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**RECONFIGURING HEALTH PROFESSIONS IN TIMES OF MULTI-MORBIDITY:
EIGHT RECOMMENDATIONS FOR CHANGE**

OECD 50th Anniversary

Conference on Health Reform: Meeting the challenge of ageing and multiple morbidities

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Thomas Plochg, Department of Public Health, University of Amsterdam

Nicolaas Sieds Klazinga, OECD Secretariat

Michael Schoenstein, OECD Secretariat

Barbara Starfield, Johns Hopkins University, United States

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ABSTRACT

The professional organization of health provision no longer reflects the changing patient and population health needs and problems caused by the growing number of complex illnesses. Health policy makers enforce coordination and remove power from the health professions in order to allow for these changes. However, it may be better to rethink the nature and type of the professionals and to initiate basic changes to the way in which they work.

The justification for asserting this is based on three types of challenges. First, the health workforce is insufficiently responsive and accountable to patient problems and illnesses. Second, the health workforce insufficiently acknowledges the full potential of new knowledge and technologies. Third, economic realities force the health workforce to change. These challenges are interrelated and form the imperative for reconfiguring health professionalism.

The existing configuration is dysfunctional as health provision is overly specialised and fragmented. Health provision is divided into numerous “single-condition” professions, which made sense when patients primarily suffered from single diseases that were treatable within the boundaries of one profession. However, a growing number of patients suffer from multi-morbidity which would lead a charge for another configuration of health professions composed of more ‘integrative’ or generalist professions.

Reconfiguring health professions requires a comprehensive approach including the redistribution and sharing of tasks and establishment of new roles for physicians, non-physicians, and nursing occupations. Three consecutive steps are proposed: (1) defining and categorizing the health needs of the population through general burden of disease studies; (2) reorganizing the professional domains and related professions around the needs of population groups; (3) reorganizing the professional domains by eliminating work that could be done by other health professionals with less professional training or by the patients themselves.

Professional leaders, supported by health policy makers, can consciously activate the self-regulatory capacity of health professionalism in order to reconfigure the way in which health professionals work to better adapt to changing health needs. Eight strategies are recommended: 1) elevating population health needs as core professional value; 2) targeted research funding; 3) targeted technology development; 4) targeted infrastructure investments; 5) more flexible professional bodies; 6) system- and multi-morbidity based health curricula; 7) balanced performance assessment and management; 8) supportive payment models.

Reconfiguring health professionalism to better suit changing health needs will not be easy. It will need strong leadership. But, if the medical and nursing world does not embark on this endeavour, good health service delivery will become merely a bureaucratic and/or marketing exercise that obscures the ultimate goal of health systems which is to optimize the health of both individuals and the entire population.

1. INTRODUCTION

Health workforce insufficiently fit for purpose	<p>There is a growing awareness that the way in which health professionals work needs to be more responsive to patients' and population health needs and problems. Improved productivity has more to do with rethinking the nature and type of the professionals than in increasing or decreasing their number. The justification for asserting this is based on three types of new challenges.</p>
Workforce not responsive to patient and policy relevant health problems	<p>First, the health workforce is insufficiently responsive and accountable to patient problems and illnesses. The standard formulation of diseases as used by health professionals no longer is optimal (Wade & Halligan, 2004). Diseases are professionally constructed entities: they do not exist in isolation from each other and are, therefore, not an independent representation of illness. Moreover, they are but one manifestation of ill health, among others including (but not limited to) discomfort, disability, and limitation of normal activity (Starfield, 2010). A ranking of the frequency of health conditions based on lost economic productivity differs from a ranking based on medical costs (Loeppke et al., 2007). For example, the top five high impact diagnoses based on productivity loss are fatigue, depression, back or neck pain, sleeping problems, and other chronic pain whereas the top five high impact conditions based on healthcare costs are relatively infrequent cancers, back or neck pain, coronary heart disease, other chronic pain, and high cholesterol levels.</p>
New knowledge & technologies	<p>Second, the health workforce insufficiently recognizes the full potential of new knowledge and technologies. Locked in the path dependencies of partnerships amongst industry and academia, innovations emerging from the R&D pipelines drive the further specialisation of health provision, rather than reconfiguring the health workforce to become more patient focused and relevant to the way in which illness manifests itself in populations. New system-based knowledge (e.g., individual risk factors; epigenetics¹; allostatic loads²) and the miniaturization and mobilization of health technologies, including modern information technology, makes it increasingly less necessary to bring professionals and patients together in one places to negotiate approaches to healing. Consequently, the future health workforce will increasingly work in stand-alone units and community settings rather than in institutions such as hospitals or even health centres.</p>
Human resources determinant of costs	<p>Third, economic realities force the health workforce to change. Health spending continues to rise inexorably, growing faster than the economy in most OECD</p>

¹ Epigenetics is the study of heritable changes in phenotype (appearance) or gene expression caused by mechanisms other than changes in the underlying DNA sequence, hence the name *epi-* (Greek: *επι-* over, above) -*genetics* (REF).

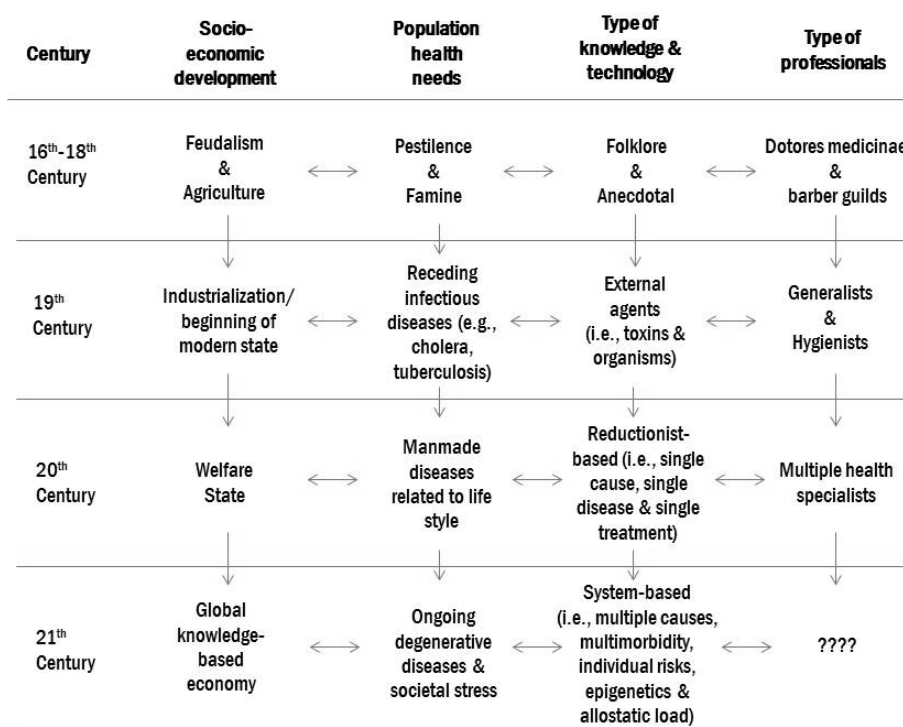
² Allostatic load is defined as the physiological consequences of chronic exposure to fluctuating or heightened neural or neuroendocrine response that results from repeated or chronic stress.

countries. Given the recent economic downturn, countries are looking for ways to improve the efficiency of health spending (OECD, 2010a). The health workforce is critical in this respect as health professionals are the key producers of health services and their functioning directly impacts on healthcare expenditure. Moreover, the workforce itself is a key determinant of healthcare expenditure, especially in the face of the looming health workforce crisis and its upward pressures on wages (OECD, 2008). Despite that health workforce policies aiming at increasing labour productivity are in their infancy, the economic agenda will likely support their development.

Against this background, it is timely and relevant that OECD governments put policies in place that not only plan the number of health professionals, but also reconfigure their nature and type to better meet patient and population health needs and problems. Figure 1.1 presents a global analytic framework visualising this need. The figure shows the complex change in patterns of health and disease in interaction with socioeconomic developments over a period of six centuries. Evidence shows that an epidemiologic transition has paralleled the demographic and technologic transitions in the now developed countries of the world featuring four stages (Omran, 1971). The key issue is what nature and type of health professionals would best reflect the health needs of populations suffering from the morbidity and mortality patterns typical for the fourth stage of epidemiological transition using the full potential of new knowledge and technologies, and in a global knowledge-based economy.

Analytic
framework

Figure 1.1. Analytic framework



Progress towards adapting systems to address changing health needs is slow or minimal: physicians and nurses work much in the same way as they did 50 years ago. The movement from generalism to specialism that was set in motion a hundred years ago (Rutkow, 2011) is still moving in the same direction although the nature of disease has changed. Newer professional occupations (e.g., geriatric medicine, intensive care medicine, emergency medicine) have emerged but are struggling to gain a foothold. And even they do not appear to be leading a charge for system reform and probably cannot do so given the power of health care institutions and academia.

This OECD discussion paper provides a long-term vision on the reconfiguration of health professionalism in the light of the rise of multi-morbidity. Based on the sociology of professions (e.g., Martiakanis et al., 2009), the basic thrust is towards using levers to trigger effective professional self-regulation. Eight recommendations are proposed to engender self-regulation of the health professions to in directions that will end in a reconfiguration of their organization and work to deal more efficiently with changing health needs, the technology imperative, and a health workforce fit to meet 21st century health needs.

2. HEALTH PROFESSIONALISM & PROFESSIONALIZATION

Defining
professionalism

In sociology, professions are defined as groups of institutions that permit the members of an occupation to make a living while controlling their own work (Freidson, 2001). Internal control is a basic characteristic of professions, as they perform non-routine tasks requiring expertise based on abstract knowledge and practical apprenticeship that is inaccessible to those lacking the required training and experience. In other words, fit to meet the status of a profession is linked to work that cannot be controlled other than by the workforce itself. Therefore, professional autonomy and strong developed ethical codes are inherent attributes of a profession (Adler et al., 2008).

Professionalization

As the status of health work is, at least in part, competitive, professionalization is linked to the pursuit of internal control over health provision and outperforming rival occupational groups. Health professions have to demonstrate the superiority, exclusiveness and discretionary nature of the knowledge which underpins their work. Meeting this requirement is a huge endeavour, as jurisdiction over knowledge cannot be claimed by decree alone, particularly in an era of evidence-based medicine. It must be established alongside, or at the expense of, other professions with a vested interest. Thus, turf battles are inherent to the professionalization processes even when all health professions are interdependent and form an configuration or so called 'system of professions' (Abbott, 1988).

Specialization	<p>Thus far, professionalization of health professions has become synonymous for specialisation. When knowledge becomes very complex, specialization in just one segment of it makes the work more manageable by limiting breadth while permitting depth and innovation. In healthcare, this traditional way of reducing complexity is based on the assumption that the human body can be reduced to smaller and simpler components, and that understanding each component separately leads to an understanding of the entire health problem - that is, that the whole is the sum of the components (Ahn et al., 2006a; Wilson et al., 2001). Under this reductionist assumption, innovation in medical science results in knowledge on smaller and smaller bodily parts reflected by an ever growing number of deeper and narrower (sub) specialties.</p>
Generalization	<p>An alternative assumption is that the whole is more than the sum of its parts. Fields such as geriatrics, critical care medicine and family medicine build upon the recognition that diagnosis and treatment require the generalist focus on 'bodily systems' rather than the specialty focus on 'bodily organs' - a notion consistent with the upsurge of 'systems thinking' in medical science: human beings are viewed as composed of and operating within multiple interacting and self-adjusting systems (including biochemical, cellular, physiological, psychological, and social systems) (Ahn et al., 2006b; Wilson et al., 2001; Sturmberg, 2007). In a systems approach, a complex health problem is made manageable by observing the overall pattern in the behaviour of the variety and interactions of bodily systems. Medical innovations based on 'systems thinking' result in more generalist knowledge reflected by stronger primary care infrastructures and/or more generalist specialty domains in secondary and tertiary care.</p>
Professions & occupations	<p>This paper does not draw a hard definitional line between medical professions and other health occupations, such as nursing, non-clinicians and the allied health professions. Instead, it emphasises that professions and occupations share many common characteristics and processes (Evetts, 2003). Thereby, professions are essentially the service and knowledge-based category of occupations at the one end of the spectrum, which usually follow a period of tertiary education and professional training and experience. Noticeably, having the status of a profession (or professionalism) is appealing to many occupations such as nurses, care assistants, physiotherapists, allied professions as it provides more independence for exercising normative and social control over their work.</p>

3. DRIVERS FOR CHANGE

Changing patient
& population
needs & problems

The process of change has three drivers: health needs, scientific knowledge and technology, and economic realities (figure 1.1). Patient and population needs and problems change over time. Burdens of morbidity are shifting from the third stage of epidemiology (i.e., manmade diseases related to life style) towards a fourth stage characterized by multiple co-existing conditions brought about by improved survival with concomitant degeneration resulting from biological, environmental, and social stresses of current-day living (Omran, 1971).

Co-morbidity

Increased effectiveness of health services' interventions that delay death by managing (although not necessarily curing) diseases, has been the impetus for this transition. It led to a marked increase in the coexistence of separate diseases in the same persons. Older literature expressed this notion by the term 'co-morbidity': the co-occurrence of unrelated diseases. However, total morbidity is not the same as the sum of unrelated diseases – despite the fact that virtually all population data on diseases assumes that it is. For instance, the sum of deaths attributed to individual diseases in the world is greater than the total number of deaths (Murray et al., 2004).

Multi-morbidity

Neither morbidity nor multi-morbidity is randomly distributed in populations. People and populations differ in their overall vulnerability to illness and resistance to threats to their health; some have more than their share of illness and some have less. Clustering of diseases is therefore a result of a complex pattern of interacting influences between the human body (biology) and life experiences (biography) in the broadest sense (Sturmberg, 2007; Getz et al., 2011). It is more common in socially deprived populations and more common in children as compared with its expected frequency based on frequency of individual diseases in populations (despite lower overall frequencies of morbidity in childhood). This morbidity mix is often called multi-morbidity.

Morbidity burden

Over time the frequency of diagnosed morbidity has increased, at least partly as a result of lowered thresholds for diagnosis, inclusion of new diagnoses (including some risk factors, such as obesity) and perhaps also as a result of true increases in some diseases (such as those resulting from environmental exposures over time) (Howard & Busch, 2010). Increasing multi-morbidity is straining the ability of quality assessment mechanisms which now have to confront the inadequacy of existing 'guidelines' based on management of single conditions (Starfield, 2010).

Note that it is not necessarily the case that increased diagnosed multi-morbidity would be associated with poorer health. For example, among the elderly in the United States, the percentage of people with five or more diagnosed conditions who reported

being in excellent or good health increased from 10% to 30% between 1987 and 2002 (Thorpe & Howard, 2007). Thus, ill health has decreased (by self-reports), but physicians are generating more interventions for the diagnosed conditions and, hence, greater burden on the health system. The increasing imperative for earlier diagnosis and management alone mandates a rethinking of the relative roles of various health professionals in a context when ‘preventing illness’ is becoming more of a priority..

Knowledge
creation as the
perpetuum mobile
of professionalism

The second set of drivers are advances in (scientific) knowledge and technologies which are the *perpetuum mobile* of professionalization processes. Health professions pursue control over knowledge-creation and –diffusion, because they thrive on new diagnostics, pharmaceuticals, and medical devices to maintain and strengthen their professional jurisdictions. These professional imperatives generally work against the adoption of new paradigms (such as new conceptualizations of illness) because they threaten existing power structures; innovations in thinking about illness genesis and progression are acceptable only to the extent that they are compatible with existing power bases. If new knowledge and or technologies are perceived as threatening, change is resisted (Abbott, 1988; Ferlie et al., 2005; Adler et al., 2008). This countervailing power is notoriously strong. It explains why professionalization within healthcare has become synonymous for sub-specialization and entrenchment of interests vested in individual diseases and organ systems and reluctance to recognize new knowledge about how diseases are generated and manifested in patients and populations.

Upsurge of system
thinking

In this perspective, the upsurge of “systems theory” in the health sciences will not automatically or easily become the imperative for substituting generalisation for specialisation. This is indicated by a quick search of PubMed, the main literature indexing system in medicine. The search reveals that the MeSH-term “systems theory” was introduced to the database in 1980 and used in the titles of 545, 529 and 1236 articles in the periods 1971-1990, 1991–2000, 2001–2011, respectively. This represents only a modest increase even at a time when evidence of the utility of system based knowledge for dealing with multi-morbidity is accumulating rapidly (Ahn et al., 2006b).

Implementing information and communication technologies (ICTs) in clinical care has proven to be a difficult undertaking. The significant public investments have resulted in both notable successes and some highly publicised costly delays and failures (OECD, 2010b).

At some point, however, integrative advancements both in knowledge (about the interrelationships among risk factors; epigenetics; and allostatic load) and information system technology will become sufficiently compelling to force a re-evaluation, as a

result of a recognition that the health care system will become dysfunctional without it.

Economic pressures

Economic realities constitute the third driver. Health spending continues to rise, growing faster than the economy in most OECD member states leading to increased pressure on already strained public finances and the need to control healthcare expenditure just at a time when more, better and safer health services are demanded. Governments have no option other than to increase value for money (OECD, 2010a). The health workforce is a critical imperative in this respect as health expenditures derive directly from how the workforce operates and what its work costs. Thus, human resource planning policies that focus on increasing labour productivity by changing their qualifications and expertise, could potentially lead to costs savings.

Disappointing results of increasing labour productivity

However, attempts to adjust health manpower in order to increase labour productivity have been unsuccessful. Experiences of some OECD countries, e.g., Canada, United Kingdom and Denmark, showed that easing the macro- financing constraint contributed to upward pressures on wages of health professionals rather than the hoped-for increase in health productivity (Rapoport et al., 2009). Not surprisingly, governments generally focus on other policies to achieve better value for money (e.g., evidence-based medicine (EBM) and health technology assessment (HTA) to rationalise resource allocation, Pay-for-Performance models, improving co-ordination of care for chronic diseases, drawing the benefits from pharmaceutical spending, and redesigning health systems with support of ICT) with varying success to stem the tide of spiralling costs (OECD, 2010a).

Reconfiguring health professionalism is becoming an imperative but conventional approaches to do so are unlikely to succeed. It is the specification of tasks or professional expertise that needs to change, not the way they are carried out by various types of health professionals that needs change.

4. DYSFUNCTIONAL CONFIGURATION OF HEALTH PROFESSIONS

Overly specialized medical professions

The three ‘drivers’ are interrelated: changing morbidity patterns make existing professional prerogatives obsolete and demand adjustments in conventional provision of health services by health professionals. Health care provision as we know it today is overly specialised and fragmented, as it is divided into numerous “single-condition” professions (or occupations) (Stange, 2009). This made sense when patients primarily suffered from single diseases that were treatable within the boundaries of one profession. However, it is dysfunctional when a growing number of patients suffer from multi-morbidity.

Having multiple, complex and overlapping health problems is associated with poor outcomes in terms of quality of life, psychological distress, longer hospital stays, more postoperative complications, higher mortality and higher costs of care (e.g., WHO, 2002; Nolte & McKee, 2008; McGlynn et al., 2003; Hofmarcher et al. 2007). These are, at least in part, attributable to the splintered and overly specialized health professions that are still configured to manage single diseases with ‘main’ causes and of relatively short duration. Patients with multi-morbidity consult on average eight physicians in a year across different settings whose inputs are poorly justified and poorly coordinated (Pham et al., 2007; Schoen et al., 2009).

Strengthening
primary care

Primary care professionals should have the expertise, knowledge and competence to consistently coordinate all the inputs from various doctors and navigate patients through the system. Countries with a strong primary care infrastructure have better outcomes in terms of population health, costs, access and coordination experiences (Starfield et al., 2005; Wennberg et al., 2005). Logically, the strengthening of primary care is widely considered to be an indispensable feature of well performing health care systems in the twenty first century (WHO, 2008). Yet in many industrialized countries, primary care physicians are explicitly prohibited (generally through the influence of specialty lobbies) from providing certain types of care that they are well able to provide. Although no data are available to quantify the magnitudes of these prohibitions, there is anecdotal evidence that countries with weak primary health care systems have more restrictions on what is permitted to be provided in primary care settings.

Strengthening of primary care alone is unlikely to change the balance between the power of specialists and primary care physicians in adapting health profession's practices to the changing health needs. Primary care physicians would still encounter problems in performing their tasks and the configuration of health professions would remain fundamentally fragmented and overly specialised (Bodenheimer, 2008). Moreover, building strong primary care infrastructures without making changes in number of professionals in secondary and tertiary care will require the production of a larger health workforce. Whereas migration may contribute to closing a gap in the short term, it would have to happen within the WHO Global Code of Practice on the International Recruitment of Health Professionals. This would pose a significant fiscal and organisational challenge and it would not provide a solution in medium to long term (OECD, 2008).

Limitations of
alternative
solutions

There is no evidence that current proposals for care, such as the Chronic Care Model, are measurably improving patient care, even of those with chronic illness (Solberg et al., 2006; Nolte & McKee, 2008). Where it has proven useful it has been in facilities

that already have achieved high levels of primary care performance, and the benefits are likely to be from that rather than from the new ‘model’ (Starfield, 2010). Although considerable progress has been made in making the health work place more accessible to patients and making it eligible for control by non-physician managers, the nature of the work still requires a considerable degree of tacit, discretionary and experiential expertise, an inherent aspect of professional work. In textbox 4.1 Eliot Freidson (2001) as the proponent of this vision is paraphrased.

Textbox 4.1. Professionalism as a superior logic for organising labour

For Eliot Freidson, *professionalism* is much more than just a desirable trait exhibited (in varying degrees) by individuals serving consumers in occupations where trustworthiness and self-denial are especially prized. In his book, he presents professionalism as a complete economic and political regime for governing significant subsectors of the economy, including healthcare. Most of the book develops professionalism as a logic or “ideology,” juxtaposing it to the generally accepted ones of “consumerism” (or the free market) and “managerialism” (or bureaucracy). Evaluating these ideologies as “ideal-typical” regimes, Freidson hypothesize the possible superiority of professionalism for fostering human endeavours requiring specialized knowledge and skill, significant discretion and judgment in the handling of individual cases, and special faithfulness to the interests of those being

Source: Adapted from Freidson, The third logic. (2001).

Well performing healthcare systems in the twenty first century need health professionals who retain their professional roles and also remain the key protectors of quality. The route to improving health care delivery for those needing it is not bypassing and curtailing health professionalism but, rather, to establishing more ‘integrative’ professions alongside the existing ones. The development of greater integrative capacity within the health system, when accompanied by a devolution of single condition tasks now provided by specialists whose talents could be redirected to tasks more in tune with their high-level training would go a long way to making care less costly and better coordinated.

5. TOWARDS A NEW CONFIGURATION OF HEALTH PROFESSIONS

Reconfiguring
health
professions

Reconfiguring health professions requires a comprehensive approach including the redistribution and sharing of tasks and establishment of new roles for physicians, non-physicians, and nursing occupations. A major barrier to rationalization of the relative roles of health professionals has been a failure to appreciate the distinction between tasks and functions in health care. For example, only recently have the functions or primary care been defined and accepted: first contact, person-focused care over time, comprehensive in scope of services available and provided in primary care settings, and coordination with care when it has to be provided elsewhere.

Yet, there continues to be controversy about whether or not non-physician professionals are equally able to serve as primary care providers because the literature on the utility and acceptability of these practitioners is based on studies that confuse functions with tasks. Providing health services involves tasks such as addressing the processes of problem or needs recognition, diagnosis, management, and reassessment across a range of preventive, curative, rehabilitative, and palliative activities. These skills necessary to fulfil these tasks can be taught to intelligent and thoughtful individuals whatever their professional backgrounds, but achieving the functions of primary care requires an organization of professional work that transcends these specific tasks.

Little is known about the functions of specialist care and the extent to which and circumstances under which it is short term, primarily for advice and guidance, shared with primary care providers, or substituting for primary care providers over the long-term. Explicitly enhancing the integrative function of primary care should prompt a re-thinking of the role of specialists, with the goal of better rationalizing their different functions. To achieve such a reconfiguration three interrelated steps are proposed.

Categorizing
the burden of
morbidity

The first entails defining and categorizing patient and populations according their burdens of morbidity. New categories are needed in order to classify patients with multi-morbidity that provide the basis for gathering and organizing health expertise (Fortin, 2007; Starfield, 2010). For example, what expertise is needed to deliver optimal medical care to patients with multi organ disorders or a frail elder with multiple diseases? There are categorizations that explicitly aim to characterize the degree of total morbidity burden from a clinical and epidemiological perspective, (see for instance <http://www.acg.jhsph.edu>).

Moreover, primary care, public health, intensive care medicine, paediatrics, occupational medicine, emergency medicine and geriatrics mark fields in medicine where more 'integrative' health professions would be advantageous. Nevertheless, which categories will ultimately be formed will depend on a study of the potential of the different alternatives to deal with multi-morbidity. Research on this theme and related issues is still in its infancy (Fortin, 2007).

The second step requires that professional work of doctors, nurses and allied health professionals be organized around the newly defined and categorized health needs. This essentially means merging or rearranging specialty domains or establishing new domains and roles. Geriatrics might be established as a fully approved medical specialty, thus making geriatricians the frontline staff for frail elderly patients (Grimly, 1997; Barton & Mulley, 2003; Boulton et al., 2008). Existing medical specialists (such

as internists, cardiologists, and neurologists) would then be aligned to better support the integrative function of geriatricians. A rearrangement of specialty domains and non-physician roles is unlikely to occur by decree; it has to be established from within, strategically supported and stimulated from the outside and based on a vision of health system design with special reference to the blurring of the interfaces between primary, secondary and tertiary care for people with multi-morbidity. Focusing on tasks to be provided by the different professionals and how they best support the integrative function is a critical first step in the process of re-aligning skills to better meet new health needs.

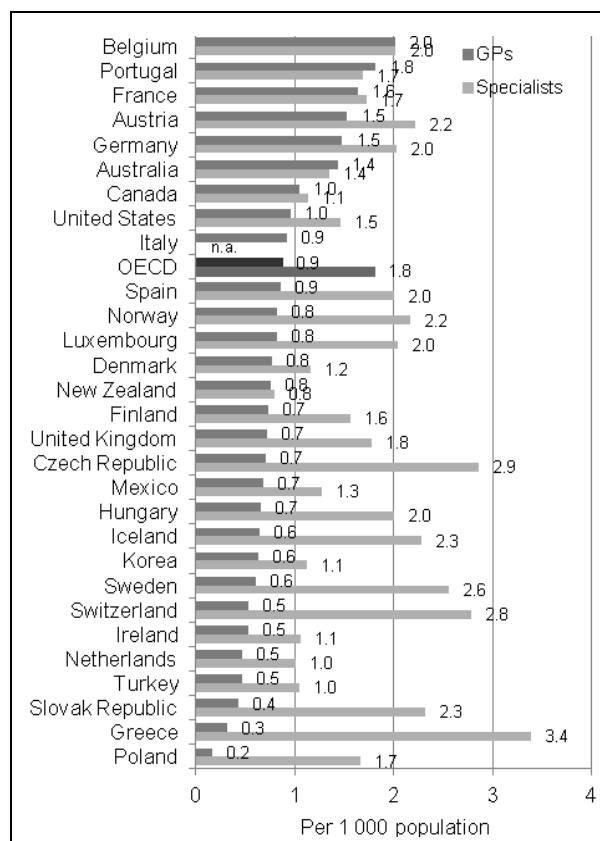
Towards
integrative
knowledge
domains

The third step is then to reorganize the work of doctors, nurses and allied health professionals practicing in these integrative knowledge domains. A major challenge will be to devolve tasks and responsibilities to the type of health worker most accessible to patients and consistent with the achievement of excellent quality and outcomes. This will require a careful reconsideration of sharing or redistributing tasks between different occupations, in particular between doctor and nurses in more advanced roles.

Advanced nursing roles have been implemented in a number of countries in response to calls for better access to services. Experiences with these new roles have largely been positive. Evaluations show that using advanced practice nurses can improve access to services and reduce waiting times. Advanced practice nurses are able to deliver the same quality of care for a defined range of problems, especially those involving various aspects of prevention and follow-up care (Delamare & Lafortune, 2010).

Furthermore, professional work that is non-discretionary in nature and which therefore can be standardized or managerially organized should be devolved to allied health professionals or less highly educated health personnel. There is well-established literature that illustrates the potential and feasibility of transferring tasks to non-physicians (Laurant et al., 2005). Developing these new roles for nurses could therefore improve access to care in the face of a changing medical workforce, and release time for physicians to expand their work into new areas involving the understanding and management of multi-morbidity.

Moreover, tasks can also be left to the patients themselves - with backup from the professionals - as illustrated by the developments in telemedicine and eHealth. The shift from office-based care in individual visits is rapidly changing to new venues to provide and receive care; e-health places a major role in these developments (Davidoff & Miglus J, 2011).

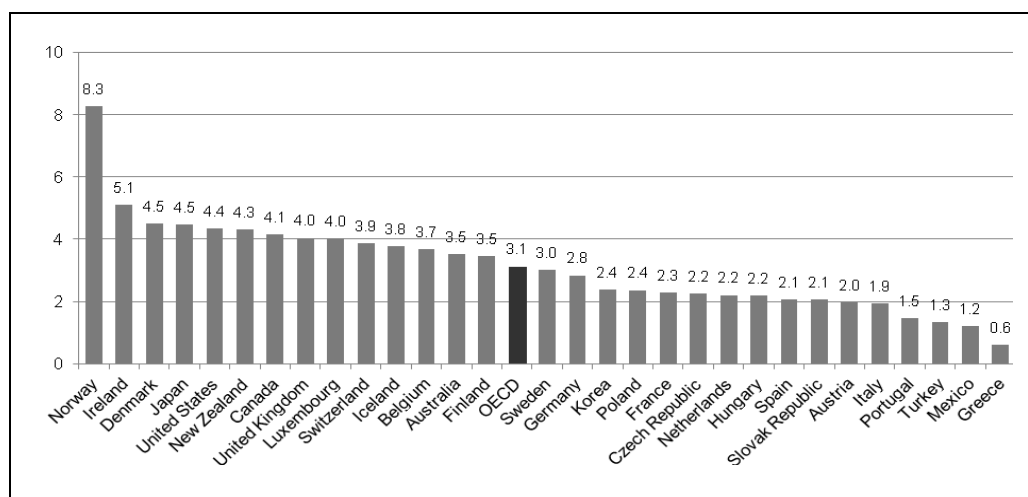
Figure 5.1. **General practitioners and specialists per 1000 population**

Source: OECD Health Data 2009 (2009)

There is little empirical evidence that the shift from reductionist based towards more system-based health professions is taking place. For doctors, this is reflected in the OECD average of 0.9 general practitioner versus 1.8 medical specialists per 1000 population (see figure 5.1). However, there is considerable variation in this ratio across countries. While for example, in Belgium there are as many general practitioners as specialists per 1000 inhabitants, in Poland, there are more than eight times more specialists than general practitioners.

While there are no comparable data on allied health professionals, countries make very different use of the services provided by nurses. Educational backgrounds and tasks undoubtedly differ and the 'average ratio of nurses per practising physician in the OECD has little meaning in the presence of wide variability. (On average, 3.1 nurses practiced for each one practising physician but variability extends from 8.3 nurses per physician in Norway to only 0.6 per physician in Greece.) This may be indicative of the wide range of specific tasks that are devolved and suggests that considerable change may be possible.

Figure 5.2. Ratio of practising nurses to practising physicians



Source: OECD Health Data 2009 (2009)

6. TRIGGERING PROFESSIONAL SELF-REGULATION

The challenge of achieving the proposed new configuration of health professions is daunting. It will run counter to the existing *status quo*, as it rearranges professional domains, resources and incomes. This creates winners and losers and one can expect prospective losers to oppose such change.

Nevertheless, the basic idea for change is straightforward: substitute a person and population health-focused view for an organ or disease-focused one. Categorization of people according to their burdens of morbidity will allow not only a more rational way of stratifying the population according to the degree of need; it will also facilitate the identification of population subgroups (e.g., those suffering from multi-morbidity) that are especially vulnerable and may profit from more system-based domains and related professional processes of care. By making such an orientation more prestigious, rewarding and beneficial than an organ or disease orientation, the configuration of health professions, as described by Abbott (1988), could more easily evolve.

The critical challenge for policy makers is to promote and strengthen such an orientation in practice by moderating the negatives of professionalism (e.g., unconstrained self-interests, distancing from the client, limited client accountability/responsiveness, professionalism tribalism) while strengthening the positives of professionalism (e.g., a strong educational base, certified expertise/expertise, evidence based practice, ethical codes) (Kuhlman & Saks, 2008).

Professional
leadership

Meeting this challenge requires professional leadership. It is the health workforce itself that is largely responsible for the way in which health expertise is organised and it has the powerbase to lead the change. Health professions and their leaders must

recognize that the proposed long-term vision is a more promising route towards both improving performance in healthcare and protecting the values and principles of health professionalism against the countervailing forces of the free market and bureaucracy that predominate in decisions about current health reforms and show no promise for reversing the dysfunctionality that is bankrupting health systems everywhere (Freidson, 2001; Plochg et al., 2009).

Triggering
self-
regulation

Second, policy makers can increase the likelihood that professionals will accept and adopt this endeavour by responding to eight key assets of health professionalism (Table 6.1). If appropriately, timely and systematically governed, initiatives, acting together, could trigger self-regulation amongst the health professions adapting to the proposed agenda for transformation.

Table 6.1. Strategies to re-configure health professions

Strategy	Description
1) Elevating population health needs as a core professional value	Elevating a population health orientation as one of the core values of health professionalism.
2) Targeted research funding	Establishing an enhanced portfolio of health research that provides the credentials for more integrative health professions.
3) Targeted technology funding	Investing in the development of integrative technologies that favour generalization rather than (sub) specialization.
4) Targeted infrastructure investment	Investments in infrastructure (including real estate) should be health needs based. Infrastructure investment decisions could also trigger workforce adaptation.
5) More flexible professional bodies	Easing the requirements that emerging integrative professions need to satisfy in order to become a fully approved health profession
6) System & multi-morbidity based health curricula	Including expert decision making based on the principles of systems thinking and multi-morbidity in medical education.
7) Balanced performance assessment & management	Developing performance based instruments related to the health outcomes of the patient groups that are served rather than for individual diseases.

8) Supportive
payment models

Developing pay-for-population-health-performance schemes that reward health professionals for maximizing population health outcomes.

Empirical evidence shows that health professions follow a common pattern when it comes to professional self-regulation. Profession-owned instruments are developed and implemented to ease the pressures and their underlying agenda's. For instance, the implementation of medical audit in the 1980's and peer review in the 1990's were profession-owned mechanisms to ease external quality and safety pressures (van Herk et al., 2001; Lombarts & Klazinga, 2001).

6.1 Elevating population health as a core professional value

Health
professional
value-systems

A key asset of a health professions is its ethical foundation and related value systems. It provides the basis for taking legal and ethical responsibility for their practices. Recently, much has been accomplished in renewing the definition, measurement and inculcation of core professional values, especially within medicine but also in other health professions such as nursing and public health (ICN 2006; and PHLS, 2002). Table 6.2 highlights various manifestos that are the yield of these efforts. Noticeably, these values systems implicitly include population health as a value, because there is a focus on social justice (which is a population concept).

Population
health as a
core value

Making population health as a core professional value more explicit in these manifestos requires health professionals to agree to operate within the constraints of a vision that sets the conditions deriving from the health situation of the population or community it is designed to serve.

Population &
individual
health

Population health as a core value fits with the existing professional value-systems despite the primacy of core values related to individual health. Individual and population health are not mutually exclusive, but are rather two sides of the same coin. Neither individual nor population health is identifiable or even definable without informative contextualization within the other (Arah, 2009; Getz et al., 2011). This can be exemplified by considering an individual healthy child growing up in India being unhealthier than an individual unhealthy child growing up in France.

Policies
supporting
population
health as core
value

The elevation of population health as a core value of health professionalism requires incorporation in the bylaws and codes of all health profession, not only the public health ones. Health policy makers at national level could explore and monitor whether this is the case and if not, ask why not. Thereby, they can refer to the World Medical Association's statement on physicians and public health (WMA, 2006). In this

statement, the World Medical Association explicitly underscores that physicians and their professional associations have an ethical and professional responsibility to the population's health.

Table 6.2. Manifestos on core professional values

Title	Professional values	Reference
WMA International Code of Medical Ethics	<p>A physician shall always exercise his/her independent professional judgment and maintain the highest standards of professional conduct.</p> <p>A physician shall respect a competent patient's right to accept or refuse treatment.</p> <p>A physician shall not allow his/her judgment to be influenced by personal profit or unfair discrimination.</p> <p>A physician shall be dedicated to providing competent medical service in full professional and moral independence, with compassion and respect for human dignity.</p> <p>A physician shall deal honestly with patients and colleagues, and report to the appropriate authorities those physicians who practice unethically or incompetently or who engage in fraud or deception.</p> <p>A physician shall not receive any financial benefits or other incentives solely for referring patients or prescribing specific products.</p> <p>A physician shall respect the rights and preferences of patients, colleagues, and other health professionals.</p> <p>A physician shall recognize his/her important role in educating the public but should use due caution in divulging discoveries or new techniques or treatment through non-professional channels.</p> <p>A physician shall certify only that which he/she has personally verified.</p>	World Medical Association General Assembly 1949. Last amended in 2006.

	A physician shall strive to use health care resources in the best way to benefit patients and their community.	
	A physician shall seek appropriate care and attention if he/she suffers from mental or physical illness.	
	A physician shall respect the local and national codes of ethics.	
Physician Charter	<ol style="list-style-type: none"> 1. Primacy of patient welfare 2. Patient autonomy 3. Social justice 	ABIM Foundation, ACP-ASIM Foundation, European Federation of Internal Medicine (2002)
Doctors in society. Medical professionalism in a changing world	Medicine is a vocation in which a doctor's knowledge, clinical skills, and judgment are put in the service of protecting and restoring human well-being. This purpose is realised through a partnership between patient and doctor, one based on mutual respect, individual responsibility, and appropriate accountability	Royal College of Physicians (2005)
The ICN code of ethics for nurses	<ol style="list-style-type: none"> 1. Nurses and people: The nurse's primary professional responsibility is to people requiring nursing care. 2. Nurses and practice: The nurse carries personal responsibility and accountability for nursing practice, and for maintaining competence by continual learning. 3. Nurses and the profession: The nurse assumes the major role in determining and implementing acceptable standards of clinical nursing practice, management, research and education. 4. Nurses and co-workers: The nurse sustains a co-operative relationship with co-workers in nursing and other fields. 	International Council of Nurses (2006)

Furthermore, the WMA statement could be further specified in the light of the contribution of physicians and their professional associations in terms of population health. For instance, the current attempts to integrate primary care and public health systems demonstrate that crisscrossing across the individual and the collective is already under experimentation (WHO, 2008; Martin-Misener & Valaitis, 2008). As such, professional practices are already heading towards a situation where professional performance towards population health is considered and rewarded.

A population health orientation requires moving from disease-oriented services to person-oriented services, based on a concept of morbidity and reflected in an organization of health services that deals with multi-morbidity rather than individual diseases. The concept of primary care is such an organizational strategy wherein the person-focus is achieved by health services that are accessible for first contact care, person-focused over time with interpersonal relationships that enhance knowledge of providers with patients (and the converse), that provide a sufficient but broad range of services within its own structure to deal with all of the common needs of the served population, and that coordinates care by facilitating the transfer and recognition generated when patients have to be seen elsewhere for uncommon needs. Generalism is critical for the comprehensiveness, person-focused, and coordinating functions; specialties that do not simultaneously serve all three of these functions cannot be considered generalist or ‘integrative’ in nature.

6.2 Targeting research funding

Research key
asset of health
professionalism

Professions are built upon a knowledge base, which can be created. Each profession is underpinned by a body of knowledge, competencies and skills (Abbott, 1988; Freidson, 2001). Since such a knowledge base is not static but dynamic, health professions must continuously renew their knowledge to maintain jurisdiction over health work. Hence, (access to) research capacity is a key asset for health professions, especially in the era of evidence-based medicine.

Research
infrastructures
coincide with
vested interests

The vested health professions, based in academic medical centers and/or universities, are equipped with a (scientific) knowledge-creation capacity that they can control to a considerable degree (Adler et al. 2008). Consequently, the scientific knowledge emerging from health research pipelines is often not widely available and is thus “siloeed” (Ferlie et al., 2005). As such, the research fails to stimulate the proposed reconfiguration of the health professions.

Targeted
research funding

OECD governments can use public money to set up national research programmes to pull scientific research findings that support the proposed system-based health professions and help to un-freeze the existing structures of health care professions and promote the development of new ones. Examples of such programmes can be found in the Netherlands for Rehabilitation Medicine, Nursing Home Medicine and Medical Care for Mentally Handicapped as organized by The Netherlands Organisation for Health Research and Development (see <http://www.zonmw.nl/en/programmes/>).

Setup of targeted
research
programmes

Designing the targeted research programmes requires addressing at least the following issues. First, the programmes should be labelled in such a way that research proposals address one or more of the following three generic themes: 1) classifying of

multi-morbidity; 2) characterising of patients' problems both for initial assessment and outcome; and 3) classifying the impact of services on health of patients' problems including adverse events. These three themes would support the knowledge base of any "integrative" health profession but in particular integrating professions such as primary care, public health, geriatrics, intensive care medicine and nursing, and community nursing that are already transforming in the proposed direction. In fact, the natural accumulation of new information and of new knowledge in these areas could constitute the basic technology of the integrating professions.

Second, funding criteria must include "integrative research". This refers to research projects that are multidisciplinary and conducted from a 'system thinking' paradigm instead of the dominating reductionist one (see table 6.3). This would lead to knowledge that is concerned not with phenomena that related to diseases (e.g., blood pressure, weight, number of cigarettes and grams of alcohol) but with understanding interrelationships that better explain the dynamics of illness and consequent variability manifestations of illness in patients and populations (Sturmberg, 2007; Getz et al. 2011). This would result in a research agenda that focuses less on trials (which artificially reduce complexity in well-defined variables) and more on effectiveness research (studying multiple outcomes in real-life populations).

Last, the membership of the research councils deciding on the granting of research proposals should be carefully considered: "experts" from vested health professions generally dominate the discussion within committees and distort their mission, thus increasing the likelihood that the most fertile research proposals are rejected.

Table 6.3. **Comparing the traditional reductionist and systemic world views**

Analytic/reductionist approach	Systemic/holistic approach
Isolates, then concentrates on the elements	Unifies and concentrates on the interaction between elements
Studies the nature of interaction	Studies the effects of interactions
Emphasises the precision of details	Emphasises global perception
Modifies one variable at a time	Modifies groups of variables simultaneously
Remains independent of duration of time; the phenomena considered are reversible	Integrates duration of time and irreversibility
Validates facts by means of experimental proof within the body of a theory	Validates facts through comparison of the behaviour of the model with reality
Has an efficient approach when	Has an efficient approach when

interactions are linear and weak	interactions are nonlinear and strong
Leads to discipline oriented (juxtadisciplinary) education	Leads to multidisciplinary education
Leads to action programmed in detail	Leads to action through objectives
Possesses knowledge of details, poorly defined goals	Possesses knowledge of goals, fuzzy details

Source: de Rosnay J. Analytic vs systematic approaches. In: Heylighen F, Joslyn C, Turchin V, editors. Principia Cybernetica Web, 1997. Available via <http://cleamc11.vub.ac.be/analysyst.html>.

6.3 Targeted technology development

Technology key asset of health professionalism

Professions can also be built upon (new) technologies. Control over technology development is therefore another key asset of health professionalism. Health professions influence the technology agenda in healthcare via consortia. Traditionally, they co-partner with commercial industries, e.g., the pharmaceutical and medical device industries, to develop technological innovations. Since national governments are often at arm's length, those technological innovations are *pushed* by the vested health professions and the industry rather than *pulled* by policy makers and consumers.

Future technological developments

Thus, the existing portfolio of expected health technology developments feature the further mobilization and miniaturization of medical devices, replacement organs and tissue engineering advances, molecular and gene-based diagnostics, modern information and communication technologies, E-health including social media, and preventive technologies. This is reflected in the corporate strategies of a couple of leading medical device industries (see table 6.4).

Table 6.4. Vision statements of global medical device companies

	Vision	Product categories
	GE Healthcare's "healthymagination" vision for the future is to enable a new "early health" model of care focused on earlier diagnosis, pre-symptomatic disease detection and disease prevention.	<ul style="list-style-type: none"> • GE Healthcare's Surgery business • GE Healthcare's Healthcare Systems business • GE Healthcare's Life Sciences business • GE Healthcare's Medical Diagnostics business. GE Healthcare's Healthcare IT business
	Simplifying healthcare through developing innovations that ultimately help to improve the quality of people's lives. Thereby, the focus is on: <ul style="list-style-type: none"> • the fundamental health problems with which people are confronted; • delivering value throughout the complete cycle of care: from disease prevention to screening and diagnosis through to treatment, monitoring and health management; making an impact wherever care happens, within the hospital - critical care, emergency care and surgery – and, as importantly, in the home. 	<ul style="list-style-type: none"> • Imaging Systems • Patient Care and Clinical Informatics • Customer Services Home Healthcare, including Sleep and Respiratory Care, Independent Living, and Remote Monitoring
	By integrating advanced medical imaging and therapy systems, laboratory diagnostics, and healthcare IT across the care continuum, the focus is on enabling healthcare providers to synchronize workflows and improve collaboration across the entire enterprise and beyond.	<ul style="list-style-type: none"> • Medical imaging & therapy • Laboratory diagnostics Healthcare IT

Sources: Websites from GE Healthcare Technologies, Philips Healthcare, Siemens Healthcare.

Targeting of
Integrative
technologies

The development of these technologies is predicated on existing modes and not necessarily on newer ones based on managing multi-morbidity. Therefore, a technology agenda should be geared towards the development of more “integrative” technologies that support professionals in understanding, unifying and concentrating on interactions between biological and biographical factors, between individual and community health and disease, and between the biomedical and psychosocial elements of a patient illness. A field such as home care technology for example, asks for partnering of industry with quite different partners than the classical medical specialties represented in academia in most countries (Rathenau Institute, 2009).

It is important and relevant that OECD governments put health policies in place to target integrative health technology developments. They can facilitate the creation of consortia between appropriate partners in industry and health professions/occupations. Foremost, the demand side is often economically not powerful enough to pull technological developments from the industry, as new needs may not have sufficiently powerful advocate to wrest technological development from vested interests in existing professional groups.

6.4 Targeted infrastructure investments

Hospitals will
become less
dominant

The infrastructure must facilitate rather than hinder the envisioned reconfiguration of health professionalism. Arguably, this infrastructure will become more diverse and less dominated by hospitals. Hospitals became the dominant feature of OECD health systems, as professional expertise (i.e., human resources) and technology were brought together in one place for health services provision. For instance, the invention of narcosis and X-rays made the hospital a place for therapy, surgery and diagnoses.

This rationale no longer is persuasive. Miniaturization and mobilization of health technologies, including modern information technology, eliminates the need for hospitals to be the dominant setting for health provision. Patients and health professionals do not necessarily be in one and the same place as shown by developments in E-health and telemedicine. And where they do, health professionals can more and more often come to the patient, rather than the other way around (Healy & McKee, 2002).

Capital
investments

In this perspective, capital investments in real estate should be carefully considered in order to avoid locking in path dependencies (Rechel et al. 2009). Investing now in the construction of new hospital buildings will freeze the hospital setting as the dominant feature of OECD health systems for yet another generation, and thus dictate the pace with which the reconfiguration of health professionalism to alternative settings of care provision can be achieved.

Changing
health
infrastructures

Despite the uncertainty (i.e., little evidence available) and complexity associated with decision making about capital investments in real estate, health policies can make a difference. For instance, the strengthening of primary care in Denmark has led to a significant decrease in traditional hospital settings, while expanding more ambulatory focussed care facilities (Strandberg-Larsen, 2007). Over the past twenty years, the number of classical hospitals declined by half, consistent with international experience showing that hospitals can change to become more flexible in delivering high-quality medicine, while ensuring high levels of access and close collaboration with primary care and other services located outside hospitals (Black & Gruen, 2005). The Danish experience could provide fertile ground for reconfiguring health professionalism in the directions as pointed out in this discussion paper. There is more flexibility build in the infrastructures that allow for more experiments and innovation, as well as limiting the financial risks run by investors. In contrast, capital investments in classic hospital settings must be earned back, which limit flexibility and enforce health professions to work as envisioned when the initial capital investment was done. Against this background, infrastructure investments should integrate the agenda for reconfiguration of health professions, so that decisions remain flexible and suitable to the objectives of health professions landscape in times of multi-morbidity. That landscape should not be limited to the classical hospital settings but should incorporate the various health care delivery functions that need to be in community settings where multi-morbid patients and populations are: primary care facilities and the numerous forms of facilities for care for the elderly and end-of-life care.

6.5 More flexible professional bodies

Barriers for
approving
integrative
health
professions

Existing bylaws and procedures professional bodies constrain the formation of new health professions. They currently favour specialization rather than generalization. Emerging professions have to demonstrate that they represent a well-defined field of health practice in their own right. This requirement will be especially hard to satisfy for the proposed ‘integrative’ health professions. Their jurisdictional claims are broad multidisciplinary thus restricting their ability to define a new practice jurisdiction and claim individual autonomy within it. Existing professional procedures and bylaws frustrate the opportunity for such ‘integrative’ health professions to build their own professional bodies and colleges, particularly because they already lack prestige and influence.

Creating more
flexibility

But bylaws evolved in the past and continue to evolve, as happened in the Dutch College of Medical Specialties (see textbox 6.5). The introduction of so called ‘profile registrations’ implied more flexibility and the easing of procedural barriers to

demarcate new health professions. To modernize the procedures and create more flexibility is foremost the responsibility of the health professions themselves, and thus a question of self-regulation and health leadership. Hence, OECD governments could put it on the agenda of the health professions by incorporate it in their regulation and governance policies.

Textbox 6.5. More flexibility in procedures of the Dutch College of Medical Specialties

In The Netherlands the Dutch College of Medical Specialties (a recent merger of the previous separate colleges of clinical specialties, general practice, and social medicine) is responsible for recognising new medical specialties. Per the 1st of July 2010 the bylaws and procedures are officially revised. The college has approved eight so called “profile registrations” alongside the 33 registrations of medical specialties, including general practice and social medicine. These “profile registrations” are the recognition of sub-specialities within and across existing medical specialties.

Thus far, the following eight profile registrations are formally recognised: 1) Emergency medicine; 2) youth care; 3) forensic medicine; 4) physician for fighting tuberculosis; 5) physician for policy and advice; 6) physician for indication & advice; 7) physician for environment & health; 8) physician infectious diseases.

In addition, the college also started to experiment with the formal recognition of previously acquired competencies as a mechanism to reduce formal training periods, and enhance the mobility of residents as well as create more career opportunities. Thus, the bylaws of the College of Medical Specialties have created more flexibility in responding to changing professional fields

Source: Royal Dutch Medical Association (KNMG)

6.6 System & multi-morbidity based health curricula

Health
education

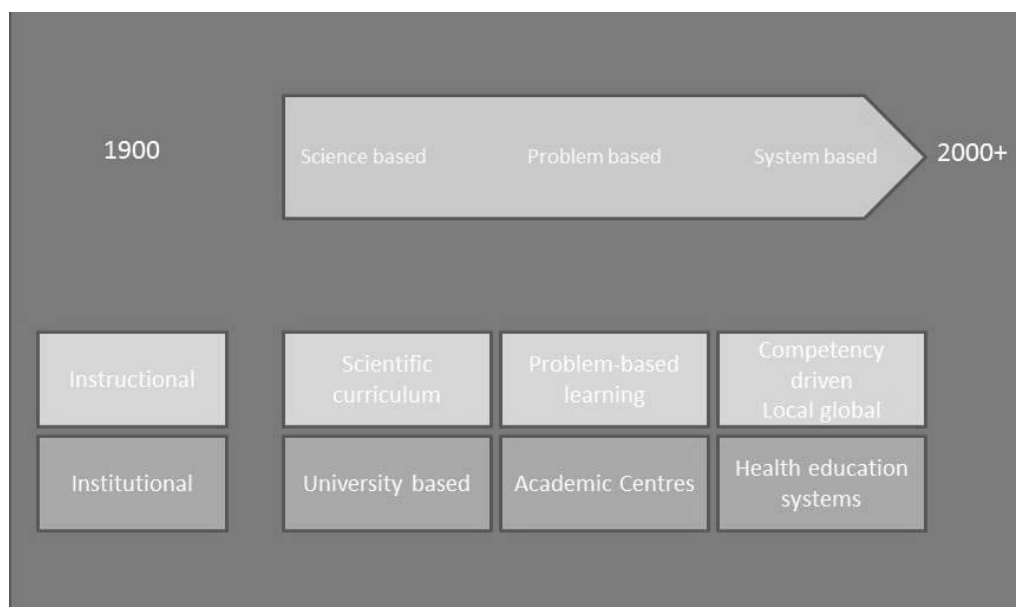
Education of health professionals must be fundamentally reformed to facilitate the reconfiguration of health professionals to better match patient and population needs, i.e., multi-morbidity. Despite tremendous modernization efforts over the last decade, education is still geared to providing high-quality care in the context of specific diseases rather than in the context of patients and populations. Most learning is carried out by teacher-researchers with expertise in one particular disease or, at best, teachers with special knowledge in one type of disease or an intervention to treat or manage one type of health problem. Frenk et al. (2010) point out how out-dated this approach is, with its static curricula producing ill-equipped graduates given the challenges to be faced.

Third
generation of
educational
reform

The educational reforms that are needed can be labelled as third generation reforms. Figure 6.6 shows these three generations of educational reform. The first generation taught a science-based curriculum, while the second generation could be characterised

as problem-based instructional innovations. The proposed third generation of reforms should be systems-based and have a stronger focus on population health. Future health professionals should be able to improve the performance of health systems by adapting their core professional competencies to specific contexts, thereby drawing on global knowledge.

Figure 6.6 **Three generations of educational reform**



Source: Frenk et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *The Lancet* 2010; 376:1923-1958.

Learning system thinking

The suggested third generation of educational reform mirrors the proposals that can be inferred from the arguments in this discussion paper. First, education of health professionals must involve learning expert decision-making based on the principles of systems thinking, including multi-morbidity. These new competencies should be applied to the care of all people, not only those with specific chronic conditions, working across the interface of individual and population health, across biology and biography (Sturmberg, 2007; Getz et al. 2010).

New skills for integrative health

Second, the focus of educational reform should not be on learning extra, non-clinical competencies, but, rather, on new skills for integrative health. The non-clinical competencies such as teamwork, assigning specific tasks across team members, and application of quality instruments and management) represent competencies that better suit more procedural and/or managerial approaches to deliver healthcare. There is a need for health professionals not for more managers.

6.7 Balanced performance assessment & management

Profession
owned
performance
management

The basic idea is that more generalist or “integrative” health professionals would perform better than the existing overly specialised and “disease oriented” ones. The advantages of professional self-regulation (e.g., a strong educational base, certified knowledge/expertise, evidence-based practice, codes of ethics, limited overhead and bureaucracy needed) should counterbalance the need for more regulation, external accountability and bureaucracy.

However, performance assessment of professionals through self-regulation can also freeze the existing nature and boundaries of specialties when focussing too much on specialty specific characteristics rather than general professional performance characteristics. Therefore specialty owned methods for performance assessment should address also more general professional aspects and be related to the organizational quality assurance mechanisms such as quality systems and accreditation used for the organizations in which the professionals practice. The developed frameworks and instruments for health care services and organizations should be reconciled with profession-owned instruments to strengthen the desired re-configuration of professions and an integrated approach to health care delivery. Reconciliation in at least two areas seems warranted.

Quality
instruments
based upon
health
outcomes

First, quality instruments need to be updated and/or newly developed to support ‘integrative’ health professions. These instruments must become performance-based and related to health (rather than the disease) outcomes of the patient groups they serve. For instance, existing practice guidelines based on the management of single conditions must be replaced by new broader -oriented guidance and measures.

Second, rather than assessing the performance of individual professionals against a narrow set of profession specific process criteria, performance measurement should be levelled up to groups of professionals and the way in which they together achieve population-based health outcomes. This system approach has consequences for the indicator development agenda but could prove more feasible than trying to develop valid and meaningful indicators to assess professional performance within disciplines. Triggering self-regulation should not only be a matter of sticks but also of carrots. An important gain for health professions to embark in reconfiguring their practices and related processes of care would be the restoring of public trust in their professional expertise, more professional autonomy, and decreasing the bureaucratic burden.

Pay for
Performance
models

6.8. Supportive payment models

Supportive payment models are a final strategy to stimulate the proposed reconfiguration of health professionalism. Many OECD countries are currently

experimenting with new methods of providing incentives to providers to improve the quality of health care, often known as “pay for performance” (P4P). Yet it remains unclear whether these new ways of paying providers significantly improve the quality of care and increase value for money in health. (OECD, 2010).

Pay for
Population
Health
Performance
models

However, to stimulate the reconfiguration of health professionalism, payment models need to go beyond controlling costs and rewarding providers who achieve professionally defined performance benchmarks. Rewarding improvements in the quality of specialty related health care alone will be inadequate to make professionals responsive to patient problems and population health needs. Proposals to move pay-for-performance towards pay-for-population-health-performance have already been suggested (Kindig, 2006). “Bundled payments” and “accountable health care organizations” are illustrations of models that seem to move in this direction (Struys & Baan, 2011; Berwick, 2011). Health professionals are likely to have a stronger interest in reorganizing their work in the proposed direction, if rewards are linked to their performance in terms of population health outcomes.

Nonetheless, such a pay-for-population-health-performance scheme has potential, as it essentially aligns the interests of society and those of the professionals. Health professionals are rewarded for optimally managing the health of the patient group for whom they are responsible. This will support the proposed reconfiguration of health professionalism.

7. CONCLUSIONS

The deliberations of health professionalism have not kept pace with changing patient and population health needs and problems, i.e., multi-morbidity, and potential strategies for management. Few promote the reconfiguration of the health professions as a potential solution to new and emerging needs. Rather, the on-going (sub) specialization within health professions and its splintering effect on health care delivery seems to be an accepted imperative. This OECD discussion paper challenges this idea. It argues that health professionalism can, and should, be reoriented in the face of populations increasingly suffering from multi-morbidity, the opportunities new technologies and knowledge offer, and the costs pressures urging for increases in labour productivity of the health workforce.

By instilling in the health professions the belief that patient and population health needs and problems should be the leading principle for the professionalization processes within health systems, professional models of care could be reconfigured in such a way that multi-morbid patient populations are better served.

This reconfiguration features three consecutive steps: (1) defining and categorizing the patient and population health needs and problems; (2) reorganizing professional domains around the needs of populations with specific needs; and (3) reorganizing professional domains by eliminating work that could be done in primary care or by the patients themselves. The eight recommendations provided in this paper mainly address strategies that could help channel professionalization in the desired direction rather than further consolidating the existing 20th century configuration of health professions.

Taking this alternative road towards health care improvement will not be easy. It calls for strong leadership in all the health professions with thorough support of their respective governments. But, if health professions do not embark in this endeavour, good health provision will become merely a bureaucratic and/or marketing exercise that obscures the ultimate goal of healthcare -optimizing the health of both individuals and the population.

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