


Denmark

Bedside scanning requires cultural change

<p>Challenge</p> <p>Despite the fact that scanners were present in the Righospitalet dispensary, barcodes were present on 99% of the secondary packs and on 84% of the primary packs, the nurses only used the scanners for approx. 5% of the dispensations.</p> <p>Approach</p> <p>Barcode scanning needed to be higher on the agenda and nurses needed to see the benefits for both patients and themselves. In collaboration with GS1 Denmark, the clinic held a staff meeting with the focus on patient safety and how scanning in the dispensary helps to prevent unintended events. Cultural change was needed to ensure everyone involved saw the value of scanning.</p>	 <p>The nurses now have a positive attitude towards the new workflow</p>	<p>The clinic held a staff meetings with the focus on patient safety and how scanning in the dispensary helps to prevent unintended events</p>
	<p>The clinic works to ensure that all medicines are marked with scannable barcodes</p>	<p>60%</p> <p>Scanning rate after six months increased from 5% to 60%</p>

REGION H Rigshospitalet Rigshospitalet is a University Hospital in the Capital Region of Denmark. It is a highly specialised hospital, which covers almost all medical areas. Annually 85,000 inpatients and around 1 million outpatients are treated at the hospital, which covers 1,200 beds. The Department of Paediatric Surgery is a clinic at Rigshospitalet, which handles the treatment of children and adolescents with acute and chronic conditions. It is a clinic with complex patient pathways and an everyday life that has many different tasks.

Trine Spiegelhauer

In 2010, scanners were installed in the dispensary, as it became a requirement in the Capital Region of Denmark that medicine should be scanned to ensure that the right drug is dispensed. Despite the fact that scanners were present in the dispensary, and that barcodes were present on 99% of the secondary packs and on 84% of the primary packs, nurses only used the scanners for approx. 5% of the dispensations. “This is proof that requirements and technology alone do not provide patient safety”, states Trine Spiegelhauer, who at that time was nursing director at the Department of Paediatric Surgery.

Methods of change

In other words, barcode scanning should be higher on the agenda, and Trine made plans for methods of change. “Basically, all nurses must see the benefits for both patients and themselves. Specifically, how barcode scanning prevents adverse events”, says Trine. In collaboration with

GS1 Denmark, the clinic held a staff meeting with the focus on patient safety and how scanning in the dispensary helps to prevent unintended events. “It can promote implementation and, in some cases, strengthen the legitimacy of the purpose of a project when several stakeholders work together. In this specific project concerning the scanning of medicines in the dispensing process, it was important for us to invite GS1 Denmark as a partner”, says Trine.

Before the process started one of the barriers for scanning was that some barcodes could not be scanned. To get an overview of the percentage of scannable barcodes, GS1 Denmark conducted a survey. The result was that the scanners in the dispensary were not able to scan 2D barcodes. Subsequently, the scanners and software were updated and configured, and afterwards all barcode types could be scanned, which also was a great driver for the process.

To ensure continuity in daily routines, the following was implemented:

- Two nurses were appointed as ambassadors for the purpose of creating a good atmosphere around barcode scanning.
- Software and hardware were updated to avoid technical barriers.
- Scanning was discussed at the weekly clinic meeting.
- Each week, based on data for the use of the scanner, a ‘Star Scanner’ was announced.

Monitoring the staff – the reaction

The first couple of months, ‘The Star Scanner’ put a sensitive issue on the agenda, namely monitoring and privacy:

“When it became clear to the nurses that in the IT system we could monitor behaviour right down to person level, some were a little scared. But through open dialogue about the purpose and by establishing the benefits for the nurses, this was no longer an issue. However, it is a fact that the human aspect in a process of change must not be underestimated – otherwise the change can go backwards”, says Trine.

Results

Trine’s plan for cultural change has created visible results. The nurses have a positive attitude towards the new workflow and now take action when they encounter packages that cannot be scanned or that do not have a barcode. It creates an important feedback link to the suppliers, and in collaboration with the hospital pharmacy of the capital region and GS1 Denmark, the clinic works to ensure that all medicines in the clinic are marked with scannable barcodes. Missing barcodes are a barrier that results in inconsistent workflows, thereby increasing the risk of errors.

%

By focusing on scanning, the scanning rate after six months increased from **5%** to **60%** (for both inpatients and outpatients), and scanning has become a natural part of workflow.

Deployment at several clinics

In 2018, Trine became nursing director of the Clinic for Children and Adolescents with Surgical Diseases, which includes five other specialties in addition to the Department of Paediatric Surgery.

The new clinic has not yet focused on scanning, and it is Trine’s goal to achieve the same results for barcode scanning in this clinic. But how?



“To a large extent I will transfer the implementation methods that we used in the Department of Paediatric Surgery - it worked”, says Trine. However, there are some differences between the clinics to consider.

“Staff turnover has generally increased in the nursing profession over the past 10 years. This underlines the importance of having barcode scanning as part of the training for new employees to ensure good scanning habits from the start”, believes Trine. In addition, Trine will involve the internal improvement secretariat of the hospital and share her experiences with management colleagues in other departments:

“In this way, our learnings can benefit others and hopefully inspire other departments to focus on barcode scanning and culture,” hopes Trine.

The change process: the importance of the leader

Creating behavioural and attitude change in a staff group is a classic example of a change project - and a major task for the responsible leader. Trine has gained a lot of experience, and her advice is:

- “It is very important to be a clear leader and show the way, but it is equally important to have strong nurses on the floor as ambassadors to help pave the way”.

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Nursing director
The Clinic for Children
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A cultural change must make sense for the individual nurse in order to succeed. Therefore, the process must be done with small steps forward, so that everyone can participate and see ongoing results. Then it makes sense for the individual nurse.”

- “Implementing barcode scanning is not something you do overnight. It is a process that needs to be kept in focus. If you think of it as a project that can be implemented in a limited period and then left alone, it will not be a success - not a lasting one, at least”.

Barriers to cultural change

When implementing barcode scanning as a new work routine, some barriers are important to keep in mind. If the new routines are not maintained, there is a risk of falling back to the old work routines. The risk of “relapses” increases if IT equipment such as scanners do not function optimally, or are placed in an impractical location with regard to the nurses’ routines. Cooperation with your local IT department is therefore crucial. Also, to be able to get the statistics that can document progress and share the progress with the nurses.

A watchful eye for opponents of change is also necessary, and emphasises the importance of having positive ambassadors in the staff group:

“The most efficient way to deal with opponents is dialogue, and no one can disagree that we should do everything possible to increase patient safety”, concludes Trine.

About the author



Trine Spiegelhauer
Nursing director
The Clinic for Children
and Adolescents with
Surgical Diseases

Qualified as a Registered Nurse in 1997 from Rigshospitalet Nursing School, Copenhagen. She holds a master’s degree in Public Governance from Copenhagen Business School. Trine has been function manager at the Department of Paediatric Surgery since 2004, and in January 2018 she became nursing director for the Clinic for Children and Adolescents with Surgical Diseases.

About the organisation



The clinic consists of four departments that treat children and adolescents with acute and chronic diseases of the gastrointestinal tract, kidney urinary tract, liver, genitals, face, bones and joints. Many of the diseases are complex, and the clinic therefore deals with children and adolescents from all over Denmark, as well as Greenland and the Faroe Islands.

There is a total of 41 beds in the 4 sections, and approximately 55 nurses are responsible for the daily care of children and adolescents. Annually, over 3,000 inpatients and almost 10,000 outpatients are treated in the clinic.
www.rigshospitalet.dk

