

Referral information Management System (RiMS) Electronic Outpatient Waiting-list Management

Wendy Pudney, Linda Leary, Kasey Evans, Jamie Ostrowski - Ambulatory Care Centre
Janet Burns, Phillip Collard, Meredith Jones - Applications Development

Overview

RiMS brings information management reform to tertiary outpatient centres where patient care is delayed because of systemic error in manual processing and the tracking of paper referrals to specialist services. Before RiMS, hundreds of patient referrals per week were received by fax or mail. The printed sheets were collated, copied and sent to multiple locations across the John Hunter campus for processing.

The aim of RiMS is to improve efficiency and equity of access for patients referred to scarce Specialist services as measured by 30% reduction in triage, waiting time and queue lengths.

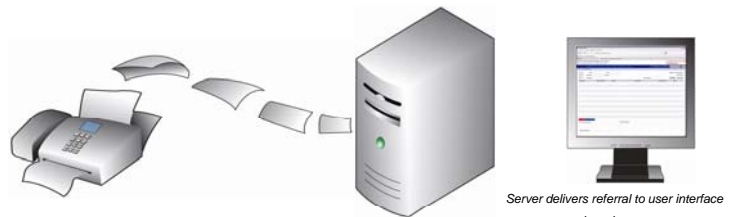
The previous manual system caused dissatisfaction for clinicians, administrators and patients. The increasing numbers of referrals to specialist services demanded a radical redesign of work processes.



Manual processing of paper referrals resulted in **lost documents, delays** in triaging, **clinician and patient frustration** and the **risk** of patients receiving inappropriate care. The capacity of the staff to manage the workload was exhausted.

Tracking of referrals was impossible, **security** could not be guaranteed and eight hours per day was **wasted** searching for and physically re-directing paper files. The high volume of telephone calls to the Referral Centre resulted in **long queues, long waiting time and caller frustration**.

Complaints from GPs and patients about poor communication and preventable delays in patient treatment demanded a solution to the unreliable and paper intensive process of referral management.



Fax server saves referral directly to file system

Server delivers referral to user interface via web page.

The new RiMS software has eliminated problems associated with a manual system and resulted in superior information management as demonstrated by significant improvements in all the key measurable indicators. This fully electronic, secure workflow system has engaged clinicians and improved the patient journey.

The RiMS Team comprising Ambulatory Care, Clinical and Application Development personnel analysed existing work processes, appointment data, telephone statistics, triage practices and complaint information from GPs, patients and specialists.

The workflow arising from a prototype of the new system was trialled over several cycles until all parties were satisfied.

Health Support Services staff were involved in the reconfiguration of the fax Server to output referrals directly to the file system instead of via email.

Key Performance Indicators for RiMS were established:

- ✓ Security of incoming and outgoing referral information.
- ✓ Creation of an auditable waiting list
- ✓ Availability of referral documents anywhere
- ✓ Improved response to clinician and patient enquiries.
- ✓ No loss of any patient's referral
- ✓ Most referrals processed within 5 working days

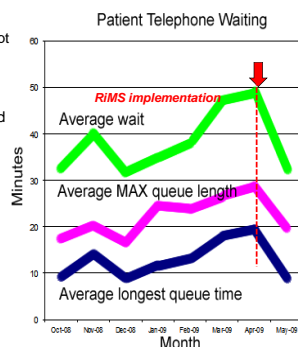
Six weeks after RiMS was implemented, a review of all the key indicators demonstrated that the new system had resulted in vastly improved referral management.

For patients:

The average time from referral receipt to triage has been reduced by 50%.

More than 75% of patient referrals are triaged and the outcome reported back to the clinician and patient **within 5 working days**.

The average time a patient waits in the **telephone queue** to make an inquiry has **dropped from 20 minutes to 9 minutes** while the number of calls to the service has remained constant at over 300 per day.



For GPs:

Delays in triaging can be monitored and managed to ensure urgent patients do not experience unreasonable delays.

For Staff:

Ambulatory Care staff & clinicians have a range of **search options to respond to referrer and patient enquiries**.

Paper handling has been completely eliminated.

Any **referral can be retrieved** on any computer on the HNEAHS network via the Intranet.

Your referral was received yesterday and was reviewed this morning by the registrar.



16 weeks after implementation, some departments have exceeded 80% of patients processed within 4 working days.

RiMS has replaced the manual process for handling outpatient referrals

The capacity to expand the outpatient referral service and respond to patients and clinicians has been increased without an increase in resources.

RiMS can be integrated into any outpatient service across the HNEAHS. State-wide and nationally, implementation could be achieved with any compatible software that is capable of creating an electronic file from a fax.

RiMS foreshadows the introduction of an electronic medical record and supports change management for stakeholders in other departments frustrated by complex paper-based processes.

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