LEAN medicine room save time and increase patient safety

Winnie Soerensen1, Morten B. Andersen1, Linda B Skovsted1

1: The Capital Region Pharmacy, Herlev, Denmark

Background
The healthcare sector is constantly challenged in order to achieve the most health care for money and increase patient safety. Medicine dispensing is a very time consuming process for nursing staff and a process with high risk of medication errors. LEAN concepts are commonly used in The Capital Region Pharmacy to optimize and secure processes. In the future, it is recommended that new/reconditioned ward-based medicine rooms are designed according to LEAN concepts.

Purpose
The objective of this pilot project was to study whether a medicine room designed according to LEAN concepts could save nursing staff time and increase patient safety.

Material and methods
The pilot project was performed on a cardiology ward during spring 2014. The nursing staff was introduced to the LEAN concepts via an interdisciplinary workshop.

Before and after the LEAN implementation the nursing staff (n=24) answered a semi-structured questionnaire including: Time spent on medicine dispensing in day shift, general overview in the medicine room and the occurrence of disturbances related to arrangement of medicine. Usage rates of the bar-code verification in the medicine dispensing process were used as a proxy for the patient safety.

Results
LEAN implementation released time in the medicine dispensing process as described in the literature. After LEAN implementation 40%(n=10) of the nursing staff used more than 30 minutes during a day shift on medicine dispensing compared to 76% (n=18) before. By optimizing the arrangement of medicine, the bar-code verification increased from 22% to 39% after six months (proxy indicator for patient safety).

Conclusion
A medicine room adapted to the ward workflows after LEAN concepts has resulted in released time in the medicine dispensing process and increased patient safety by encouraging the bar-code verification.

References

Acknowledgement
Henrik Rye Nielsen, The Capital Region Pharmacy, Herlev, Denmark

Corresponding author
Winnie Soerensen: winnie.soerensen@regionh.dk

DISCLOSURE STATEMENT: The authors have nothing to disclose