

The Power of Innovation

A health care system to meet our needs
NSW Health
 Symposium Oct 2012

Medication incident reduction at Illawarra Cancer Care Centre, Cancer Services Award for Excellence in the Provision of Cancer Services

Introduction

Following an adverse medication incident relating to chemotherapy administration, the Illawarra Cancer Care Centre (ICCC) reviewed its systems for prescription and administration of chemotherapy.

The review targeted improved patient safety in the prescription and administration of chemotherapy.

Improved patient safety was to be achieved through the introduction of an Oncology Information System (OIS) and an organisation wide agreement to use the Cancer Institute NSW's eviQ standardised chemotherapy protocols.

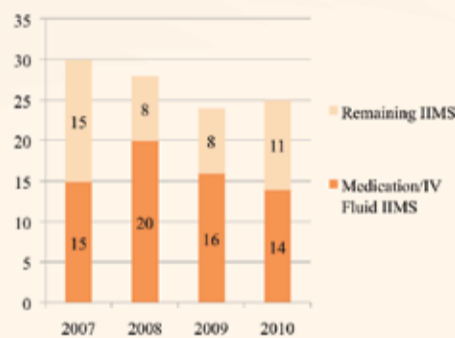
Aim

To reduce the number of medication incidents at Wollongong Oncology Day Care by 50% within 12 months.

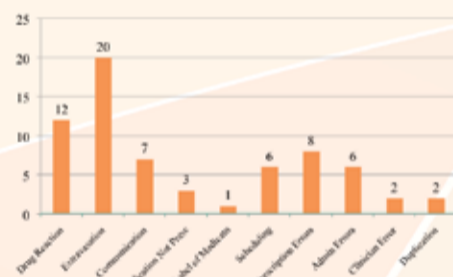
Method

An investigation into the previous 4 years medication IIMS was followed by a process-mapping critique of the chemotherapy prescription and administration process.

On examination of these IIMS, clinicians concluded that as many as 50% of the errors could have been prevented if an electronic system were in use.



Medication/IV IIMS make up on average over 60% of all IIMS incidents at the ICCC ODC.



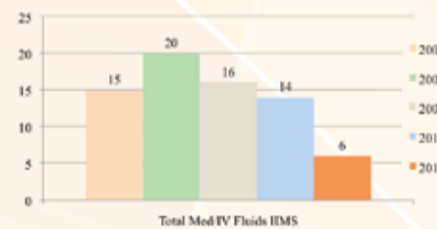
Medication/IV fluid IIMS Type over the past 5 years.

A review of the literature demonstrated that an OIS with comprehensive clinical decision support could assist in the reduction of medication errors within the service. To further improve medication safety, literature supported the use of standardised, evidenced based, best practice cancer treatment protocols.

In January 2011, an OIS with eviQ standardised chemotherapy protocols was launched

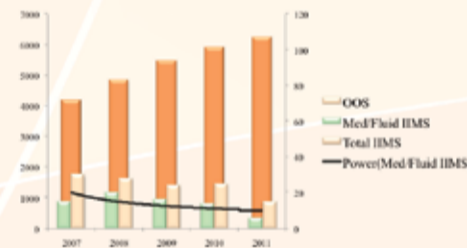
Results

Since the introduction of the OIS combined with protocol standardisation, **medication incidents have reduced by 63 %** (P=0.0068 – significant).



Medication / IV Fluid Related Errors per Year 2007-2011.

The significance of the result was further underlined by the fact that the Oncology Day Care unit's individual occasions of service increased by over 8%.



IIMS Reduction as a Function of Occasions of Services to

In addition to improved patient safety, the introduction of standardised chemotherapy protocols led to a reduction in the amount of IV and oral ondansetron prescribed, resulting in a direct cost saving to the service of approximately \$6000 a year.



Reduction in IV Ondansetron 2011-12



Reduction in Oral Ondansetron 2010-11

Conclusion

The introduction of an Oncology Information System, combined with the use of standardised chemotherapy protocols has resulted in a dramatic drop in the number of medication/ intravenous fluids incidents.

These gains in patient safety would not have been achieved without proper systems design, implementation and maintenance.

Additionally, the standardisation of anti-emetics within the chemotherapy protocols has resulted in drug cost savings for the service.

Acknowledgements

ISLHD MOSAIQ working group