International Journal of Risk & Safety in Medicine 18 (2006) 55–57
IOS Press

Patient Safety

Advice concerning patient safety research [1,2]

Dutch Advisory Council on Health Research *

Summary

Since the publication of "To Err is Human" by the Institute of Medicine (IOM) in 2000 and a few reports shortly afterwards, suggesting that in the Netherlands at least one thousand patients die each year due to medical error, 'patient safety' has become an important issue in Dutch healthcare. However, exactly what type of adverse events occur and how many patients are involved, is unknown. This lack of data led the Minister of Health to ask the Advisory Council on Health Research (Raad voor Gezondheidsonderzoek – RGO) for its opinion on the need for further research and the way patient safety research should be organized. The Council was asked to restrict its opinion to research in hospital care.

Speaking about 'patient safety' a bewildering array of terms is often used, mostly rather sketchy descriptions than precise definitions. In this report the term 'patient safety' is used to indicate all activities in health care aiming to reduce (unintended) preventable harm to patients (i.e. prolongation of treatment, loss of body function, death) due to the way health care is delivered.

Patient safety research in the Netherlands is not new. In the past 25 years academic medical centres and local hospitals have carried out some research projects, and in recent years the number of projects is rapidly growing. Yet, most research in the area of patient safety is carried out in only small projects and lacks continuity. Some research projects are carried out by the technical universities. Researchers from these universities generally face difficulties in performing their research in a clinical setting, since they lack the research facilities medical researchers in (academic) hospitals usually have. With regard to reporting programs, most programs that could contribute to patient safety do not, at least not structurally, give cause to further research in the (root) causes of events. In short, patient safety research in the Netherlands is too much dispersed over several small projects, and suffers from lack of continuity and coherency.

In recent years, exemplary efforts to improve patient safety on a national level have been undertaken in Australia, the United States, the United Kingdom. A few countries such as Canada have followed recently establishing national patient safety activities.

[1] Originally published in "Publicatie 48" of the Dutch Advisory Council on Health Research, February 2005.

[2] Published with permission of the Dutch Advisory Council on Health Research.

* Address for correspondence: Raad voor Gezondheidsonderzoek – RGO, Postbus 16052, 2500 BB Den Haag, The Netherlands. E-mail: bureau@rgo.nl.

Despite major differences in the way these activities have been carried out, all countries have their activities preceded by epidemiological research into the number and character of adverse events in health care. In addition, in all these countries the discussion on national patient safety converges on three major issues: (1) the need for reliable reporting of adverse events and the way reporting should be established (voluntary vs mandatory and nationally vs locally), (2) the need for protection of those reporting adverse events and the need for legal reforms, and (3) the need for an umbrella organisation for the coordination of patient safety activities.

Outside the medical area, in so-called 'high-risk industries', safety currently is top priority. In addition to specific technical solutions in the industries related, all 'high risk industries' nowadays have introduced incident reporting systems and programs to improve human performance and to promote a culture of safety. These comprise not only activities to improve individual behaviour, but – assuming that error is inherent in human behaviour – measures to improve system functioning and management performance as well. A culture of safety presumes the presence of what is called a 'just and fair environment', i.e. the possibility of blame-free reporting of (near)accidents , attention to not only overt or active errors but to latent factors in design and management as well, and transparent accountabilities.

In order to develop the necessary research the Council advocates a research promotion program "Research in Patient Safety" consisting of:

Three 'Centres of Excellence'

Three Centres of Excellence should help concentrating research and enabling research organisations and hospitals to focus their research on one of the following 3 research areas (research priorities):

Reporting and analyzing adverse events. A proper system for reporting and analysing adverse events is a precondition for evidence based patient safety practices. Further research into the usefulness and efficiency of reporting systems should be carried out in the short term, preferably in connection to current patient safety projects. Further research into ways to merge national and local data is needed, as well as research into legislative responsibilities and legal conditions of reporting adverse events.

Medication safety. In view of the relatively large number of adverse events that occur due to prescribing or administration errors, further research in medication safety is needed. Research into this field should preferably be connected to current medication safety projects such as the "Medication-Safety" breakthrough projects (CBO) and the projects of the Dutch Society of Hospital Pharmacists (Nederlandse Vereniging van Ziekenhuis Apothekers).

Complex care/Communication. Accidents are more likely to happen in complex situations with tightly coupled (inter)actions. Such complex situations not only arise from treatments with intricate medical equipment or technical procedures; of major importance here as well is the way the interaction and communication between those involved in patient care is organised. Research is needed into the contribution of ICT (e.g. optimising information processing) and into the effectiviness and efficiency of interventions to reduce complexity.

To enable the Centres of Excellence to develop the necessary research, each Centre should provide a professorate addressing one of the 3 research priorities, and a scientific staff with at least 3 to 4 scientific positions. In view of the need for clinical research and the necessary access to clinical care, each Centre of Excellence should be attached to an academic medical centre. Certainly this does not exclude non-academic hospitals to participate in the Centres. Research institutions, academic medical centres and

hospitals can apply for establishment on the basis of existing expertise, and a joint and detailed research and management plan.

The Council holds the view that government should fund the establishment of the three Centres in the first 6 years. The costs involved are estimated to be €1.5 million per centre.

A research fund

A fund should be established for research into the 3 priorities identified by the Council. The Council believes that researchers and clinicians in hospitals not involved in the Centres of Excellence should also be able to find research funding in case they have excellent research proposals. Since current research programs in the Netherlands do not offer sufficient funding opportunities for patient safety research, the Council feels that a small research fund "Research in Patient Safety" should be established within the Netherlands Organisation for Health Research and Development (ZonMw). Assuming two funding cycles and awards for four excellent research proposals in each cycle, a budget of €1.35 million should be made available for this program.

Committee on Patient Safety Research

To put the Council's recommendations into effect a small 'Committee on Patient Safety Research' is needed. Its main task will be to initiate and coordinate the establishment of the Centres of Excellence, to supervise the funding of the Centres, and to promote and coordinate their research in the short and long term. Additional tasks of the committee are reviewing research proposals for the "Research in Patient Safety" fund and furthering national and international collaboration between researchers in the field of patient safety. This committee should be a recognizable part of the National Platform Patient Safety that is to be founded at the Netherlands Organisation for Health Research and Development in the near future.