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Educating Health Professionals: an Intersectoral Policy Approach

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Thinking about the future of health and care

At present, the health system and the health industry are undergoing historic changes and are confronted with major challenges. The health society is increasingly interconnected globally, which leads to a shift in the traditional boundaries between disciplines and professions, institutions and countries. By the same token, the relation between service provision and citizen, market and regulation, doctor and patient, service provider and consumer is redefined. New approaches and strategies in the healthcare system and in the education of healthcare professionals need to accommodate all these challenges in order to be able to make a relevant contribution to the future. In a dialogue with the partners in the educational and healthcare sectors, Careum intends to point out how the trends can be transformed into concrete endeavours in educational policy.

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Preface

The present Careum working paper was developed as a basis for the 2013 Careum Dialogue of the "healthcare policy meets educational policy" series. By means of the dialogues on educational policy in healthcare, the Careum Foundation participates in the worldwide reflection on how shortcomings, deficits and trade-offs in educational strategies can be overcome. The starting point is the Lancet Report, "Health professionals for a new century: transforming education to strengthen health systems in an interdependent world", which the Careum Foundation translated into German. Approximately 80 decision-makers[1] from Switzerland, Germany and Austria are invited to participate in the annual Careum Dialogues in order to discuss which educational strategies and structures are necessary in order to get the right professionals for the healthcare systems of the 21st century.

The authors have considered the results of the Careum Dialogues 2012 and 2013 in Zurich and in Vienna as well as the occasionally controversial debates. In a process of reflection that lasted several months, they have tried to pursue the questions related to the development of the educational system in line with an orientation towards health and the health benefit for society. This analysis entailed assessing the challenges of social and economic policy as well as the limits of the healthcare system. In the course of the discussions it became evident that rather than starting with the range of established professions, it was more effective to focus on the functions of the healthcare system as a whole and to derive from them the activities and professional profiles necessary to cope with the challenges from the perspective of a healthcare policy oriented towards innovation and reform. This gave rise to new and intersectoral policy objectives being formulated for the education of health professionals. The approach advocated by the authors opens up a completely novel perspective in educational policy, in particular because it disengages itself from the focus on professions centred on patient care and treatment, which are currently dominating the discussion.

The authors wish to thank the participants in the dialogues from Germany, Austria and Switzerland, who have actively contributed to specifying the present postulates of a sustainable policy for the education of health professionals. The feedback has encouraged the authors to revise the working paper and has inspired the Careum Foundation to continue the dialogue. With a view to the ambitious aims, the present edition remains a work in progress. However, we consider the points we argue sufficiently substantial to enrich the discussion and to provide impulses that contribute to specifying concrete measures in the three countries.

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[1] In the interest of readability, the male and female forms are used synonymously.

An Intersectoral Policy for the Education of Health Professionals: Aligning Health and Education as Learning Systems (with other Sectors)

Executive Summary

The postulates for an intersectoral policy for the education of health professionals predominantly follow two lines of reasoning. On the one hand, the recommendations and conclusions from the Lancet Report, "Health professionals for a new century: transforming education to strengthen health systems in an interdependent world", on the other hand, the WHO policy framework "Health 2020", which was accepted by the European states in the autumn of 2012 and provides new impetus especially for designing health policy, associated with the Health in All Policies Approach.

The momentum provided by the Lancet Report as well as the WHO policy framework "Health 2020" (and other initiatives that have a similar intention) are important, but are insufficient for formulating a sustainable educational strategy. The challenges that have arisen in connection with the recent economic and epidemiological developments in Europe show that everyone involved in the healthcare system needs to reconsider the established appraisals and mindsets. For this reason, the authors want to take the conclusions further. In order to achieve the necessary integration of the diverse perspectives, they suggest a holistic view of the healthcare system as a field which consists of four mutually dependent functional areas (functions related to the population, to patients, to organisational development, and to increasing knowledge).

The authors combine existing lines of reasoning in new ways in order to derive five postulates for an intersectoral policy for the education of health professionals which is expected to provide appropriate answers to the challenges:

1. Objectives in the education of health professionals must be oriented towards society's ability to innovate and the health literacy of citizens. Education for the professions which work in the health system must lead to cross-functional and intersectoral thinking and a new professional attitude.

2. The scope of a policy for the education of health professionals must be expanded. Besides educating for patient-related functions, the functions related to the population, to organisational development, and to increasing knowledge must receive the same attention in regard to regulation and financing. It thus becomes intersectoral.

3. The governments that have agreed on the WHO policy framework "Health 2020" are called upon to establish an intersectoral policy for the education of health professionals and to steer towards it by means of appropriate objectives in legislation and appropriate budgeting.

   The ministers of health and education (at the national or at the subnational level in federal states e.g. Cantons or Länder) have essential roles of advocacy in their coordination efforts with the other departments, in particular with finance and economics, research and innovation, as well as with legislation.

4. Besides promoting technical expertise, the education for different functions in the healthcare system must make the nurturing of cooperation skills a priority. These skills require new approaches in methodology and didactics, which include cross-sectoral processes, inter-professional learning arrangements and learning venues in community practice. Such education and training also require educators who are capable of reflection and who can moderate these sophisticated processes of acquiring skills.

5. Besides the sustainable education of health professionals, a parallel strategy of continuous further education and training is required for those that are currently working in the health system. Systematic training grounded in institutions, life-long learning and a development towards learning organisations are essential for a flexible health system of tomorrow which is oriented towards innovation and reform – in parallel with measures to increase the health literacy of patients and citizens.

The strategic measures aim to
– reorient health services research along and across the four different functions
– organise the educational institutions as an integrative health campus
– adapt legislation to the requirements and to pass regulations with restraint
– create structures for continuous dialogue and cooperation

The postulates and the strategic measures aim to inform the political decision makers, the educational institutions and the organisations operating in the health system how the process of changing education and training for health professionals can be approached. This vision is broader and more encompassing: it does not only focus on the education of professionals engaged in the care and treatment of patients and on how this is financed, but also on the education for planning, governance and managing the health system, on the production of insights and knowledge for the purpose of innovation, organisational development to improve impact and quality. As a result, the approach aims to change obsolete images and concepts and to facilitate "transformative learning". This form of learning is intended to move from a focus on curative measures and on the physician (with a tendency towards paternalism) to a systemic understanding of processes which ultimately facilitates more participation from society and improved health for all. This consequently also leads to increased economic competitiveness.

The diverging legal situations and in particular the federal structures and responsibilities in Germany, Austria and Switzerland imply the need to develop such a reform-oriented intersectoral policy for the education of health professionals in country-specific project groups. Such groups are better placed to assess the steps and measures necessary to ensure active involvement in the respective national debates on strategies and to develop concrete model projects. Moreover, they may support and strengthen those institutions which have initiated significant steps towards innovation or which have already embarked on an intersectoral policy for the education of health professionals as outlined in this paper.

1. Which Education does the Health System Require?

Education and health are two areas in society that have exceptional importance and are cost-intensive. They are in the focus of interest of the general public and the professional and political actors – and they are both highly regulated sectors.

1.1 The health system encompasses more than caring for patients

By definition, health systems comprise all organisations, institutions and resources that by virtue of their actions strive to improve, preserve or re-establish health[2]. For historical reasons, the health system is frequently associated or equated with patient care, treatment and healing, while preserving health, participation, autonomy and functionality do not receive the same share of attention. This tradition has persisted until today, and this inequitable attitude is particularly apparent in the education of health professionals.

However, an effective health system that provides high health benefit requires diverse experts and groups of professionals with different functional skills and generalist qualifications as well as very diverse degrees of expertise. This is why it is necessary to broaden the focus: besides caring for patients, it is mandatory that four functional fields interact in the health system:

Outlines of a new intersectoral policy for the education of health professionals

The table of four fields: Four functional fields are imperative for an effective health system

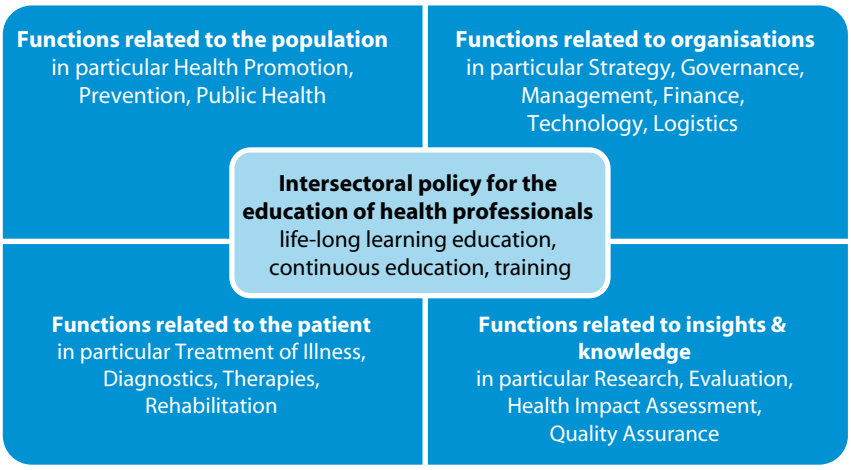

Figure 1: The four essential functional fields of the health system. Education must meet the needs of all functions – life-long and inter-professional across the boundaries of the professions and with the participation of citizens, patients and relatives.

The four functional fields are not to be equated with professions, roles or persons operating in the health system. From the system perspective and with a view to the challenges and needs, the question at hand is to ask which functions and roles require which competencies, specific skills and qualifications.

[2] WHO (2000) The World Health Report 2000. Health systems: improving performance.

The *functions related to the population* comprise activities and tasks which are necessary for public health and a life in good health. They make a major contribution to the quality of life and to maintaining economic productivity and competitiveness.

Functions related to the population

The *functions related to the patient* comprise the activities of diagnostics, therapy, and care. This is the functional field of the groups of professions that fulfil tasks in patient care, but that are also increasingly dealing in individual prevention, chronic diseases, or palliative care.

Functions related to the patient

The *functions related to organisational development* comprise activities and tasks of the so-called "facilitators" in leadership processes, in management, in governance or supervision, in political processes, in financing or in technology and logistics.

Functions related to organisations

Besides the traditionally important area of research, the functions destined to gain insights and increase knowledge comprise in particular also quality assurance as well as statistics, epidemiology and HTA or HIA[3], i.e. people who develop the foundation and analyses as well as those who evaluate the effects and benefits[4].

Functions related to insights & knowledge

Such a comprehensive view determines the requirements for the educational system. It leads to an intersectoral policy for the education of health professionals which also creates space for further inter-professional development of the professions in patient care, which will be required anyway in future.

1.2 The health system must take a long-term view on education

The question whether those working in the health system are sufficiently aware of, and prepared for, the demands of the future is discussed controversially from different perspectives across the globe. While on the one hand, concerns are expressed in relation to deficits with regard to professional excellence, expertise and consequently international competitiveness, on the other hand, critical voices question the relevance of these educational strategies. Specifically, criticism focuses on the self-reproduction of existing professions and the predominance of curative activities at the cost of an orientation towards preserving public health. It is maintained that this is due to a selective perception of the challenges owing to paternalistic assumptions of needs and of demand.

Careum Dialogues as part of a worldwide process of reflection towards re-designing education

▶ see Postulate 1

[3] HTA = Health Technology Assessment. It comprises considerably less than HIA (Health Impact Assessment), which analyses and evaluates planned political endeavours with a view to their positive and negative effects on health as well as their distribution among the population in the form of a systematic process. Such benefit analyses have different names; they are used in order to facilitate more informed political decision-making in the sense of an all-encompassing policy destined to promote health.

[4] Compare Murray, Frenk (2000) A framework for assessing the performance of health systems in: Bulletin of the World Health Organisation, 2000, 78

▶ see Postulate 4

Moreover, it is argued that the knowledge necessary to better understand the conditions and the dynamics of the health system as well as the determinants of health and illness is inadequate, which hinders establishing linkages, conjunctions, more effective processes, and inter-professional cooperation (see chapters 2.1 and 2.3).

▶ see Postulate 2

These statements underline the fact that the health system cannot ignore the educational needs of its actors: It also has educational responsibilities and needs to take an active role in ensuring the education and training of those who work in this system.

Life-long learning as a consequence of knowledge being short-lived

Educational strategies must have several dimensions, as their development, implementation and their taking effect require long periods of time. Moreover, they need to comply with very diverse, occasionally even controversial, requirements:

- Knowledge is increasing rapidly, interdependencies are growing and internal and external factors lead the system to change permanently, sometimes even suddenly.
- New findings and projections in epidemiology as well as changes in society reduce the "half-life" of knowledge.
- Processes of education and learning cannot be conceptualised as a one-time input; life-long learning and re-learning are necessary.
- The competencies of patients and the expectations of the public are increasing constantly.

Acquiring competencies that will also be useful in 15 years´ time

▶ see Postulate 5

Accordingly, the actors need to have a flexible mindset, and adequate training needs to be provided – in particular because the innovators need to prevail against the forces that aim to preserve the status quo. Moreover, education of patients and their relatives as well as the health literacy of the citizens need to be ensured. Besides technical expertise, co-production is gaining importance, which refers to the development of competences necessary so that those concerned can be actively involved and included in an optimal way.

1.3 Taking into account the broad range of practice in professional education

Promoting all four functional contexts, not only patient care

The table of four functional fields of the health system (see fig. 1) illustrates that it is critical that educational strategies cover all four functional areas and their interrelations. Specifically, this means that the answer to health system challenges cannot only consist in increasing – at the cost of the taxpayer – the educational opportunities for those professions who work directly with patients, in particular in medicine.

Rather, a strategy is called for that covers the overall demand for professionals required in both the first and the second health market[5] and at the same time

[5] See the 2010 Careum Dialogue „Health Policy Meets Health Industry"

corresponds with the other functions outlined in this paper: functions related to the population, to organisational development, and to the functions destined to increase knowledge. At present, the debate in education focuses on the professions directly working with patients (primarily physicians and nurses), but there is a need to establish institutions which support governance functions (e.g. institutes for quality assessment, public health institutes, HTA and HIA institutes, institutes for health economics). These institutions must be staffed with individuals who have the abilities and management skills to facilitate and promote the reforms advocated by politics and by providers. But the healthcare system also needs additional and partly new types of staff that care for individuals with chronic diseases, the very old, individuals at the end of their lives, or children in precarious situations. In this context, the distinction from social work and social education is becoming increasingly meaningless.

Functions related to insights & knowledge enhance governance and scope for steering

Overcoming the repair paradigm

1.4 Overcoming system and sector boundaries

Intersectoral policies for the education of health professionals fall in the political responsibility and legal requirements related to both the health and the educational system in most countries. This also means that it falls within the purview of different policy sectors that pursue different interests.

The analyses and discussions show that these two systems – with the exception of very few encouraging bridging activities – move in parallel at best. They emphasise different issues according to their own largely independent dynamics. Moreover, they pursue their own visions, priorities and agendas in policies that are aligned with their respective sectors.

Independent dynamic systems

Two independent systems with visions, priorities, and aims specific to their respective sectors

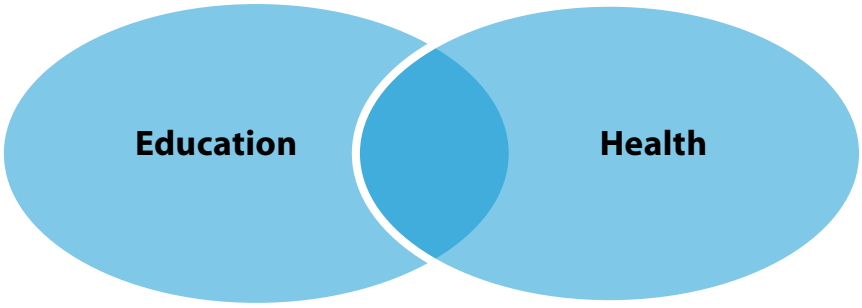

Figure 2: Despite strong dynamics of change and shared interests, the educational and the health system pursue different aims which are not concerted – they rarely engage in a dialogue about the future

In spite of rapid developments and high pressure for reforms priorities are not concerted or coordinated between the two systems, and frequently attempts at reform fail because of particular self-serving interests and because the stakeholders lack the willingness to endorse reform (WHO Europe 2012, SVR-G 2012).

Little willingness to cooperate

The "order form" directed by the health system to the educational system, which was frequently cited in the discussions, may be an adequate metaphor, but the expectation it entails turns out to be a trivial simplification.

There is no authoritative relation or official channel between these two systems which would enable the health system to express its demand or to dictate e.g. the quantity and the appropriate abilities or competences of those to be educated. The focus on the relation between the health system and the educational system also fails to consider the broader context. Hence it is not sufficient to delegate the problems to the political or administrative system, and more specifically to the institutions responsible for the areas of education and health, respectively.

▶ see Postulate 3

Rather, assessing the demand for the necessary professions and profiles requires processes of negotiation between the relevant stakeholders and between all those involved and concerned, i.e. the groups of professions as well as the representatives of politics and administration along with the patients, their relatives, and the economic actors. In the understanding that they all have individual interests, they need to be involved in the dialogue on an equal level.

1.5 Education for the health system – towards a new governance

Competence is a broadly spread key resource

Competence and co-production constitute the key resources in the health system. Competence rests partly with the qualified professionals, partly with the state and the organisations operating in the health industry, partly with the patients and their relatives – however, it only takes real effect through co-production by all those involved and consequently leads to quality, orientation towards needs, and innovation.

The present educational strategies hardly reflect this situation, because they are based on the priorities of medical care in the early 20th century. The health problems prevalent at that time strengthened a system for the treatment of the sick that was dominated by a curative approach which has dominated the allocation of resources up to this day. Other aspects that are also important, such as public health, health promotion and prevention, mental health, long-term and palliative care, systems governance and research on healthcare provision as well as research on educational strategies and the benefit resulting from them are underdeveloped.

Scarcity of health professionals obstructs the view towards the other functions that are also necessary

The heated debate which is presently conducted about (quantitative) deficiencies with regard to the functions related to the patient (e.g. lack of physicians and nurses) as well as about global and regional misallocations of "health workers" obstructs the view of the entire range of tasks. It illustrates that the "system as a whole" has hardly any advocates – rather, it is repeatedly thrown back on the defining power of the influential professions. By the same token, the question which other professions are currently needed and which will be required in the future is also forced to the sidelines. Yet the lack of capacities and competences in all functions of the health system and in particular the fact that these are not sufficiently interlinked represents an increasingly important problem (see fig. 1: table of four fields depicting the necessary functional contexts which must be considered in an intersectoral policy for the education of health professionals). However, emphasising this problem is hardly in the interest of the dominant professions in medical care.

Considering the relevance of health and of the health system, the population must have an interest in the competences that professionals have acquired in the educational system as well as in the outcomes of this system – and consequently also in the way in which this education is offered. Ultimately, the cost of education is predominantly covered by the public financing of the educational system, i.e. in general by tax money[6]. This financing takes place independently of the efficiency and effectiveness of the educational system and hence independently of the question of whether unfavourable conditions are being preserved or whether the ground is prepared for the future. In view of limited resources, it is problematic that the relation between investment and benefit or need does not exist.

Citizens must have an interest in the outcomes of education – they finance it

It appears urgent that appropriate (development) incentives are established in the educational system. It makes a considerable difference for a society whether the education is a misallocation of resources or an asset. Regular feedback loops between the mandate to provide care and the mandate to provide trained health professionals are vital so that the future challenges in social and economic policy (e.g. of demographics and epidemiology as well as of capacity to innovate and to be competitive) can be met. However, fulfilling the functions beyond patient care and treatment makes involving a larger number of stakeholders essential. This requires a fundamental change in the governance of education compared to the present strategies with their strong focus on single professions and profession-specific knowledge and attitudes.

Feedback loops for facilitating a change policy vis-á-vis education focused on professions

With its "Health in all Policies" strategy, the WHO has created important impetus[7] for achieving a more broadly anchored commitment to shaping health policy: health and welfare of humans cannot be delegated to one particular sector and the professionals working in that field – a healthy population results from policies in all areas being aligned and coordinated in conformity with the health objectives. This also means that a much broader group of professionals and decision-makers needs to be aware of health and its (social) determining factors.

Education must learn from "Health in all Policies"

The same applies to education in and for the health system: it cannot be delegated exclusively to the professions that work in patient care. Or clearly: it must not be left to them (any longer). The Lancet Report discusses the negative repercussions of this act of delegating (or this attitude of laissez-faire) at great length and concludes that the educational objectives are continuously becoming more divergent from the needs of society – a phenomenon that

▶ see Postulate 2

[6] Educational opportunities, possibilities of admission and permeability between educational programmes vary strongly between the professions: while the education and training of physicians are justified and financed with reference to a public interest, in particular in Germany, the principle of self-financing or high co-financing is applied to "non-medical" educational programmes for therapists. Eventually this leads to insufficient diversity.

[7] The relevance of prevention and health promotion was already emphasised earlier in the WHO „Ottawa Charter" for Health Promotion and a New Orientation in Health Services (1986). For the field of rehabilitation, a change of paradigm towards participation and promoting potential is formulated by the ICF WHO 2001.

Competencies and needs are drifting apart

triggers far-reaching consequences[8]. These contradictions are exacerbated by driving forces within the system and by external "megatrends" (see chapter 2.2), which are numerous and complex and hence frequently trigger contradictory developments of change and create new conditions.

The broadly anchored commitment to intersectoral education for health professionals is necessary, because besides the system which centres on medical care and treatment, other fields have a strong interest in educated professionals too, specifically research institutions, insurance companies, governing bodies in the political-administrative field, the media, and the many companies operating in the health industry[9] – these employers are increasingly developing specific expectations and requirements in recruiting staff and hence operate explicitly as "buyers" on the educational and labour market.

▶ see Postulate 3

The expansion of responsibility and authority advocated by the authors appears to constitute an effective approach to overcoming the divergent logics displayed by the two policy sectors of health and education, which have been illustrated in figure 2. It is necessary to resolve these contradictions by involving the different actors, the ministries, social security, the health industry, the citizens and patients (as well as their relatives engaged in providing care at home) so that these interested parties can come together to develop the strategic course and operational objectives. In view of the responsibility towards society, it can be inferred that it is a political task to instigate and manage this process. Its goal is to establish a *new culture of cooperation and responsibility,* which, rather than referring problematic issues to levels that cannot affect decisions, ensures that educational objectives as well as sustainable structures and processes can develop as the result of co-production[10]. Therefore, it takes a more flexible and adaptive approach to education for all functions in the health system (see chapter 3 on the outlines of a new intersectoral policy for the education of health professionals).

Governance means seeking cooperation instead of delegating responsibility

[8] This non-coordination also triggers undesirable quantitative consequences: the lack of qualified personnel is discussed in a very biased form; out of necessity, new professions and employment programmes or forms of assistance are "mushrooming". However, these are to be interpreted as forms of training or apprenticeship without the reliability required being created both in the educational system and for the new employees themselves. Whenever the lack needs to be compensated for somehow, the labour market responds by patching up holes. This is in contradiction to the postulate that a high-quality health system needs the "best" in many areas (see also the reasoning provided by the German Council of Science and Humanities (Wissenschaftsrat) on complex tasks of healthcare in 2012).

[9] The three countries have differing views on what the health industry actually represents. In contrast to Austria, in Switzerland the term denotes not only the pharmaceutical industry and medical technology, but the entire industry including the organisations operating in the mostly labour-intensive fields of diagnostics, therapy, rehabilitation and (long-term) care as well as logistics, insurance and the bodies in charge of political-administrative regulation.

[10] See also *"Memorandum Kooperation der Gesundheitsberufe"* ("Memorandum Cooperation of Health Professions") by the Robert Bosch Foundation

2. Trends and Challenges

2.1 Deficits in the functions related to the patient and to patient care

Enormous investments in education related to patient care

In the industrialised countries, investments in educating clinical and therapeutic professions – what we refer to as functions related to the patient – are enormous. The Lancet Report mentions expenses of USD 100 billion that recur annually. The range of educational offerings for health professions which are financed publicly varies considerably from country to country. The principles that determine the education of the health professions were introduced approximately 100 years ago. A significant and sustained influence was exercised by the Flexner Report (1910) on the reform of medical education. The Lancet Report (Frenk et al. 2010) describes the main dimensions of this concept and its significance for the constitution of a mainstream.

Shortcomings and deficits of educational strategies

However, owing to blatant deficits and shortcomings, this tradition is criticised because the education and training of health professionals have not kept up with the challenges manifest in today´s societies. Among others, this is also a consequence of educational strategies that emphasise "premium education" for "premium care" rather than ensuring primary care and public health. In the words of the WHO, the priorities observed at present "lead to an imbalance between the competencies of those educated in the system and the needs of those using their services as well as of the population as a whole, a primary orientation towards hospital services as well as a narrow technical focus without a broader understanding of the context" (WHO 2012, p. 91). Also the Lancet Report refers to a long list of shortcomings which may be summarised as follows:

– The content learned does not meet the needs of society
– Primary care is neglected
– Education focuses on episodic contacts rather than on continuous care
– There is no real training in inter-professional teamwork, which is indispensable in practice
– Professional socialisation encourages hierarchic thinking
– The technical-instrumental approach is dominant
– There is a lack of understanding that health policy and governance matter
– The future health professionals primarily acquire factual knowledge and specialist skills, but hardly any leadership competencies and the willingness to initiate an improvement in services and benefits

Tribal thinking, silos of professions, territories

Accordingly, the Lancet Commission concludes that old patterns of thinking are maintained and that "laudable efforts to eliminate these shortcomings have largely failed". This failure is frequently caused by a "tribal thinking" of the professions – i.e., their tendency to act on their own or even in competition with each other. Professional development has led to the roles of specialists having become set at certain positions and models of what constitutes an ideal way of acting in the past 100 years. Owing to the legislative regulation of the past 50 years, these have additionally been strengthened as territories of responsibility and as "silos of professions" with particular economic and professional interests.

2.2 Megatrends, driving forces and educational need

The need for action through an intersectoral policy for the education of health professionals can be derived from "megatrends". These forces driving change, each comprise entire bundles of trends, developments, and chains of effects. Megatrends also include expectations, suppositions, and extrapolations which can influence each other. They take a gradual, but continuous effect over periods of several decades, but are not equally dominant in all areas of life and in every context. Their multiple forms of appearance, interrelations and trade-offs as well as their change along the axis of time affect education, and the way in which professions are exercised in several ways that are frequently contradictory.

Megatrends as bundles of similar trends and chains of effects

Demographic change is one particularly prominent megatrend, which leads to effects that go far beyond issues of medical care and health policy. Predominant are the ageing society and the growing number of individuals in old age. On the one hand, they result in a loss of relative importance of acute care, as non-communicable diseases, mental health as well as chronic and degenerative conditions are becoming more pressing. The WHO calls this change a slow motion disaster. On the other hand, the growing number of people with impairment, of the socially disadvantaged and those with poor health literacy calls for new responses and competencies in dealing with multi-morbidity, exclusion, dementia, isolation and a "good death" (see also footnote 7).

Demographic change

Demographic change also affects the workforce in the health system, because more than 15% of all those employed in the entire economy work in a broad range of health system functions (see figure 1). Depending on the region and the definition employed, this share can be even higher. Accordingly, the labour market for health professionals is faced with two challenges. On the one hand, the number of young professionals is declining owing to years with low birth rates, on the other hand, demographic change hits the health sector much more strongly than other sectors of the economy, because it entails an increasing demand for personnel – for instance, in Switzerland, the growth rate of those working in the health system is twice as high as the growth rate for the economy as a whole.

A second megatrend comprises the multiple **innovations in therapy and technology.** New substances, devices and procedures, but also genetics, neurosciences, nanotechnology, robotics, and assistance systems are changing the view of the human being, the analytical perspective, increased diagnostic capabilities, and the range of possibilities of intervention. Improved diagnostics can lead to a new definition of being ill or healthy, respectively – healthy individuals possibly are not as healthy as they think, but only under-diagnosed (for instance, when the norm values in the blood for diabetes are lowered). This favours increasing medicalisation.

Innovations in medicine and technological change

High hopes are pinned on information technologies and eHealth because they can provide multiple benefits for individuals, professional groups, and health institutions. Applications like patient dossiers and subscriptions, online services for long-distance consulting and guidance facilitate access to data from any

location, enabling individuals to increase their health literacy and make co-production easier. They are to contribute to avoiding duplication, errors in medication and incompatibilities. Moreover, they can diminish obstacles between those providing services and institutions and can lead to more efficient and effective processes owing to improved exchange of information. For instance, interactive channels of communication based on web 2.0 technologies facilitate long-distance monitoring as well as communication and care. Social media are gaining importance, among others for a wide range of applications and feedback functions. Although these trends are important forces driving the restructuring of the health system, it cannot be assessed whether the mechanisms of inclusion and exclusion will turn citizens and patients into active users and responsible individuals – whether they will become *prosumers*[11] instead of *consumers*.

Issues of economic viability change the health world

The third megatrend – also related to technological innovations – is the growing **economic relevance and commercialisation of health.** It is becoming a central value and driver of change both on an individual and on a social level. At the individual level, a changing awareness of health is transforming ways of living into health styles, which affect consumption behaviour and purchasing power[12]. It also opens up opportunities for new, converging markets of high economic relevance, between nutrition, pharmaceuticals, medicine, wellness, and cosmetics. On the one hand, these increasing patterns of demand are of economic importance, on the other hand, they are relevant for the health industry as a whole, because more illness equals more interventions, more products, and increased sales.

Unfavourable developments impair well-being and economic competitiveness

At the social level, the interplay of social and economic change is significant. The European policy framework "Health 2020" illustrates the most recent developments. The financial crisis and the severe cost-cutting programmes in its wake are named as a new driver with adverse effects which poses a significant threat to the performance of the institutions and structures and creates new imbalances related to health. Problematic issues which are known and have already been cited continue to exist. Additionally, it is questioned more and more often whether health expenditures also create an appropriate return. Increasingly the debate no longer focuses only on the impact of treatment on the health of the individual but also on the cost incurred by the whole entire society, following a renewed effort to increase awareness by the OECD in the early 1970s[13].

▶ see Measure 2

[11] Toffler introduced this term in 1980. He uses it to refer to users or customers who become part of the production process through feedback mechanisms.

[12] This shift has been documented in the Porter Novelli HealthStyles Database. This is actually a market research tool which has been operated by one of the largest PR agencies worldwide since 1995. www.porternovelli.com. See also Kickbusch, *Die Gesundheitsgesellschaft* (The Health Society) (2006).

[13] At the beginning of the 1970s, the OECD, the Organisation for Economic Co-operation and Development among the industrialised countries, declared that "there can be no doubt that the development of industrialised societies has created a new form of morbidity and mortality, [...] leading to the rapid growth of [...] expenditure by the community and requiring a complex approach." The OECD´s interest focused on the economic system and was concerned that socio-economic trends and determinants could impair the

Healthy citizens are decisive for social cohesion and economic growth

However, the WHO warns that growth in the health industry can be deceptive, because unfavourable developments in patterns of illnesses, population and migration can significantly impair health and wellbeing and hence the productivity of the economy as a whole. Currently, specifically the exponential growth in chronic diseases and mental health conditions, the lack in social cohesion, but also environmental threats and financial uncertainty are critical factors which threaten the stability of health and welfare systems while at the same time reducing economic capacity and prosperity. In its conceptual framework "Health 2020", the organisation also points out that many health-related challenges are not "health problems" in the narrower sense, but that they result from social or societal problems, such as insufficient participation and conditions that foster discrimination.

Many health problems originate from social issues

Of high economic relevance is the hunger for personnel displayed by the health system, because the foreseeable scarcity of the workforce will change the income patterns especially for the functions related to patient care. As efficiency is mandatory in times of declining resources, processes related to treatment and caretaking are increasingly imitating the patterns and processes which follow the logic of industrial production. The professions working in patient care experience these changes as loss of autonomy, tutelage and de-professionalisation. One of the reasons for this development is the fact that primarily they obtain competencies necessary for therapeutic intervention with persons, but hardly any knowledge which would enable them to understand how priorities are set and governance is exercised. They know too little about the health system and frequently are not able to reflect on issues of economy and economic viability with a focus on results and to put them in context. Again, this illustrates that a focus on patient care is not sufficient at all and that overlaps with the economic and social systems need to be considered as well.

Efficiency is needed, but many health professionals do not understand the necessary processes

Changing roles of patients, users, and citizens

The **growing autonomy of patients and citizens** constitutes the fourth megatrend, which affects most particularly the functions related to the patient and to patient care. Primarily it results from the ease of access to knowledge which in past decades has been exclusively available to those with a medical education. Emancipation is additionally helped by experience gained in self-management of medical conditions, but also by a rising scepticism, loss of confidence and mistrust towards providers of services, institutions, and the healthcare system. Emancipated patients want to have a share in defining their health and wish to be partners in dialogue[14]. Hence it is imperative that the

economic development of the individual states. The education of health professionals was identified as one weakness: "professionals are not being educated in the numbers and kinds, and with the attitudes most congruent with the needs of society" (OECD 1977, p. 148), in particular because of "fragmented learning". The "Regional Health Universities" concept introduced in 1972 suggested a model which was to provide answers firstly to some of the problems in university education discussed at the time and secondly to challenges in the health system – and which also addressed economic prosperity (OECD 1977, p. 22; Sottas et al. 2013).

[14] The words of Don Berwick need to be remembered so that the participatory approach cannot be overshadowed by paternalism despite best intentions. The former president and CEO of the renowned Institute for Healthcare Improvement takes a radical stance: "Some say that doctors and patients should now be partners in care. Not so, I think. In my view, we doctors are not our patients´ partners; we are guests in our patients´ lives."

health system develop a new attitude in relation to the "power of patients[15]" and follow the postulate that no decisions are to be taken about patients without involving them in the processes on an equal level and without providing them with opportunities to improve their health literacy. This also includes involving patients´ families as well as relatives and close friends, as these frequently take over a large share of the care for these individuals in their homes and bear the burden of care.

▶ see Postulate 1

When citizens and patients see themselves as co-producers, they will be increasingly willing to take responsibility in the process of treatment and in its result. Accordingly, they claim the right to check diagnoses and obtain a second opinion. This can lead to them considering themselves customers of the care system: they would like to claim the individually appropriate services from the choices on offer. This can lead to the unfavourable case that providers of services become interchangeable.

Education is also undergoing fundamental change

The societal **megatrends also affect the educational system:**

- Demographic change becomes manifest in the declining number of graduates. Educational institutions and study programmes are increasingly competing with each other in order to win students. Recruiting students internationally is also becoming standard practice in the educational system.
- Support by means of electronic media and ICT has been standard in modern educational settings for a long time and plays a prominent part in didactics, especially in self-determined learning. Today, acquisition of knowledge and learning communities are not necessarily limited to one educational facility or one organisational setting any longer. Study programmes which are fully web-based are already being offered. The new technologies permit and promote interactive and dialogue-based interaction with peers, tutors as well as the public as participants in virtual forums and are changing the very basis of the way we learn.
- Economic issues affect education in many ways – not in the least because education is also an asset in the marketplace. Moreover, social status depends on formal educational qualifications to a large extent. In this context, it is becoming less and less acceptable that education for the different functions is not treated equally when it comes to financing, because this inequality weakens the health system as a whole (see chapter 2.6).

  The Lancet Report also identifies and critically discusses a global trend towards establishing new faculties of medicine and towards commercialising education. Comparing the objectives and the management of many of these new institutions, the Lancet Commission finds that frequently these think in terms of prestige and yields and apply lower standards of quality.

Commercialisation of education

[15] See the results of the 2010 Careum Congress "The Patient as Factor of Power – The Role of Patients in Shaping the Health System of the Future" www.careum-congress.ch

Therefore it speaks of a trend of "De-Flexnerisation[16]". Although private universities are also being established in Switzerland, Germany and Austria, the legal requirements for accreditation[17] and licensing ensure that the trend lamented by the Lancet Commission can hardly materialise in the same way. In general, the pressure on the educational system will rise, owing to the competition law enacted by the EU, specifically the cross-border market access for services, and powerful players on the market with commercial interests will gain access to the educational market.

- In the context of education, the principle of emancipation becomes manifest in the shift from knowledge to competences. While the content is still of primary interest, also strategies of learning, in particular the competence of cooperation and the competence of coping with, interpreting and synthesising information, are gaining increasing importance. Accordingly, teachers are less providers of knowledge and experts than moderators or coaches of learning processes. It is their task to enable individuals to select information and to identify its relevance so that in the wealth of information the essential can be separated from the inessential. What is decisive is a targeted and well reasoned selection of information that guides activities and decision making. This requires individuals to become information managers in their spheres of activity. Competence results from being capable of continuously expanding and updating fundamental knowledge, from questioning what has become habitual in one´s setting, and from reflecting one´s own reasoning and action. In the best case, acquiring competence and "transformative learning" are congruent, and individuals are able to influence and change society as innovators and transformers.

2.3 The "right education" for the "right care"

The "right" profile for ever more complex needs of care

One fundamental question, which has been discussed passionately since Flexner´s time and hence for more than 100 years, concerns the "right" profile for the professions working in patient care. As knowledge keeps increasing, biomedical models of intervention and a focus on specific organs or functions as well as specialist methods of repairing malfunctions have replaced the generalist approach towards activities of healing and care. In the field of education, this strive for the best treatment possible has led to the deficits outlined previously (see chapter 2.1) and to the request for a return to effective primary care in order to counteract the proliferating differentiation of health professions and sub-specialisations (WHO 2008).

[16] This entails that the new faculties, which are established in Brazil, India or China, to name but a few, are measured against the scientific standards and the model of education with which the American educator Abraham Flexner has shaped medical education since 1910.

[17] However, the mandates bestowed on the agencies of accreditation in the three countries do not entitle them to exercise a visionary influence on the content of education beyond the state of the art; the said agencies are primarily administrators of conformity with the rules regulating processes and forms of implementation.

What is "best" is not always the same as what is most appropriate

In view of rising multi-morbidity and as needs for care are becoming more complex, indeed the question is justified whether "the best" (that is, the highest specialisation possible) makes sense: Does education have to produce more expertise in diagnosis and more technological competence or rather improved social competencies and communication skills? Or is it the task of education to prepare for end-of-life care, which confronts the "health workers" with the failure of their efforts? The competencies necessary to meet these complex requirements extend far beyond patient care, because "rather, it takes complementary approaches and interventions which also consider social participation by those that have fallen ill or are in need of support or care, with their possibilities of psycho-social and practical adaptation, of coping with the consequences of illness and of self-management as well as of support by the social environment and other informal helpers[18]." Moreover, education must address the conditions prevalent in a society, in particular the economic and political environments, so that inadequate incentives and ineffective processes of treatment can be identified and changed.

Pressure to reform is changing the way in which tasks are accomplished

A global discussion is taking place on the shift from the actual profession's own definition of what the educational objectives should be, to an approach where the measures to be taken are dictated by the priorities in healthcare, which then leads to the implementation of a corresponding health policy. The focus still prevailing today which centres on (hierarchically organised) groups of professions is losing its legitimacy owing to such processes of transformation. The Austrian framework of health objectives or the priorities set in the 2020 health policy of Switzerland reflect this trend in the countries represented in the Careum Dialogue. The need for reform is changing the scope of practice, i.e., the way in which tasks can be completed effectively. New questions and new tasks necessitate new solutions and lead to differentiated health services and products which correspond with the different requests of patients, citizens and providers. The constellation of professions[19] and their relation to each other has already changed considerably and is expected to keep changing even more. In practice, the work processes can be conceptualised and divided according to functions in a new way. However, this change requires entrepreneurship in the health industry which is inspired by a sense for transformative potentialities[20], reaching far beyond the conventional models of care. This must also be reflected in the law and various regulations. Three illustrative examples at the international level which reflect this transformation and stand for many other similar initiatives will be discussed in the following.

Developing a sense for transformative entrepreneurship

[18] Ewers, Grewe, Höppner et al. 2012, p. 38. See also the Careum Programme Work&Care on care at home, www.careum.ch/workandcare

[19] Inter-professional and cross-functional teams of doctors, nurses for the sick and for the healthy, physician assistants, physio- and ergo-therapists, psychologists, midwives, speech therapists, specialists in medical technology, medical employees or assistants in medical practice, persons in the care service, specialists in public health, controllers, coders, evaluators, specialists in health impact assessment, logistics experts, social workers, case managers, communication specialists, documentation assistants, mediators, and others.

[20] "Möglichkeitssinn" – the authors wish to thank Adelheid Kuhlmey for her reference to "Man Without Qualities" by Robert Musil.

In the context of the *Action Plan for the EU Health Workforce (2012),* the EU has inferred the required changes in the following way:

EU Action Plan Health Workforce

The conditions lead to new roles and skills

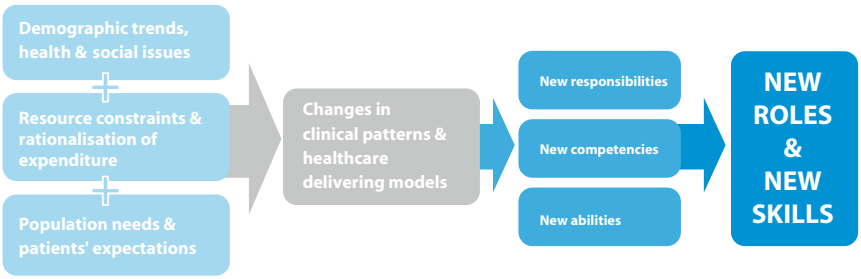

Figure 3: Megatrends create new conditions which change the way in which health services are provided and necessitate new competencies which become manifest in new roles (EU 2012, p. 6).

Triple Aim Initiative

In the USA, the Triple Aim Initiative of the Institute of Health Improvement (2012) aims to increase the performance of the health system by simultaneously developing strategies towards achieving the following three objectives:

- Improving the patient experience of care (including quality and satisfaction)
- Improving the health of populations, and
- reducing the per-capita cost of healthcare

The success of this Triple AIm Initiative rests on five main components: the focus on individuals and families, redesign of primary care services and structures, population health management, cost control platforms, integration of the processes and the implementation activities). This shows that the Triple Aim Initiative draws on an analysis similar to the table of four fields presented at the beginning and also demonstrates that considerable efforts need to be made to educate a broad range of professions and to maintain their capacity over time.

All the Talents: consistently more task-sharing and task-shifting in GB

The third example is furnished by Great Britain, where a parliamentary commission made up of members from several political parties advocates a much more consequent mobilisation of all talents despite reforms in the division of tasks, roles, and competencies which are broadly accepted and have been well anchored in different institutions. It aims to increase quality, reduce costs, and improve access to health services by means of even more far-reaching task sharing or task shifting. In conclusion, the report recommends developing "a far-sighted vision of the future workforce" (APPG 2012).

2.4 Occupations in the health system – is the concept of professions still valid?

The current discussion primarily centres on the professions working in patient care and on their positioning. These professions draw on science to deal with complexity and risk. They derive their legitimacy from a qualification regulated by the state, which also grants them a monopoly for exercising their profession in defined areas. Professions with particularly high problem-solving capacity – like physicians – have gained the additional privileges of the so-called "liberal professions" with self-defined professional ethics as well as a high degree of autonomy in exercising their profession and setting their fees.

High density of regulations is curtailing the degrees of freedom of the so-called "liberal professions"

However, it needs to be noted that a traditional concept of profession dating from the 19th century only partly corresponds with the settings in which the health professions are working today. Especially in the health system, these degrees of freedom have become restricted owing to safety requirements and the density of regulations; requirements linked to licensing and authorisation as well as dependencies on external monitoring and supervisory bodies with sanctioning power are ubiquitous. Moreover, administered schemes of fees and the increasing number of professionals working under contracts of employment are rendering the relevance of assuming entrepreneurial risk that was associated with the liberal spirit virtually meaningless. Besides, many of the problems that need to be addressed can no longer be solved by one profession or discipline alone given the wealth of information, highly condensed work processes, and the high complexity in the provision of care.

Communities of practice covering a broad range of functions are needed

The privileged treatment of the functions related to patient care amounts to discrimination against the other professions and leads to system errors, because an effective health system not only needs "professions for curing the sick" as it covers a broad range of responsibilities between health promotion, public health, prevention, diagnostics, therapy, rehabilitation, palliation, and social services. It is necessary to have functioning communities of practice involving a large number of specialists with very diverse qualifications and competencies. As illustrated in the table of the four fields, the health system needs to involve and acknowledge the professions which address aspects related to the population, to organisations, or to gaining insight and knowledge in the same way as the professions caring for the patient. And also in this context it is essential that physical, mental and social problems and their interaction as well as multi-morbidity are considered. Therefore, a "new professionalism" of actors is no longer defined by distinction and exclusivity, but rather by networking, cooperation and connectedness: the various actors need complementary ways of thinking and working – across different professions, marked by an orientation towards the patient, and including the familial system and the related boundary conditions.

The lines of conflict become apparent, in the German speaking countries, in the discussion of the so-called "academisation" of health professionals. Although the professions educated at universities of applied sciences have experienced a considerable gain in competencies and have obtained new roles, they have not

Inter-professional cooperation by virtue of a new attitude which overcomes hierarchical thinking

received more influence and power. The heated debates about creating new professional chambers or eliminating all professional chambers (including the existing ones) show that there is little willingness to abandon old structures and restrictions. Consequently, the inter-professional approach which is necessary from the perspective of supply policy is primarily a matter of willingness to cooperate. This ultimately needs to become manifest in a new professional approach which builds on mutual appreciation, is aware of mutual dependencies, and overcomes hierarchical thinking.

Following this line of reasoning, the authors cannot unconditionally endorse the discourse which is gaining importance in German-speaking countries that the continuing qualification of professions working in nursing and therapy turns these into professions that are analogous to those of medical specialists – i.e., that currently they are "professions in the making". While doubtless professionalism in the sense of technical know-how and expertise is the primary prerequisite for their effective contribution and for cooperation on an equal level, the conditions currently present in society are hardly conducive to a profession evolving in the sociological sense of the 19th and 20th centuries. Even though the representatives of the health professions working in patient care like to claim that they are becoming a profession, there are critical voices. Ultimately this claim would serve to establish and strengthen a hierarchical system (e.g. chambers of professions) in which the healing professions claim superiority over all other groups that are necessarily involved and over the patients. Literature terms this endeavour a "construct for exercising power" in which "the concept of medical professionalism [is] not a quality of individuals but a kind of rhetorical tactic to perpetuate power" (Christmas and Millward 2011, p. 6).

Academic qualification no longer leads to professions in the sociological sense

Willingness to cooperate with all occupations instead of professionalism as construct for retaining power

2.5 Gender and diversity in occupations of care and cure

Although the traditional division according to which male occupations are medical professions and female occupations are professions related to care and nursing is losing importance, it still reverberates: care work is still predominantly a female domain. However, nowadays over 60% of students of medicine are female. Despite the backdrop of an assignment of gender-specific occupations and roles, the different professions in the health system experience professionalisation and de-professionalisation differently.

Gender roles still exercise influence

The pace at which specific health professions are upgraded differs in the three countries – however, academisation (nursing professions, ergo- and physiotherapy, midwifery, speech therapy) makes these professions more attractive also for men. By contrast, in medicine, and more specifically in the studies of medicine, a trend is emerging which changes the relation of the sexes. However, it would be exaggerated to speak of "feminisation", because even a large proportion of women does not in itself lead to a dramatic change in the status quo – especially in a vertical and horizontal labour market that also in medicine is segregated according to gender (Kuhlmann, 2012[21]). What does change, however, are the traditional images and gender roles ("the male

No "feminisation" – only marginal change despite the rising share of women

[21] See "it´s a woman´s world", Heinrich Böll Foundation, livestream of Nov 27, 2012

doctor and the female nurse/therapist") and therefore the organisation of sharing tasks.

However, diversity goes far beyond the issue of gender. Diversity in society (age, social strata, lifestyles, people with impairment, people from other cultures, etc.) must also be reflected in the professions of the health system – according to the constellation of patients / clients – and must be utilised constructively. Categories like gender and diversity are significant markers of new developments in which conventions are dissolving. They facilitate adaptation to society, which is becoming more complex, and open up new possibilities of shaping the future by means of co-operative ways of working and flatter hierarchies.

Diversity dissolves conventions

The current access barriers and mechanisms of selection are one of the reasons why the potentials of social diversity are not exploited at present. For instance, many entry exams do not reflect the societal need. Change is necessary in order to establish more cross-professional cooperation and improved answers to the needs of patients, the insured, and the public in general. Society and the health system need to develop an awareness of the efforts necessary in the formulation of an intersectoral policy for the education of health professionals. This would prevent professions from becoming less attractive and young people from turning to other industries.

Access barriers and mechanisms of selection reduce diversity and potentials

2.6 Inequality in financing education

When the megatrend of economising the health system was discussed above, the inequality in financing education for the four functions (see figure 1) was already addressed. Indeed, there exist disparities that need to be reflected on and reviewed with a view to their relevance and their consequences. In the context of the functions related to patient care, this is particularly true of the antagonism between substantial public funding of medical education and training and the frequently or complete self-financing in the field of psychotherapy as well as of the professions of therapy, of care for the elderly, or of public health, which prevails in Germany. Among others, this also works to intensify an already existing constellation of risk in which the professional circle of therapists itself has few commonalities with the problems of their patients/ clients[22]. If money decides on access to a profession, this profession will ultimately lack the diversity and heterogeneity necessary to anticipate and adequately meet actual needs.

Balancing education financed publicly and self-financed education in the interest of quality

However, inequality of public financing is even more pronounced in the context of the functions related to organisational development and governance and those related to increase insights and knowledge (which are not automatically associated with the interest of public welfare) – although these functions are also vital for an effective health system. Specifically, this concerns occupations

Allocation of public funds for education to all four functional fields must be a priority on the political agenda

[22] The Lancet Commission also identifies this constellation in threshold countries, where newly emerging educational institutions in the health system facilitate self-reproduction of the privileged social classes and enable these to fulfil their monetary expectations.

in planning, in logistics and support, in process and data management, in general management and administration as well as in governance and finance, but also with respect to evaluation, quality assurance and health impact assessment.

▶ see Postulate 2

These differences between the areas financed publicly and privately, both in education and in exercising a profession, open up different perspectives of living. The authors are convinced that the question of which professions in the health system are educated by means of tax funds and which need to finance their education themselves, must be discussed and decided by politics in the interest of public health and the quality of care.

3. A New Intersectoral Policy for Educating Health Professionals

The foreseeable challenges of the 21st century, which are of a demographic, social, health-related and economic nature, give rise to the question how well those working in the health system are prepared for them. The authors are convinced that this sustainability requires more than reforms in the education for patient care and treatment or regulating guidelines issued by health policy and directed towards educational policy, if these are possible in the first place. Consequently, it appears decidedly reasonable to examine the relation between health policy and educational policy in a first step. But, both the system of "health" and the system of "education" are dynamic systems that work independently. However, they would need to interact with each other in order to be able to respond to changes in society as loosely coupled learning systems. Therefore, a continuous dialogue is needed which also involves the other forces relevant in society in an effort that reaches across different sectors – namely patients and relatives, the health industry and financing bodies. This dialogue must use differentiated feedback loops to mediate between the mandate to provide care and the mandate to provide education. This constitutes a fundamental change in view of the prevailing built-in dynamics of the educational and the health system, respectively, that presently focus on professions and professional expertise or excellence.

Dialogues across sectors to provide differentiated feedback to education

3.1 Considering and developing the Lancet recommendations

There have been, and there still are, numerous initiatives which aim to improve and change the education of those working in the health system. The Lancet Report 2011, "Health professionals for a new century: transforming education to strengthen health systems in an interdependent world", advocated a notable position because it attempted to build bridges beyond the development of professions. In its essence, the Lancet Report calls for an educational reform that comprises two bundles of measures related to institutions and to educational strategy, respectively:

Lancet Postulates: institutional reforms and reforms in educational strategy

a) – breaking up professional silos of education
   – inter-professional education and common learning in shared study programmes
   – connecting education with primary care, ideally with a mandate to provide health services assigned to the educational institution
   – a global exchange regarding learning and didactics

b) – "demand-based" criteria of admission rather than "score-based" selection
   – consequent orientation towards competencies throughout the learning process
   – more effective use of all channels of learning, primarily of the new media
   – differentiated career paths instead of professional one-way streets

The reforms called for by the Lancet Commission aim to link the systems of education and health. The suggested measures particularly include joint planning and dialogues between the interest groups as well as extending the venues of learning into primary community care. Moreover, education is to include the development of the personality and to provide leadership skills.

Leadership and transformative competencies

This vision is based on the conviction that nothing will be more permanent in the health systems of the future than change, and as actors embracing change, will be needed more than ever today.

Education as development of personality for innovation

Innovators who have an open mind and "transformative" competencies and who are willing to assume leadership responsibility in a form appropriate to their respective professional level and as actors embracing change, will be needed more than ever today.

However, experience shows that implementing such demands is a difficult process hindered by complex boundary conditions, contradictory interests and blurred responsibilities. Therefore, the measures of reform suggested in the Lancet Report need to be thought further – and partly in a different way.

3.2 Outlines of a new intersectoral policy for educating health professionals

Postulate 1

Against the backdrop of the Ottawa Charter and current health policies such as the European concept of the WHO "Health 2020" as well as diverse new discourses on education held in the German-speaking countries, a sustainable intersectoral policy for the education of health professionals which is orientated towards reform and need, is based on five postulates and four strategic measures:

❶ Directing education towards health literacy and a new professional identity

Health literacy for all citizens

Education opens up opportunities in life. Education is a prerequisite for ability to judge and to criticise, for awareness of responsibility, for tolerance, autonomy, capacity to act and social participation. Education yields a high benefit for society and for health, because it can reduce inequality, increases performance and facilitates economic prosperity. Moreover, it is also decisive for a society that its citizens possess a high degree of health literacy. Accordingly, a societal objective of education must consist in providing competencies and strategies necessary to manage complex issues and to identify processes promoting health. This should contribute to the emergence of resilient communities, which are true caring communities.

A new professional attitude for a more democratic health system

The professions operating in the health system – in particular those active in functions related to patient care – must possess more than technical expertise and excellence. A successful and satisfactory management of change requires meta-competencies and a new professional identity, i.e., in particular a new understanding of the self and of responsibilities. It consistently involves users and is orientated towards providing benefits. Hence, it distances itself from profession-specific analyses and profession-specific definitions of tasks, profession-specific claims as well as paternalistic patterns and behaviour.

Societal objectives of education must be directed towards innovation and health literacy. Education for the professions active in the different functions of the health system must lead to cross-functional thinking and a new professional attitude guided by co-production. The competencies necessary to meet these objectives make life-long learning imperative for all.

Educational objectives for innovation, health literacy and a new professional identity

❷ Conceptualising the intersectoral policy for educating health professionals in a comprehensive way

Postulate 2

The qualification to treat patients is only one of four tasks in the health system. An effective health system and high health benefit also require a broad range of specialists and groups of professions with different competencies for the purposes of governance, leadership and organisation, technology and logistics, research and evaluation, assessment of benefit and quality assurance as well as for public health, prevention, and health promotion (see figure 1).

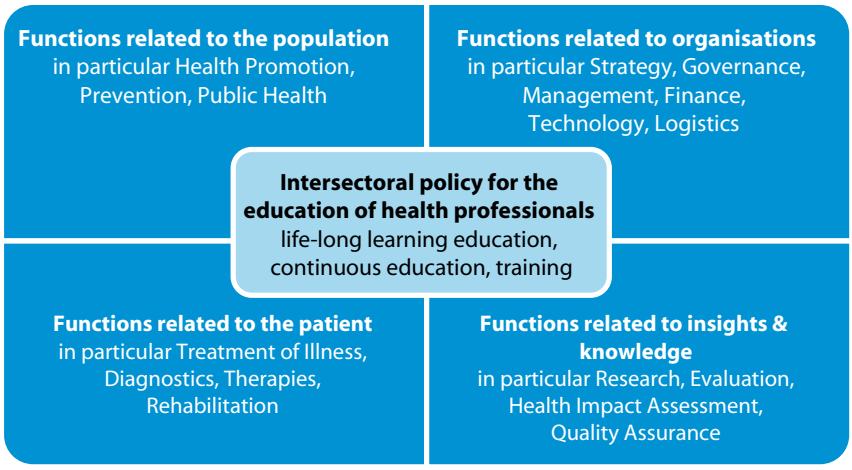

Figure 1: The four essential functional areas of the health system. This lifelong and inter-professional education must be accessible to all the functions - crossing the boundaries of professions and with participation of citizens, patients and their relatives. © Careum Foundation

New forms of qualifications are to be provided in an equivalent way with the four functions of the health system. Accordingly, they have to meet the needs and assume social responsibility, i.e. by focusing increasingly on outpatient care and community healthcare as well as by developing appropriate leadership and management skills. Hence, public financing, which today is directed almost exclusively to educating those working in remedial professions related to patient care, needs to be reconsidered and must be re-arranged according to the interests of public welfare and to the demand for functions related to the population, to organisational development, and to functions related to gaining insight and knowledge.

Assigning the same degree of attention, both substantially and financially, to all four necessary functional fields

The view and the scope of the intersectoral policies for the education of health professionals need to be extended. In addition to the functions related to patient care, which already today are adequately covered, also the functions related to the population, to organisational development as well as to a better understanding and increased quality and benefits must command more attention. Therefore, it needs to be discussed and decided which educational measures are financed by taxes and to what extent, and which are self-financed.

Postulate 3

❸ Having different sectors govern educational reform

The guiding principle of "Health in All Policies" has illustrated in a convincing manner that responsibility for health and welfare must also be anchored beyond the narrower field of health policy. In an analogous way, education derived from need must seek the dialogue across sectors with other areas of politics and the actors involved in its development – bearing in mind their respective interests – specifically with the different bodies of public administration, the private sector, as well as patients and relatives.

Co-production

The process of integrating these stakeholders into policy design and development tasks must be conceptualised in the sense of a co-production that is meaningful to all those involved.

Health and Education Ministers have a responsibility of advocacy in planning legislation and steering budgets

The European governments, which have endorsed the WHO policy framework "Health 2020", are called upon to define appropriate aims of legislation and budgeting to direct the priorities towards utilising the potentials of all functions and groups of professions.

Health and Education Ministers (of the countries or cantons and federal governments) have essential roles of advocacy in their coordination efforts with the other departments, in particular with finance and economics, research and innovation, as well as with legislation.

Postulate 4

❹ Learning to cooperate: developing structures and a culture of cooperation

Also in times of fast-paced change and declining resources, quality of care and high benefits remain paramount objectives. To achieve these objectives, improved cooperation as well as inter-professional thinking and working among the actors in all four functional fields and cooperation with the public and patients are imperative. The dogma that one´s own professional identity must be strengthened before shared problem-solving can ensue is, therefore, not a sustainable education strategy. Accordingly, the processes of learning need to be designed not only between the professions related to the patient, but also with and between the other professions in such a way that they prepare learners for new models of care in the communities and regions (see chapter 2.3).

Cooperation competence facilitates inter-professional communication, discourse analysis and conflict management as well as an attitude marked by respect and appreciation of the "added value" of cooperation which neither patronises the clients / those concerned nor other professions. This attitude forms part of a process of transformative learning which enables students to assume responsibility in the team, in organisations, and in society, and which empowers them to take over leadership roles in order to manage change acting as transformers.

Besides providing technical expertise, education for functions in the health system must make promoting competencies of cooperation a priority. These competencies require new approaches in methodology and didactics that comprise processes across sectors, inter-professional learning arrangements and learning venues in the practice of community care. Such education and training also depend on instructors capable of reflection who can moderate these demanding processes of acquiring competencies.

Cooperation competence is the most important educational objective; it requires inter-professional learning arrangements

❺ Parallel strategy for training and further education in line with future needs

Postulate 5

Educational strategies generally address the first cycle until graduation. With respect to the four functions, there are some manifest deficits in the education of a broad range of specialists required in the health system.

Moreover, aspects like "life-long learning" and "learning organisation" are not given sufficient consideration. Equally important as learning for the first graduation is, therefore, continued training of all individuals that already work in the system today. Accordingly, a parallel strategy in training and further education is needed. Systematic training (or further education), which is anchored in institutions, and its financing, is a fundamental prerequisite for a functioning and innovative health system of tomorrow.

The health system is a complex system which is under a lot of pressure to change and adapt permanently – but which displays high resistance against institutional change at the same time. For this reason, it must be reformed in a continuous process primarily by those employed in the system and with the support of owners and the management. Especially older employees, who are becoming increasingly important in the labour market, must be enabled to assure the transfer of their experience, knowledge and competencies to a learning organisation. In the context of life-long learning, they have the responsibility to become fit for future changes in a process of continuing reflection. This offers huge opportunities and potential for organisational development: bringing together young and old employees in favourable learning arrangements creates a setting in which the challenges of the enterprise can be reconciled with the individual aspirations and perspectives.

A training strategy ensures that innovation and transformation can emerge from within the system

Besides education of health professionals in a future-oriented form, a parallel training strategy is needed for all those currently working in the health system. Systematic training anchored in institutions, life-long learning and a development towards learning organisations are essential for an adaptive reform-driven health system of tomorrow. At the same time, efforts to raise health literacy among patients and citizens are to be enforced.

These 5 postulates must be realised by means of the following four strategic measures:

Strategic Measure 1

Generating conclusive and policy-relevant data:
Promoting research about the health and educational systems

Data about the health and the educational systems which are gathered continually in a systematic way are an indispensable prerequisite for shaping and managing the complex change adequately. Current research on healthcare primarily examines processes and effects from the view of the professions and the financial flows. Existing data mostly describe structural attributes (profession, gender, area of specialisation and partly conditions of employment as well as the share of employment in outpatient or inpatient care). However, in the interest of an intersectoral policy for the education of health professionals oriented towards reform, research, and evaluation must be anchored more broadly and must specifically include the status quo, the effects of new incentives, patterns of demand and the degree to which offerings are used as well as questions of organisation and costing, the effectiveness of the system, process quality, and the perspective of users as well as communication and the quality of life. Research covering the entire range of all four functional fields of the health system has been insufficient so far. It lacks analyses of political (non-) decisions, cross-functional evaluations, analyses of professional spheres, processes and effects from an inter-professional perspective. Such issues provide the starting points for defining new objectives, which, besides basic research and clinical research, are to be requested and promoted to a considerably higher degree in the future (Adler/von dem Kneesebeck 2010).

Data for more comprehensive knowledge about the systems of health and of education

Research into healthcare understood in this way quickly arrives at what is desirable as the subject matter of research[23]. Altered needs necessitate responses on the direction and quality of education and the quantities of a specific profession or profile. This should lead to a new research approach, focusing on (professional) education differently, which reflects on, and evaluates, the acquisition of competencies and capabilities from the perspectives of all those involved and in the light of given needs. Such research could also resolve issues of misallocation of investments in obsolete educational structures or in education guided by the idea of distinct classes of professions. Moreover, it would facilitate educating graduates

Investigating the desirable and the co-production

[23] See also the "Throughput" concept by Pfaff 2003, in: Pfaff and Schrappe 2010

more effectively towards the health markets of the future, professional career paths guided by cooperation and benefit for the population as a whole. Furthermore, such research could address successful approaches and examples of good practice and hence serve to assign the appropriate visibility and attention to the educational pioneers, who today frequently find themselves marginalised.

A research fund shared by the health and educational system is put forward as an appropriate instrument to facilitate the research and evaluation of intersectoral educational strategies guided by the idea of reform (in particular their objectives, measures and effects).

Research on health systems, care and professional education needs to be aligned consistently towards the mutual dependencies between outcomes of education and care. In particular, such research must reflect the entire range of actors and services present in the health system and in a health policy guided by the idea of reform and innovation. Research has an integrative function: besides ex-post evaluation of performance, effects and costs, also educational objectives, content and pathways of qualification, educational architecture and learning arrangements need to be observed and reflected on. The guidelines for the provision of research grants of the different instruments need to be adjusted accordingly or to be standardised by means of a shared fund.

Changing Educational Institutions:
Allowing the courageous approach towards the vision of the health campus

Strategic Measure 2

The current educational strategies were developed 100 years ago and consolidated 50 years ago. As a rule, universities, universities of applied sciences and vocational schools work with competencies related to professions which lead to distinctions and silos of professions. The potentials offered by inter-professional cooperation, the diversity and wealth of experience of an inter-professional practice cannot be utilised for the purpose of education and hence subsequently neither for the health system. Consequently, at the level of educational institutions it takes long-term cultural and organisational development as well as new learning arrangements which lead to a new professional socialisation. In order to overcome these deficits, the OECD suggested the organisational forms of a "Regional Health University" (Sottas et al. 2013) already in the 1970s. A health campus is intended to facilitate interlinking educational programmes and paths of qualifications by means of inter-professional learning arrangements and project assignments as well as by shifting some elements of educational programmes to primary care structures in the communes with "real" patients, together with the public, authorities, and relatives. The model was implemented in different venues around the world (Linköping, McMaster, Tromsø, King's College, among others) and continues to offer visionary guidance also today.

Organising educational institutions as a health campus

When transforming the existing system towards inter-professional education, attention needs to be paid predominantly to interlinking the institutions and to raise permeability and transfer opportunities between educational programmes and levels (from vocational education to research and development) (Wissenschaftsrat [German Council of Science and Humanities] 2012). What exists in an isolated form today is not sufficient. But it is necessary to start from where there is dynamic development and to strengthen those that move in the sense of the intersectoral policy for the education of health professionals outlined here. Therefore, it is crucial to have adequate incentives for change and to involve all the professions working in the health system, as well as the public and the patients. In addition to this, intersectoral strategies can be explored with the help of innovative companies, which in turn helps to create an environment where new forms of educational institutions and learning can be tested.

The professions working in all four functional fields of the health system are to be brought together on a "health campus". This educational strategy aims to utilise the inter-professional organisation of education and research across different professions and functional fields in order to improve the health of the population as a whole, and in order to make a significant contribution to promoting innovation and regional economic strength by assuming a leadership role in integrating politics, education, and health.

Strategic Measure 3

Regulation: Adapting laws to needs

Health is a valuable asset, therefore the laws for the protection and preservation of health affect almost all areas of social life. Although the intersectoral policy for the education of health professionals postulated in this paper aims to utilise the entire range, it firstly needs to address the regulations domineering patient care and the right to practise a profession, as well as the resulting regulations on education. What is noticeable is a density of regulations which hinders transparency and fragmented laws on specific professions that includes barriers to admission, stipulated monopolies, and discourses of liability. These regulations hinder an effective organisation of processes that involves all four functional fields necessary for the health system and innovative forms of exercising a profession by shifting tasks and responsibilities, and hence do not reflect the needs of users and patients. The way in which liability is regulated in the context of architecture and engineering shows that liability law need not necessarily be personalised (in the sense of the individual liability of a sole proprietor).

Development needs visions. This would entail developing and adjusting the legal framework and regulations both in the health and education system. The most fully developed capacity to cooperate is of no use if the legal regulations prevent innovative structures of communication to the public and targeted users, as well

as prohibit new types of educational institutions and learning arrangements. Restraint in enacting legislation and de-construction of the rigid system, which is currently over-regulated, could serve to create new rooms for action. Innovative educational strategies and new approaches to education can only be beneficial if the activities within the healthcare system are fully supported by legislation – or at least not hindered.

In order to facilitate innovation, the numerous regulatory bodies need to include clauses that permit experimenting with new types of institutions in tertiary education and innovative forms of care:

- Professional and social law must develop new forms of regulating liability. They must also correspond, in particular, to the cooperational challenges that exist between the professions in the healthcare system, and to furthermore facilitate the transfer of tasks and responsibilities.
- In education, conditions must be created that foster system and organisational development and facilitate the participation of citizens, patients, and companies. Besides enabling permeability and transfer between different types of educational programmes, these conditions must also address financial incentives.

Reducing the density of regulation to facilitate improved inter-professional cooperation of all four functional fields

Creating structures for dialogue: facilitating continuous cooperation between sectors and facilitating moderation of related processes

Strategic Measure 4

The need for a health system oriented towards reform is insufficiently concerted with the educational strategies. There are no appropriate interfaces and platforms for dialogue. In a complex and dynamic system, reform is a permanent process. Owing to the importance of health, moderating the process is largely an issue of public responsibility, specifically of the political departments of health as well as of education and science. As also many non-public actors are active in this area, the health industry and civil society need to be integrated into the institutional dialogue.

Creating structures to ensure dialogue and cooperation

The same applies to moderation of processes related to expertise in health and in education. Given the diversity of professions in the four functional fields, this is a demanding task. Yet it appears reasonable to have a circle of experts from the four functional fields, which assess and guide the intersectoral policy for the education of health professionals in its entirety, so as to ensure cohesion and inter-professional cooperation. For instance, an intersectoral panel of experts could judge the development of education for all professions of the health system and suggest aims and measures in order to align them with each other. However, the mission of the frequently cited "German Council of Health Professions" would have to be expanded in compliance with the functions named in the table of four fields, because in the present discussion it is too biased towards the professions in patient care and functions related to the patient.

A Council of Health Professions or an Intersectoral Panel for Education evolving from the Health Industry?

In comparison with the Health Research Council in Germany, a council of experts is to specify the definitive conditions and promote the development of a "roadmap for intersectoral education in the health sector", which comprises the professions operating in all four functional fields of the health system. Essential drives to assist this effort could be provided by establishing a transnational network of the initiatives launched in various countries.

4. Outlook

Sketching the outlines of a new intersectoral policy for the education of health professionals does not in itself change the circumstances. The Careum Foundation and the authors of the present paper want to contribute to the debate with the vision and the postulates presented, because the fast pace at which the challenges of the health world are changing is a marked contrast to the strong persistence of the actors and professional sub-systems. Even though the questions of change are addressed with the intention to promote evolution, the discussion is about willingness to embrace change and hence also about questions of power. In the context of education, generally change and transformation do not result from radical changes of course, but are the consequences of discourses and long-lasting processes which require much soft power, i.e., critical reflection, voicing questions, and courageous negotiations in the form of dialogues with all the interested parties.

A new intersectoral policy for the education of health professionals is necessary in order to achieve the aims of the European "Health 2020" framework. However, this strategy formulated by the WHO does not address the consequences for educating those working in the health system. This gap is to be closed. With the present working paper, among others, the 2013 Careum Dialogue has tried to indicate routes along which new aims for an intersectoral policy for the education of health professionals can develop from the substantial challenges in social and economic policy (e.g. regarding demographics, the capacity to innovate or competitiveness). This initiative is not intended to constitute an isolated effort, on the contrary, it reflects a new way of thinking which can also be found in the priorities of the Health Policy 2020 in Switzerland, in the recommendations issued by the German Council of Science and Humanities on qualifications for the health system in post-secondary education, in diverse strategic papers on inter-professionalism, in the current discussions of health professions and primary care held in Switzerland, or in the reflections on the sustainability of reforms.

The participants in the 2013 Careum Dialogue were in agreement that a timeline of approximately one decade is not sufficient for implementing effective measures. It may take as long as twenty years for new priorities to be established in the curricula and lead to a critical mass of staff in the health system that naturally implements these priorities in their everyday actions.

The working paper does not present a ready-made strategy. The postulates and measures suggested are to be understood as invitation to continue devising a sustainable intersectoral policy for the education of health professionals. It is intended to drive organisational development in the educational landscape and to encourage pioneers. In a next step, a process of dialogue could address the suggestions and serve to define, and conceptualise aligned concepts of implementing the country-specific policies of health education as a task to be shared by all those involved in the health and educational systems. As, for the reasons already named, this dialogue between the two systems as well as dialogues between the public, the patients, and local healthcare services will not start on its own accord. It is necessary to have country-specific inter-professional project groups prepare and guide this coordination between the four sectors by means of a road map.

Doubtless model projects need to be established. They can serve to transform strategy into more specific programmes of health education, based on appropriate platforms that facilitate exchange and interaction in close cooperation and coordination with steering bodies and regulators. Plus: where there already is dynamic development, those that move in the sense of the intersectoral policy for the education of health professionals outlined in this paper need to be supported and promoted.

Careum strives to continue the dialogue on these premises and to shed new light on the relationship between health policy and educational policy involving as many partners as possible. This dialogue is intended to contribute to promoting the hitherto under-developed connection between the health system and the educational system and to bridging divides between different actors in society (e.g. science and practice, medical and other professions, civil society and administration), between the sectors of healthcare and the different areas of politics.

References

Adler G, von dem Kneesebeck J-H 2010. Gesundheitsfachberufe:
Auf akademischen Wegen. Deutsches Ärzteblatt 2010; 107(9):

APPG 2013. All the Talents. How new roles and better teamwork can release potential and improve health services. London: All-Party Parliamentary Group.

BAG 2013. Gesundheit 2020: Eine umfassende Strategie für das Gesundheitswesen. Bern: Bundesamt für Gesundheit.

http://www.bag.admin.ch/gesundheit2020/index.html?lang=de

Bundesministerium für Gesundheit 2012. Rahmen-Gesundheitsziele für Österreich. Wien.

Christmas S, Millward L 2011. New medical professionalism.
The Health Foundation, London.

Cooke M, Irby D M, O'Brien BC (2010). Educating Physicians:
A Call for Reform of Medical School and Residency. San Francisco: Jossey-Bass

EC 2012. Action Plan for the EU Health Workforce. Strasbourg:
European Commission. SWD(2012) 93 final;
http://ec.europa.eu/dgs/health_consumer/dyna/enews/enews.cfm?al_id=1247

Ewers M, Grewe T, Höppner H et al. 2012. Forschung in den Gesundheitsfachberufen. Potenziale für eine bedarfsgerechte Gesundheitsversorgung in Deutschland. Deutsche Medizinische Wochenschrift, Supplement Nr. 2.
Stuttgart: Thieme

Frenk J, Chen L et al. Health professions for a new century: transforming education to strengthen health systems in an interdependent world.
The Lancet, Nov 29, 2010. Deutsche Übersetzung
http://www.stiftung-careum.ch/de-ch/careum/publikationen/lancet_report.html

Herzlinger, R 2013. 21st-Century Health Care Management Education:
Confronting Challenges for Innovation with a Modern Curriculum. a White Paper based on: Benchmarks for confronting the Challenges for Innovation in Health Care with a modern Curriculum. Harvard Business School. Boston.

Institute for Healthcare Improvement. 2012. Triple Aim Initiative. Cambridge.
http://www.ihi.org/offerings/Initiatives/TripleAim/Pages/default.aspx

Kickbusch I 2006. Die Gesundheitsgesellschaft. Gamburg:
Verlag Gesundheitsförderung

Kuhlmann E 2012. Organisationsroutinen und Arbeitskräftemanagement im Gesundheitssystem. Vortrag am 27.11.2012. Heinrich Böll Stiftung «It´s a womans world. Gendertrends in den Gesundheitsberufen»
http://www.boell.de/calendar/VA-viewevt-de.aspx?evtid=11981

OECD 1977. Health, Higher Education and the Community. Towards a Regional Health University. Report of an International Conference at OECD Paris, 15th – 18th December 1975. Paris: OECD.

Pfaff H 2003. Versorgungsforschung – Begriffsbestimmung, Gegenstand und Aufgaben. In: Pfaff H, Schrappe M, Lauterbach KW, Engelmann U, Halber M (Hg.) Gesundheitsversorgung und Disease Management. Grundlagen und Anwendungen der Versorgungsforschung. Bern: Hans Huber 2003: 233-240.

Robert Bosch Stiftung (Hg.) 2011. Ausbildung für die Gesundheitsversorgung von morgen. Stuttgart: Schattauer

Robert Bosch Stiftung 2011. Memorandum Kooperation Gesundheitsberufe. Qualität und Sicherung der Gesundheitsversorgung von morgen. Stuttgart.

Sachverständigenrat SVR-G 2007. Kooperation und Verantwortung. Voraussetzungen für eine zielorientierte Gesundheitsversorgung. Gutachten. Dokumentation und Kurzfassung unter:
http://www.svr-gesundheit.de/Gutachten/Gutacht07/Kurzfassung%202007.pdf

Sachverständigenrat SVR-G 2012. Wettbewerb an der Schnittstelle zwischen ambulanter und stationärer Gesundheitsversorgung. Sondergutachten. Dokumentation und Kurzfassung unter:
http://www.svr-gesundheit.de/index.php?id=396

Sottas B, Brügger S, Meyer PC 2013. Health Universities – Konzept, Relevanz und Best Practice. Mit regionaler Versorgung und interprofessioneller Bildung zu bedarfsgerechten Gesundheitsfachleuten Gesundheit. Winterthur: ZHAW.

Toffler A 1983: Die dritte Welle, Zukunftschance. Perspektiven für die Gesellschaft des 21. Jahrhunderts. München: Goldmann
(Übersetzung von The third wave, 1980)

WHO 2008. Primary Health Care. Now more than ever. World Health Report 2008. Geneva: World Health Organization.

WHO Europa 2012. «Gesundheit 2020». Kopenhagen: World Health Organization.

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