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The mission of measuring medication omissions: Qualitative insights into the associated challenges

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1. Background

- Medication omission rates range from 1.4% - 20%. [1] Although most lead to little harm, some can cause severe harm. [2]
- To improve omissions, they must be measured. Recently, the Medication Safety Thermometer (MedsST) has been used as an improvement tool by over 100 NHS organisations to collect routine medication safety data, including omissions data (Fig. 1).
- Our earlier analysis highlighted omissions as one of the "biggest challenges" in terms of medication safety improvement.

2. Aim

- The aim of this phase of the study was to explore barriers and facilitators to measuring and improving medication omissions.

Figure 1: Question 1.6 of the MedsST (Omissions)

1.6a Please tick below which medicines the patient has been prescribed. 1.6b If any have been omitted in the last 24 hours please tick all reasons that apply for each ✔		Reasons for Omission								
		Valid Clinical Reason (eg low BP)[1]	Patient Refused	Outstanding Reconciliation	Medicine not available	Route not available	Patient absent at med round	Not Documented	Other	*Excluding food supplements & O2*
	Anticoagulant									
	Opioid									
	Insulin									
	Anti-infectives[2]									
	Any other prescribed medicines									

3. Methods

- 15 semi-structured in-depth interviews were conducted (face-to-face or via telephone) with MedsST leads (staff leading the implementation of the MedsST) and MedsST users (frontline users) from 10 organisations.
- Those recruited included pharmacists, nurses, pharmacy technicians, pre-registration pharmacists and audit clerks.
- Thematic analysis was grounded within the data.

4. Results

- All participants were aware of omission issues within their organisations, yet some were surprised by the high rate of them.
- Collection of omission data allowed identification of problematic areas, such as high rates of patient refusal omissions.
- Mixed views were expressed about patient refusal omissions; some staff felt they could not be improved, and others argued that they could cause serious preventable harm and can be improved.
- MedsST data had also been used to identify and learn from wards that had no omissions and displayed positive practice,
- Staff needed to trust the data in order to use it, and most did. Differences in omissions rates from other audits could lead to distrust of data, however, this was due to definition differences.
- Most participants were not using omissions data for further improvement due to "lack of capacity".
- Where improvement was seen, multi-disciplinary teams were often involved.
- Improvement work had been shared between organisations.

"Omissions were not something I used to think about during my ward round too much." P11 (Pharmacist, MedsST lead)

"We looked at NPSA alerts and MedsST data, to say 'our next project is going to be called 'make it our mission to stop drug omissions'." P6 (Pharmacist, MedsST lead)

"Our biggest issue is 'patient refusal', and then 'not documented' and then 'medicine not available'. It has helped to define what our focus should be". P1 (Pharmacist, MedsST lead)

"We decided to do an omissions awareness week. We had badges made and a 'find the drug' flowchart that was laminated and distributed." P5 (Pharmacy Technician, MedsST user)

"It was a 100% perfect score in the 20 patients we looked at…(and) I was like, 'Woohoo, it's a green'(i.e. no omissions or harms)." P13 (Nurse, MedsST user)

"If patients don't get anticoagulated…they'll get a clot. That's a serious harm. If you're withholding an anticoagulant because the patient is refusing, there's a fundamental issue." P12 (Pharmacist, MedsST lead)

5. Conclusions

- Routine measurement of omissions is possible.
- Data can be used for improvement but this is not happening in many organisations.
- Data can also be used to celebrate positive practice.
- Clearer communication about standardised definitions is required to ensure valid data and consistent interpretation.
- A multi-disciplinary approach may help improve awareness.
- Solutions for improving omissions can be transferable between organisations.

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