

# Streamlining Pharmacist Intervention Reporting

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## Background

Documentation of pharmacist interventions is well embedded into clinical practice, ensuring improved quality of patient care through communication and feedback to other healthcare professionals.

A challenge exists regarding collection of this information. The ability to efficiently access a large volume of intervention data allows pharmacists to not only demonstrate the quality of clinical services, but also provide large scale targeted feedback.

Within our organisation, pharmacist interventions were captured using the hospital's incident reporting system, however the speed of the system, number of required fields and incident definitions all presented barriers to usability. In addition, the reporting and analysis capabilities of the system were limited, thus restricting the usability of captured data.

## Description

A new reporting tool was required, to allow pharmacists to record intervention data quickly and simply, in a standardised manner.

## Action

In preparation for the introduction of an electronic medical record (EMR) an opportunity arose to review pharmacist intervention categories. Quality pharmacists from each site implementing the shared EMR met to discuss a precinct approach to intervention categories. Existing intervention categories were compared with the Pharmaceutical Society of Australia's 'Standard and guidelines for pharmacists performing clinical interventions'<sup>1</sup>, Society of Hospital Pharmacists of Australia 'Standards of Practice for Clinical Pharmacy Services'<sup>2</sup> and the Victorian Medication Incident Taxonomy<sup>3</sup>. Once intervention categories and subcategories had been agreed on, a tip sheet was developed which contained definitions and examples to assist pharmacists with classifying interventions.

Options for recording intervention data were then evaluated, weighing up reporting options, usability, confidentiality and time required to enter and analyse data.

A decision was made to trial REDCap<sup>®</sup>, a secure web application (on the hospital server) for building and managing surveys and databases. Advantages of using REDCap<sup>®</sup> included security of confidential data, ease of building and maintaining the tool, the ability to enter data quickly in survey mode without a password, compatibility with both desktop and mobile devices and ability to export data to Excel<sup>®</sup> for analysis.

An intervention recording tool was designed (refer to figure 1), with the majority of required information being in the form of pre-set options, minimising the need for free-text. Drop down menus and branching logic were utilised whenever possible to ensure usability on mobile devices.

The tool was piloted by a small number of clinical and operational pharmacists to test usability and identify areas for improvement. Once the tool had been refined, it was utilised to pilot large scale snapshot intervention reporting.

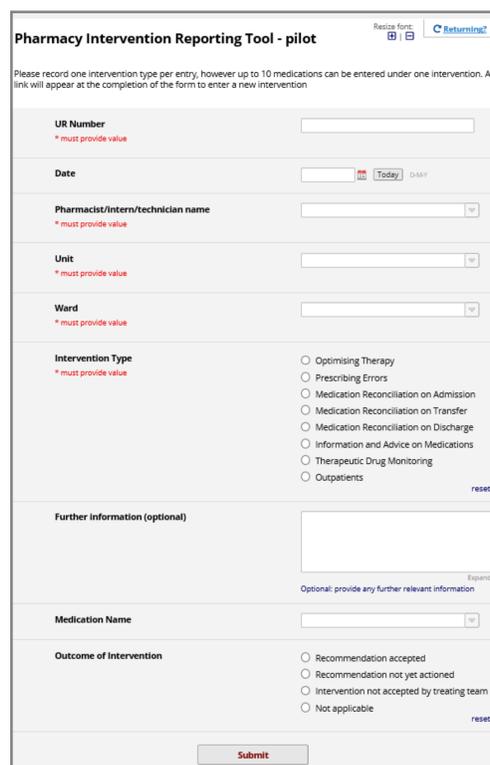


Figure 1. RedCap<sup>®</sup> Intervention Reporting Tool

## Evaluation

The initial snapshot intervention reporting occurred on a single business day, with 301 interventions recorded by 43 pharmacists. The majority of interventions were classified as 'optimising therapy'.

Feedback received from pharmacists indicated that the tool was easy and quick to use and the intervention categories were generally intuitive. Uncategorised interventions were reviewed to assess whether they could have been classified under pre-existing categories. Further education was planned for pharmacists regarding category definitions and examples to reduce the use of 'other' during subsequent intervention reporting.

A dashboard was developed in Excel<sup>®</sup> to allow quick and easy access to usable data by Pharmacy Team Leaders (refer to figure 2 below).

## Implications

The development of a user-friendly intervention reporting tool has allowed the pharmacy department to capture intervention data in a format that can readily be reported.

A standardised report template has been developed to assist Pharmacy Team Leaders with using and disseminating intervention data at relevant forums, such as Divisional interdisciplinary Quality and Improvement meetings. Pharmacy Team Leaders have received coaching from the Quality pharmacists to guide interpretation of data and how to identify local trends.

Data captured by the 'optimising therapy' category provides robust data, demonstrating the value pharmacists add to the team while interventions relating to 'prescribing errors' help identify areas for improvement. This data will guide targeted medical education and feedback.

The EMR will provide us with the ability to streamline our process for intervention reporting and we are exploring how we will optimise this functionality. However, categories will remain the same allowing comparison of data pre and post.

Expansion of intervention reporting to include the technician workforce is planned.

## References

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2. Taylor G et al. Chapter 13. Documenting Clinical Activities: Standards of Practice for Clinical Pharmacy Services. Journal of Pharmacy Practice and Research. 2013;43(2 (suppl):S42-S46
3. Tio J, Young J. Victorian Medication Incident Taxonomy. VICTAG; 2018

## Acknowledgements

Study data were collected and managed using the REDCap electronic data capture tool hosted by the Royal Melbourne Hospital Business Intelligence Unit.

Clinical Pharmacy Services Committee

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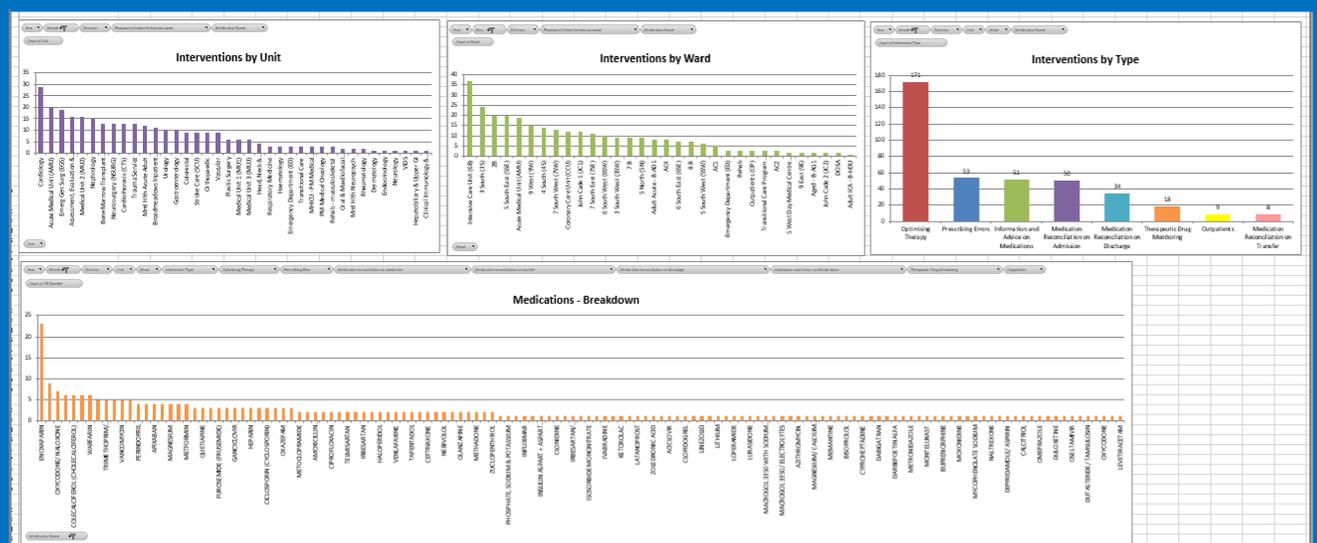


Figure 2. Example of intervention dashboard