the members present for their comments. Special thanks to Carolyn Tuohy, Tom van der Grinten en Paul Batchelor. Finally, we are very grateful to two anonymous reviewers and the editor of this journal for their comments and suggestions that helped us to improve the paper.

as the transfer of professional skills and habits. Despite considerable changes in health care policy regimes in the 20<sup>th</sup> century, this core attribute of the professional medical community has remained largely uncontested. In the past decade, however, the medical profession has faced increasing outside pressure to reform training programs to improve patient safety and better equip young doctors for changing health care needs and public expectations (Ludmerer and Johns 2005; Drazen and Epstein 2002). To that end, medical associations in various Western countries (e.g. USA, Canada, Britain, and the Netherlands) have launched new vocational programs to meet revised standards in residency training, lifestyle, and preparation for supervisory roles (Ringsted et al. 2006: 437; Drolet et al. 2010; Fitzgibbons et al. 2006). Traditional apprenticeship-based programs, where residents gradually learn the skills and professional values of their specialty are being replaced by more structured and transparent training based on modern educational insights (Wallenburg et al. 2010).

A growing body of sociological and medical educational literature has discussed these reforms in technical and methodological terms, addressing the *kind of knowledge* that should be transferred during medical training (Frank and Danoff 2007; Jones et al. 2001; Sales and Schlaff 2010) and *how* this should be done to prepare medical doctors for contemporary health care problems and changing public expectations (Teunissen et al. 2007; Schuwirth and van der Vleuten 2004). In contrast, we wish to move past the technical account of medical educational reform and argue that contemporary reform of medical curricula has implications that go far beyond teaching method aspects and the educational content of medical curricula.

This article seeks to explore the impact of successive reforms of medical vocational training programs on the capacity and authority of the medical profession to govern its own affairs. Our empirical focus is on reforms in postgraduate medical specialist training in Britain and the Netherlands. Both countries have considerably different health care systems and diverging state-profession relationships yet both face similar reforms to their medical training systems. The central questions we address are: *What mechanisms of institutional reproduction and change are at play in the evolving transformation of the medical training regimes in Britain and the Netherlands, and what are the consequences of these transformations for self-governance of medical professional training in both countries?*

We conducted a comparative historical-institutional analysis of the origins, evolution, and transformation of the British and Dutch postgraduate medical educational systems. In accordance with recent literature on institutional change, we consider institutional change as a gradual, incremental and continuous process in

which institutions are subject to frequent negotiations (Thelen 2004; Streeck and Thelen 2005; Deeg and Jackson 2007; Mahoney and Thelen 2010). We explore the implications of this theoretical perspective on gradual and negotiated institutional change in section 2. In the empirical sections (sections 3-5), we show how medical training regimes in Britain and the Netherlands have evolved over time due to the dialectic relations between endogenous and exogenous forces touching upon vested interests and power relations in the domestic health care systems. In the conclusions we compare the cases and discuss the consequences of regime transformation for professional self-governance. We argue that in both countries professional self-governance has turned into more hybrid forms of co-regulation in which the medical profession, the state, and other private actors continuously reinstate their positions and related claims to authority. This shift to co-regulation also becomes visible in everyday clinical training practice where the traditional training-and-license models are increasingly supplemented, or replaced by more formal instruction, performance measurement and standardized practices of resident training, in order to enhance transparency and accountability of medical training. We argue that this enhanced visibility of former closed training practices may provide other stakeholders with new means to further reform postgraduate medical education and, with that, strengthen their authority in the medical training regime. We conclude by elaborating on the implications of this study for contemporary debates on institutional change.

## **2. Transforming the Medical Training Regime**

### ***A Social Regime Approach***

This article focuses on the transformation of one of the core institutions of the medical profession: the ownership and accompanying authority and autonomy of physicians over the vocational programs of medical professional training. Here we term the governance structure of medical training a ‘training regime’ embodying the distinct institutional configurations and agencies involved in medical training. Specifically, regimes are defined as “a set of rules stipulating expected behavior and ‘ruling out’ behavior deemed to be undesirable. A regime is legitimate to the extent that the expectations it represents are enforced by the society in which it is embedded” (Streeck and Thelen 2005: 12-13). Actors in the regime have explicitly undertaken to respect certain interest positions of other parties (including those not directly involved), to pursue certain substantive goals and values, and to follow certain procedures in their future interactions (Scharpf 1997). As such, regimes create order and stability in an otherwise chaotic and anarchic world.

In order to understand the genesis, reproduction and change of a social regime, three important characteristics of regimes should be noted. Firstly, in terms of their composition, regimes are typically structured by a host of different institutions, together constituting an institutional configuration that makes up a regime. The actors involved can be seen as ‘purposeful’, meaning that they have their own interests and may undertake their own strategies to pursue their goals. Secondly, regimes can be specified at different levels of breadth, that is, they are embedded or nested in other regimes (Hood et al. 2001:10). The medical training regime, for example, is embedded in the overarching regime of the health care system. Given physicians’ central stake in health care, a medical training regime can in turn be regarded as one of the constituting regimes of any health care regime, meaning that changes in the medical training system may have profound effects on medical governance in general—and the other way around.

Thirdly, any distinct regime consists of a configuration of institutions, some with deeper roots (‘more important’) than others. Reforming these institutions is likely to be harder and more politicized than reforming institutions located more in the periphery of an institutional configuration. We refer to these deeply rooted institutions as ‘core institutions’. Although core institutions are complemented by other institutions, they are likely to dominate the governance mode in any regime and thus impose their logic on the institutional configuration of a regime as a whole. Core institutions are also dominant in terms of their authority claim in distinct regimes.

In short, different sub-regimes and their accompanying institutional arrangements interact in the overarching social regime. To understand regime transformation, then, we should study the different sub-regimes, their mutual relationships, as well as any changes in one sub-regime that might spill over to the others. This analysis requires a subtle approach to the analysis of institutional change.

### ***Regime Transformation: Negotiating Power and Authority***

Institutions can be defined as the formal and informal rules of the game providing political agents with incentives and constraints that induce stable patterns of behavior. Institutional analysis generally shares an emphasis on the constraining character of institutions. Increasing returns, sunk costs, and positive feedback are powerful mechanisms that make institutional change largely path-dependent (Pierson 2000; Mahoney 2000). In the path dependency view, institutional change is usually explained in two ways: either as minor, usually continuous change (seen most often) or as major change caused by some sort of exogenous shock opening up existing

paths (seen rarely) (Streeck and Thelen 2005: 8). In the absence of analytical tools to characterize and explain more gradual institutional change, much of the institutional literature has relied—explicitly or implicitly—on a strongly punctuated-equilibrium model that draws on overly sharp distinctions between long periods of institutional stasis periodically interrupted by ‘critical junctures’ allowing for more or less radical reorganization (Tuohy 1999; True et al. 2007).

A growing body of literature is currently questioning these ideas of institutional resistance to change; for a discussion on this topic see also a special issue of this journal (JHPPL, August 2010).<sup>1</sup> Scholars writing in the realm of institutional change display what Deeg and Jackson (2007) have called “a greater plasticity” of institutional evolution, meaning that institutional change is essentially a gradual and evolutionary process (Streeck and Thelen 2005; Hacker 2004; Mahoney and Thelen 2010). Beyond the conventional view of institutions as stable constructs that owe their stability to powerful policy legacies and path-dependent processes, the authors point out that institutional change is essentially a gradual evolutionary process. The determinants of institutional change not only come from outside, but can also be produced endogenously by the very behavior that the institutions themselves have generated. In this view, a far more dynamic component is built in, wherein institutions represent compromises of relatively durable though still contested settlements based on specific coalitional dynamics. These coalitions, however, are always vulnerable to shifts as institutional rules are subject to varying interpretations and levels of enforcement. Therefore, they exhibit ambiguities that provide space for interested agents to exploit their efforts to alter them (Thelen 2004; Mahoney and Thelen 2010). To understand these more gradual and incremental processes of institutional evolution, one should consider the mechanisms of reproduction that help to sustain these institutions over time as well as the changes in institutions that gradually transform them into new directions. Institutional change can best be understood in terms of the ‘co-evolution’ of multiple institutions in a social regime (Thelen 2004: 32).

Power and authority are important features in institutional transformation analysis, stressing the role of agencies in social regimes (Moe 2005; Mahoney and Thelen 2010; White 2009). Such power relations create order as well as rigidities because all actors in a particular regime become more expert at pursuing courses of action that favor their own interests. Potential rivals, however, not only lack the power to challenge pre-established institutions, but lack the accepted expertise and

---

<sup>1</sup> *Journal of Health Policy Politics and Law*, Vol. 35, No. 4, August 2010

potential to convince others that alternative actions are practically viable (Crouch and Keune 2005: 85–86). This can be illustrated by the medical training regime in which specialization, the application of medical knowledge, technical skills and tacit knowledge have long been accepted as dominant sources of expertise, thereby excluding actors without this kind of knowledge. However, notwithstanding these deeply embedded power relations, institutional change often involves compromises or contested settlement between coalitions of countervailing powers and always carries an element of dynamism or ambiguity, implying that regime stability is not automatically generated but depends on the ongoing mobilization and reproduction of power (Light 2000). Light proposes a model of “countervailing powers”, in which one set of interests, such as medical professional dominance over postgraduate medical education, overextends its attempts to dominate the field, prompting the regrouping of other actors and interests (like the state). As a consequence, the medical training regime swings back and forth between different kinds of authority (see also Mendel and Scott 2010).

Contemporary theories on institutional change put more emphasis on the ambiguity and dynamics of institutional evolution. They stress the crucial importance of the interaction between the political context, strategic actors and the properties of institutions themselves in explaining institutional change (Mahoney and Thelen 2010: 31). Changes in existing procedures, ideologies and structures that may be due to changes in the overarching social regime or in adjacent regimes can lead to conflicting logic and authority claims, as various actors have their own identities, interests and commitments to different goals and objectives. Specifically, if new expectations and related kinds of knowledge emerge and become legitimate—such as in health care, where is increasing acceptance of the necessity of other kinds of expertise besides medical technical expertise to provide good care (e.g. good doctor-patient communication and organizational knowledge; see Zuiderent-Jerak and Berg 2010, Waring 2007)—vested authority becomes contested. Eventually, such conflicts may become more manifest and thereby weaken the legitimacy of settled interests, providing openings for new actors and other interests to renegotiate established institutions and claim a share in the authority over these regimes.

To conclude, in contrast to earlier accounts on institutional change, the regime perspective adopted in this article allows for a more subtle analysis of gradual institutional change to understand the transformative processes of the medical training regime. The analysis entails a thorough understanding of the origins, evolution, and transformation of the medical training regimes in Britain and the Netherlands. The next sections turn to empirical cases of medical educational reform.

First, we provide insight into the institutional contexts of medical governance. Then we move on to the comparative and historical-institutional analysis of medical educational reform in both countries.

### **3. Medical Governance in Britain and the Netherlands**

Since its inception in 1948, the British NHS system has been based on the principle of universal free access to state-provided health care funded by taxation. Hospital specialists are salaried employees of state-owned hospitals, and general practitioners work as independent contractors with the NHS.

The Dutch health care system can be portrayed as a neo-corporatist associational system with predominantly public funding and privately owned and operated health care providers. Contrary to their British colleagues, most Dutch physicians work in entrepreneurial medical specialty partnerships (*maatschappen*) in association with a hospital. Notwithstanding these differences, the medical profession has always possessed considerable self-regulatory authority in both countries.

In the Netherlands, medical self-regulation fits in nicely with the corporatist system in which the state has major constitutional responsibilities but depends highly on privately working professional practitioners and private not-for-profit institutions to accomplish this (Helderman, 2007). On the national level Dutch physicians are represented by the Royal Dutch Medical Association (*Koninklijke Nederlandse Maatschappij tot bevordering van de Geneeskunst*, KNMG) to which most physicians belong. The KNMG acts as an advocate of medical professional interests and is formally involved in the regulation of medical practice. The interests of the various medical specialties are also defended by the specialty associations that are more or less commensurable with the British Royal Medical Colleges. Specialty associations play an important role in the formulation of educational programs and clinical guidelines for their medical specialty.

The early days of the British NHS have been described as ‘the politics of the double bed’ (Klein 1990) as initially the NHS offered a state-based health care system while physicians kept a large degree of autonomy. The British medical profession has a deeply rooted tradition of self-governance, with the British Medical Association (BMA), the Royal Medical Colleges, and the General Medical Council as the most prominent regulatory bodies. The BMA serves as a trade union as well as a professional organization. The Royal Medical Colleges are the professional bodies of the various medical specialties that play important roles in the regulation of professional training programs and entry to the professional community (Klein 2006).

An independent regulatory body, the GMC is involved in quality regulation of the medical profession as a whole (Irvine 2006).

A comparative analysis of the transformation of medical training regimes in Britain and the Netherlands thus seem to fit a most different case design (George and Bennett 2005). While Britain and the Netherlands differ in important institutional characteristics of their health care systems, when it comes to the self-regulatory authority of medical doctors, they share important similarities. In the last two decades, however, the self-regulatory capacity of the medical profession has increasingly been challenged by a number of exogenous developments.

In Britain, the introduction of the internal market and performance indicators had an important effect. The Thatcher government introduced the internal market in 1991, in an attempt to reduce health care budgets and create more efficiency in public sector spending. Central elements were the introduction of a purchaser-provider split and a system of provider competition in which money would follow the patient (Bevan and Robinson 2005). After the Labour party returned to power in 1997, successive governments more or less continued the policies of the internal market, with more emphasis on performance control and state-based regulation (Helderman et al. 2011). As a result, medical practitioners have been confronted with many managerial instruments such as standards of good practice and procedures for monitoring, evaluating, and sanctioning medical performance (Bevan and Robinson 2005, Helderman et al. 2011).

The Netherlands went even further in the reform attempt by enacting a new health insurance system and incorporating a system of regulated competition in its corporatist health care system. The reforms began with the Dekker Commission advisory report of 1987 but it took almost 20 years before the suggested reforms were fully implemented. Meanwhile incremental changes were made to enhance the institutional and technical feasibility of regulated competition, while keeping control over health care supply and prices (Helderman et al. 2005). The new Health Insurance Act was finally enacted on January 1, 2006, also considered the date on which the Dutch turned to the system of regulated competition. Citizens can now choose between health insurers, while health care insurers aim to contract efficient care of good quality with competing health care providers. Despite the current emphasis on competition, Dutch health care is still heavily regulated to contain macro healthcare expenditures and guarantee equity (Helderman 2007).

Against the background of these overarching system-level reforms the reform of medical training regimes became increasingly politicized in both countries in the 2000s. However, the way these system-level reforms interfered with the more



gradual and endogenous modernization of the medical training regimes asks for a subtle and detailed analysis of medical training reform. In the next two sections, we focus specifically on the origins, evolution, and transformation of medical training regimes in Britain and the Netherlands.

#### **4. Medical Vocational Training Reform in Britain**

##### ***Enhancing Unity in British Medical Education***

In the early 19<sup>th</sup> century, Britain had no structured system of medical education. There was extreme variation in the quality of medical education and thus in the quality of medical practitioners (Nutton 1995). This slowly started to change with the introduction of the Medical Act in 1858, when the medical profession was confronted by a fast-developing body of medical knowledge, which increasingly made clear the distinction between real medical treatment and quackery. The profession felt an increasing need to set up a registration system to distinguish good doctors from the bad. A registration system would also enhance the social status and income of physicians as it would establish a monopoly on medical care (Loudon 1995). The establishment of the registration system meant a significant push toward skill standardization, which was further enhanced by the 1858 Act's requirement to follow a four-year Bachelor's degree to practice medicine. The General Council of Medical Education and Registration was also established through the Medical Act. It was abbreviated to General Medical Council (GMC) in 1951. The GMC was licensed to provide a register of qualified doctors and had to ensure adequate standards for medical education. Originally, the GMC was appointed an independent authority funded by physicians' mandatory payments. All council members were medical practitioners representing various medical corporations. In daily practice, however, the Royal Medical Colleges set and controlled the standards and practices for their specialties. Yet, training practices—and outcomes—varied considerably due to local circumstances.

With the introduction of the NHS, the professionally dominated system remained largely intact. However, because of the importance of medical education to the quality of health service provision and the fact that medical education was mainly paid from NHS resources, medical education increasingly became a political concern. Initially, political involvement was mainly restricted to undergraduate medical education as the Royal Medical Colleges successfully defended their medical curricula against outside interference. Nonetheless, several political attempts were made to reform medical vocational training. A significant example was the

Royal Commission on Medical Education in 1965. In its final report, published in 1968, the Royal Commission recommended a smooth transition between different training phases by strengthening ties—and thus alignment—between undergraduate schools, universities, regional hospitals and Royal Medical Colleges. It recommended changing teaching methods, curricula contents by also including non-medical technical courses, as well as the examination system (Townsend 1968). The commission argued for a specialist register to recognize qualified doctors. However, many of its recommendations were not implemented, or simply failed, because of resistance from the Royal Medical Colleges.

Some issues, however, were readdressed a few years later by the Morrison Commission, installed in the mid 1970s to advise the government on a deepening conflict between the GMC, Royal Medical Colleges, and medical practitioners threatening the continuity of NHS service provision. Although the Morrison Commission addressed broader issues related to medical governance, about a quarter of its final report was dedicated to the topic of medical education. As with the Royal Commission, it recommended introducing a specialist register and expressed the need to unify the medical educational system. Although very critical of the part the GMC had played in the conflict with the medical practitioners (Parry 1976), the commission argued that the GMC should play a pivotal role in the coordination of the various training phases. The Morrison report paved the way for the 1978 Medical Practitioners Act. The Act launched a new GMC, including lay membership in order to influence the GMC's thinking from outside the profession (Stacey 1992). It also established a special education committee inside the GMC to coordinate all stages of medical education. However, in everyday practice it appeared difficult for the GMC to fulfill this role because of the increasing authority of the Royal Medical Colleges over medical affairs due to fast medical technological development and associated specialization.

Although neither inquiry led directly to fundamental changes in the British medical training regime, they did however redirect attention to expectations and interests outside medical education and sowed the seed for more outside interference in medical vocational training in subsequent decades. In other words, medical training was no longer the exclusive domain of the medical profession.

### ***Building and Losing Trust in the British Medical Training Regime***

In the mid 1990s newly introduced European legislation required significant changes in medical training governance to guarantee mutual recognition of specialist medical qualifications between Britain and European partners. The Calman Commission,

named after its initiator, then Chief Medical Officer Sir Kenneth Calman, was installed to fit British medical vocational training to the new requirements. Noticeably, the Calman Commission executed its task in close collaboration with the medical profession as well as other stakeholders in professional training, such as the NHS, universities, medical schools, and postgraduate deans. The reforms not only addressed institutional arrangements but also aimed to improve medical curricula. Key elements were competitive entry to training posts, structured training programs across all specialties with regular assessment of medical residents, the introduction of Specialist Registrar as a new training grade, and the introduction of the Certificate of Completion of Specialist Training (CCST) as evidence of competence to mark the end of training. The Specialist Training Authority (STA) of the Royal Medical Colleges was introduced for overall supervision in postgraduate medical education. Remarkably, given all the years of professional resistance, a specialist register was established (Calman et al. 1999). Generally, the reforms were regarded as a successful collaboration to improve postgraduate medical education. The Calman Commission was highly appreciated for the time that it took to deliberate on reforms and the trust it created between the different agencies in the British medical training regime.

Yet the emerging trust relationships between medical doctors and other stakeholders in the medical training regime were still very fragile. The success of the Calman reforms was soon overshadowed by the disclosure of scandals in pediatric cardiac surgery in Bristol and the Shipman case. These notorious failings set in motion successive policy measures to enhance medical performance management. The Bristol inquiry, published in 2001, suggested replacing the STA with the GMC. In response, the Department of Health said it preferred an independent agency to supervise medical vocational training and announced the establishment of the Postgraduate Medical Education and Training Board (PMETB). The PMETB came into being in 2005 as part of the reforms of Modernizing Medical Careers (MMC), the topic we turn to next.

### ***Modernizing Medical Careers***

MMC can be traced back to two policy documents: the *NHS Plan* (Department of Health 2000) and *Unfinished Business* (Donaldson 2002). The *NHS Plan* stressed the need for a larger workforce to improve access as well as quality of care. The report set out a commitment to a health service increasingly delivered by fully trained doctors rather than those in training. It announced a shorter training period as one of

the policies that would accomplish this (Klein 2006). Interestingly, the government now started to wield medical training as a strategic tool to achieve other NHS goals.

The Department of Health asked Chief Medical Officer Sir Liam Donaldson to work on a future prospect of medical vocational training, particularly addressing the Senior House Officer (SHO) grade, which in the 2000 report was identified as one of the causes of the delay in training consultants. In his final report, entitled *Unfinished Business*, Donaldson went beyond the SHO problem. *Unfinished Business* presented a critical image of the British medical educational system and recommended far-reaching reforms. First, it outlined a time-capped structured training program with seamless transitions between training phases. Second, it proposed a new admission procedure to provide equal opportunities to applicants. Third and in line with the earlier government's announcement, *Unfinished Business* recommended handing over the supervision of the training program to the PMETB (Corrigan and Pinchen 2009). Feeling a sense of urgency to reform medical curricula because of growing political and public distrust, the medical profession was moderately positive about the proposed reforms. With the experience of the Calman reforms in mind, the professionals felt committed to another round of reforming medical curricula.

Yet, whereas the Calman reforms deliberately proceeded gradually, in order not to undermine fragile trust relationships, MMC happened almost overnight. Many of the recommendations set out in *Unfinished Business* were implemented at once by the Department of Health. The first measure was to establish PMETB in 2005. The second was to implement a special foundation program in the first two years of medical vocational training to improve the transition between the various training phases. A third major change was the introduction of a new appointment system, the Medical Training and Application System (MTAS). The MTAS aimed to enhance the validity and reliability of the admission procedure to vocational training (Madden and Madden 2007). A special review group with representatives from the BMA, Royal Medical Colleges, and governmental bodies was set up to coordinate the reforms. Although the medical profession was formally included in the review group, their actual influence was rather limited (House of Commons 2008).

### ***The Battle of Modernizing Medical Careers***

The selection of new trainees became the central focus of MMC. The MTAS was based on explicit selection criteria for entering medical vocational training in that all candidates could apply for the training position of their choice through a nationally administered electronic portal. Short-listed candidates would then be interviewed by local attendants and offers would be made to the most successful candidates. The

overall idea was that the recruitment system would become much more open and equal this way. By the end of 2006, the Department of Health set out plans to introduce MTAS as soon as January 2007. The medical associations warned that this would be too soon as the system was not ready for it. Moreover, they feared a shortage of training posts. A week before the system went live, the BMA asked for suspension of the new procedure, but the Department of Health refused and pressed ahead with its plans.

Right from the start, the system was heavily criticized by candidates and local assessors. There were serious concerns that the best applicants were not being short-listed for interviews. Moreover, the number of applicants was far higher than expected due to overseas applicants as well as applications from doctors already in the system who so far had not had good career opportunities. This created fierce competition for posts in many areas and made thousands of young doctors deeply anxious about their future prospects (House of Commons 2008, Madden and Madden 2007). In the spring of 2007, the widely shared discontent led to a revolt against MMC, and in particular against the MTAS. The onset was a letter from a group of senior physicians published in the *British Medical Journal* that shared their concerns about MTAS as well as the role of PMETB in professional training (Brown 2007). Additionally, a local group of surgeons refused to proceed with the selection procedure, effectively sabotaging the new system, as they felt that the system was unable to select the best candidates (Hawkes 2007). The revolt was followed closely by the British media. Matters came to head when a special group, the Douglas Review led by the Vice Chair of the Academy of Royal Medical Colleges, was installed to investigate the problems. The Douglas Review decided to proceed with the MTAS nevertheless (Eaton 2007a). This decision was heavily criticized by practicing medical practitioners, who felt unrepresented by their governing bodies.

Feeling that their career options were negatively influenced by the MTAS, junior doctors organized demonstrations against the system in London and Glasgow (Eaton 2007b). They increased the pressure by going to court to ask for the MTAS to be quashed. Although it refused their application, the Higher Court was very critical of the MTAS, calling the system disastrous (House of Commons 2008). In April 2007, during an interview on BBC Radio, Health Secretary of State Patricia Hewitt apologized to junior doctors for the crisis, saying that the application scheme had caused 'needless anxiety and distress' and repeating the apology to parliament later that month. The BMA welcomed the government's acknowledgement of the problem but stated that an apology was not enough. Shortly after, two critical incidents with the MTAS made personal information publicly accessible. These breaches of privacy

proved the last straw; the Secretary of State decided to abolish the MTAS and handed the selection procedure over to local deaneries.

So, in sharp contrast to the Calman reforms ten years earlier, MMC became highly politicized, with the MTAS at the center of the heated debate. Medical practitioners not only protested the government, but also turned against their own representatives in the reforms. The MTAS was regarded as nothing less than a direct attack on one of the core institutions of the medical training regime. Although the medical profession had learned to deliberate, discuss and even compromise with external stakeholders on many other aspects of medical governance, the MTAS was simply not acceptable.

Disapproval was not only directed at the MTAS but MMC as a whole became highly contested. This illustrates the spillover effect of the system of recruiting new trainees as a core institution in the medical training regime. This does not mean, however, that the reform of postgraduate medical education was put on hold. In practice, for example, there was a significant shift to more outcomes based medical training. A competency framework has been implemented in all residency training programs, listing the competencies a resident should master. Furthermore, residents have become obliged to have their competencies assessed and signed off by consultants regularly in order to obtain licensure to practice medicine (Noordegraaf 2011)

After the abolishment of the MTAS, medical associations successfully asked for an inquiry, which was led by the physician Sir John Tooke. In its final report, published in 2008, the Tooke Commission claimed that the problems had been caused partly because the medical profession had been bypassed in the reform process. The Tooke Commission stated, “[S]trong professional involvement [...] is essential to ensure plans are co-owned and supported to ensure that those with insight into the likely evolution of specialty practice are able to influence policy” (Tooke 2008:97). They proposed establishing an independent, professional-led advisory body for medical training and education, further recommending a merger of PMETB and GMC. Despite some reluctance, the government agreed with the merger of PMETB and the GMC, which became effective in 2010. A few months later, Lord Darzi's report *NHS Next Stage Review* was published, announcing the creation of Medical Education England (MEE) as an independent non-departmental advisory board to be headed by a physician. This body has to ensure that “policy, professional, and service perspectives are integrated in the curricula” (Darzi 2008:73). Note here that the authority over medical vocational training is not handed back to the Royal Medical Colleges. Instead, the medical training regime has become

increasingly co-regulated by independent bodies comprising both professional, lay and government members.

At first sight, MMC may be considered a classical critical juncture, opening up a window of opportunity for the involvement of external stakeholders in the medical training regime. In this classical portrayal of institutional change, institutional development is envisioned as long periods of institutional stability alternating with brief periods of revolutionary upheaval in which there is room for more substantial changes (Thelen and Steinmo, 1992; Helderman 2007). The historical-institutional analysis presented above, however, reveals a far more gradual and evolutionary reform process. Indeed, the medical training regime as a professional-controlled system had already started to transform into a more co-regulated regime in the 1960s and 1970s. Both endogenous and exogenous factors were at stake in this process. Whereas in the second half of the 20<sup>th</sup> century endogenous changes led to incremental changes in the medical training regime to adapt medical vocational training to new circumstances (e.g. the GMC obtaining an albeit small role in governing medical vocational training), exogenous forces, such as new European legislation paved the way for further state involvement and a more structured and formalized postgraduate medical education.

This gradual transformation process was interrupted in the late 1990s, when growing distrust in the medical profession provided the government with legitimate means to claim partial authority over the professional training system. However, by rushing past the objections of the medical profession and implementing a new recruitment system to wield other NHS goals, the government touched upon a core institution of professional self-regulating authority, provoking a revolt of practicing clinicians against the government as well as against their own professional bodies. The government had to back down, painfully realizing that such reforms could not be succeeded without the necessary medical practitioners' support and expertise. The MMC debacle led to a renegotiation of authority in the medical training regime putting in place new governance arrangements of co-regulation. Moreover, the involvement of other stakeholders introduced new kinds of knowledge in medical training that increasingly gained legitimacy. As a consequence, in everyday medical training practice there was a shift from the traditional, implicit training-and-licensure model to a competency / performance model which put more emphasis on the formal assessment of residents' skills and knowledge.

Compared to the British case, the Dutch reforms were a far more deliberate process, though not less contested. In the next section, we turn to the Netherlands and explore the transformation of the Dutch medical training regime.

## **5. Medical Vocational Training Reform in the Netherlands**

### ***Establishing a Self-regulatory Structure for Medical Education***

Similar to Britain, the Netherlands of the 19<sup>th</sup> century lacked any formal certification and examination system to assess the quality of training that apprentices received in a given workplace. This slowly started to change with the establishment of the Dutch Medical Association (NMG) in 1849. The NMG had to overcome practical differences by enhancing the unity and status of the medical profession (Goudsmit 1978). One measure it introduced was a university-based medical curriculum to train doctors with uniform authority. Overall, the role of the government in medical education was restricted to subsidizing medical faculties.

Increasing specialization between 1900 and 1930 enhanced the competition between generalist and specialist practitioners, threatening the hard-won unity of the medical profession. Most doctors realized that further formalization of specialization was necessary to, as one of the medical leaders pointed out, 'prevent chaos and ensure quality' (Klazinga 1996). In 1931, the Specialist Registration Commission was established, aimed not only to register medical specialists but also to set formal requirements for medical curricula and select the hospitals that would become training sites.

After World War II successive Dutch governments tried to gain more control of medical education, mainly driven by concerns about rising health care costs. Initially, measures were directed only at undergraduate medical education as the medical associations successfully resisted external interference in their postgraduate training programs. In the early 1950s, however, after rising complaints about the quality of hospitals selected as training sites, the government installed a state commission to investigate medical vocational training (Klazinga 1996). This inquiry led to the introduction of the Central Board for the Recognition and Registration of Medical Specialists (CC, later Central Board of Medical Specialists, CCMS) in 1961. The CCMS, which fell under the aegis of the Royal Dutch Medical Association (KNMG) had to regulate and control the quality of medical training. The ten years needed to create this board, prior to its establishment, reflect the severe negotiations between the medical associations and the government about the composition and authority assigned to the board. In its final appearance, it comprised members of the medical associations and medical faculties, as well as representatives from the government and teaching hospitals. Although government and hospitals thus became formally involved in medical vocational training—adding a new layer to the existing



system dominated by professionals—medical practitioners still held a majority of seats and dominated the board's policies and decisions (Klazinga 1996).

By this time, the quality requirements of medical curricula were discussed mainly in terms of years of training at a selected training site and the skills of the educator. This changed in the 1980s when requirements were sharpened because a rising number of medical residents had put the capacity of the old master/trainee system under pressure. The CCMS, in consultation with the specialty associations, formulated new requirements to improve training quality, such as a minimal number of hospital beds and the number of patient contacts. External peer-reviewed site-visit programs for teaching hospitals were introduced to monitor and assess the quality of local training programs (van Herk et al. 2001). Although these measures enhanced the formalization of the medical training system, it was also widely recognized that many of the requirements were not met in daily practice (Klazinga 1996).

At the same time, government interference in postgraduate medical education increased. This was mainly due to an increasing felt need to adapt the number of doctors-in-training to future health care expectations. To this end, the Capacity Board was established in 1999. Typically for the Dutch corporatist system, this board was an independent body set up by the Ministry of Health in close collaboration with the medical associations, health insurers and hospital associations. Yearly, the board determines the number of training posts for each medical specialty. These numbers are only maximums, however, meaning that a specific specialty association can also decide not to fill all posts, for example when fearing over-capacity (Frissen 2008).

Hence, as in Britain, external interference in Dutch postgraduate medical education increased in the second half of the 20<sup>th</sup> century but it evolved differently than in Britain. The reforms of Dutch medical vocation training were very similar to the mechanism of institutional layering, in which new institutional elements are grafted onto the existing system, thereby touching upon powerful vested interests (Schlicker 2001). In recent literature on gradual institutional change, layering is recognized as one of the key mechanisms of institutional transformation. It may alter the overall trajectory of institutional development by allowing alternative courses of action to involve actors alongside the established trajectories without abolishing established institutions (Thelen 2004; Streeck and Thelen 2005). Over time, however, alternative trajectories may grow into new structures of governance, enabling non-dominant actors to gain power, and thereby enforce changes, in the existing governance regime. This is exactly what happened during the medical training reforms of the 2000s, which we turn to below.

### ***Adapting to New Requirements***

By the late 1990s, medical professional leaders and politicians were increasingly arguing that medical curricula were not keeping up with major changes in the health care arena. An important turning point was marked by a speech by the then Minister of Health, Els Borst-Eilers, addressed to the Dutch Medical Association in 1999. Minister Borst, a physician before entering politics, drew attention to upcoming changes in health care, such as an increasing need for technically skilled healthcare workers who are also good communicators and organizers of care. The minister stressed the need for more efficient training and a shorter training trajectory. Reforms of the medical curricula were necessary to accomplish this, she argued. Typically for the public-private dependency in Dutch medical governance, the minister's appeal for reform was followed by two policy documents, one by the medical association, the other by a government appointed commission. The first was *Tomorrow's Doctors* published in 2002 (*De Arts van Straks: Een Nieuw Medisch Opleidingscontinuüm*, Commissie Meyboom 2002). In short, the report painted a prospect for the medical education system of shorter follow-up periods between the training phases and a curriculum based on modern educational insights into improving the quality of workplace-based learning. *Tomorrow's Doctors* was followed by *Tomorrow's Care* (*De Zorg van Morgen: Flexibiliteit en Samenhang*, Commissie Legrand 2003) that supported the recommendations made in *Tomorrow's Doctors* yet placed more emphasis on improving the efficiency of professional training.

At the same time, and similar to the British case, the medical profession was confronted with new European requirements for medical curricula that established a maximum length of medical training trajectories, and restricted the number of working hours for residents. The medical profession, feeling an increasing sense of urgency to adapt their training programs to changing outside demands, announced a sweeping reform of medical curricula in 2004. Following the decree, all postgraduate medical curricula had to be redesigned following a competency-based model that specified clear end terms. In addition, residents' skills had to be tested regularly using special clinical assessment tools. Overall, the reforms can best be understood as an attempt to render medical vocational training in a more formal and transparent structure, without losing professional values and the traditional method of apprenticeship-based learning. In daily practice, the training reforms focused strongly on restructuring individual training schemes and the use of modern educational tools. Educational specialists, who had no access to postgraduate medical education before, were hired to implement the reforms. Special courses were developed to teach the doctors how to work with the new teaching and evaluation methods.

So, the reforms that started as an attempt to keep up with changing health care demands were gradually reframed as educational improvements to existing training programs, yet without making any substantial changes to the governance structure (de Bont et al. 2008).

By this time, however, the medical profession had to face significant policy developments that also impinged on their self-regulating capacity in medical training. These policies were closely related to the introduction of regulated competition in Dutch health care. The most significant policy change turned out to be the introduction of the Education Fund to subsidize training posts. Up until then, medical vocational training was paid for through health insurance premiums. Teaching hospitals received more money (were more expensive) than hospitals without residency training programs. When the system of regulated competition was announced in 2005, the difference in costs became a problem as teaching hospitals could not compete with non-teaching hospitals. As medical training was considered a general good, it was decided to introduce a tax-based fund to subsidize residency training. This Education Fund was administered by the Ministry of Health.

Initially, the medical professional association agreed, considering the Education Fund as a purely administrative tool to protect vocational training from the possibly harmful consequences of competition. A year later, however, their opinion changed entirely, when the government introduced a new distribution model for the allocation of training posts among teaching hospitals. The government announced that the allocation of training posts would partly depend on measured teaching quality. Better training quality, it argued, would be rewarded with more training posts.

It should be emphasized at this point that the distribution of training posts had always been a professional matter regulated by the medical specialty associations. Although the government had become involved in the late 1990s with the establishment of the Capacity Board, the allocation of training posts among the training sites (the hospital departments) was still fully controlled by the specific specialty associations working in close collaboration with local clinical teachers. The distribution procedure was viewed as a highly delicate process as it involved money (because of disbursement from the Education Fund, and also because a medical resident provides medical services and is thus cheap labor, especially in the last training phase when a resident acts almost on the level of a fully trained physician), as well as reputation (having more residents means more prestige). The Education Fund impinged on the professional distribution system in three ways. Firstly, because all training posts were subsidized separately and each teaching clinician had to account for the money received, the fund rendered the mechanisms and related

powers of the distribution system visible. Secondly, as the fund was paid out of public resources it legitimized the Minister of Health to set requirements for claiming resources, thus intervening in the traditional closed practices of allocating training placements. Thirdly, as the resources were paid to the hospital administration and not to the teaching clinicians directly, it provided new interests for hospital boards to become involved in local medical training. Indeed, as medical training generated income it was attractive to create more training posts. This extra income was even more warranted in the light of increasing competition on price between hospital institutes. Whereas the medical profession often preferred fewer training posts to guarantee some kind of scarcity favoring the economic position of the particular specialty group, hospital boards preferred more training posts.

Here we see another example of the development of a new institutional layer into the medical training regime. In the next section we will demonstrate how the Education Fund, introduced as an administrative tool, gradually turned into a strategic instrument to control the allocation of training placements, thus enhancing the politicization of medical vocational training. Put dramatically, the innocent Education Fund turned into a treacherous Trojan horse that seriously challenged the authority monopoly of medical doctors.

### ***Defending and Redefining Professional Jurisdictions***

The medical profession soon realized that “they had sold their autonomy to the government”, as one of the medical leaders pointed out. After announcing the assignment of training posts on the basis of measured quality, in 2009 the government initiated a project that offered limited additional training placements to two medical specialties (surgery and internal medicine) according to measured performance. However, both medical specialties refused to cooperate, arguing that the quality indicators were invalid. The Department of Health thereupon postponed its project and commissioned education specialists and policy makers to develop a series of performance indicators that could be used to measure training quality.

The medical associations were dismayed by the new situation, and gathered together to develop a strategy to forestall further government control. Opting to maintain control by initiating change themselves (rather than being its victim), the associations designed a counter-project that would enhance competition on training quality, but placed at the other extreme of the training trajectory: medical residents could follow a time-capped apprenticeship at the end of their residency in a teaching hospital of their choice. The performance indicators would allow choices to be based on learning opportunities for specialization as well as measured teaching quality.

Although (former) Minister Klink doubted whether this plan would indeed stimulate competition on quality, he decided to embrace the profession's initiative. He did warn that it could only be a first step towards more competition in residency training.

Subsequently, a special pilot project developed 'displays' where local clinical teachers advertised their end-term apprenticeships, providing insight into learning opportunities as well as into training quality scores. Ironically, but also typical for the interdependencies between the medical profession and the government in Dutch medical governance, the project was funded by the Ministry of Health. In the second phase, scheduled for 2011, senior medical residents gain the opportunity to apply to the advertised training positions. Though the outcomes are still unclear, medical residents have responded enthusiastically to these new opportunities for getting a grip on their training and their professional career. Although it is too early to draw conclusions, this empowerment of medical residents vis-à-vis their clinical teachers (the physicians) may eventually have consequences for the traditional master-apprentice structure as it enables residents to leave a teaching setting in the training phase in which they possess the highest clinical productivity.

In sum, the Dutch reforms of medical vocational training can be characterized by processes of institutional layering through which new governance arrangements in the Dutch medical training regime have been introduced alongside already existing ones. It is along these alternative trajectories that, from the 1960s onwards, endogenous changes in regulatory bodies (e.g. introducing the CCMS and later on establishing the Capacity Board) gradually enforced state authority in the medical training regime. This induced new forms of state-profession coalitions in which hospital organizations increasingly took part. In daily practice, however, the medical profession still dominated the coalitions. Surprisingly, the introduction of regulated competition in the Dutch health care arena—a significant shift in the overarching system of health care governance—encroached considerably upon the vested power of the medical profession in professional training. Whereas the Education Fund was introduced to protect medical education against the dynamics of competition, it eventually brought new ambiguities in the medical training regime (see Jacobs 2010 for a similar observation). The fund opened up the traditional closed practices of training post allocation, providing other stakeholders (e.g. the government, hospital boards) with new legitimate means to intervene in the process. As such, the Education Fund indirectly empowered the government and hospital boards, challenging vested medical professional authority in the allocation of training placements. Typically for the Dutch neo-corporatist system this resulted in a new

negotiation process in which the medical profession attempted to regain authority over their professional recruitment system.

## **6. Conclusions**

A comparative analysis of the transformation of medical training regimes in Britain and the Netherlands comes close to a classical most different case design (George and Bennett 2005) in the sense that both countries differ on many institutional characteristics except for one crucial independent variable, namely, the self-regulatory authority of the medical profession with regard to their vocational training programs. The paper has demonstrated that in Britain and the Netherlands medical training regimes have transformed from predominantly professionally-controlled systems into regimes of co-regulation. There are important differences between the two countries in terms of the strategies that were enacted as well as in the nature of the interactions between the medical profession, state and other stakeholders, which can be explained from the nested institutional structure of both countries.

Nonetheless, the outcomes of the reform of the two medical training regimes were quite similar. In Britain and the Netherlands medical professional bodies had to give up their monopoly in professional training and increasingly had to share power with other stakeholders. Yet, in the end, in both countries reforms got politicized, and contested, when they touched upon the core institution of medical training regimes: the recruitment of new trainees.

In Britain, the increasing emphasis on medical performance management and the government's subsequent attempt to wield medical education to improve the NHS, led to MMC and the highly contested new recruitment system. In the Netherlands, seemingly unintentionally, regulated competition in the overarching regime of health care touched upon vested professional power over the selection and placement of new recruits. The new authority claims over medical vocational training ended up in a clash between the medical profession and other stakeholders, in particular the state. In both countries authority conflicts were more or less settled by agreeing on a regime of co-regulation that reconfirmed and perpetuated the importance of medical professional expertise and the accompanying authority claim of the medical profession. This co-regulation forced the medical professional to adapt its training practices to new kinds of knowledge that have increasingly become legitimate in the health care arena, like enhanced transparency and accountability of medical training practice.

At first glance this may be read as a proof of professional authority over their vocational system in which the profession 'only' has to adapt its practices to the

overarching agenda of health policy reform in order to maintain its legitimate authority. However, a closer look reveals that adaptations like structuring training programs and enhancing visibility of former closed training practices may provide other stakeholders with new means to impose their logics on medical training. These changes may set in motion more profound reforms of the distribution and allocation of authority in the medical training regime. The attempts of the Dutch government to introduce competition on training posts is a striking example hereof. Moreover, contemporary changes in medical education may also make physicians (especially the ones that are now trained in the new performance based system) more likely to accept more profound forms of performance based management in their (future) work (see also White 2009). Seen this way, the transition to forms of co-regulation has not reconfirmed professional authority over the medical training regime, but, instead, has opened up the former closed practices of medical vocational training by installing new kinds of ambiguities that provide space for further reforms in the (near) future.

Analytically, the paper shows that the self-governance of medical professional training cannot be fully explained by a model of countervailing powers but requires a more dynamic explanatory approach directed at the co-evolution of changes in multiple institutions that make up an institutional configuration. In Britain and the Netherlands medical training regimes co-evolved with systemic health care reforms. Initially, these reforms were located in the periphery of the medical training regime. However, as soon as the reforms touched upon the core institutions of the medical training regimes, co-evolution became far more politicized, ending up in a clash of contradicting authority claims. Indeed, MMC entailed a much wider reform than the introduction of the MTAS but its failure had a large impact on other forms of external involvement in postgraduate medical training as well.

Overall, this article adds to the current debate on institutional transformation by demonstrating the necessity of detailed empirical analysis to our understanding of on- and off-path change. Subtle analysis allows us to gain insight into the ongoing processes of negotiation on authority in distinct social regimes, and the mediating role that institutions play in this. Importantly, as we have tried to show, such analysis also helps to unpack the more unexpected and unpredictable transformations in a social policy regime. In general, our analysis of institutional change in complex policy systems such as health care stresses the need to study the interaction between aspects of the political context, the properties of institutions and the process of negotiation and renegotiation between the actors involved. All are crucially important to the understanding of institutional transformation. Especially in a critical case such

as the self-governance of medical doctors and their accompanying authority claims over their medical training regimes.

## References

- Bevan, G., and R. Robinson. 2005. The Interplay Between Economic and Political Logics: Path Dependency in Health Care in England. *Journal of Health Policy Politics and Law* 30(1-2): 53-78.
- Bont, A., de, I. Wallenburg, M. J. Heineman, S. J. van Luijk, J. A. A. M. van Diemen-van Steenvoorde, F. Scheele, and P. Meurs. 2008. Onderwijsvernieuwing als Beleidsinstrument: Over de Modernisering van de Medische Vervolgopleidingen. *Tijdschrift Voor Medisch Onderwijs* 27(6): 316–22.
- Brown, M. J. 2007. Raging Against MTAS. *BMJ* 334: 549.
- Calman, K.C., J.G. Temple, R. Naysmith, R.G. Cairncross, and S.J. Bennett. 1999. Reforming Higher Specialist Training in the UK: A Step along the Continuum of Medical Education. *Medical Education* 33: 28-33.
- Commissie Legrand. 2003. *De Zorg van Morgen: Flexibiliteit en Samenhang*. Den Haag.
- Commissie Meyboom. 2002. *De Arts van Straks: een Nieuw Medisch Opleidingscontinuüm*. Utrecht: KNMG.
- Corrigan, O., and I. Pinchen. 2009. Tomorrow's Doctors, a Changing Profession. In *Handbook of Sociology of Medical Education.*, eds. C. Brosnan and B.S. Turner, 242-60. London: Routledge.
- Crouch, C., and M. Keune. 2005. Changing Dominant Practice: Making Use of Institutional Diversity in Hungary and the United Kingdom. In *Beyond Continuity. Institutional Change in Advanced Political Economies.*, eds. W. Streeck and K. Thelen, 83–102. Oxford: Oxford University Press.
- Darzi, A. 2008. High Quality for All: NHS Next Stage Review Final Report. London: Department of Health
- Deeg, R., and G. Jackson. 2007. Towards a More Dynamic Theory of Capitalist Variety. *Socio-Economic Review* 5 :149–79.
- Department of Health. 2000. *NHS Plan: A Plan for Investment, a Plan for Reform*. London: Department of Health.
- Donaldson, L. 2002. *Unfinished Business: Proposals for Reform of the Senior House Officer Grade*. London: Department of Health.
- Drazen, J. M., and A. M. Epstein. 2002. Rethinking Medical Training—the Critical Work Ahead. *The New England Journal of Medicine* 347(16):1271–2.



- Drolet, B. C., L. B. Spalluto, and S. A. Fischer. 2010. Resident's Perspectives in ACGME Regulation of Supervision and Duty Hours. A National Survey. *The New England Journal of Medicine* 363: e34(1)–e34(5).
- Eaton, L. 2007a. Junior Doctors' Interview Process is Revised in Compromise Deal. *BMJ* 334:768.
- . 2007b. 10000 March in Jobs Protest. *BMJ* 334: 602–3.
- Fitzgibbons, J.P., D.R. Bordley, L.R. Berkowitz, B.W. Miller, and M.C. Henderson. 2006. Redesigning Residency Education in Internal Medicine: A Position Paper from the Association of Program Directors in Internal Medicine. *Annals of Internal Medicine* 144 :920–6.
- Frank, J. R., and D. Danoff. 2007. The CanMEDS Initiative: Implementing an Outcomes-Based Framework of Physician Competencies. *Medical Teacher* 29(7): 642–7.
- Freidson, E. 2001. *Professionalism: The third logic*. Cambridge: Polity Press.
- Frissen, P.H.A., M. Van der Steen, and L. van der Meeren. 2008. *Schaarste tussen Politiek en Ramingen: Verdeling van Opleidingsplaatsen voor Medisch Specialisten*. Utrecht: CBOG.
- George, A.L., and A. Bennett. 2005. *Case Studies and Theory Developments in the Social Sciences*. BCSIA Studies in International Security. Cambridge: MIT Press.
- Goudsmit, J. 1978. *Anderhalve Eeuw Dokteren aan de Arts: Geschiedenis van de Medische Opleiding in Nederland*. Amsterdam: Socialistiese Uitgeverij Amsterdam.
- Hacker, J. S. 2004. Privatizing Risk without Privatizing the Welfare State: The Hidden Politics of Social Policy Retrenchment in the United States. *American Political Science Review* 98(2):243–60.
- Hawkes, N. 2007. Observations. Body Politic: How to Win Friends and Influence People. *BMJ* 335: 284–5.
- Helderman, J.K., F. Schut., T.E.D. van der Grinten, and W.P.M.M. van de Ven. 2005. Market-Oriented Health Care Reforms and Policy Learning in the Netherlands. *Journal of Health Policy, Politics and Law* 30 (1–2): 189–210.
- Helderman, J.K. 2007. *Bringing the Market Back In? Institutional complementarity and hierarchy in Dutch housing and health care*. PhD dissertation, Erasmus University Rotterdam.
- Helderman, J.K., G. Bevan, and G. France. 2011. The Rise of the Regulatory State in Health Care: a Comparative analysis of the Netherlands, England en Italy. Submitted to *Journal of Health Economics, Policy and Law*.

- Herk, R. van, N.S. Klazinga, R.M.J. Schepers, and A.F. Casparie. 2001. Medical Audit: Threat or Opportunity for the Medical Profession. A Comparative Study of Medical Audit among Medical Specialists in General Hospitals in the Netherlands and England, 1970–1999. *Social Science & Medicine* 53: 1721-32.
- Hood, C, H. Rothstein, and R. Baldwin. 2001. *The Government of Risk: Understanding Risk Regulation Regimes*. Oxford: Oxford University Press.
- House of Commons Health Committee. 2008. *Modernising Medical Career*. London: The House of Commons.
- Irvine, D. 2006. A Short History of the General Medical Council. *Medical Education* 40:202–11.
- Jacobs, A. M. 2010. Policymaking as Political Constraint: Institutional Developments in the U.S. Social Security Program. In *Explaining Institutional Change: Ambiguity, Agency, and Power*., eds. J. Mahoney, K. Thelen, 94–131. Cambridge: Cambridge University Press.
- Jones, R., R. Higgs, C. de Angelis, and D. Prideaux. 2001. Changing Face of Medical Curricula. *Lancet* 357 (9257): 699–703.
- Klazinga, N. S. 1996. *Quality Management of Medical Specialist Care in the Netherlands: An Explorative Study of its Nature and Development*. PhD dissertation, Erasmus University Rotterdam.
- Klein, R. 1990. The State and the Profession: The Politics of the Double Bed. *BMJ* 301:700–702
- .2006. *The New Politics of the NHS: From Creation to Reinvention*. 5th edition ed. Abingdon: Radcliffe Publishing.
- Larson, M.S. 1977. *The Rise of Professionalism*. California: University of California Press.
- Light, D. 2000. Social Perspectives on Competition in Health Care. *Journal of Health Politics, Policy and Law* 25 : 971–4.
- Loudon, I. 1995. Medical Education and Medical Reform. In *The History of Medical Education in Britain*., eds. V. Nutton and R. Porter, 229–249. Amsterdam–Atlanta, G.A.: Rodopi.
- Ludmerer, K. M., and M. M. E. Johns. 2005. Reforming Graduate Medical Education. *JAMA* 294 (9): 1083–7.
- Madden, G. B. P., and A. P. Madden. 2007. Has Modernising Medical Careers Lost its Way? *BMJ* 335: 426–8.
- Mahoney, J. 2000. Path Dependence in Historical Sociology. *Theory and Society* 29: 507–48.

- Mahoney, J., and K. Thelen, eds. 2010. *Explaining Institutional Change: Ambiguity, Agency and Power*. Cambridge: Cambridge University Press.
- Medel, P. and W.R. Scott. 2010. Institutional Change and the Organization of Health Care: The Dynamics of “Muddling Through”. In *Handbook of Medical Sociology*., eds. C. E. Bird, P. Conrad, A. M. Fremont, and S. Timmermans. 6th edition ed., 249-269. Nashville: Vanderbilt University Press.
- Moe, T. M. 2005. Power and Power Institutions. *Perspectives on Politics* 3 (2): 215–33.
- Noordegraaf, M. 2011. Remaking Professionals? How Associations and Professional Education Connect Professionalism and Organizations. *Current Sociology* 59: 465-488.
- Nutton, V., and R. Porter, eds. 1995. *The History of Medical Education in Britain*. Amsterdam: Rodopi.
- Parry, K.M. 1976. Conference on 14 July 1975 on the Educational Implications of the Report on the Committee of Inquiry into the Regulation of the Medical Profession. *Medical Education* 10(1): 67-75.
- Pierson, P. 2000. Increasing Returns, Path Dependency and the Study of Politics. *American Political Science Review* 94 (2): 251–67.
- Ringsted, C., T. L. Hansen, D. Davis, and A. Scherpbier. 2006. Are Some of the Challenging Aspects of the CanMEDS Roles Valid Outside Canada? *Medical Education* 40: 807–15.
- Sales, C. S., and A. Schlaff. 2010. Reforming Medical Education: A Review and Synthesis of Five Critiques of Medical Practice. *Social Science & Medicine* 70 (11): 1665–8.
- Scharpf, F. W. 1997. *Games Real Actors Play: Actor-centered Institutionalism in Policy Research*. Boulder: Westview Press.
- Schlicker, E. 2001. Disjointed Pluralism: Institutional Innovation and the Development of the U.S. Congress. Princeton NJ: Princeton University Press.
- Schuwirth, L. W. T., and C.P.M. van der Vleuten. 2004. Changing Education, Changing Assessment, Changing Research? *Medical Education* 38: 805–12.
- Stacey, M. 1992. *Regulating British Medicine*. Chichester: John Wiley & Sons.
- Streeck, W., and K. Thelen. 2005. *Beyond Continuity: Institutional Change in Advanced Political Economies*. Oxford: Oxford University Press.
- Teunissen, P.W., F. Scheele, A.J.J.A. Scherperbier, C.P.M. van der Vleuten, K. Boor, S.J. van Luijk, and J.A.A.M. van Diemen-Steenvoorde. 2007. How Residents Learn: Qualitative Evidence for the Pivotal Role of Clinical Activities. *Medical Education* 41:763–70.

- Thelen, K., and S. Steinmo (1992) 'Historical Institutionalism in comparative politics'.  
In: S. Steinmo, K. Thelen and F. Longstreth (ed.) *Structuring politics. Historical institutionalism in comparative analysis*. Cambridge: Cambridge University Press.
- Thelen, K. 2004. *How Institutions Evolve: The Political Economy of Skills in Germany, Britain, the United States, and Japan*. New York: Cambridge University Press.
- Tooke, J. 2008. *Aspiring to Excellence. Findings and Final Recommendations of the Independent Inquiry into Modernising Medical Careers*.
- Townsend, E. 1968. Royal Commission on Medical Education 1965-68 Report. *J. R. Coll. Gen. Pract.* 16(3): 245-7.
- True, J. L., B. D. Jones, and F. R. Baumgartner. 2007. Punctuated-Equilibrium Theory: Explaining Stability and Change in Public Policy Making. In *Theories of the Policy Process*, ed. P. A. Sabatier, 155–187. Colorado: Westview Press.
- Tuohy, C. H. 1999. *Accidental Logics: The Dynamics of Change in the Health Care Arena in the United States, Britain and Canada*. Oxford: Oxford University Press.
- Wallenburg, I., J. van Exel, E. Stolk, F. Scheele, A. de Bont, and P. Meurs. 2010. Between Trust and Accountability: Different Perspectives on the Modernization of Medical Specialist Training in the Netherlands. *Academic Medicine* 85(6): 1082–1090.
- Waring, J. 2007. Adaptive Regulation or Governmentality: Patient Safety and the Changing Regulation of Medicine. *Sociology of Health & Illness* 29 (2): 163–179.
- White, J. 2009. Capacity and Authority: Comments on Governing Doctors and Health Care. *Journal of Health Economics, Policy and Law* 4: 367-382.
- Zuiderent-Jerak, T., and M. Berg. 2010. The Sociology of Quality and Safety in Health Care. In *Handbook of Medical Sociology.*, eds. C. E. Bird, P. Conrad, A. M. Fremont, and S. Timmermans. 6th edition ed., 324–337. Nashville: Vanderbilt University Press.