

Review article

The impact of management on medical professionalism: a review

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Abstract In the last three decades, medical doctors have increasingly been exposed to management control measures. This phenomenon has been reflected in a number of studies in various disciplines, including sociology, organisation studies, management, and health service research. This article seeks to provide a comprehensive overview of the studies dealing with the impact of management on professional control. In particular, it seeks to bridge the diversity of assumptions, theoretical perspectives and conceptual underpinnings at play, by exploring synergies between them and opening up new horizons for research. The review shows how the relationship between clinicians and management has been analysed at an organisational level using two interconnected analytical frameworks focusing on the sociocultural and task-related dimensions of professionalism. In the final discussion, we argue that comparative, longitudinal and cross-sectional research is necessary, and there is a need to overcome the hegemony/resistance framework in current analyses of the impact of management on professionalism. Such an approach would contribute to the revision of macro theories of professionalism and stimulate emerging research by examining different perspectives towards management in medical specialisations. This approach might also stimulate a discussion of medical professionals' relationships with members of other professional groups, including nurses and healthcare managers.

Keywords: management, professionalism, hegemony, resistance, hybridisation

Introduction

In the last three decades, the control of clinical practice has undergone substantial change. Doctors have extensively been exposed to management control mechanisms that have affected the nature of medical professionalism. These developments emerged in reaction to several challenges that threatened healthcare systems in Western countries, such as the welfare state crisis, reinforced market requirements (Harrison and Ahmad 2000, Harrison

and Pollitt 1994), more demanding and knowledgeable clients (Light and Levine 1988) and publicly exposed clinical failures (e.g. Weick and Sutcliffe 2003).

In this context, governments and policymakers searched for more effective and efficient healthcare services, coupled with demands regarding healthcare accountability and transparency (e.g. Dent 2003, 2006, Lewis and Marjoribanks 2003, Salter 2007, Kuhlmann and Bureau 2008, Chamberlain 2009, Pickard 2009). The introduction of these mechanisms has often been promoted by the new public management movement and has reflected trends in the broader public sector (Hood 1991, Kitchener *et al.* 2000, Doolin 2001, Leicht *et al.* 2009). These developments have contributed to an increased implementation of management systems that have been employed by healthcare organisations to govern professional practices, such as auditing, clinical guidelines, knowledge managements systems, protocols, standards, incident reporting systems, and a variety of incentive tools. These systems have been implemented in contexts where patient choice and market competition was promoted.

A substantial amount of research has been carried out to analyse these developments. Notwithstanding the increasing number of studies investigating the impact of management on professionalism in different contexts, no comprehensive review capturing analytical diversity has been conducted. To help overcome this gap, this article reviews existing scholarship on the impact of management on medical doctors. Other professional communities in the healthcare sector such as nurses, pharmacists, or healthcare managers, are not included in this review unless they perform tasks that overlap with those of medical doctors.¹

We do not aim to present a definitive review of all published work. Such an objective would be unrealistic, considering the increasing quantity of papers in recent years. However, we offer a much needed review that classifies, discusses and critically reflects upon the vast body of scholarship. In particular, our goal is to address the following questions: Which concepts and categories have predominantly been used to capture the impact of management on professionalism? How have these theoretical developments contributed to the empirical findings on the impact of management on professionalism? How will these findings affect research agendas, methodologies and theoretical perspectives in the literature?

This article is organised along the following four lines. First, we describe the process of the selection of the reviewed literature. We then reflect upon the major changes in the investigations of the impact of management on professionalism and outline the main analytical dimensions employed by this review. Third, we discuss the academic debate about the transformation of medical professionalism at an organisational level in terms of two major dimensions: the sociocultural and task-related aspects of professionalism. Finally, we summarise and discuss the major trends in the research that have been carried out thus far and provide insight into potential future developments.

Selection of reviewed literature

A combination of two search strategies was chosen to identify the relevant literature, the key concepts and various scholars dealing with the impact of management on professionalism. First, we searched four databases: PubMed, Web of Science, ScienceDirect and Business Source Complete (EBSCO). Every article which was in at least one of these databases on 18 September 2009 (published online, therefore, any time before this date) and which included in the title or abstract at least one of five keywords (professionalism, professional control, professional autonomy, professionalisation or professionalization) was selected for analysis via further selection procedures. We screened all the titles and abstracts resulting from the initial searches and excluded: (1) articles that did not discuss medical professions but focused

only on other professions, among which the most numerous were accountants, social workers, lawyers, or nurses; (2) studies that focused on the professionalisation and socialisation processes of medical specialisations, unless they significantly dealt with the impact of management practices on professionalism; (3) book reviews, editorials and other publications that were not peer-reviewed; and (4) articles that were normatively² (rather than analytically or epistemologically) driven. Based on this screening the initial number of 6144 papers retrieved through the databases was reduced to 139.³

Second, to ensure coverage of the most relevant studies, a form of snowball sampling was used to identify those articles that did not appear as a result of the initial systematic search but were commonly cited as significant by one or more of the articles included in the first list. This search strategy is highly effective in finding journal articles in English, but it has clear limitations because it does not allow one to identify books and studies published in languages other than English. However, while the literature mainly comes from authors based in Anglo-Saxon countries and may reflect the peculiarities of professionalism in these countries, the relevance of the review is clearly wider; in fact, most of the management practices mentioned above are globally diffused.⁴

Studying professionalism: from abstract theories to specific contexts

The exploration of the impact of management on medical doctors at an organisational level emerged as an attempt to revisit abstract and ideal-typical hypotheses at a macro level of analysis which postulated proletarianisation (McKinlay and Stoeckle 1988, Navarro 1988), de-professionalisation (Starr 1982, Haug 1988, Elston 1991) and corporatisation of professions (Light and Levine 1988). These hypotheses have been criticised for their unsatisfactory explanatory power, as they have not adequately considered the variability of professional practice in specific cultural and organisational contexts or differences among professional groups (e.g. Harrison 1994, Waring and Currie 2009). Attempts to revisit abstract theories also mirrored advances in social theory, particularly the cultural turn, the employment of discursive methodological approaches and the post-structuralist perspective in investigations of professions.

As a consequence, a more contextualised, qualitative and process-oriented approach to investigating the transforming nature of professional control was employed and focused on two dimensions of professionalism within organisational context. These dimensions can be classified as socially oriented or task-oriented analyses of professionalism (Southon and Braithwaite 1998).

Three comments shall be made in relation to these dimensions. First, although they have been presented separately, these dimensions are, in fact, frequently interconnected. Second, the analysis of professionalism in sociocultural and task-related dimensions draws heavily on the analytical legacy of cultural studies and is therefore focused on the struggle between hegemonic forces, most commonly management, and their opposition, most commonly the resisting professional forces. According to this epistemological perspective, the hegemony/resistance framework structures the presentation of professionalism *vis-à-vis* management forces. In particular, the dynamics between management and professionalism can result in five different outcomes: (1) managerial hegemony; (2) co-optation; (3) negotiation; (4) strategic adaptation; and (5) professional opposition.⁵ Third, these five types of outcomes are ideal-typical and abstract rather than real. Any outcome of the impact of management on professionalism could therefore be situated in this continuum. The epistemological utility of the hegemony/resistance framework is addressed in the final discussion.

Sociocultural facets of professionalism

The exploration of the impact of management based on its cultural features has been theoretically framed by concepts such as discourse, identity, habitus, subculture, ideology, or social construction of meaning. Professionalism has traditionally been defined in terms of its substantially different goal orientations and ethics compared to the imperatives of management (Lemieux-Charles *et al.* 1993, Schlesinger *et al.* 1997, McDonald 2009). Furthermore, the roles of managers and medical doctors have been understood in terms of different and fragmented subcultures with distinct sets of beliefs and values (Morgan and Ogbonna 2008) as well as specialised languages and communication habits (Holtman 2009).

The reviewed studies have captured a variety of professionals' reactions to management culture. First, by employing the concept of managerialisation, they have argued that their professional control has been eroded by the introduction of management. Furthermore, different narratives of the professional reaction to management have been presented. In this vein, the reviewed studies have analysed how specific patterns of professionalism reinforce resistance towards managerial measures, how some cultural aspects of professionalism have been transformed by management measures, or, less frequently, how some sociocultural aspects of medical professionalism have facilitated the incorporation of managerial tools.

Managerial hegemony: managerialisation

Literature focused on new public management and anchored within the tradition of critical sociology and post-structuralism has tended to create a picture of managerialisation as a process in which professional culture has substantially changed under the pressure of managerial hegemony. These accounts have deconstructed the ideological nature of managerialism and critically examined the changes in the patterns of professional control.

Through this lens, managerialism represents an 'ideology' that contributes to the shifting nature of healthcare through the use of managerial symbols, codes and language and by approaching healthcare services with an eye toward the criteria of rationalisation and standardisation. These cognitive mechanisms facilitate the 'indoctrination' of doctors into the managerialist mode of reasoning (Pollitt 1993). Accordingly, the perspective of physicians is pervaded (in other words, colonised) with concerns regarding accountability, constant calls for transparency, evaluation and other managerial priorities.

Framed by the Foucauldian concept of governmentality, several scholars have explained how the logic of management discourse has been internalised by physicians and become part of their identity (e.g. Doolin 2001, Joyce 2001, Levay and Waks 2009) and therefore influenced their self-monitoring 'at a distance' (MacKinnon 2000, Light 2001, Sheaff *et al.* 2003, Pickard 2009). In the context of governmentality (Dean 1999, Rose and Miller 2008), managerialisation represents a new mentality of 'the conduct of conduct' and provides a new, invisible and all-pervasive technology to govern professionals. As part of the governmental processes at play, the meaning of professionalism has even changed according to the discursive logic of managerialism. In this manner, managerial or entrepreneurial values and references to standardised, rationalised and thus calculable and controllable procedures potentially become a constitutive part of professionalism (Schlesinger *et al.* 1997, Dent 2003, Audet *et al.* 2005, Germov 2005), as in the case of incident reporting (Waring 2004) and accountability (Harrison and Dowswell 2002, Pawlson and O'Kane 2002).

In summary, managerialism can be understood as one of the expressions of the so-called colonisation of professionals in which professional autonomy is affected not only through formalised systems of monitoring and control but also at a deeper level of mental processes. Moreover, managerialisation is not exclusively cognitive; as we will discuss later, it is

interwoven with task-related aspects of professionalism and, in its most pervasive expression, can affect the nature of clinical practice.

Co-optation of management culture

The power of managerial discourse does not have to be necessarily all-encompassing. The impact of management can be limited to the use of the principles, discourses and logic of management by professionals who maintain their jurisdictions and exercise local control over their tasks. These processes were identified as processes of co-optation of management logic by professionals (Waring and Curie 2009), during which the utility of some management tools is recognised by professionals and used within their jurisdictions. Under the conditions of co-optation, professionals' communication with hospital management is reduced to the minimum necessary reporting. Moreover this form of co-optation protects doctors from management interference into their practice and surveillance. The professional co-optation of management must be distinguished from Freidson's (1988, 1994, 2001) use of the term co-optation, describing the involvement of professional elites in management hierarchies.

While not always present, the co-optation of management practices often appears in the context of organisational arrangements of 'soft bureaucracy'. This term, coined by Courpasson (2000), represents an invisible, indirect and non-hierarchical form of control stimulated by market competition (Courpasson 2000), or political pressure (Berg *et al.* 2000, Sheaff *et al.* 2004). Notwithstanding the decentralised control and regulation tasks and the consequent empowerment of professionals, the central power continues to be exerted by management (Flynn 2002, Sheaff *et al.* 2004, Waring and Currie 2009).

Negotiation: hybrid identities and adaptive regulation

Examples of negotiation and merging between professional and managerial cultures can be explained through investigations that have explored new and hybrid identities. Such arrangements rest on professionals' acceptance of managerial responsibilities and involve the part-time or even full-time movement of medical doctors into managerial positions.

Mo's (2008) analysis of a management reform at a Norwegian university hospital explains that the so-called 'hybrid' managers, who aim to guarantee themselves authority and legitimacy, must be able to relate to the existing cultural 'codes' and thus to acknowledge the discourse of management, on the one hand, and understand and heed clinical needs, on the other. Abernethy and Stoelwinder (1990) revisit the previous prevailing conceptualisations of conflict between professional and bureaucratic cultures in this context and stress the importance of physicians who adopt managerial roles and provide the interface between the two control cultures.

The emergence of hybrid roles has likely been accompanied by role conflicts (Kitchener *et al.* 2000, Thorne 2002, Mueller *et al.* 2003) and conflicts between obligations and responsibilities (Lemieux-Charles *et al.* 1993). However, several studies have suggested the possibility of balancing intrapersonal and interpersonal conflicts among clinical and professional roles. Such suggestions have been presented as hypotheses (Starr 1982) or existing models in which organisational and professional loyalties can co-exist (Brewer 1996) through trust, openness and cooperation (Hoff 2001); negotiation and respect for diversity (Allen 2009); or the acknowledgement of managers' or professionals' areas of competence (Griffiths and Hughes 2000).

A complementary explanation of the interaction between management and professional cultures is provided by Waring's account on the processes of adaptive regulation, well captured by the following statement: 'In being adaptive and seeking to limit managerial involvement, doctors are seemingly re-articulating what it means to self-regulate, absorbing

managerial assumptions and recreating themselves as the managers' (Waring 2007: 176). Throughout this quotation, the continuity of an imaginary axis delineated by the hegemony/resistance framework and the ideal-typical nature of categories employed by this review becomes clearer.

Strategic adaptation: reverse managerialisation

Professionals sometimes retain external facets of managerial ideology and discourse while their perspective, identity and culture remain unaffected. In some cases the physicians even act as if they adhered to certain management principles and discursive strategies to safeguard their identities and achieve their professional objectives. These processes, whereby 'managerial techniques and jurisdictions are [...] strategically drawn into professional practice and identity' (Waring and Currie 2009: 755), can be described as 'reverse managerialisation' or 'reverse colonisation'. During these processes a colonised actor employs the instruments of colonisation to question the authority and build independence from the colonisers.

Formal adherence to management discourse has similarly been framed by the concept of decoupling (Anessi-Pessina and Cantù 2006, Levay and Waks 2009), which refers to a superficial and ritualistic form of coping with formal reporting demands to keep professional practices unaffected. These include paperwork compliance or the use of standardised formal language and vocabulary to redefine the meaning of objectivity or to hide various aspects of work (Berg *et al.* 2000).

Some tools that are generally perceived to be functional to management are more liable to be strategically used by professionals, such as evidence-based medicine (EBM). Physicians could strategically use the appeal of EBM rhetoric to articulate their professional autonomy and identity while also adhering to management principles (McLaughlin 2001).

On the border between strategic adaptation and professional opposition can be situated a critical position attributed to (informal) professional networks and subcultures (Holtman 2009) and their role within an organisational context. Informal networks and subcultures provide an autonomous platform for independent clinical judgements and play a substantial role in physicians' decision-making. As noted by Southon *et al.* (2005), the significance of these networks is often neglected by managers and policymakers.

Professional opposition: resistance to management

Several studies argued that managerial culture has seldom affected medical autonomy, contrary to the rather theoretical picture of managerial dominance drawn by the concept of managerialisation. This makes sense considering that management is confronted with the historically formed professional authority (Griffiths and Hughes 2000), habitus (McDonald 2009), dispositions and imperatives of medical professional culture. In this context, medical strategies of resistance against management originate.

In general, cultural differences have been understood as the root of physicians' reluctance to implement management techniques, such as the use of clinical guidelines (Lawton and Parker 1999), utilisation review (Wolff and Schlesinger 2002), or EBM tools (Dopson *et al.* 2003). Through this perspective, professional norms and medical ethos have seldom been eroded during encounters with the imperatives of management. Rather, they tend to be retained (Doolin 2001), or even reinforced in reaction to managerial culture (Wolff and Schlesinger 2002). Medical norms and ethics equip physicians with a solid foundation for coping (McDonald 2009) with managerial requirements. In fact, they are often understood as a source of physician's reluctant attitude towards management.

An *a priori* negative understanding of management represents another explanation of management failures. These failures can be observed in the case of monitoring procedures,

which are perceived as excessive paperwork (Schlesinger *et al.* 1997, Waring and Currie 2009), or as tools of control over professional work (Darr *et al.* 2003, McDonald *et al.* 2005, Waring 2007). These practices can nourish doctors' suspicion and strengthen motivation to resist management. Efforts to standardise the nature of clinical practice can be understood as a tool primarily intended to contain costs and increase professional labour productivity rather than to contribute to the improvement of healthcare (Wilkes *et al.* 1998, Lawton and Parker 1999, Beckman *et al.* 2006, Carlsen and Norheim 2008). Similarly, claims about the 'un-medical' or 'managerial' character of incident reporting systems have been expressed by some resistant doctors (Waring 2007). Quantitative studies investigating doctors' perceptions indicate that doctors view financial accountability as opposed to autonomy (Lewis and Marjoribanks 2003) and autonomy as correlated with quality of care (Forsberg *et al.* 2001).

Both the notion of resistance and the concept of reverse managerialisation are implicitly based on the idea of two conflicting cultures – professional and management – that are struggling to attain power. In this vein, an innovative, technical and business-driven discourse with an emphasis on quantifiable and externally assessable objectives exists in conflict with a traditional clinical discourse whose advocates criticise the managerial discourse for encouraging inappropriate standardisation, simplification and commodification of clinical processes (Thorne 2002).

Task-related professionalism

The role of management must be understood through its impact on two fundamental aspects of the medical profession that represent the basis of the doctor's daily tasks: clinical practice and interlinked expert knowledge. The task-related dimension of professionalism refers to the distribution of tasks and nature of knowledge as applied during the course of clinical practice and evaluation procedures. Similar to the sections on sociocultural aspects, the following paragraphs interpret the previous scholarship following the hegemony/resistance framework. The reviewed studies investigated how managerially fostered transmission and diffusion of expert knowledge can reinforce professional autonomy, how it can contribute to its erosion, and how professional needs are mediated by managerial objectives.

Managerial hegemony: standardisation of care and its evaluation

The task-related aspects of professionalism are strongly connected to the content of clinical practice and thus are much more resistant to managerial forces. This is different in comparison to sociocultural aspects of professionalism, which are related to discursive facets of social action. Management dominance over medical tasks is therefore ideal-typical rather than real and an emergence of management hegemony in the task-related dimension of professionalism has been connected to the *ex post* processes of evaluation and monitoring of healthcare rather than to the *ex ante* definition of the standards of clinical practices. Although medical tasks have never been totally subordinated to management forms of regulation, they have not remained completely immune.

The explorations of managerial hegemony were linked with quantitative, positivist and empiricist assumptions of EBM (Villanueva-Russell 2005), with a decrease in clinical autonomy of individual practitioners due to increased accountability requirements (Rappolt 1997, Lewis *et al.* 2003, Harrison 2009) and with 'legitimate managerial decision making over clinical decision making, and a redefinition of performance from patient care to financial efficiency' (Doolin and Lawrence 1997: 118).

However, as in Waring's (2007) analysis of patient safety policy agenda, these developments occur at a policy rather than at an organisational level as part of clinical practice. An understanding of various tactics and strategies through which the managerial ways of regulations are adopted, co-opted, negotiated or resisted as part of medical practice appear to be crucial for understanding task-related professionalism and is summarised in the following sections.

Co-optation: assimilation, autonomy, soft bureaucracy and expert networks

Knowledge management measures regulating medical practice can reinforce professionalism. Klazinga (1994) demonstrated how the imperatives of accountability and efficiency reinforce professionalisation in circumstances when they are 'developed within the framework of a consistent goal-method-effect scheme and applied as an integral part of professional quality assurance activities.' (Klazinga 1994: 51). Berg *et al.* (2000) have similarly provided evidence from the Netherlands of how guidelines contribute to reinforcing professional autonomy. The authors of the study suggest that guidelines are not simply followed by physicians through interpretation or negotiation but rather that their content is accepted and even creatively extended by physicians developing so-called disciplinary objectivity.

Waring and Currie (2009) describe a process of co-optation in which medical specialists from departments of obstetrics and gynaecology in the UK have assimilated techniques of learning and reporting into their everyday clinical practice. The example of guidelines shows that if they adhere to the norms of professionalism, they are also forced to pursue and legitimise established modes of clinical practice or impose them on others (McDonald and Harrison 2004). Mechanisms of co-optation could be enhanced by the nature of knowledge beyond clinical practice. In this vein, Harrison (2009) suggests that due to its consonance with management measures, the biomedical model actually contributes to the weakening of clinical autonomy, although it is traditionally understood to be a resource of such autonomy.

Co-optation of management at task-related level occurred in several occasions under the circumstances of the 'soft bureaucracy,' and the top-down introduction of expert networks. In a 'soft bureaucracy', organisational context, management or governmental power is exercised through subtle, tacit and sophisticated techniques employed by professionals and their own systematic self-scrutiny, which substitutes for the traditional control mechanisms associated with hierarchical supervision. In this context, although the responsibility for monitoring process is delegated to professionals, the achievement of centrally and managerially defined objectives is secured. Within this organisational context, the managerial control continues to be executed and simultaneously provides professionals with sufficient clinical autonomy. Control is decentralised and guaranteed by local professional leaders who function as proxies for management in interactions with a wider network of physicians (Sheaff *et al.* 2004).

A particular expression of co-optation was observed on the example of introduction of the top-down established expert networks, such as the network organisations of GPs (Fattore *et al.* 2009, Fattore and Salvatore 2010). Doctors' networks can facilitate learning or induce peer control (Salvatore 2006). An explicit managerial effort to foster creation of expert networks can lead to maintaining a certain degree of clinical autonomy, although it can also undermine basic principles of professionalism. The top-down introduction of expert networks has proven to be challenging for professionalism because it simultaneously increases the demand for accountability. These mechanisms were documented during the introduction of primary care groups and trusts in the UK, which provoked a negative reaction from physicians and led to the increased protection of the traditional enclaves of

general practitioners (Sheaff *et al.* 2002). Similarly, the introduction of multidisciplinary teamwork in the Netherlands showed that a top-down established expert network eroded clinical and occupational autonomy by increasing the demand for accountability (Molleman *et al.* 2008).

Negotiation: hybridisation and compatibility

Hybridisation helps explain how management measures have contributed to the blurred boundaries between the tasks of management and medical doctors and increased the hybrid roles within public and private healthcare organisations. The partial or full involvement of doctors in management positions (Fitzgerald 1994, Dawson *et al.* 1995, Kitchener 2000, 2002, Freidson 2001, Kurunmäki 2004), such as that of a clinical director (Forbes and Prime 2000, Fitzgerald and Ferlie 2000), appears to contribute not only to the disappearance of 'pure professionalism' (Noordegraaf 2007) but also to a division between practising and non-practising professionals (Causser and Exworthy 1998).

Narratives of compatibility have stressed the benefits of managerially promoted diffusion of expert knowledge and the collaborative nature of the relationship between professionals and managers in the application of medical knowledge. Noting the successful implementation of changes to chronic diseases management programmes in East England, Spooner *et al.* (2001) suggested that the programme's efficiency was achieved not only due to the legitimacy guaranteed by scientific data but also (and perhaps mainly) because of the multi-faceted nature of its implementation, which was based on the involvement of local leaders and supported by links to educational programmes and financial incentives. It has also been argued that reasonable financial incentives can facilitate a positive view of managerial control among professionals (Darr *et al.* 2003).

Situated between co-optation and strategic adaptation, the involvement of medical doctors in monitoring can represent another form of negotiation between management and professional autonomy. Sheaff *et al.* (2004), in their analysis of general practice self-regulation in England, suggest that the role of practitioners in monitoring clinical practice remains more significant than the managerial tools of control; however, the nature of clinical practice has been transformed and now operates using a form of governmental logic. In comparison to traditional informal networks, these systems of self-regulation tend to be more collective and continuous, and they are based on durable semi-formal networks maintained by a system of sanctions and adherent to monitoring requirements progressively set by policymakers.

Compatibility can evolve when equal importance is attributed to the consideration of both efficiency and clinical judgement and when the compatibility of accountability with healthcare delivery is supported (Southon 1994). In more general terms, compatibility can occur when economic elements are integrated into professional behaviour (Lawton and Parker 1999, Kalble 2005). This sort of compatibility can have ethical roots in ideas of justice and morality that extend beyond the level of individual-patient interaction to the overall healthcare system (Ten Have 2000). 'Encoded knowledge', as in clinical governance that is internally steered according to the logic of 'soft bureaucracy', represents a more robust theoretical explanation of this phenomenon (Flynn 2002). These situations can be connected with a loss of professional autonomy at the local level that is expressed, for example, in voluntary limits on prescriptions (Barnett *et al.* 1998).

Last but not least, some management tools, such as managerial accounting, could co-exist simultaneously with autonomous clinical praxis, as they are not perceived as a real threat to autonomy; instead, they are seen as mere technical tools that do not infringe on clinical judgement (Kurunmäki 2004).

Strategic adaptation: (re-)definition and accommodation

Professional control represents a 'third logic' inherent in the functioning of healthcare systems that exists simultaneously with recently crystallised managerial and market controls (Freidson 2001). Freidson's thesis explains why doctors often retain autonomy over operational work (Harrison 1994). One of the strategies for maintaining clinical autonomy has been adapting protocols and guidelines to physician needs through the negotiation and (re-)interpretation of standardised rules. To achieve this objective, doctors either intervene in the process of creating rules and protocols (Weisz *et al.* 2007) or actively influence their implementation.

Professionals, particularly those in leading positions, can maintain their clinical autonomy by gaining full control over the development and implementation of regulatory tools such as quality measures or medical audits, as demonstrated by the case of the Netherlands and England (Herk *et al.* 2001). A selective approach to the use of management measures is another strategy. In this vein, Exworthy *et al.* (2003) have suggested that general practitioners redefine the content of assessment procedures and adapt them to suit their quest for professional autonomy. Greener's (2008) analysis focused primarily on the role of local managers in the UK NHS and the subtle tactics through which doctors steer their encounters with public service managers during business meetings. To protect their professional and clinical objectives, doctors followed strategies such as selectively participating in managerial meetings, circulating meeting agendas at the last minute to avoid manager's participation and concealing the significance of decisions 'under the guise of "any other business"' (Greener 2008: 204).

The role played by informal expert networks is of particular importance here. Their involvement in decision-making processes overcomes the idea of strictly hierarchical systems and is typical of continuous critical assessment and discussion within professional networks. These arrangements, whether deliberate or unintentional, help professionals to maintain control over evaluation criteria and procedures and therefore allow them to enjoy considerable freedom. This concept has been labelled 'soft autonomy' (Levay and Waks 2009) and is distinguished from either 'colonisation' or 'soft-bureaucracy', which rely on stronger control mechanisms that are external to the professional community.

Similarly, invisible mechanisms of professional's strategic adaptation can be viewed via the mechanisms of institutional isomorphism and its strategic usage. In several studies, professional adherence to new organisational arrangements and controls such as total quality management (Audet *et al.* 2005), accreditation (Pawlson and O'Kane 2002), or clinical directorates (Kitchener 2000), has been understood as a result of institutional isomorphic forces. According to this concept, new organisational arrangements and management forms of control have been imposed from outside or adopted as established models due to the external legitimacy that they can guarantee. Although the mechanisms of institutional isomorphism can be symptomatic of the intrusiveness of management and therefore a sort of professional co-optation of management organisational arrangements, this practice can be a deliberate manner of coping with the institutional model. Professionals can conform to managerial patterns of organisation selectively and ceremonially rather than substantially (Kitchener 2002). In this context, many ostensible organisational changes do not significantly affect professionalism inside organisations in which a certain level of autonomy for expert networks is safeguarded.

Professional opposition: resistance and critique of medical knowledge

The incommensurability of imperatives of management with the requirements of doctors and their clients has frequently been emphasised. The implementation of guidelines has been

perceived as violating professional (and particularly clinical) autonomy (e.g. Schlesinger *et al.* 1997, van der Sanden *et al.* 2003, Carlsen and Norheim 2005). Similarly, an overemphasis on organisational policies and on the use of information systems has been linked with the threat of impeding the acquisition of skills by junior doctors and reducing their competency (Broom *et al.* 2009).

This conflict has given rise to professional strategies of resistance to managerial measures. Some attempts by general managers to constrain and control doctors have resulted in doctors' resisting, ignoring or defeating them (Harrison and Pollitt 1994, Audet *et al.* 2005, Brownlie and Howson 2006). Clinicians do this either by eroding particular aspects of the system, for instance refraining from using guidelines (McDonald *et al.* 2005), bypassing safety procedures, disabling alarms, or defeating information systems designed to prevent medication errors (Holtman 2009), or by occupying strategic positions within the system itself. As a consequence, these more or less subtle acts of resistance can serve to reinforce medical identity. A selective approach to managerially transmitted knowledge can potentially lead to the implementation of only those proposed changes in treatment that doctors find medically appropriate (Dopson *et al.* 2003).

Doctors' resistance has often been supported by criticism of the medical knowledge used by management. Numerous studies have asserted that the scientific, medical knowledge diffused and transmitted as part of management measures has often been inaccurate. Physicians' resistance to knowledge management procedures is expressed in three different ways.

First, predefined rules in the form of guidelines and protocols, which have inspired the term 'cookbook' medicine (Hunter 1996, Schlesinger *et al.* 1997, Timmermans and Berg 2003), cannot be adapted to local circumstances (McDonald and Harrison 2004), because they fail to take into account the complex and uncertain nature of healthcare. Nor can they fully mirror subtle elements of medical knowledge (McDonald *et al.* 2005). Second, medical professionals have pointed out the weak research on which standard procedures, guidelines and protocols are often based. They have done this by criticising the research methodology (Broom *et al.* 2009), highlighting inadequate accreditation procedures that have no potential to increase the quality of healthcare (Levy and Waks 2009), and emphasising the technical superiority of professional reporting systems over systems introduced by management (Waring and Currie 2009). Third, the legitimacy of guidelines can be undermined if they are understood as a tool of managerial control based on the mere fact that the guidelines come from management (Dopson *et al.* 2003).

Discussion and conclusions

Existing scholarship provides robust testimony on the significant impact of management on medical professionalism. Focusing on the impact of these changes at an organisational level on sociocultural and task-related dimensions, a critical discussion of previous research provides some insight into macro theories and opens up new horizons for research.

Macro-theories revisited

In addition to the primary scope of this review on professionalism within an organisational context, this paper also provides valuable insight into macro-societal processes interlinked with the impact of management on professionalism. A dialectical perspective that considers the interconnectedness of structure and agency (Gleeson and Knights 2006) reveals how the majority of reviewed studies have captured particular expressions of professional autonomy within broader processes of policy implementation. Furthermore, such a dialectic standpoint

can also help link the political power of professionals and their social status with front-line medical practice and thus encourage researchers to revisit theories of contemporary professionalism.

In particular, no evidence of deprofessionalisation among doctors has recently been identified. However, the goal of many arrangements has been that of 'controlling doctors' activities through a mixture of hierarchical discipline and market incentives' (Kitchener 2000: 139). Moreover, the subtleties of the re-stratification concept, originally postulating an increasing gap between elite professionals and rank-and-file physicians (Freidson 1988, 1994, Davidovitch and Filc 2006), have been elaborated upon. The evidence shows that re-stratification processes do not exclusively result in inequalities within the profession but can also simultaneously contribute to the creation of new opportunities for lower segments of the medical profession, such as GPs, stimulating their professional emancipation and repositioning (Quaye 1997, Lewis *et al.* 2003, Kuhlmann and Burau 2008).

Research agenda

This review has primarily focused on the profession of medical doctors and has deliberately left out other professional groups such as nurses, pharmacists and healthcare managers. The frequent consideration of doctors in strict relation to other healthcare professionals suggests the need to examine the interaction of these professional groups to understand the different paths through which doctors maintain their autonomy and negotiate their professional position in relation to the nursing profession and other professions in the healthcare sector, such as managers. This should simultaneously open more room for the examination of the (dualistic) impact of professions on management in terms of transformed or accommodated forms of management practice.

As noted in studies of re-stratification, some doctor subgroups have gained status and power relative to other subgroups through recent reforms and reorganisations. However, the dynamic and the consequences of those changes have not been sufficiently investigated. Another important issue is the lack of focus on organisational performance, including the consequences of the changes in professional practice for patients, the quality of care and patient safety. In the same vein, most published studies seem to disregard implications for practice and policy. Furthermore, this review not only has implications for the narrow scholarly field of professionalism but should also stimulate cross-thematic investigations within the medical sociological sub-discipline. In this regard, the transformation of medical professionalism is intertwined with contemporary issues, including patient safety, the doctor-patient relationship, health policy and the so-called biomedical model.

Hitherto, scholarship shows that professionalism and management are frequently framed as contradictory in doctors' views. However, a number of contextual and situated analyses have concluded that interplay between professionalism and management results more often in co-existence, co-optation, mediation, negotiating, merging and (strategic) adaptation rather than in clashes, hegemony and resistance. The investigation of these subtle reactions should further be encouraged.

Nevertheless, it is worth noting that concepts such as co-optation, adaptation, negotiation or resistance remain located within the cultural incorporation/opposition, in other words hegemony/resistance framework and tend to situate the result of the dynamics between professional practice and managerial logic on a continuum between resistance to and compliance with managerialism. We suggest that this conceptualisation tends to overemphasise the importance of a conflictual model and fails to adequately capture the more complex role played by the boundary fields of epidemiology or EBM, whose empirical accounts are commonly placed in juxtaposition with managerialism.

Epidemiological knowledge plays two oppositional roles. On the one hand, through its content and positive impact on medical knowledge, it potentially strengthens professional values. On the other hand, mainstream studies on management impact on professionalism tend to situate epidemiology in opposition to professionalism by emphasising the surveillance and governmental logic linked to the consonance of epidemiology with controlling management. Further research should therefore overcome a one-dimensional and an *a priori* critical approach towards the so-called biomedical model and empirically distinguish between the expert content of epidemiology, which potentially fosters professional autonomy, and managerial procedures through which this content is (inevitably) administered. Furthermore, more studies shall describe the circumstances under which the consonance of the biomedical model with management can prevail as a power structuring clinical practice and limit professional autonomy.

The call for a stronger consideration of epidemiological perspective does not obviously match the Foucauldian critique of epidemiology in modernity, surveillance and the governmental logic of professional practice. However, neither does this call signify a refusal of such a critique *per se*. These comments recall unexplored issues, such as the existence of a quality healthcare system as a collective good. They also evoke questions about professional ethics, medical responsibility and the nature of trust, rather than distrust, between medical doctors, other professions in the healthcare sector and patients. These topics may have remained sidelined in studies on professionalism due to the ‘hermeneutics of suspicion’ nourished by the cultural turn in social theory and mirrored in the sociology of healthcare writings.

Last but not least, the ways in which professional resistance is politicised – and this means both affected by political ideologies and instrumentally (mis)used in political struggles – should be explored. This is particularly relevant in relation to the role of labour movements and allegiances of professional associations within the sphere of politics.

Research methodologies

Most empirical research has been based on single case studies, with only few analyses based on multiple, comparative or longitudinal case studies. In this regard, comparatively driven research could provide stimulating insights into the diffusion of management principles and help us to understand and, in the case of policy-making processes, even anticipate some regularities in the implementation of management measures and their impact on professional practice across different geographic areas, medical specialisations and organisational settings. Furthermore, this evidence should stimulate a deeper understanding of the causal mechanisms that lead to the resistance or acceptance of managerialisation and the role played by different national and political contexts in structuring doctors’ responses to management practices. From the theoretical perspective, this comparative approach could simultaneously contribute to the debate on isomorphism, problematise the widely uttered idea of convergence and enhance an elaboration of alternative explanations for the idea of monolithic global pressures (Pollitt 2001). This applies not only to policy-level changes but also to organisational arrangements and work practices.

Moreover, qualitative focus prevalent among the studies reviewed in this article, which fit the subtle and discursive nature of the explored reality, could be further complemented with quantitatively driven research which could add some solid evidence, test and enrich existing examinations. As noted in the previous section, the consequences of the changes in professional practice for patients, quality of care and patient safety remain unexplored. In this respect, a linkage of ‘hard’ aggregate data of an epidemiological nature (e.g. hospital discharge registers or mortality registers) and indicators of organisational performance to

'soft' data, such as surveys on professional autonomy, would represent a new stimulating avenue for research with significant policy implications.

Moreover, analyses of healthcare systems within non-Anglo-Saxon countries have been neglected in previous scholarship. There is a lack of internationally driven studies on the introduction of management measures in non-Western and developing countries. Similarly, more research on the Mediterranean or the (post-)transforming countries of Central and Eastern Europe is warranted. An analysis of the impact of management on medical professionalism would not only contribute to an understanding of professionalism in new geographic contexts but also stimulate a far less developed comparative study. Several exceptions, either in the case of healthcare (Dent 2003, Kuhlmann and Burau 2008, Kirkpatrick *et al.* 2009), or the general impact of new forms of management on public services (Saltman 1997, Pollitt and Bouckaert 2000), have already been explored. Further development of comparative inquiry, however, still represents a challenge for scholars dealing with professionalism, particularly in relation to the transferability of management practices.

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Notes

- 1 Both nurses and managers follow their own paths of professionalisation (e.g. Lawton and Parker 1999), which have also contributed to the establishment of new inter-professional boundaries.
- 2 Articles in medical journals that describe the threats and opportunities associated with a medical speciality and articles that present ideas on 'how to become a good professional' or 'how to educate medical students for professionalism' were excluded from the selection.
- 3 The full list is available from the corresponding author upon request. One hundred randomly selected articles were screened by all three authors independently to check the concordance in the application of the criteria.
- 4 Global diffusion shall not be interchanged with unifying global pressures as long as different management practices are adopted in different national and political contexts and while doctors' responses to management continue to vary (Dent 2003, 2006, Kirkpatrick *et al.* 2009).
- 5 The most explicit expression of this continuum can be found in similar terms in Waring and Curie's recent paper (2009). They actually distinguished between compliance, co-optation, adaptation, circumvent and resistance.

References

- Abernethy, M.A. and Stoelwinder, J.U. (1990) Physicians and resource management in hospitals: an empirical investigation, *Financial Accountability and Management*, 6, 1, 17–31.

- Allen, D. (2009) From boundary concept to boundary object: The practice and politics of care pathway development, *Social Science and Medicine*, 69, 3, 354–61.
- Anessi-Pessina, E. and Cantù, E. (2006) Whither managerialism in the Italian National Health Service? *International Journal of Health Planning and Management*, 21, 4, 327–55.
- Audet, A.M., Doty, M.M., Shamasdin, J. and Schoenbaum, S.C. (2005) Measure, learn, and improve: Physicians' involvement in quality improvement, *Health Affairs*, 24, 3, 843–53.
- Barnett, J.R., Barnett, P. and Kearns, R.A. (1998) Declining professional dominance?: Trends in the proletarianisation of primary care in New Zealand, *Social Science and Medicine*, 46, 2, 193–207.
- Beckman, H., Suchman, A.L., Curtin, K. and Greene, R.A. (2006) Physician reactions to quantitative individual performance reports, *American Journal of Medical Quality*, 21, 3, 192–9.
- Berg, M., Horstman, K., Plass, S. and van Heusden, M. (2000) Guidelines, professionals and the production of objectivity: Standardisation and the professionalism of insurance medicine, *Sociology of Health and Illness*, 22, 6, 765–91.
- Brewer, L. (1996) Bureaucratic organisation of professional labour, *Australian and New Zealand Journal of Sociology*, 32, 3, 21–38.
- Broom, A., Adams, J. and Tovey, P. (2009) Evidence-based healthcare in practice: A study of clinician resistance, professional de-skilling, and inter-specialty differentiation in oncology, *Social Science and Medicine*, 68, 1, 192–200.
- Brownlie, J. and Howson, A. (2006) 'Between the demands of truth and government': Health practitioners, trust and immunisation work, *Social Science and Medicine*, 62, 2, 433–43.
- Carlsen, B. and Norheim, O.F. (2005) 'Saying no is no easy matter': a qualitative study of competing concerns in rationing decisions in general practice, *BMC Health Services Research*, 5, 70.
- Carlsen, B. and Norheim, O.F. (2008) 'What lies beneath it all?': an interview study of GPs' attitudes to the use of guidelines, *BMC Health Services Research*, 8, 218.
- Causser, G. and Exworthy, M. (1998) Professionals as managers across the public sector. In Exworthy, M. and Halford, S. (eds) *Professionals and the New Managerialism in the Public Sector*. Buckingham: Open University Press.
- Chamberlain, J.M. (2009) *Doctoring Medical Governance: Medical Self-Regulation in Transition*. New York: Nova Science.
- Courpasson, D. (2000) Managerial strategies of domination. Power in soft bureaucracies, *Organization Studies*, 21, 1, 141–61.
- Darr, A., Harrison, M.I., Shakked, L. and Shalom, N. (2003) Physicians' and nurses' reactions to electronic medical records. Managerial and occupational implications, *Journal of Health Organization and Management*, 17, 5, 349–59.
- Davidovitch, N. and Filc, D. (2006) *Reconstructing data: Evidence-based medicine and evidence-based public health in context*, *Dynamis: Acta Hispanica ad Medicinae Scientiarumque Historiam Illustrandam*, 26, 287–306.
- Dawson, S., Mole, V., Winstanley, D. and Sherval, J. (1995) Management, competition and professional practice: Medicine and the marketplace, *British Journal of Management*, 6, 3, 169–81.
- Dean, M. (1999) *Governmentality: Power and Rule in Modern Society*. London: Sage.
- Dent, M. (2003) *Remodelling Hospitals and Health Professions in Europe: Medicine, Nursing and the State*. Basingstoke: Palgrave Macmillan.
- Dent, M. (2006) Patient choice and medicine in health care. Responsibilization, governance and proto-professionalization, *Public Management Review*, 8, 3, 449–62.
- Doolin, B. (2001) Doctors as managers: New public management in a New Zealand hospital, *Public Management Review*, 3, 2, 231–54.
- Doolin, B. and Lawrence, S. (1997) Managerialism, information technology and health reform in New Zealand, *International Journal of Public Sector Management*, 10, 1/2, 108–22.
- Dopson, S., Lcock, L., Gabbay, J., Ferlie, E. and Fitzgerald, L. (2003) Evidence-based medicine and the implementation gap, *Health*, 7, 3, 311–30.

- Elston, M.A. (1991) The politics of professional power: Medicine in a changing health service. In Gabe, J., Calnan, M. and Bury, M. (eds) *The Sociology of the Health Service*. London: Routledge.
- Exworthy, M., Wilkinson, E.K., McColl, A., Moore, M., Roderick, P., Smith, H. and Gabbay, J. (2003) The role of performance indicators in changing the autonomy of the general practice profession in the UK, *Social Science and Medicine*, 56, 7, 1493–504.
- Fattore, G., Frosini, F., Salvatore, D. and Tozzi, V. (2009) Social network analysis in primary care: The impact of interactions on prescribing behaviour, *Health Policy*, 92; 3, 141–8.
- Fattore G. and Salvatore, D. (2010) Network organizations of general practitioners: Antecedents of formation and consequences of participation, *BMC Health Services Research*, 10, 118.
- Fitzgerald, L. (1994) Moving clinicians into management, *Journal of Management in Medicine*, 8, 6, 32–44.
- Fitzgerald, L. and Ferlie, E. (2000) Professionals: Back to the future? *Human Relations*, 53, 5, 713–39.
- Flynn, R. (2002) Clinical governance and governmentality, *Health Risk and Society*, 4, 2, 155–73.
- Forbes, T. and Prime, N. (2000) Changing domains in the management process: Imaging services managers in the post-1990 National Health Service, *Health Services Management Research*, 13, 3, 178–86.
- Forsberg, E., Axelsson, R. and Arnetz, B. (2001) Effects of performance-based reimbursement on the professional autonomy and power of physicians and the quality of care, *International Journal of Health Policy and Planning*, 16, 4, 297–310.
- Freidson, E. (1988) *Profession of Medicine: A Study of the Sociology of Applied Knowledge*. Chicago, IL: University of Chicago Press.
- Freidson, E. (1994) *Professionalism Reborn: Theory, Prophecy, and Policy*. Chicago, IL: University of Chicago Press.
- Freidson, E. (2001) *Professionalism: The Third Logic*. Chicago, IL: University of Chicago Press.
- Germov, J. (2005) Managerialism in the Australian public health sector: Towards the hyper-rationalisation of professional bureaucracies, *Sociology of Health and Illness*, 27, 6, 738–58.
- Gleeson, D. and Knights, D. (2006) Challenging dualism: Public professionalism in ‘troubled’ times, *Sociology*, 40, 2, 277–95.
- Greener, I. (2008) Decision making in a time of significant reform: managing in the NHS, *Administration & Society*, 40, 2, 194–210.
- Griffiths, L. and Hughes, D. (2000) Talking contracts and taking care: Managers and professionals in the British National Health Service internal market, *Social Science and Medicine*, 51, 2, 209–22.
- Harrison, S. (1994) Professional control as process – beyond structural theories, *Human Relations*, 47, 10, 1201–31.
- Harrison, S. (2009) Co-optation, commodification and the medical model: Governing UK medicine since 1991, *Public Administration*, 87, 2, 184–97.
- Harrison, S. and Ahmad, W.I.U. (2000) Medical autonomy and the UK state 1975 to 2025, *Sociology*, 34, 1, 129–46.
- Harrison, S. and Dowswell, G. (2002) Autonomy and bureaucratic accountability in primary care: What English general practitioners say, *Sociology of Health and Illness*, 24, 2, 208–26.
- Harrison, S. and Pollitt, C. (1994) *Controlling Health Professionals: The Future of Work and Organization in the National Health Service*. Buckingham: Open University Press.
- Haug, M. (1988) A re-examination of the hypothesis of deprofessionalisation. *The Millbank Quarterly*, 66, 2, 48–56.
- Herk, R., Klazinga, N.S., Schepers, R.M.J. and Casparie, A.F. (2001) Medical audit: Threat or opportunity for the medical profession, *Social Science and Medicine*, 53, 12, 1721–32.
- Hoff, T.J. (2001) The physician as worker: What it means and why now? *Health Care Management Review*, 26, 4, 53–70.
- Hood, C. (1991) *A public management for all seasons?* *Public Administration*, 69, 1, 3–19.

- Holtman, M.C. (2009) Paradoxes of professionalism and error in complex systems, *Journal of Biomedical Informatics*. Available at <http://dx.doi.org/10.1016/j.jbi.2009.08.002>, date last consulted 18 September 2009.
- Hunter, D.J. (1996) The changing roles of health care personnel in health and health care management, *Social Science and Medicine*, 43, 5, 799–808.
- Joyce, P. (2001) Governmentality and risk: Setting priorities in the new NHS, *Sociology of Health and Illness*, 23, 5, 594–614.
- Kalble, K. (2005) Between professional autonomy and economic orientation: The medical profession in a changing health care system, *Psycho-Social Medicine*, 2. Available at <http://www.egms.de/static/en/journals/psm/2005-2/psm000010.shtml>, date last consulted 18 September 2009
- Kirkpatrick, I., Jespersen, P.K., Dent, M. and Neogy, I. (2009) Medicine and management in a comparative perspective: The case of Denmark and England, *Sociology of Health and Illness*, 31, 5, 642–58.
- Kitchener, M. (2000) The ‘bureaucratization’ of professional roles: The case of clinical directors in UK hospitals, *Organization*, 7, 1, 129–54.
- Kitchener, M. (2002) Mobilizing the logic of managerialism in professional fields: The case of academic health centre mergers, *Organization Studies*, 23, 3, 391–420.
- Kitchener, M., Kirkpatrick, I. and Whipp, R. (2000) Supervising professional work under new public management: Evidence from an invisible trade, *British Journal of Management*, 11, 3, 213–26.
- Klazinga, N. (1994) Compliance with practice guidelines: Clinical autonomy revisited, *Health Policy*, 28, 1, 51–66.
- Kuhlmann, E. and Burau, V. (2008) The ‘healthcare state’ in transition: National and international contexts of changing professional governance, *European Societies*, 10, 4, 619–33.
- Kurunmäki, L. (2004) A hybrid profession: The acquisition of management accounting expertise by medical professionals, *Accounting, Organisations and Society*, 29, 3–4, 327–47.
- Lawton, R. and Parker, D. (1999) Procedures and the professional: The case of the British NHS, *Social Science and Medicine*, 48, 3, 353–61.
- Leicht, K.T., Walter, T., Sainsaulieu, I. and Davies, S. (2009) New public management and new professionalism across nations and contexts, *Current Sociology*, 57, 4, 581–605.
- Lemieux-Charles, L., Meslin, E.M., Aird, C., Baker, R. and Leatt, P. (1993) Ethical issues faced by clinician/managers in resource-allocation decisions, *Hospital and Health Services Administration*, 38, 2, 267–85.
- Levy, C. and Waks, C. (2009) Professions and the pursuit of transparency in healthcare: Two cases of soft autonomy, *Organization Studies*, 30, 5, 509–27.
- Lewis, J.M. and Marjoribanks, T. (2003) The impact of financial constraints and incentives on professional autonomy, *The International Journal of Health Planning and Management*, 18, 1, 49–61.
- Lewis, J.M., Marjoribanks, T. and Pirotta, M. (2003) Changing professions: General Practitioners’ perceptions of autonomy on the frontline, *Journal of Sociology*, 39, 1, 44–61.
- Light, D.W. (2001) Managed competition, governmentality and institutional response in the United Kingdom, *Social Science and Medicine*, 52, 8, 1167–181.
- Light, D. and Levine, S. (1988) The changing character of the medical profession: a theoretical overview, *The Milbank Quarterly*, 66, 2, 10–32.
- MacKinnon, D. (2000) Managerialism, governmentality and the state: A neo-Foucauldian approach to local economic governance, *Political Geography*, 19, 3, 293–314.
- McDonald, R. (2009) Market reforms in English primary medical care: Medicine, habitus and the public sphere, *Sociology of Health and Illness*, 31, 5, 659–72.
- McDonald, R. and Harrison, S. (2004) The micropolitics of clinical guidelines: An empirical study, *Policy and Politics*, 32, 2, 223–39.
- McDonald, R., Waring, J., Harrison, S., Walshe, K. and Boaden, R. (2005) Rules and guidelines in clinical practice: A qualitative study in operating theatres of doctors’ and nurses’ views, *Quality and Safety in Health Care*, 14, 4, 290–4.

- McKinlay, J.B. and Stoeckle, J.D. (1988) Corporatization and the social transformation of doctoring, *International Journal of Health Services*, 18, 2, 191–205.
- McLaughlin, J. (2001) EBM and risk: Rhetorical resources in the articulation of professional identity, *Journal of Management in Medicine*, 15, 4–5, 352–63.
- Mo, T.O. (2008) Doctors as managers: Moving towards general management? *Journal of Health Organization and Management*, 22, 4, 400–15.
- Molleman, E., Broekhuis, M., Stoffels, R. and Jaspers, F. (2008) How health care complexity leads to cooperation and affects the autonomy of health care professionals, *Health Care Analysis*, 16, 4, 329–41.
- Morgan, P.I. and Ogbonna, E. (2008) Subcultural dynamics in transformation: A multi-perspective study of healthcare professionals, *Human Relations*, 61, 1, 39–65.
- Mueller, F., Harvey, C. and Howorth, C. (2003) The contestation of archetypes: Negotiating scripts in a UK Hospital Trust board, *Journal of Management Studies*, 40, 8, 1971–95.
- Navarro, V. (1988) Professional dominance or proletarianization?: Neither, *The Milbank Quarterly*, 66, 2, 57–75.
- Noordegraaf, M. (2007) From ‘pure’ to ‘hybrid’ professionalism: Present-day professionalism in ambiguous public domains, *Administration and Society*, 39, 6, 761–85.
- Pawlson, L.G. and O’Kane, M.E. (2002) Professionalism, regulation, and the market: Impact on accountability for quality of care, *Health Affairs*, 21, 3, 200–7.
- Pickard, S. (2009) The professionalization of general practitioners with a special interest: Rationalization, restratification and governmentality, *Sociology*, 43, 2, 250–67.
- Pollitt, C. (1993) *Managerialism and the Public Services: Cuts or Cultural Change in the 1990s?* Cambridge, MA: Blackwell.
- Pollitt, C. (2001) Convergence: The useful myth, *Public Administration*, 79, 4, 933–47.
- Pollitt, C. and Bouckaert, G. (2000) *Public Management Reform: A Comparative Analysis*. Oxford: Oxford University Press.
- Quaye, R. K. (1997) Swedish physicians’ perspectives on the introduction of the Stockholm model, *Journal of Management in Medicine*, 11, 4, 246–55.
- Rappolt, S. (1997) Clinical guidelines and the fate of medical autonomy in Ontario, *Social Science & Medicine*, 44, 7, 977–87.
- Rose, N. and Miller, P. (2008) *Governing the Present: Administering Economic, Social and Personal Life*. Cambridge: Polity Press.
- Salter, B. (2007) Governing UK medical performance: A struggle for policy dominance, *Health Policy*, 823263–75.
- Saltman, R.B. (1997) The context for health reform in the United Kingdom, Sweden, Germany, and the United States, *Health Policy*, 41, 1, S9–26.
- Salvatore, D. (2006) Physician social capital: Its sources, configuration, and usefulness, *Health Care Management Review*, 31, 3, 213–22.
- Schlesinger, M.J., Gray, B.H. and Perreira, K.M. (1997) Medical professionalism under managed care: The pros and cons of utilization review, *Health Affairs*, 16, 1, 106–24.
- Sheaff, R., Marshall, M., Rogers, A., Roland, M., Sibbald, B. and Pickard, S. (2004) Governmentality by network in English primary healthcare, *Social Policy and Administration*, 38, 1, 89–103.
- Sheaff, R., Rogers, A., Pickard, S., Marshall, M., Campbell, S., Sibbald, B., Halliwell, S., *et al.* (2003) A subtle governance: ‘Soft’ medical leadership in English primary care, *Sociology of Health and Illness*, 25, 5, 408–28.
- Sheaff, R., Smith, K. and Dickson, M. (2002) Is GP restratification beginning in England? *Social Policy & Administration*, 36, 7, 765–79.
- Southon, G. (1994) Professional autonomy and accountability. A critique of current health reforms and an alternative proposal, *World Hospitals and Health Services*, 30, 3, 4–9.
- Southon, G. and Braithwaite, J. (1998) The end of professionalism? *Social Science and Medicine*, 46, 1, 23–8.

- Southon, G., Perkins, R. and Galler, D. (2005) Networks: A key to the future of health services, *Australian Health Review: A Publication of the Australian Hospital Association*, 29, 3, 317–26.
- Spooner, A., Chapple, A. and Roland, M. (2001) What makes British general practitioners take part in a quality improvement scheme? *Journal of Health Services Research and Policy*, 6, 3, 145–50.
- Starr, P. (1982) *The Social Transformation of American Medicine*. New York: Basic Books.
- Ten Have, H. (2000) *Re-evaluating professional autonomy in health care*, *Theoretical Medicine and Bioethics*, 21, 5, 503–13.
- Thorne, M.L. (2002) Colonizing the new world of NHS management: The shifting power of professionals, *Health Services Management Research*, 15, 1, 14–26.
- Timmermans, S. and Berg, M. (2003) *The Gold Standard: The Challenge of Evidence-based Medicine*. Philadelphia, PA: Temple University Press.
- van der Sanden, W.J.M., Mettes, D.G., Plasschaert, A.J.M., van't Hof, M.A., Grol, R.P.T.M. and Verdonshot, E.H. (2003) Clinical practice guidelines in dentistry: Opinions of dental practitioners on their contribution to the quality of dental care, *Quality and Safety in Health Care*, 12, 2, 107–11.
- Villanueva-Russell, Y. (2005) Evidence-based medicine and its implications for the profession of chiropractic, *Social Science and Medicine*, 60, 3, 545–61.
- Waring, J. (2004) A qualitative study of the intra-hospital variations in incident reporting, *International Journal for Quality in Health Care*, 16, 5, 347–52.
- Waring, J. (2007) Adaptive regulation or governmentality: Patient safety and the changing regulation of medicine, *Sociology of Health and Illness*, 29, 2, 163–79.
- Waring, J. and Currie, G. (2009) Managing expert knowledge: Organizational challenges and managerial futures for the UK medical profession, *Organization Studies*, 30, 7, 755–78.
- Weick, K.E. and Sutcliffe, K.M. (2003) Hospitals as cultures of entrapment: A re-analysis of the Bristol Royal Infirmary, *California Management Review*, 45, 2, 73–84.
- Weisz, G., Cambrosio, A., Keating, P., Knaapen, L., Schlich, T. and Tournay, V.J. (2007) The emergence of clinical practice guidelines, *The Milbank Quarterly*, 85, 4, 691–727.
- Wilkes, M., Coulter, I. and Hurwitz, E. (1998) Medical, law, and business students' perceptions of the changing health care system, *Social Science and Medicine*, 47, 8, 1043–9.
- Wolff, N. and Schlesinger, M. (2002) Clinicians as advocates: An exploratory study of responses to managed care by mental health professionals, *The Journal of Behavioral Health Services and Research*, 29, 3, 274–87.