

Developing a quality management information system (QMIS) in an acute Irish hospital setting

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Objective:

To develop, and evaluate, a Quality Management Information System to co-ordinate quality and patient safety activities in an acute care setting.

Methods:

The requirements of good governance are based on the need for appropriate controls assurance, co-ordination and communication in all clinical, non-clinical and corporate areas. (Mc Sherry & Haddock 1999) Appropriately developed, this allows an organisation to demonstrate that its systems and processes for assuring healthcare governance are both efficient and effective.

In 2007 Sligo General Hospital undertook the development of a QMIS, utilising Q-Pulse Quality Management System software, to assist with the control, co-ordination and communication of numerous quality and safety activities across the organisation. The QMIS went live in January 2008 and was accessible to all staff on any internal computer. A Project Team was established to oversee the project which was co-facilitated by Health Care Informed. The QMIS development process was undertaken during a six month period and included:

- Process Mapping, with Senior Management, of communication and control systems
- Proposal of control and communication systems for all documented processes
- Development of Q-Pulse software to support agreed proposals
- Set-up and upload of all documented processes required to be controlled
- Development of hospital specific supporting documents and procedures
- Training of staff, hospital wide, in new processes and QMIS utilisation.

The QMIS development resulted in the co-ordination of documented process controls, incident reporting, clinical and non-clinical audit, as well as maintenance requests. To facilitate the continuous improvement of the QMIS questionnaires were circulated to all system users. Data collection took place during September - October 2008. A total of 90 questionnaires were returned within the allocated timeframe. Data analysis was undertaken by the Accreditation/Quality Department using SPSS (Statistical Packages for Social Sciences).

Results:

- Overall 72% of respondents rated the new Quality Management Information System as excellent or very good.
- 82% rated the new documents system as either excellent or very good.
- 75.5% rated the point of occurrence incident reporting as either excellent or very good and 73% rated the maintenance wizard as either excellent or very good.
- 21% of respondents use QMIS on a daily basis, 28% on a weekly basis and 40% as required.

Conclusions:

The Quality Management Information System (QMIS) development project at Sligo General Hospital has achieved the implementation of:

- A pan hospital framework for defining, developing, and maintaining best practice policies, procedures, protocols and guidelines which ensures corporate and local ownership.
- A structure to support the co-ordination and communication of quality improvement initiatives.
- A system for the instigation and implementation of all internal and external quality and safety audits including, Clinical Audit, Health and Safety, Hygiene Audits and Infection Control Audits.

Local challenges included the difficulty with the release of staff to attend regular training due to limited cover at ward level. To address this, a series of Computer Based Training Movies were designed and are now accessible to all staff via local intranet. Overall the development of a QMIS, utilising Q-Pulse, software has provided a centralised system which supports the overall governance of Sligo General Hospital, both corporate and clinical, through the provision of a communication hub.