Implementation of a Clinical Information System encompassing Electronic Medications Management

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HIC 2013: Adelaide
Peninsula Health

- The major health care provider serving the metropolitan and rural areas on Victoria’s Mornington Peninsula.
- Approximately 80,000* ED presentations per year
- 931 beds*
- Provide a wide range of services including
  - Obstetrics (approx. 2,500 babies per year)
  - Aged care
  - Rehabilitation
  - Emergency and Intensive Care
  - Oncology
  - Psychiatric services
  - Hospital in the Home (HITH)

*2011 – 2012 year stats
Golf Links Rd

Mornington

Rosebud
Clinical Systems

• Based at Frankston Hospital
• Mixture of Clinical and technical backgrounds
  • Nursing
  • Pharmacy
  • Health Information
  • Pathology
  • Information Technology
  • Project Management
• Provide functional/technical training and support
  • 7 days/week, 365 days/year
Peninsula’s *eHealth* Journey...

- Proud reputation of embracing eHealth initiatives
  - ORION HEALTH CIS 2002
    - Results viewing, allergy/alert documentation
    - eDischarge Summaries
    - eDischarge Prescriptions
  - VPH Award 2005 *and* Don Walker Award 2007
- One of the four lead agencies selected for the HealthSmart (HSS) Clinicals rollout *“Victoria’s whole of health ICT strategy”*
  - Main application: Powerchart (CERNER)
  - Centrally hosted, shared domain
  - Deployed locally using CITRIX
  - Integrated with critical applications
    - PAS (ADT)
    - LIS (pathology)
    - RIS (radiology)
    - PACS (imaging)
    - PHARMACY
    - DMR (scanned MR)
Implementation approach

• In June 2011, Peninsula Health began the transition from the use of Orion Health CIS with a two-phased, staged rollout of the new HealthSmart clinicals

• Phase one was rolled out to all sites, which included:
  • Results viewing
  • Documented allergies, alerts, medical history
  • Electronic discharge summaries
  • Electronic discharge prescribing
  • **Electronic orders for pathology and radiology (new)**

• **Phase two began in June 2012**
  • *Inpatient ePrescribing (new)*
Infrastructure

- Mixture of clinical and desktop devices
  - Tablets PC’s
  - WOW’s (Workstations On Wheels)
  - Wall/Device Mounted
  - iPad’s
  - BYOD
- Complete wireless upgrade
- Remote monitoring
- Down Time Viewers

*(real-time backup system)*
Training Approach

• A mixture of delivery methods:
  • Classroom based sessions
  • One-on-one tuition
  • Online training in partnership with Edmore™
  • In-services/information sessions
  • Electronic and Printed reference guides

• Investing in local SUPERUSERS
  • Up-skilling of local clinical staff (Train the trainer)
  • Local Support and Training
  • Clinical Portfolio with regular meetings
Inpatient ePrescribing

“e-PS prevented many more prescribing errors than they created…..providing some confidence of the overall benefit of e-PS for patient safety”

Inpatient ePrescribing

- First sites went live in June 2012:
  - Rehabilitation Units x 2
  - Geriatric Evaluation and Management Units x 2
  - Inpatient Acute Mental Health Units x 2
  - Frankston Hospital acute inpatient units
    - Including Intensive Care Units
  - Rollout of also saw the introduction of electronic medication reconciliation
  - Peninsula Health's major Emergency Department at Frankston Hospital live in February 2013
  - Frankston Surgical Services and Theatre complex live in
  - Full rollout of e-PS is due for completion mid-August 2013
Implementation reflections

• Benefits of a state-based/centralised architecture
  • Standardised
  • Evidence Based
  • Best practice
  • Leverage off existing resources

• Limitations
  • Flexibility to health service workflows
  • Customise to clinician requirements
  • Timely implementation of changes/updates
  • Increases potential points of system failure
Training Reflections

• Classroom training is:
  • Time and resource intensive
  • Dependant on clinical leadership and executive support
  • Often seen as an interruption to “real work”

• Online training is:
  • Initially resource intensive, but with ROI over time
  • Reliant on self-motivation and self-initiation
  • Inflexible
  • Requires updating
Training Reflections

• Some training considerations for future rollouts:
  • Establishing training as a mandatory employment prerequisite for all new clinical staff
  • Formalise competency requirement for annual training
  • Credentialing: continual professional development (CPD) hours with the relevant registration boards (e.g. AHPRA)
  • Conducting more training sessions out of hours to accommodate shift workers
  • More intense promotion of the online training modules, and related reference guide material
In summary

• The new CIS has been implemented successfully to date
• A staged rollout allowed for appropriate analysis, planning, training and support to be delivered
• BIG-BANG approach across the organisation was deemed unsupportable, due to the substantial EFT requirements for support and training
• Clinical champions and Executive management support were key factors in the success
• The whole of the health service is scheduled to be live with electronic inpatient prescribing as of August 2013
• We are relatively early in our journey, and there is more system functionality and benefits yet to come...
In summary

- We are still in the adoption phase of our journey.
- Continued success is dependant on continued investment by Peninsula Health.
- We are working hard to provide meaningful, effective and timely training and support to our clinicians.
- We continuously engage with clinicians to make local customisations in line with their requirements (e.g. order sets).
- Local recognition of our efforts and progress to date.
  - PH Chairperson’s Awards x2
Reference

Questions?

THANK YOU!

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