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A Successful StrategyAddressing Wait Time and Matching Patient's to their Records

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Abstract

Matching patients and healthcare providers has new importance as nations embrace electronic health records (EHRs) and define strategies for enhancing healthcare delivery. Silos of data are broken down in the new electronic world, striving for increased patient safety, better customer service, and more cost-effective healthcare.

Long wait lists prove the bane of customer satisfaction, government policy, and effective use of resources. Matching patients to their records across the data silos is fundamental, while maintaining the integrity, confidentiality, and security of information.

The Province of Ontario developed a strategy to reduce wait times for select procedures, addressing a chronic problem of long waits for diagnostic or surgery modalities. Ontario developed a provincial Wait Times Information System (WTIS), capturing data critical to monitoring and determining best use of resources. Now used by 1700 hundred physicians at over 60 sites, WTIS has contributed to significantly reduce wait times for cancer surgery, sight restoration, hip and knee replacement, cardiac surgery and MRI/CT – which is all now publicly reported on a regular basis.

Keywords:

EMPI – Enterprise Master Person Index,
EHR – Electronic Health Record, Canada Health Infoway,
probabilistic algorithms, wait list(s),
Cancer Care Ontario, patient matching

Introduction

Canada is blazing a trail in establishing EHRs based upon blueprints developed by Canada Health Infoway, a government funded agency that oversees and disseminates healthcare funds, and addressing the customer satisfaction issue of wait lists. The Province of Ontario is breaking additional new ground through addressing wait lists for specific treatment modalities by using an electronic master person index (EMPI) as a primary tool to create the client registries necessary for EHRs and manage a complete view of patient care.

In order to ease and validate patient data entry, ensure appropriate matching of patient information across care sites; and to track when patients are on more than one list, Ontario concurrently implemented a provincial client registry. It was also understood that implementing this core piece of infostructure at the same time as a business focused consuming system was put in place would enhance adoption and prove utility of the service in its first implementation. Neither privacy nor security of personal health information is compromised in this strategy. In fact, rigorous attention at all levels of policy development and strategy deployment has been paid to this key public issue.

Learn how the strategy was created and implemented and could be applied to numerous problems that plague the healthcare delivery system, irrespective of the country or continent.

Methods

In case study format, the presenters will explore the wait list problem, the solution set defined to address the problem, and the implementation that enabled the Province of Ontario to execute a Wait List strategy and the provincial Client Registry. Additionally, the presenters will address the Infoway blueprint for client registry and how this as served as a model for interoperability and effective use of healthcare resources.

The Province, through its Client Registry deployment, is currently managing 45M records across 100 disparate source systems and has integrated the enterprise master person index (EMPI) with the Wait Time Information System (WTIS). At full deployment, anticipated for June 2007, the WTIS will serve all of Ontario and encompass approximately 50M records and 130 source systems.[1]

Noteworthy throughout strategy development and execution is the emphasis on privacy and security of personal health information, as the WTIS developed and Implemented a Privacy Policy[2] structured around the ten fair information practice principles of the Canadian Standard

1 Ontario Cancer News. WTIS/EMPI -- Making better access to care possible. 2006; 4(5).

Association's Model Code for protection of Personal Information.[3] This emphasis was defined during planning and followed in design and implementation.

Results

From the time of contract signing for the client registry software, the implementation took nine months to fully implement the provincial EMPI, and to achieve 90 percent capture with the provincial WTIS. Multiple vendors and provincial staff worked in cohesive teams to address the core objectives and document results. Results achieved to date show a reduction of 27 percent for cataract surgery, 20 percent for knee replacement, 39 percent for angiography, and 18 percent for angioplasty. The final 10 percent for WTIS will be captured by the end of June 2007.[4]

All hospital and procedure specific data is regularly reported on the Government's website (ontariowait-times.com) – where the 1.8M hits indicate public and media interest in results. Data generated served as a rationale and impetus for the Government to invest an additional amount of greater than $100M (Canadian Dollars) to bring problem procedures in line with wait time targets established by clinical experts

This phase will include active integration to the source systems through recognized standards consistent with the Canada Health Infoway blueprints.

Discussion

Attendees of this session will be able to:

- Gain an understanding of Canadian client registries and the registry's role in achieving an EHR
- Learn how a complex project plan with multiple vendors (under separate contract) and distinct objectives can be managed.
- Describe the necessary infrastructure for a successful wait list solution
- Recognize the process of how patient data can be successfully stored, retrieved, secured, and linked with an EMPI
- Develop strategies that address breaking down silos of data in order to enhance patient safety, customer satisfaction, and more cost effective healthcare
- Discuss the correlation between Canada's healthcare system, including Client Registry and Wait List, and those in Australia and other countries

Conclusion

Increased customer satisfaction and enhanced patient care are immediate benefits of Ontario's Wait Time Information Strategy (WTIS). Key to achieving these results in a very short timeline were a clinical business focus, strong project management, meticulous planning, service level agreements with the vendors, strong stakeholder relations, and a clear focus on defining and achieving success. Achieving this has allowed Ontario to make prudent additional investments for specific procedures since success metrics have been defined, and return on investment has already been met for the initial phases of the WTIS.

Attendees will have the opportunity to learn from the advanced efforts of a government-funded system and learn success strategies that can be applied to the global wait time problem. Timelines, key elements, success strategies and pitfalls to avoid will be discussed.

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