

# A qualitative investigation of workflows in the processing and communication of pathology laboratory results.



Thomas J<sup>1</sup>, Dahm MR<sup>1</sup>, Li J<sup>1</sup>, Westbrook JI<sup>1</sup>, Georgiou A<sup>1</sup>

<sup>1</sup> Centre for Health Systems and Safety Research, Australian Institute of Health Innovation, Macquarie University, Sydney, Australia.

## **BACKGROUND**

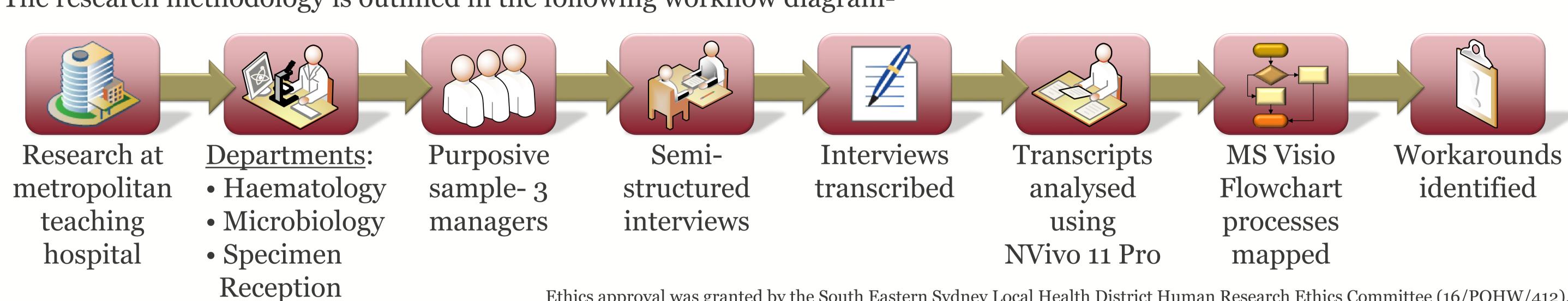
The accurate communication of test results is imperative for clinicians to make informed and accurate diagnoses and treatment decisions for their patients. "Test Result Reporting and Follow-up" has been identified by the ECRI institute on their list of the Top 10 Patient Safety Concerns for 2017.

### **AIM**

To develop process maps of the workflows involved in the processing and communication of normal and critical pathology laboratory test results to better understand the complex relationships in the results reporting and communication process.

#### **METHODS**

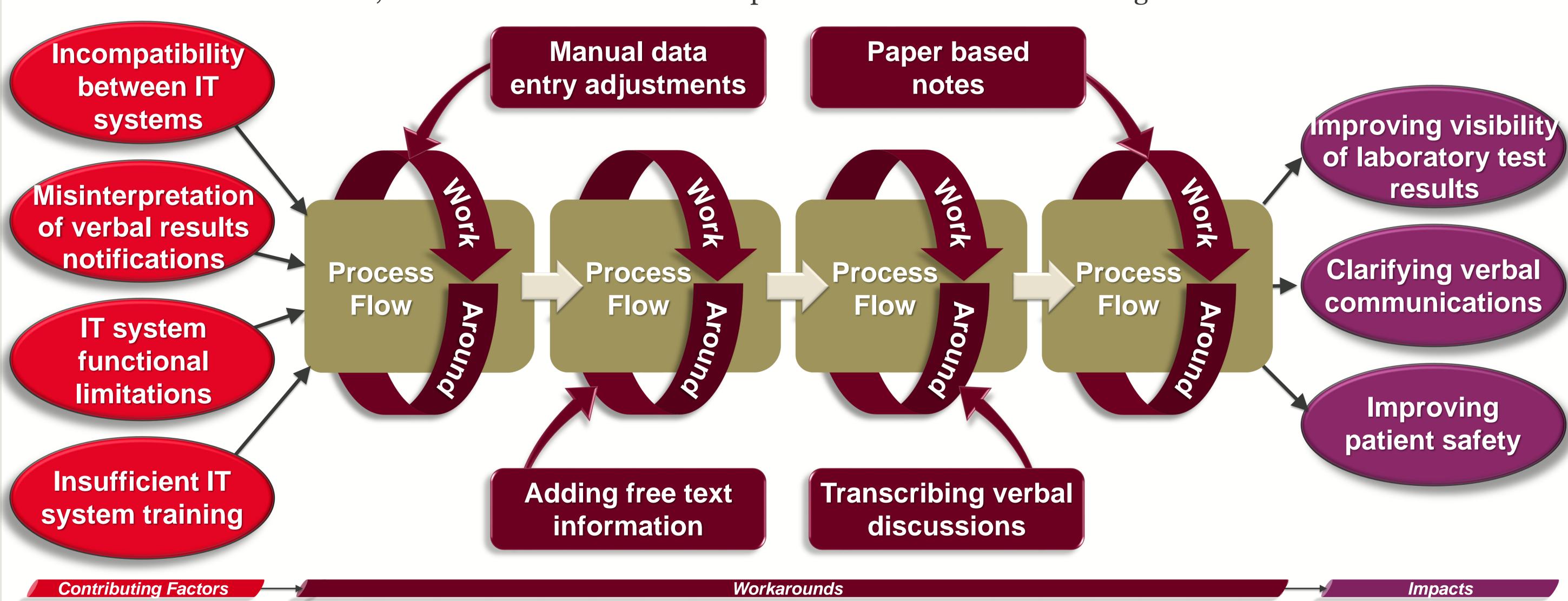
The research methodology is outlined in the following workflow diagram-



Ethics approval was granted by the South Eastern Sydney Local Health District Human Research Ethics Committee (16/POHW/412).

## **RESULTS**

Workflow analysis of the laboratory test result and reporting process identified a number of factors resulting in the development of workarounds. These factors, the workarounds and their impacts are summarised in the diagram to follow-



## CONCLUSIONS

The processing and communication of pathology laboratory test results is a complex process. Despite the availability and use of health information technology, manual processes still exist and workarounds are often employed as an attempt to safeguard against diagnostic error. Workflow charts are a valuable means of identifying and explicating issues and potential problems in the test result communication process.

The authors declare no conflict of interest. Correspondence to: judith.thomas@mq.edu.au