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GOOD PRACTICE BRIEF

REFORM OF THE MEDICAL CURRICULUM IN SWEDEN: Towards a more active and multidisciplinary learning of people-centred care

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Summary

Medical schools in Sweden are revising their medical curricula to involve students in more active and multidisciplinary learning and to better integrate basic science and clinical experiences. This is in response to changing needs in patients, rising incidence and prevalence of chronic diseases and multimorbidity, the proliferation of new knowledge and technologies, changing practice environments and new understandings of pedagogy. These reforms are a joint effort by the government and universities, health care providers, patient organizations and professional organizations.

It has been recognized that new and main competencies are required. The reform identified the need for pro-active chronic disease management, increased emphasis on disease prevention and health promotion, critical thinking, continuous quality improvement, generalist competencies, communication skills and multidisciplinary teamwork. This means that practice-based learning is gradually moving from hospital settings to primary care.

Motivation

Like most countries in the WHO European Region, the Swedish health care system is still primarily organized to deal with acute rather than chronic disease conditions, with limited focus on disease prevention and health promotion in clinical practice. Overall, medical training does not reflect sufficiently the enormous changes in the health care environment including changing needs in patients, the rising incidence and prevalence of chronic diseases and multimorbidity, the proliferation of new knowledge and technologies, changing practice environments and new understandings of pedagogy.

Some of the most significant changes over the last century in virtually every medical field have been the proliferation of training programmes in new subspecialties and the lengthening of training time. Moreover, the clinical environment within academic health centres, including their teaching hospitals, is currently widely perceived as being

Key Messages

- Transforming the medical curriculum is possible and requires collaborative efforts between all stakeholders for sustained impact.
- Better alignment of residency curricula in every discipline with current and anticipated requirements of practicing physicians is needed.
- Learning outcomes addressing the desired competencies must be clearly formulated and assessed.
- Priority should be given to competency-based training and the development of generalists.
- Competencies should target both clinical-technical skills and soft-skills.
- Practice-based learning is gradually moving from hospital settings to primary care.
- Improved interdisciplinary curricular arrangement (medical, nursing and allied health professionals working together) is essential.
- New accreditation standards are needed across the continuum of medical education.

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unreceptive to educational innovations. Training remains largely tied to local and subspecialty traditions and to the requirements of inpatient service units. The culture of training and practice that students and residents are taught outside of the classroom inculcates values and approaches to clinical practice that often do not align well with those promoted within the formal medical school curriculum *(1)*.

A medical curriculum in line with today's health care challenges

The transformation started in 2013 with an agreement between relevant stakeholders including the government, health care professionals, professional organizations, educational organizations and patient organizations on the main health problems that must be managed and the related competencies needed. Chronic diseases, multimorbidity and the need to strengthen primary care and teamwork were critical drivers of a needed paradigm shift that emphasized the best possible health and quality of life in individuals and populations in contrast to curing diseases only. Basic and clinical knowledge, skills and professionalism that remain central components of the new curiculum are addressed with this focus in mind *(2)*.

The Swedish reform of the medical curriculum is in line with the vision as outlined by the World Federation for Medical Education *(3)* that highlights the need for new accreditation standards across the continuum of medical education.

The reform consisted of two main dimensions.

The first dimension is a re-definition of competencies. The stakeholders of the reform process have investigated and identified what competencies are needed in medical graduates to address society´s priority health concerns. Priority is given to the development of generalist competencies of relevance to strengthening primary care. In this context, emphasis is placed on pro-active chronic disease management, comprehensive needs assessment, goal-oriented care, patient education and empowerment, health promotion, interdisciplinary care, integrated care, evidence-based practice, quality improvement approaches, effective use of information and communication solutions, and long-term support of patients and their relatives. Examples of competency clusters in the field of communication, teamwork and people-centred care are provided in Table 1.

Competencies also target particular attitudes and skills, such as critical thinking, scientific approaches to new information and knowledge development, life-long professional development and ethics.

The second dimension is the definition of learning strategies. In addition to the existing traditional master-apprenticeship system of learning, new learning strategies were introduced including: interprofessional learning (medical and nursing students working together aiming for case-based learning) and videotaped recording of patient–provider dialogues to improve patient-centred communication and clinical reasoning. In the new undergraduate curriculum (which is extended over 5.5 years before students graduate as doctors), the clinical practice periods have been extended and to a larger extent are taking place in outpatient settings and primary care *(4)*. The students are part of existing multidisciplinary teams and are assigned individual tasks and responsibilities. Attention is also given to the use of information and communication technology, and its role in promoting integrated care.

Table 1. Examples of competency clusters for medical graduates relating to communication, teamwork and people-centred care in Sweden

Effective communication	• Demonstrate active, emphatic listening. • Convey information in a jargon-free and non-judgmental manner. • Communicate care plan options to patients in a clear manner. • Adapt the style of communication that most appropriately takes into account the impact of health conditions on a patient's ability to process and understand information. • Ensure the flow and exchange of information between the patient, family members and relevant providers is complete. • Provide health education (materials) that are appropriate to the communication style, cultural norms and literacy of the patients and reinforce information provided verbally during health care visits.
Teamwork	• Clearly identify and support roles and responsibilities of all team members, including patients. • Represent one's professional opinions and encourage other team members, including patients, to express their opinions and contribute to decision-making. • Resolve differences of opinion or conflicts quickly and without acrimony. • Demonstrate practicality, flexibility and adaptability in the process of working with others, emphasizing the achievement of treatment goals as opposed to rigid adherence to treatment models. • Link patients and family members with needed resources, including but not limited to specialty health care, rehabilitation and social services, peer support, financial assistance and transportation, following up to ensure that effective connections have been made. This includes arranging access to patient navigation services.
People-centred care	• Comprehend that effective care planning requires several discussions with the patient and other parties, over time. • Screen for multimorbidity and assess cognitive impairment and mental health problems including risky, harmful or dependent use of substances and harm to self or others, abuse, neglect and domestic violence. • Assess the nature of the patient's family, social supports and other socioeconomic resources that impact patient health. • Match and adjust the type and intensity of services to the needs of the patient, ensuring the timely and unduplicated provision of care. • Incorporate the patient's wishes, beliefs and history as part of the care plan, while minimizing the extent to which provider preconceptions of illness and treatment obscure those expressed needs. • Understand the effect of disparities on health care access and quality.

Source: Author.

Impact

All medical faculties in Sweden have embarked on the road to reform the medical curriculum. Major changes involve an emphasis on generalist competencies, the increased number of training hours students spend in primary care practices and facilities, and the introduction of new topics to the curriculum including quality of care, integrated care, people-centred care and the use of information technology. The introduction of new learning strategies is another major change to the development and implementation of the new curriculum.

Faculties now focus on documenting learning outcomes related to the defined competencies, as well as on developing quality indicators to assess the performance of the reform.

Lessons learned

- Transforming the medical curriculum is possible and requires collaborative efforts between all stakeholders for sustained impact.
- Better alignment of residency curricula in every discipline with current and anticipated expectations of practicing physicians is needed.
- Learning outcomes addressing the desired competencies must be clearly formulated and assessed.
- Priority should be given to competency-based training and the development of generalists.
- Competencies should target both clinical-technical skills and soft-skills.
- Practice-based learning is gradually moving from hospital settings to primary care.
- Improved interdisciplinary curricular arrangement (medical, nursing and allied health professionals working together) is essential.
- New accreditation standards are needed across the continuum of medical education.

References

(1) Lawley T, Saxton J, Johns M. Medical education: time for reform. Trans Am Clin Climatol Assoc. 2005;116:311–20.

(2) Lindgren S, Brännström T, Hanse E, Ledin T, Nilsson G, Sandler S et al. Medical education in Sweden. Med Teach. 2011;33(10):798–803.

(3) Lindgren S, Gordon D. The doctor we are educating for a future global role in health care. Med Teach. 2011;33(7):551–4.

(4) Strand P, Edgren G, Borna P, Lindgren S, Wichmann-Hansen G, StalmeijerRE. Conceptions of how a learning or teaching curriculum, workplace culture and agency of individuals shape medical student learning and supervisory practices in the clinical workplace. Adv Health Sci Educ Theory Pract. 2015;20(2):531–57.

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