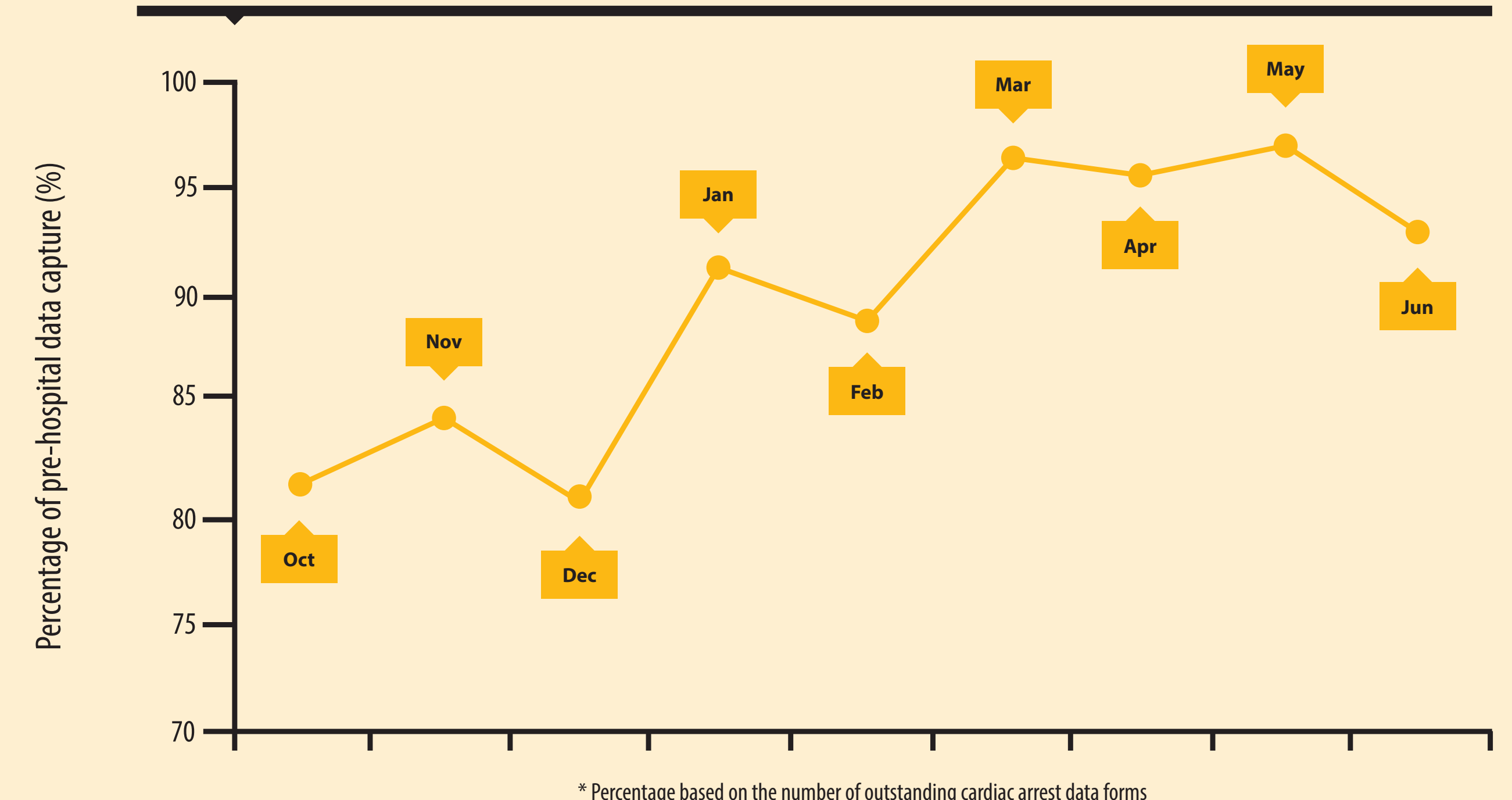


Development of the St John New Zealand Out-of-Hospital Cardiac Arrest Registry (April 2013 - June 2014)

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IMPROVEMENTS IN PRE-HOSPITAL DATA CAPTURE OVER TIME



Review

In April 2013 St John reviewed its Out-of-Hospital Cardiac Arrest (OHCA) data collection and reporting. The review identified several areas where processes could be improved:

- ▶ Data collection needed to be aligned to international standards
- ▶ A national policy and process for data collection was required
- ▶ Collaboration with District Health Boards (DHBs) was required for collection of in-hospital patient outcome data

Implement changes

A steering committee was appointed to implement changes in OHCA reporting. The steering committee put into effect the following changes:

- ▶ A new paper cardiac arrest data form was generated based on the Utstein definitions, that aligned collection variables with those in international OHCA registries and the Aus-ROC registry
- ▶ A national policy was implemented that:
 - Mandated all frontline staff were required to complete a cardiac arrest data form for every OHCA attended
 - Mandated a process for collection of OHCA data forms at a national level, via scan and email to a designated email address
 - Mandated that the data be collected in a national registry overseen by research staff, formalised as the St John OHCA Registry in September 2013

Resource

Implementation of the registry utilised the following resources:

- ▶ A secure database with an application interface that mirrored the paper cardiac arrest data form for ease of data entry
- ▶ Computer aided dispatch (CAD) data, The use of CAD data enabled reconciliation of the receipt of a data form with the cardiac arrests attended
- ▶ A clinical data clerk for data entry and follow-up with managers and district health boards
- ▶ A researcher for ethics approvals and research over-site
- ▶ An analyst for the generation of reports

Monitor and report

Monitoring of the registry is on-going and consists of the following:

- ▶ Weekly reconciliation of receipt of data forms with CAD data
- ▶ Weekly phone and email follow-up by the clinical data clerk with frontline managers to ensure completion and return of forms
- ▶ Monthly follow-up with District Health Boards
- ▶ During transcription from the paper data form into the registry, automated validation rules and error messages limit errors.
- ▶ A quality control audit of a random sample of 10% of cases is undertaken every three months to validate the accuracy of data entry within the registry.
- ▶ Registry reports are generated on a monthly and quarterly basis and these are analysed for variances in the numbers of cases and patient outcomes.
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