# Evidence-based practice for Norwegian physicians?

A new report from the Norwegian Knowledge Centre for the Health Services sheds light on why and how evidence-based practice should be introduced in the specialist health service. We hope that the Norwegian Medical Association will play a key role in encouraging Norwegian doctors to be willing and able to use evidence from research in a balanced manner in clinical practice.

«Evidence-based practice» means integrating current best research evidence with clinical expertise and patient preferences (1). However, the understanding and dissemination of evidence-based practice is low (2). Few are aware that the bulk of research in medical databases such as PubMed is unreliable due to risk of bias and other methodological limitations (3). Evidence-based practice as a method for delivering patient care demands that the doctor has fundamental skills in knowledge management and access to user-friendly tools, and also that there are systematic approaches in health care organizations.

## Hospital Trust Project

The hospital trust project was conducted by the Norwegian Knowledge Centre for the Health Services in cooperation with Innlandet Hospital Trust under the leadership of the authors of this article. The former Eastern Norway Health Authority commissioned the project and in 2005 requested support for the introduction of evidence-based practice in their hospitals. Our report (4) summarizes four years' systematic efforts to introduce evidence-based practice in Innlandet Hospital Trust. In the report we propose a framework with four components: competence, organization, technological infrastructure and tools for knowledge support.

*Competence*

Clinicians and decision-makers need to increase their competence in evidence-based practice. The range of educational options continues to improve, e.g. through an increase in the number of courses (e.g. the web-based course www.kunnskapsbasertpraksis.no) and learning programmes both locally and nationally. Sound educational programmes both at the undergraduate level and in continuing medical education should be established, as well as centres with skilled personnel that can provide support and counselling locally and regionally.

*Organization*

The introduction of evidence-based practice as a method for delivering health care demands cultural and organizational change and systematic efforts over time. One organizational approach tested at Innlandet Hospital Trust is the recruitment of an interdisciplinary team of dedicated professionals with management support and time allocated to carry out the work. Rather than setting up separate projects we have woven evidence-based practice into ongoing processes linked to professional development and improvement of quality of care.

*Technological infrastructure*

A sound infrastructure is a prerequisite for evidence-based practice. Clinicians in Norwegian hospitals need unhindered access to a PC, the Internet and mobile devices without today's limitations in functionality. Time-consuming log-on procedures, inadequate access to state-of-the art e-learning and difficulties in accessing local guidelines and protocols must be improved. Smartphones provide fast access to increasingly advanced web-based information resources.

*Knowledge sources and tools for knowledge support*

An increasing number of information resources allow health professionals to access valid research evidence. The report summarizes experiences from the testing of various web-based information resources in Innlandet Hospital Trust. The Norwegian Electronic Health Library (www.helsebiblioteket.no) is a portal for health professionals giving free access to clinical guidelines and evidence-based textbooks (such as UpToDate), medical journals and databases. The Knowledge Pyramid (6 S-model) helps clinicians to find valid and applicable knowledge about diagnostic tests, prognosis and treatment (5). The Knowledge Refinery McMaster Plus, now available at the Electronic Health Library, identifies a small number of new studies that are valid and relevant for clinical practice, and makes them available through email alerts and/or through a separate search engine. This service facilitates effective searches in information resources at all levels of the Knowledge Pyramid, triggered by one or two search words.

The challenging task of developing recommendations on diagnostic procedures and treatment for clinicians demands both clinical expertise and methodological competence. Experience gathered from developing, disseminating and updating local protocols and clinical guidelines in the hospital trust project reveals a need for systematic improvement. Tools such as GRADE and AGREE help to ensure that recommendations for professionals are balanced by integrating research evidence, clinical expertise and patient preferences in a local and national context (6, 7).

## Who is responsible for evidence-based practice?

The implementation of evidence-based practice in Norwegian specialist health care is still at an early stage. Our professional culture and working methods need to change, clinicians and decision-makers need to increase their competence, and clinicians need unhindered access to tools for knowledge support at the point of care. Targeted and comprehensive national and regional efforts are essential if a balanced use of research-evidence is to become a natural, integral part of everyday activities. It is about time Norwegian doctors acquire basic skills in evidence-based practice.

We hope that the Norwegian Medical Association with its emphasis on professional development and quality improvement will promote the introduction of evidence-based practice in the Norwegian health service as an integrated part of professional development for physicians, integrated with continuing medical education and efforts to improve patient security and quality of care.

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**Conflicts of interest: none declared.**

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**Conflicts of interest: none declared.**

**Litteratur**

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*Received 8 July 2011, first revision submitted 25 July 2011, Approved 4 August 2011. Medical editor: Siri Lunde.*