



The impact of clinical pharmacist driven interventions on patient safety in hospitalised patients: preliminary results of a point prevalence study

Contact: s.wilkes@erasmusmc.nl

Abstract number: 4CPS-215

Sarah Wilkes, PharmD¹; Rianne Zaal, PharmD, PhD¹; Alan Abdulla, PharmD¹; Nicole Hunfeld, PharmD, PhD^{1,2}

Department of Hospital Pharmacy, Erasmus University Medical Center, Rotterdam, The Netherlands
Department of Intensive Care, Erasmus University Medical Center, Rotterdam, The Netherlands

OBJECTIVE

To identify potential drug related problems after implementation of hospital wide pharmacists driven medication reviews

CONCLUSION

- Structured medication reviews by clinical pharmacists, besides using CDSSs, contribute to detection and resolution of DRPs, mainly by reducing overtreatment.
- A hospital-wide integration of clinical pharmacists as part of the multidisciplinary team can improve medication safety and optimize pharmaceutical care.

RESULTS



6/16 wards were included



250 medication reviews



417 potential drug related problems (pDRP)

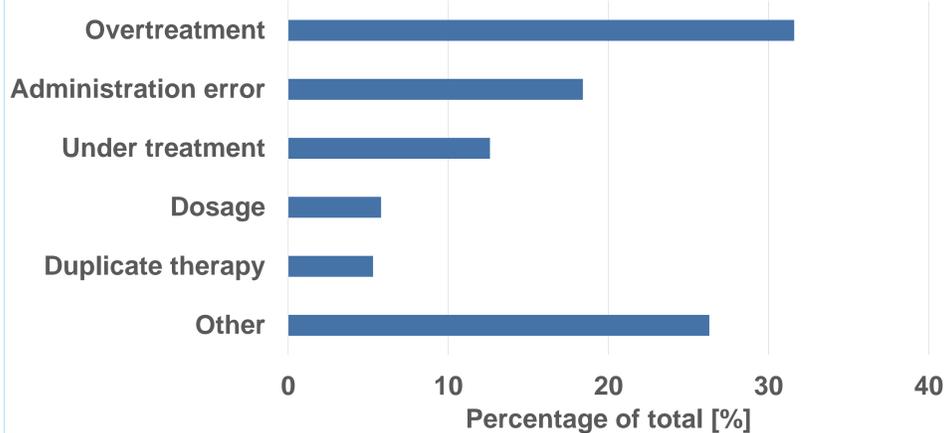


In 60.4% of the reviews a pDRP was detected

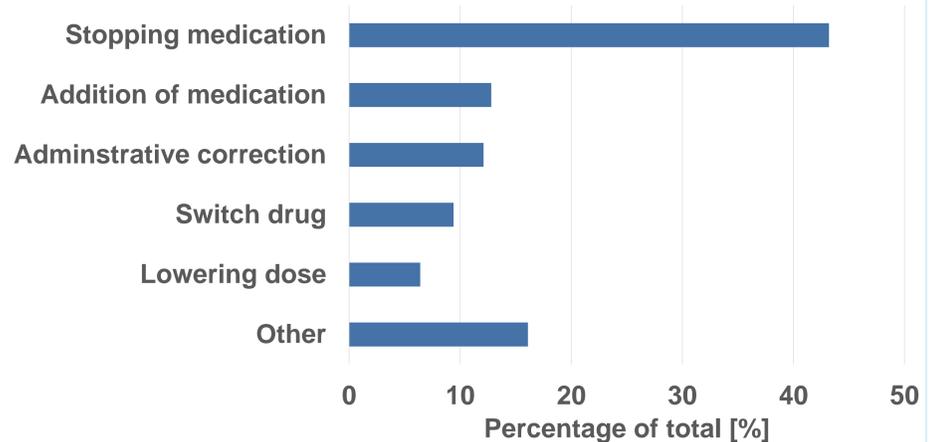


8.6 minutes per review (range 2-30 minutes)

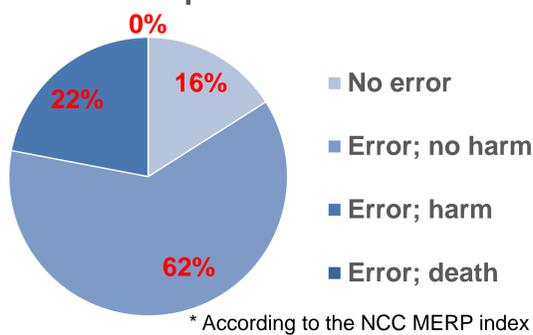
Type of potential drug related problem



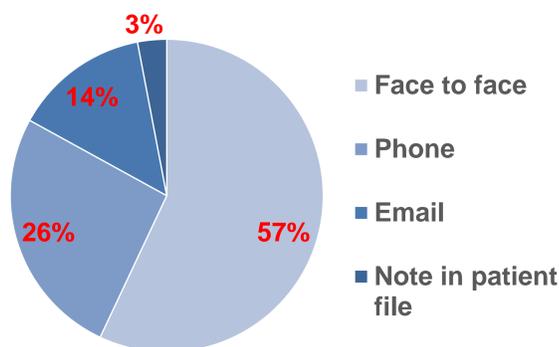
Type of advice



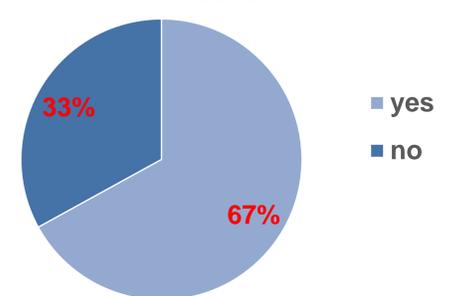
Potential consequences of pDRPs*



Communication of intervention



Intervention with follow up <24 hours



BACKGROUND

- Hospitalised patients are at risk for medications errors.
- Traditionally hospital pharmacists use clinical decision support systems (CDSSs) and clinical rules in order to prevent medication-related problems.



- It has been shown that the involvement of a clinical pharmacist integrated in the medical team on the ward has a beneficial effect on the reduction of drug-related problems. Therefore, there is a shift from the traditional way of practice to a clinical pharmacist on the ward. However, the impact of hospital-wide integration of clinical pharmacists on patient safety is not clear.



MATERIAL AND METHODS

An observational point prevalence study. During 5 consecutive working days pDRPs (on top of the interventions based on clinical rules or CDSSs) were registered.

Setting: clinical pharmacists work on every ward and are performing medication reviews

Inclusion: Patients admitted to the Erasmus University Medical Center for more than 24 hours

Recorded endpoints: type of intervention, reason for intervention, severity of the underlying drug-related problem (using the NCC MERP¹ index scale), proportion of interventions accepted by the physician, communication route and time investment.

REFERENCES

1. Hartwig, S.C., Denger, S.D., & Schneider, P.J. (1991) Severity-indexed, incident report-based medication error-reporting program. Am J Hosp Pharm, 48. 2611-2616



<https://www.erasmusmc.nl/25-4CPS-215>