Dansk Selskab for
PatientS!kkerhed

Danish Society for Patient Safety

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More patient safety for our money – but how?

Danish experts give their assessment of the patient safety initiatives creating most value for money. Inspired by an OECD report on the economics of patient safety.

This is an English resume. The survey has been published in a report in Danish.

About The Danish Society for Patient Safety: https://patientsikkerhed.dk/english/

In Denmark, we have worked with patient safety for many years. Many initiatives to prevent adverse events, errors and patient harm have been implemented to varying degrees at hospital wards and in other parts of the health services. At the same time, however, there are still many adverse events, errors and incidents of patient harm in regard to patients in Denmark.

A recent OECD report (1) concluded that 15% of hospital costs of the OECD countries is spent on handling and processing errors and patient harm situations. There is a lot to indicate that the Danish health services also spend large amounts on these errors and situations, even if the precise number is not known.

A recent Danish study (2) of acutely admitted patients found considerable additional costs in the amount of DKK 107,000 over a twelve-month period for patients who suffered an adverse event during admission. This means that patients experiencing an adverse event are twice as cost-intensive as patients not experiencing an adverse event.

According to the OECD report, errors and patient harm are number 14 on the global disease burden list, i.e. at the level of tuberculosis and malaria, costing billions of kroner to treat in health services around the world. Patient harm in the health services have major personal impact on patients and their families, and on health care staff involved in such patient harm. Production losses in society are very significant, when the working capacity of patients is reduced or lost completely as a possible result of patient harm.

The OECD report states that a large proportion of the adverse events in the health services can be prevented, for example by means of systematic initiatives. The investment in such initiatives costs considerably less than it costs to process and handle such patient harm situations.

That is why it makes good sense for society to invest in patient safety, says the OECD report.

The Danish study

The purpose of this Danish report is to examine which strategies and initiatives directed at different organisational levels (national, organisational and clinical levels) in the Danish health services which are deemed to give most value for money, i.e. are deemed to have the biggest effect in relation to the investment made in such initiatives.

A number of stakeholders and decision-makers working with patient safety in Denmark participated in a questionnaire study. The focus was on deciding which strategies and specific patient safety improvement initiatives in Denmark they deem to be most cost-effective.

The procedure and method for the Danish questionnaire study were taken from the OECD's questionnaire study in 2017 (1). This includes an assessment of effects and costs involved in 42 different patient safety initiatives from a number of experts from different OECD countries.

In the Danish questionnaire study, respondents were asked to assess 41 patient safety initiatives, which have been inspired by the OECD initiative descriptions, but adapted to Danish conditions by the Danish Society for Patient Safety (PS!) in a dialogue with VIVE (The Danish Center for Social Science Research). Respondents were recruited from a broad geographical area, covering national as well as regional and municipal organisations, research institutes, hospitals and GPs. The results of the questionnaire study were subsequently discussed and qualified in two focus group interviews with key persons – one in Copenhagen and one in Aarhus.

The most cost-effective initiatives

Most of the initiatives deemed to be the most cost-effective, individual initiatives in the Danish questionnaire study are directed at the clinical level. These are the following initiatives:

• "peri-operative safety: check-lists in connection with surgery and other procedures"

• "initiatives against adverse events in medication by involving the patient in the patient's own pathway"

• "patient safety bundle for the prevention of Venous Thromboembolism, VTE."

• "patient identification systems"

• "peri-operative medication protocols"

• "prevention of dehydration"

• "The pressure ulcer bundle"

Two initiatives at the organisational level and one initiative at the national level were deemed to be the most cost-effective initiatives:

• "rational use of antibiotics" (organisational level)

• "hand hygiene initiatives" (organisational level)

• "patient safety in basic training programmes"

Best buy

Subsequently, patients were asked to choose the seven initiatives which as a total ”package” and in their view would give most value for money in terms of patient safety in a Danish context. The outcome of this exercise was that respondents chose initiatives at the national, the organisational, and the clinical level.

“Patient safety in basic training programmes” was the highest scorer in the respondents’ “total package of initiatives”. The five most frequently chosen initiatives were the following:

• “Patient safety in basic training programmes” (national level)

• “Improvement work in the organisation” (organisational level)

• “Building up a positive patient safety culture” (organisational level)

• “Involvement of patients in their own pathway” (clinical level)

• “A national, electronic health platform” (national level)

Focus group interviews

At the subsequent focus group interviews, nuances were added to various points.

It is a precondition for better patient safety that management at all organisational levels is committed to it. A positive patient safety culture must be built up with openness which promotes organisational learning, and management must initiate and set directions for implementation and follow-up on specific patient safety initiatives.

Basic training in patient safety should be directed at all professional groups. Merit transfer should be addressed and it should be discussed whether a patient safety training programme could be a precondition for taking a management position in the health services.

Even if many patient safety initiatives have already been implemented at the clinical level, e.g. hygiene initiatives, they must continually be driven forward, refreshed and relearned when new and other types of staff members join, etc.

Patient errors often occur in intersectorial cooperation. Communication about patients in the transition between sectors could be improved by a combination of better IT tools and more real-time data, as well as more awareness of how the different sectors and professional groups use such tools and what kind of information they need, plus more focus on building relations among professional groups across organisations.

There is great improvement potential as regards the handling and verification of medication, but there is a need for tools and training, appropriate remuneration for the task, and specific identification and implementation of responsibility for discontinuing medication.

When considering the cost-effectiveness – or the ”business case” – of initiatives to improve patient safety, the potential cost reductions on treatment, rehabilitation and productivity loss as a result of patient harm should also be included and compared with the investment in the patient safety initiatives concerned. This should be done in the short term as well as the longer term. Furthermore, it should be done in the individual organisation where treatment is carried out, but also across all the organisations which deal with and have to coordinate patient pathways across systems.

In this connection, it is important to clearly demonstrate the cost-effectiveness of initiatives to decision-makers and to those who will be implementing such initiatives. This will support the creation of financial and resource-related latitude which will ensure better quality in the health services, while at the same time helping healthcare professionals to see the result of their patient safety work, thereby increasing their motivation for this work.

1) Slawomirski L, Auraeen A, Klazinga N. The Economics of Patient Safety - strengthening a value-based approach to reducing patient harm at a national level. : OECD; 2017.
2) Kjellberg J, Wolf RT, Kruse M, Nielsen KJ, Rasmussen K. Cost associated with adverse events among acute patients. BMD Health Services Research 2017;17(651).