HSE National Endoscopy and RIMD Endoscope Systems Implementations

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Summary

• Provide a brief overview of 3 national HSE ICT Projects underway at present
  – National Endoscopy Reporting Systems Rollout (21 Hospitals) Phase 1 Complete + Phase 2 50% complete
  – National RIMD (Reusable Invasive Medical Devices) Track & Trace Systems Rollout (18 Hospitals) Phase 1 Complete & Phase 2 (10 Hospitals) commencing
  – National Endoscope Track and Trace Rollout (27 Hospitals) Phase 1 Commencing

• Describe the projects Core Business and ICT objectives
• Highlight some Project Successes, Benefits, Challenges and Future plans
National Endoscopy ICT Systems
Project Background

- 36 Public Hospitals provide endoscopy services nationally.
- Only 6 Hospitals with Endoscopy IT or Reporting systems in place prior to start of project. 30 without any I.T. System, relying on manual records
- National Colorectal screening Programme and designation of 15 screening locations and requirement to have an Endoscopy I.T. system in place
- National QA Programme in Endoscopy
- Support HSE Quality and Patient Safety Directorate in Improvement Programme for Decontamination Services and emphasis on Endoscope Track and Trace
National Endoscopy ICT Systems

Core Business Objectives

• Provide a comprehensive Patient Electronic record including
  – Patient Management for both screening and non screening referred patients
  – Procedure Ordering
  – Procedure results including image capture
  – Diagnosis follow up and reporting Support scheduling and reporting

• Support the National Colorectal Screening programme
• Support the National Endoscopy QA Programme
• Support the National Endoscope Track and Trace Project
• Generate activity reports and management Information
National Endoscopy ICT Systems
Project Status

• System has now been implemented on a phased basis in 15 of the 30 locations without an ERS
• Further 6 bringing total to 21 Scheduled to be completed by end 2013
• Phase 1 Deployment of Unisoft System in 9 Locations Complete
• Phase 2 deployment of Manitex system in 12 locations 50% Complete Completion by year end 2013
• Funding will be sought For Phase 3 to rollout to remaining 9 Hospitals without an ERS in 2014
National Endoscopy ICT Systems
Core Business Objectives

• Interface appropriately with other systems such as
  – National and local PAS Systems
  – National Cancer Screening Service
  – National Endoscopy QA System
  – National Endoscope Track and Trace Systems

• Provide accurate, structured coded data, and
• Ensure that users work to common standards and definitions.
National Endoscopy ICT Systems
Core ICT Objectives

- Deployment in HSE national Data Centre on central virtualised server architecture
- Connectivity to Hospitals via National Health Network
- Access to local users using light clients either web browser of thin client technology
- Use national standards such as HL7 for interfacing of information between systems PAS and Endoscopy ERS systems
- Tiered architecture using robust and scalable database systems including efficient image transfer and storage
# National Endoscopy ICT System Rollout Status

<table>
<thead>
<tr>
<th>Existing ERS (7 Hospitals)</th>
<th>Phase 1 Completed (9 Hospitals)</th>
<th>Phase 2 50% Complete (12 Hospitals)</th>
<th>Phase 3 (8 Hospitals Funding Approval required)</th>
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<tbody>
<tr>
<td>1. St James Hospital <em>C</em></td>
<td>1. Cork University</td>
<td>1. Connolly Hospital <em>C</em></td>
<td>1. Portiuncla Hospital</td>
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<td>7. Ennis <em>C</em></td>
<td>7. Louth County <em>C</em></td>
<td>7. South Infirmary Cork</td>
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*C* Denotes national Colorectal Screening Hospital (15 Hospitals Nationally)
Project Successes

• Strong Governance structures in place and good communication between various stakeholders NCSS, National QA Programme, Decontamination Services, HSE Integrated Services, Regional Directors of Operation, ICT and DOHC
  • Ensured Business objectives were met and issues addressed quickly
  • Ensured changes in project objectives and site prioritisation could be identified and addressed quickly

• Deployment in line with tight schedules to meet National Colorectal screening timelines

• Flexible of Project Team to meet changing objectives during project implementation notably site prioritisation
Project Benefits

- Addresses previous Significant ICT Deficit in Endoscopy Services
- Manual data capture in 30 out of 36 units will be replaced with Endoscopy Electronic Record facilitating improved patient care
- Facilitates improved efficiencies and standardisation in Referral Management, Patient procedure and diagnosis reporting.
- Enables improved patient care through rollout of National Colorectal Screening Programme in 15 Designated locations
- Facilitates improved patient care and service delivery standards through provision of data to Endoscopy QA Programme from ERS systems
- Facilitates improved patient care through tracking and tracing of Endoscope through patient journey
Challenges

• Overhead in terms of ensuring good Communication through three Governance Structures and a National Co-ordinating group
• Change Management aspects of Project and establishment of appropriate structures to ensure benefit of system is realised and core business objectives realised
• Ensure integration is leveraged fully with other programmes to realise fully benefits of IT deployment and deliver improved efficiencies in service delivery and Patient Care, National Endoscopy QA programme, National Colorectal screening programme and National Endoscope Tracing Programme
• Tight timelines and Management\Co-ordination of finite re-sources both vendor and HSE across different projects National ERS, Endoscopy QA and Endoscope Track and Trace
Future Plans

- Secure Funding and Complete Rollout of ERS for Phase 3 rollout to 9 remaining Endoscopy locations

- Rollout of Endoscope Track and Trace in 27 Endoscopy locations

- Change Management aspects of Project and establishment of appropriate structures to ensure benefit of system is realised and core business objectives realised
National RIMD and Endoscope Track & Trace Systems  Project Background

• What are RIMD’s (Reusable Invasive Medical Devices)?
• Sterile Supply Units in 47 Hospitals and 36 Endoscopy Units Nationally
• Majority of units prior to start of project had manual or semi-manual systems in place for tracking RIMD’s and Endoscopes
• Manual and semi-manual systems have proven to be prone to user and machine error including missing information e.g. Previously up to 5,000 pieces of information were transcribed each day in the larger sterile services units.
• Existing paper based systems do not facilitate easy and timely identification of usage of instruments by patient if they need to be withdrawn from use if found contaminated or faulty
• Support HSE Quality and Patient Safety Directorate in Improvement Programme for Decontamination Services and emphasis on RIMD’s Endoscope Track and Trace
National RIMD and Endoscope Tracing

Core Business Objectives

- Ensures compliance with national and European standards
- Reduces significantly contamination risk for patient within hospitals due to machine failure or user error
- Faster and more efficient access to Sterile Instrument and decontamination record in event of call-back or withdrawal of faulty or contaminated instruments
- More complete history of sterilisation for all instruments within the hospital as well as between hospitals in respect of “loaned sets”
- Removes the dependence on paper records as the primary source of information
- Support efficient management of resources in terms of service delivery due to less manual processes
National RIMD and Endoscope Track and Trace systems Project Status

- Phase 1 of project has been completed which has implemented an RIMD Track & Trace system in 8 locations nationally using single national integrated system.
- Phase 2 is commencing which will deploy same RIMD system in a further 10 locations nationally.
- Phase 1 of an Endoscope Track & Trace system is commencing which will deploy a system in 27 locations nationally.
- Endoscope Track and Trace system will be integrated with ERS system in those 27 locations.
Project Benefits

- Meets National and European best practice

- Automatic Tracking of instrument set through de-contamination process and linking of set to patient
  - Minimises contamination risk for patient within hospitals due to machine or user error

- All records stored digitally
  - Can be referenced quickly post-event due to recall or withdrawal of faulty or contaminated instruments
Project Benefits

• Link between tracking system and theatre
  – Important for Full Traceability - patient, provider and the loan set are scanned

• Much easier to share Loan sets
  – Interoperability between hospitals
  – Lists more accurate and legible

• Improved Workflow
  – Scanning of instrument trays means team has to communicate and be more organised

• Reporting
  – More reports, Enables asset management
Future Plans

• Rollout to 10 Phase 2 RIMD locations

• Rollout to 27 Phase 1 Endoscope Track & Trace locations and integrate with ERS systems in those locations

• Secure Funding and Complete Rollout to all remaining Sterile Services departments and Endoscopy locations

• Change Management aspects of Project and establishment of appropriate structures to ensure benefit of system is realised and core business objectives realised
Questions ?