Background
The Sunshine Coast Hospital and Health Service (SCHHS) is the major provider of public health services, health education and research in the Sunshine Coast, Gympie and Noosa local government areas of Queensland. It provides services through the Sunshine Coast University Hospital, Nambour General Hospital, Caloundra Health Service, Gympie Hospital and Maleny Soldiers Memorial Hospital with a clinical workforce of approximately 7000 staff.

Riskman is the system used to report medication clinical incidents across the health service. historically, analysis of minimal harm/no harm clinical incident data generated by this system was not performed due to lack of accessibility and time required. Analysis of ‘near-miss’ data is important as it provides a wealth of information to help identify system issues which may eventually contribute to actual harm if not identified and addressed. The inability of SCHHS clinical staff to easily access this data hindered their ability to identify themes and trends in medication risk, communicate awareness to other staff and drive quality improvement initiatives.

Aim
To increase awareness of our clinical workforce to medication safety risks and trends and engage multidisciplinary quality improvement to maximise patient safety.

Method
A medication safety dashboard was designed and implemented using Riskman clinical incident data and the Qlikview platform in collaboration with a data analyst in our Patient Safety and Quality unit. Medication, as specified in six months of previous medication related clinical incident data, was classified into drug classes and high risk/non-high risk categories based on the health service definition of high risk medications. Riskman data is manually uploaded each day to the Qlikview dashboard by data analysts within the Safety, Quality and Innovation team.

Results
The Qlikview medication safety dashboard was implemented across the health service in 2018 providing clinical staff with quantitative and qualitative analysed medication related clinical incidents at a glance, with slicing functionality to instantly narrow data down to a specific hospital, service group, clinical area, risk group, drug category, process or issue (Figure 1). Clicking on the ‘Detail’ tab populates a list of the actual clinical incidents with details as reported in Riskman. This list is exportable to an Excel document which can be saved and further filtered.

Discussion
Implementation of the Qlikview medication safety dashboard has increased medication risk awareness across the health service due to its user friendly functionality and availability of data to all clinical staff. Medication related clinical incidents are easily reviewed and categorised into themes and trends for discussion and quality improvement designed around reducing preventable patient harm at local medication safety working groups, morbidity and mortality meetings and ward meetings.

The medication safety team utilise the dashboard to analyse health service wide data for reporting changes in themes and trends to the Medication Safety Committee and Patient Safety and Quality Committees. The dashboard is also used live during meetings to demonstrate medication near miss themes and trends. medication safety nursing portfolio holders are now able to easily access data enabling communication of local and health service wide medication risks to their clinical unit staff. Data is analysed and documented monthly via the Qlikview reporting and action plan tabs located on the home page which link to reporting templates.

More detailed clinical incident information from Riskman can be accessed instantly by clicking on the ‘details’ tab in the top right corner of each screen. This enables the viewer to see specific details about each medication clinical incident to direct targeted quality improvement initiatives.

Availability of data on the dashboard relating to week, weekday and nursing shift mostly reflects quantitative reporting culture trends, however significant changes in this data may indicate an emerging issue.

Information about accessing the Qlikview medication safety dashboard was provided to clinical staff via fact sheets during the roll out period. Access to the dashboard at present requires individual use by each member of clinical staff and the Qlikview program installed on designated devices by the information technology team. Future plans include having Qlikview available on the Qld Health server to make initial access to the dashboard easier.

Conclusion
The Qlikview Medication Safety Dashboard allows the SCHHS clinical workforce access to a user friendly, searchable, visual platform where data relating to local and HHS wide medication clinical incidents can be easily analysed into themes and trends to target quality improvement. The success of the medication safety dashboard model has driven the development of similar dashboards for other categories of Riskman clinical incident data in our health service.

References:
3. Wu AW (editor). The Value of Close Calls in Improving Patient Safety: Learning how to avoid and mitigate patient harm. Oak Brook, IL: Joint Com