

# Patient Safety Tools In Primary Care: What Do We Know?

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## INTRODUCTION

Rates of patient safety incidents in primary care have been reported from as low as 4 per 1,000,000 primary care consultations to as high as 240,000 per 1,000,000 consultations (Makeham et al., 2007).

Patient safety tools, such as processes, checklists, surveys, and other technologies, provide primary care providers and organizations with the opportunity to learn and improve quality and safety.

However, many health service organizations and health care providers face challenges when trying to implement and sustain practices within their local context, and a better understanding of factors and preconditions that mark successful implementation in the primary care setting is needed.



## OBJECTIVE

To describe the range of strategies used to implement patient safety tools in primary care.

## METHODS

A secondary analysis of a narrative review of patient safety tools in primary care (Spencer and Campbell, 2014) was done.

Eligible studies for inclusion were identified through the use of language or instruction for tool implementation. Two independent reviewers screened all studies.

Study data were abstracted using a modified version of the Cochrane Effective Practice and Organisation of Care (EPOC) Review Group Data Collection Checklist, including type of intervention, targeted behaviour, participants, barriers, evidence base, format, source, deliverer, recipient, and use of theory.

### Types of Tools

#### Professional

- Safety culture (2)
- Performance improvement (2)
- Alerts (2)
- Lab result management (2)
- Prescribing Indicators (3)
- Reporting Systems (1)
- Systems engineering (2)
- Medication reconciliation (1)
- Medication monitoring (1)
- Reporting Systems (3)

#### Structural

- Accreditation (1)
- Root cause analysis (1)
- Trigger tools (2)
- e-Prescribing (2)
- Team development (1)
- Referral (2)
- Discharge (1)
- Patient involvement (2)

Box 1. Types of patient safety tools

Table 1. Tool Implementation Characteristics

Intervention Type	Source	Deliverer	Recipient	Barriers to Change	Implementation Strategies
<ul style="list-style-type: none"> <li>• Professional (n=15, 48.4%)</li> <li>• Structural (n=10, 32.3%)</li> <li>• Organizational (n=4, 12.9%)</li> <li>• Patient (n=2, 6.5%)</li> </ul>	<ul style="list-style-type: none"> <li>• Local Clinicians (n=1, 3.2%)</li> <li>• Local Expert Body (n=7, 22.6%)</li> <li>• National Professional Expert Body (n=7, 22.6%)</li> <li>• National Government Expert Body (n=7, 22.6%)</li> <li>• Academia (n=9, 2.90%)</li> </ul>	<ul style="list-style-type: none"> <li>• Pharmacist (n=2, 6.5%)</li> <li>• Local Expert (n=2, 6.5%)</li> <li>• Researcher (n=7, 22.6%)</li> <li>• Computer System (n=7, 22.6%)</li> <li>• Other (n=5, 16.1%)</li> <li>• Not Clear (n=8, 25.8%)</li> </ul>	<ul style="list-style-type: none"> <li>• Individual (n=10, 32.3%)</li> <li>• Group (n=13, 41.9%)</li> <li>• Not Clear (n=8, 25.8%)</li> </ul>	<ul style="list-style-type: none"> <li>• Time (n=6)</li> <li>• Workflow/workload (n=4)</li> <li>• Staff awareness/acceptance (n=4)</li> <li>• Training/usability (n=4)</li> <li>• Staff availability (n=2)</li> <li>• Organizational commitment (n=2)</li> <li>• IT structure/support (n=2)</li> <li>• Patient (n=2)</li> <li>• Behaviour change (n=2)</li> <li>• Financial cost (n=1)</li> </ul>	<ul style="list-style-type: none"> <li>• Teams (n=11)</li> <li>• Training/meetings (n=11)</li> <li>• Workflow/IT integration (n=9)</li> <li>• Flexibility (n=6)</li> <li>• Dedicated time (n=5)</li> <li>• Organizational/leadership buy in (n=5)</li> <li>• Mass marketing/newsletters (n=4)</li> <li>• Support/encouragement (n=3)</li> <li>• Feedback (n=3)</li> <li>• Reminders (n=3)</li> </ul>

## RESULTS

Thirty-one of the 114 studies were included for secondary analysis (Table 1). A number of patient safety tools were represented in the analysis (Box 1).

Implementation strategies for patient safety tools were poorly reported. Tools published on professional websites were more likely to be accompanied by implementation instructions.

Common implementation strategies for each intervention type included:

- **Professional:** training/meetings, teams, mass marketing/newsletters
- **Structural:** teams, training/meetings, workflow/IT integration
- **Organizational:** workflow/IT integration, usability, flexibility
- **Patient:** reminders, mass marketing/newsletter

## CONCLUSIONS

This research presents a new approach to identifying strategies associated with patient safety tool implementation in primary care.

Greater understanding regarding implementation strategies and readiness for change is needed in order to ensure successful translation of findings in different organizations and settings.

### REFERENCES

- Makeham M, Dovey S, Runciman W, et al. Methods and measures used in primary care patient safety research: results of a literature review. Geneva: World Health Organization, 2007.
- Spencer R, Campbell SM. Tools for primary care patient safety: a narrative review. *BMC Family Practice* 2014;15:166.



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