

A health care system to meet our needs

The Power of Innovation

Medication Incident
Reduction at Illawarra
Cancer Care Centre

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Health

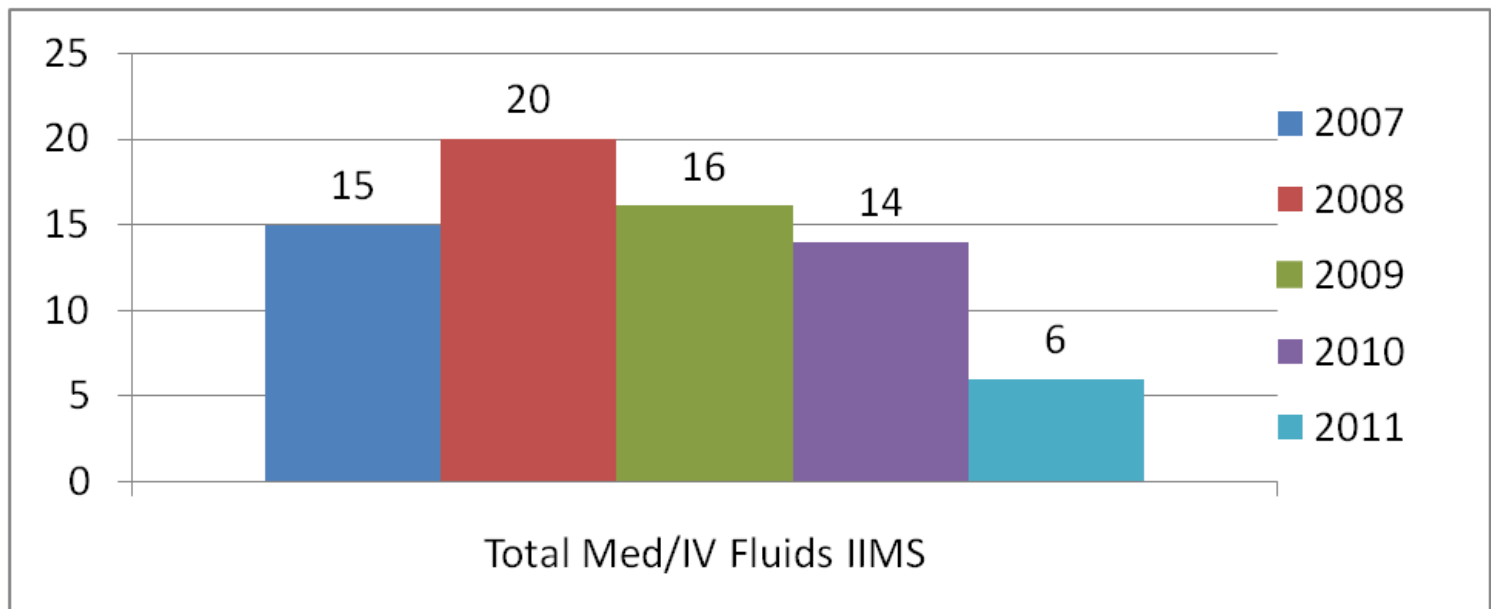
Our Innovation: How We Improved Care/Services

The Illawarra Cancer Care Centre (ICCC) have improved the safety and efficiency of cancer service delivery to patients through:

- the use of standardised current evidence based, best practice peer maintained cancer treatment protocols
- the use of information technology initiatives including electronic prescribing, administration, scheduling and clinical decision support

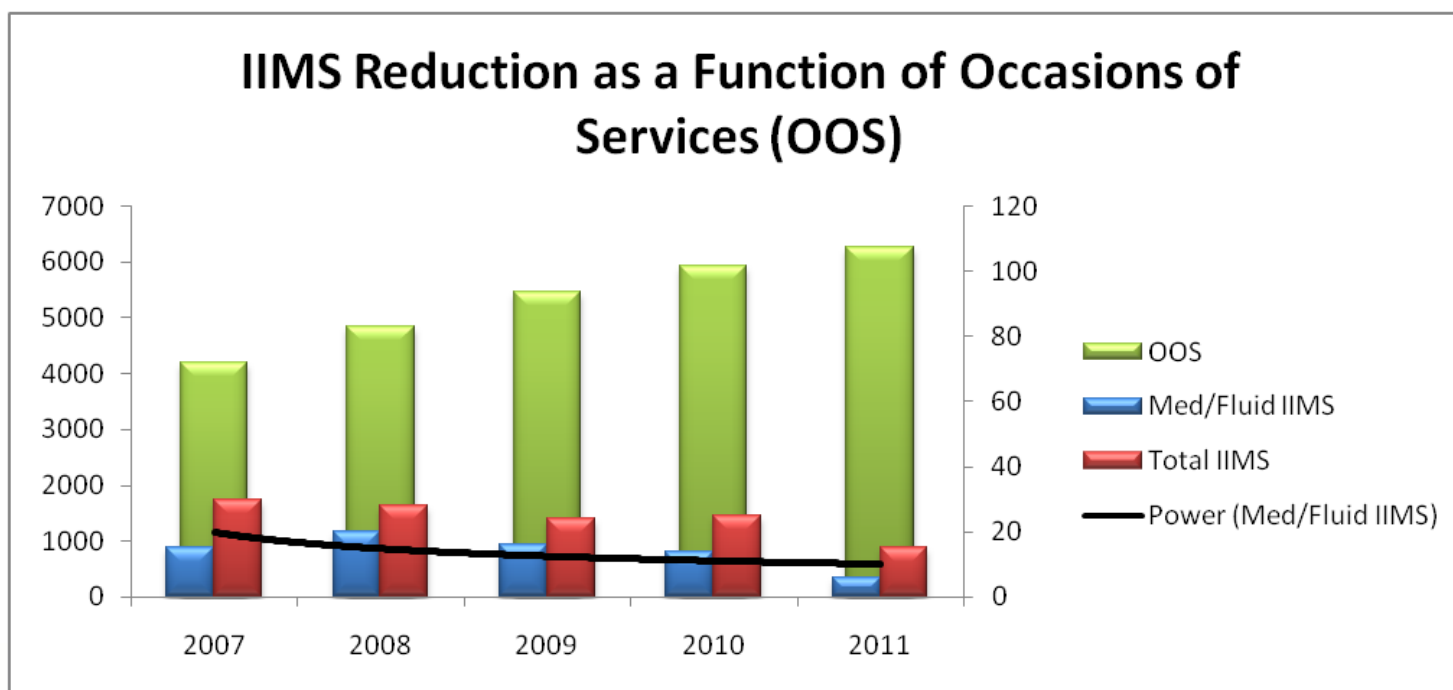
Our Innovation: How We Improved Care/Services

Since the introduction of the oncology information system, medication incidents have reduced by 63 % (P=0.0068 – significant), which exceeded our overall aim for the project



Our Innovation: How We Improved Care/Services

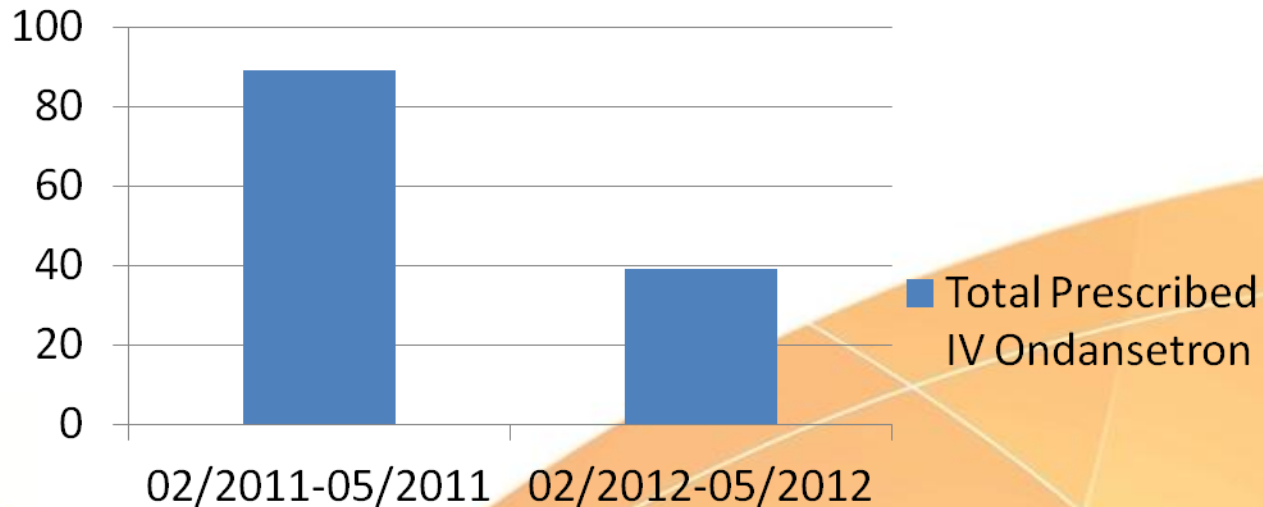
Total IIMS were reduced by 50%, whilst patient Occasions of Service increased



Our Innovation: How We Improved Care/Services

Additionally, the introduction of standardised chemotherapy protocols led to a reduction in the amount of IV and oral ondansetron prescribed.

This resulted in a direct cost saving to the service of approximately \$6000 a year.



Our Innovation: How We Improved Care/Services

Now have complete electronic record for:

- Chemotherapy prescription
- Chemotherapy administration
- Scheduling
- Patient Assessment
- Pharmacy Ordering
- Clinical Documentation (toxicities/lab values)

Our Innovation: How We Improved Care/Services

Successfully completed a project assessing feasibility of automated data extraction to a central location (NSW Clinical Cancer Registry). In the future, this will allow for:

- bench marking with other districts
- collation of baseline data for comparison with new treatment protocols

Our Inspiration: The Start of the Journey

“Every error is potentially tragic and costly, not only for the patient but for the healthcare professionals involved. This is particularly true, of course, when the error could have been prevented.” IOM (2006)



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Our Inspiration: The Start of the Journey

- A chemotherapy medication incident has the potential to cause significant mortality or morbidity
- Chemotherapy medications possess a narrow therapeutic window and are associated with potentially high incidences of toxicities, even at therapeutic dosages. (Jaehde 2008)
- Chemotherapy protocols can be complex, and the same drug can have variable doses dependent upon the protocol and patient diagnosis

Our Inspiration: The Start of the Journey

Medication charts:

- Were hand written and at times illegible
- Had incomplete vital information (ht + wt, blood results)
- Had differing dosing practices and regimens stemming from no agreed standard practice by Oncologists on chemotherapy protocols, or supportive medication therapy (e.g. anti-emetics)
- Required error prone transcription of protocol each time it was prescribed on to a new medication chart

Our Inspiration: The Start of the Journey

- 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.
- Literature also supported the use of standardised, evidenced based, best practice cancer treatment protocols

Our Inspiration: The Start of the Journey

- ISLHD Oncology Information System working group formed
- Various systems assessed and a vendor chosen
- Clinical Lead and Project Manager dedicated “fulltime” to project – a pre requisite for any implementation

Our Idea Comes to Life

Challenges/Road Bumps:

- Need for Medical Drivers
- Team dedicated to The Project
- Consult/involve clinicians throughout
- Analyse/Assess current work practice
- Learn from Others



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Our Idea Comes to Life

Implementation

- Use implementation as a catalyst for change
- Avoid assumption that the current workflow is ideal
- Assess and map current work processes
- Make required improvements
- Reflect improved workflow in the construction of the OIS



Our Idea Comes to Life

Learn From Others

- Site visits and communication with recognised reference sites
- Attend OIS User Group Meetings
- Assistance from vendor project team
- Use available resources (Vendor Help Desk/Internet Support)



Our Insights: What We Have Learned

- Consult and listen to the people whose work your changes are going to affect
- Have a thick skin – be prepared to listen to criticism, there is always something to be learnt
- Discuss ideas with colleagues and peers
- Challenge your own thoughts – can your idea be improved upon?

References

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