Transitioning Initial Success into Sustainable Results: The Future of the WTIS

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Introduction

Getting a new concept or project up and running is never an insignificant undertaking. In many cases, however, the successful completion of a project signals the start of the "real work" in which the greater challenge is in turning that initial success and investment into results that can be sustained over the long-term. This was the challenge facing Cancer Care Ontario (CCO) once they developed and deployed the Wait Time Information System (WTIS) on behalf of the Ontario Ministry of Health and Long-Term Care (MOHLTC).

With the launch of the WTIS, the government, Local Health Integration Networks (LHINs), hospitals and patients had for the first time - standardized, near real-time data to make more informed healthcare decisions and better manage access to critical health services. But much more work was ahead. The next step was to begin leveraging the technology and the wealth of data it provided to help drive significant performance improvements within the overall health system. The time had come to shift gears from an IT deployment project to a sustainable operations and information management program that could continue to provide value for the province.

This article looks at the future of the WTIS and describes the journey CCO has taken to establish a permanent Wait Time Information Program. These concepts will be of interest to leaders of or participants in information management/information technology (IM/IT) projects looking for ideas on how to smoothly transition a successful project into a sustainable operational program.

Leveraging the WTIS to Meet More Needs

When the MOHLTC launched the Wait Time Strategy in 2004, the aim was to improve access to healthcare by reducing the time patients had to wait for procedures and treatments. To reduce wait times, the province first needed to solve an information problem. For the longest time, there had been no way of knowing how many individuals across Ontario were waiting for a specific procedure or how urgent their need was. Where information did exist, it was measured and gathered in different ways and available only retrospectively.

Based on its experience working with complex information systems for cancer services, CCO was asked by the MOHLTC to develop what would become the first electronic solution to collect and report wait time information from hospitals and clinician offices across the province – the Wait Time Information System (WTIS).

The initial focus was on reducing the time between when the decision to treat is made and when the treatment or procedure is actually completed (referred to as "Wait 2" in the strategy) for five priority areas identified by the government: cancer surgery, cardiac procedures, cataract surgery, hip and knee replacements and CT and MRI scans.

Under the direction of CCO's Chief Information Officer, the WTIS progressed from concept to a Beta test to a fully implemented application in 81 hospitals across Ontario in less than two years. By June 2007, some 1,700 clinicians were using the system to capture wait times for an estimated 1.2 million procedures in the five initial service areas. Close on the heels of this

province-wide deployment, and responding to requests from clinicians and other stakeholders, the WTIS went through two major expansions to cover wait time reporting for all surgical areas. As of March 2009, the WTIS user base and number of procedures doubled in volume to approximately 3,300 clinicians and more than 2.2 million cases. In the meantime, wait times for the initial five areas started to show significant signs of improvement – down as much as 62% in the case of cataract surgeries.

Recognizing the value of the WTIS as a catalyst in reducing wait times for surgical and diagnostic imaging procedures, the government was now ready to take the application beyond the hospital walls to measure performance in other points of access to healthcare. The functionality has already been expanded to capture "Wait 1" - the length of time it takes to see a specialist upon referral from a physician - with a Pilot conducted in one LHIN. Now, work is under way to develop the system to support the collection of data for "Wait 3" - the time it takes for a patient to be discharged from an acute care setting or transferred to an alternate level of care (ALC).

With the ability to capture wait time data in near real-time, the flexibility to be configured to meet more data requirements and the capacity to integrate with existing hospital and provincial information systems, the WTIS holds great promise to be leveraged for the broader access to care agenda. Consolidating data to get a comprehensive view of trends across all access points would allow the government, LHINs and healthcare providers to make broad-based decisions on where and how best to target resources and bring about transformational changes across the entire health system.

With real plans and significant potential, it was clear that the demands on the WTIS - technically and operationally - would rise and evolve dramatically. With proven experience in operating and managing the WTIS, the MOHLTC asked CCO to continue hosting the program on behalf of the province and to determine the most appropriate model for long-term sustainability.

Understanding the Challenges in Moving from Project to Program

After successful completion of a project it is logical and natural to institutionalize the program in order to maintain continuity and grow the operations. The one-time and finite characteristic of a project (i.e., to achieve a set deliverable within a defined start and end date), however, stands in contrast to a permanent program in which operational work and functions will need to continually evolve over time in line with changing business dynamics and stakeholder needs. The transition, therefore, can often be complex and impact the organization and its stakeholders in a number of ways that require careful consideration and management:

• Impact on support. Sponsorship, and often funding, is more readily available when starting up a new project. Once

- project deliverables are met, focus and support tend to shift to other priority initiatives, making it difficult to maintain engagement and resources required to sustain a long-term program.
- Impact on functions. The operating model used by projects to achieve their defined deliverable cannot always be moved into an organization wholesale. A successful transition often requires the organization to first re-assess its core functions, processes, roles and competencies in order to ensure the capacity is there to absorb the work and support growth
- **Impact on resources.** The organization needs to ensure it can cost-effectively accommodate the pace and demands of an evolving and growing program.
- Impact on service. Primarily the result of funding, projects can usually provide a certain level of focused support and expertise to system users and other stakeholders. For a program structure, an organization will need to determine how best to provide an appropriate level of support, often with limited resources, without compromising service.
- Impact on stakeholders (primarily hospitals and clinicians). As the system expands and evolves, the organization will need to consider the impact of these changes on hospital resources, workflow and systems, and how to support the hospitals in managing through the evolution.

With all of these variables in play, the move from a project state to an operational state is not one that can be made overnight. Planning needs to begin well in advance and must often be done in parallel with the work underway to meet short-term deliverables and day-to-day requirements. Despite the time and effort required to prepare for a transition of this nature, there are important benefits to investing in early planning.

Working with an Eye to the End State

Creating the foundation for an eventual transition to a sustainable program for the WTIS was always an end goal for CCO. Working with this end state in mind, and recognizing that hospitals would require extensive upfront support, CCO took proactive steps to establish from the outset an in-house operations function known as the Wait Time Information Office (WTIO). The WTIO initiated a number of practices that were gradually refined throughout the course of the project, based on user feedback. These forward-thinking practices turned out to be critical success factors for the WTIS and would lay the groundwork for what would become the support model used by CCO for the Wait Time Information Program.

The WTIO worked closely with the WTIS project team to ensure that, when the time came, the transition from project to program could be as seamless as possible for both CCO and hospitals. This collaboration included the following activities:

Initial operations support provided by CCO's Wait Time Information Office (WTIO)

- Stabilizing hospitals and end users on the application as it was implemented, which included the intricacies of managing user registration and system access rights
- Managing data collection (first through an interim manual process and then through the automated WTIS application) and compliance with wait time reporting requirements set out by the MOHLTC in Hospital Accountability Agreements
- Supporting hospitals' ability to use wait time information to manage wait lists, improve access to services and continually improve the quality of data
- Operating a help desk to provide hospitals with dedicated technical and business-related support. The help desk model was refined through the course of the project to respond in a timelier manner, including expanding hours of operation and applying a tiered system for general inquiries (Tier 1) and businesslevel support (Tier 2)
- Establishing and managing an operational privacy program in an environment where confidential personal health information was involved
- Managing the process for quarterly system releases to support operational enhancements to the application
- Gathering user feedback to apply toward system, reporting and operational process improvements
- Joint planning. Members of the WTIO were critical participants in project meetings to ensure operational requirements were factored into all WTIS project planning and decisions. Through this joint effort, the impact of project activities on operations functions and end users was kept top of mind.
- Early knowledge transfer. Including operations team members in meetings and decision-making also facilitated the early and gradual transfer of key learnings, materials and processes from project team members to operations team members.
- Bridging the gap. To maintain the integrity and momentum of the project, it was critical to ensure that upon "go-live," the transition of activities and support from the project team to the operations team was transparent to users. To ensure that the hand-off went smoothly, a sufficient transition period was built into the project plan, during which project and operations support and resources could overlap. During this period, project team members exchanged information with operations team members on hospital relationship styles, issues and concerns experienced during the deployment phase. This insight was critical in being able to bridge

- the gap and maintain the appropriate level of support for the hospital, going forward.
- Lessons learned/continuity in best practices. Over the course of a large-scale initiative, a project team learns a lot about its stakeholders and the success of its activities. These learnings and practices, including what did or did not work well, were clearly documented and shared.
- Setting expectations. It was important for the project team to establish upfront with hospitals that the WTIS would not be a static application. It would evolve as the Wait Time Strategy matured and as operational requirements changed accordingly. Open channels of communication with hospitals and ongoing active solicitation of feedback from users ensured their concerns would be heard.

Making the Transition

Building on the project learnings and initial operations experience, CCO began the complex process of establishing the permanent Wait Time Information Program (WTIP). While it was a natural evolution for the WTIS, CCO knew that, as the hosting organization, it would not be business as usual. The size and scope of the WTIS meant that the organization now needed to accommodate not only the cancer system, but also a larger-scale provincial program that touched a much broader stakeholder base.

CCO understood that, while the structure and operating model used for the project worked well, it could not just be brought into the organization "as is." The move to support the WTIP would involve a fundamental shift in cultural thinking within CCO, a thorough reassessment of the functions of the CIO portfolio, and proactive change management to support internal and external stakeholders through the transition.

In creating a new operating model for the WTIP, CCO needed to be able to meet the tactical needs for sustainable operational support for a growing user base and still allow the program to maintain its momentum and continue to deliver on its commitments to stakeholders. This meant that the WTIP would need to balance the support it provided to hospitals for ongoing timely data collection and the growing need to support hospitals in better utilizing wait time data for performance management. In addition, building on the relationships and goodwill created with hospitals, the WTIP would need to maintain a service-oriented approach to ensure physicians continued to be actively engaged in the effective use of the WTIS and wait time reports.

At the same time, the model needed to accommodate the more ambitious strategic goals for the WTIS, including prospects of future integration with other provincial and e-Health initiatives. This required that the model be scalable, in line with new and emerging opportunities.

Designing the optimal model would require an extensive look at a number of factors:

- How to migrate the functions that operated independently in the project and effectively integrate them into the existing CCO structure without duplicating effort?
- How to take an initiative supported by a large team of experts and build up internal capacity and expertise without losing the pace of a time-driven project or compromising service?
- How to ensure the organization could effectively manage costs and risks as demands and pressures grew?
- How the current requirements differed from the future requirements of the WTIP and would there be any gaps or areas that would face capacity and expertise constraints?
- Which project processes and tools worked well and could be re-used or improved upon?

To absorb the existing work of the WTIS, create increased capacity for service and prepare to support new opportunities in the area of healthcare transformation, CCO recognized that it would first need to make some fundamental changes to strengthen the overall organization. A strengthened organization would come from having well-integrated functions that would enable CCO to provide a coordinated and cohesive approach to common services and pivotal business planning areas, such as operational service delivery and customer relations management, strategic technology planning using a common information architecture and procurement and resource management. In addition, the organization would need to build up its business intelligence capability to support the increasing focus on performance management, as well as create stronger partnerships and alliances in the area of e-Health and explore strategic business development opportunities.

With the organizational functions identified, CCO set out to determine how the WTIP team should be structured. Over a six-month period, CCO conducted an in-depth review of the requirements for a program team. The review identified several roles and processes that were previously partially fulfilled through the overall project management function, and that would now require discrete focus, more rigour and greater accountability within a mature program. The WTIP structure emerged with four key areas working in alignment and collaboration under the leadership of an experienced program director:

- A Product Management stream to oversee the multi-year WTIS product roadmap and all application development to meet both operational and strategic changes. Managing the application scope and releases in a coordinated way ensures that the degree of change for the field can be contained.
- A Deployment stream to support hospitals through future large deployment initiatives as the WTIS expands into new areas.
- An Operations and Support stream to manage the day-today business operations for the WTIS, including business

- processes, end user support and data quality and compliance. This team would include new "Clinical Liaison" and "Customer Service Management" roles to formalize the service orientation of the program.
- A Program Support stream, including a function to manage all WTIP controls and processes (such as change requests, and issue, risk and decision logs) as well as to coordinate overall program planning and requirements (such as contracts, procurement, budgets), and a communications team to ensure all stakeholders remain fully engaged in WTIP activities and informed about the program's progress.

The final step in making the transition was for CCO to identify the leadership and staff and recruit where gaps existed. To support long-term sustainability, the focus was on recruiting permanent resources, as opposed to contract staff, to build inhouse capacity, ensure knowledge retention and support talent management over the long-term. A solid transition period and opportunities for job shadowing and job-sharing enabled a smooth transfer of skills and knowledge between outgoing project members and incoming staff.

Continuing the Evolution

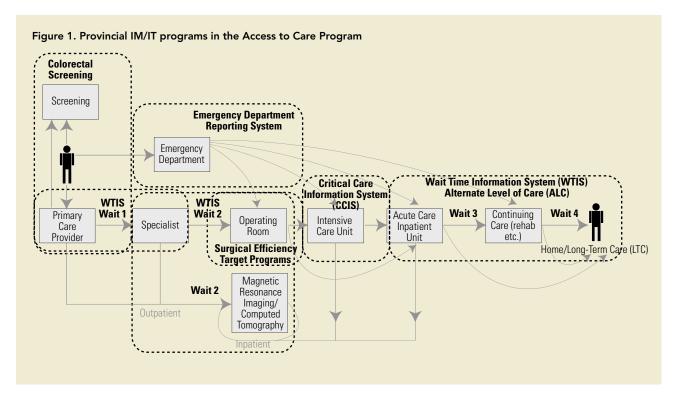
Understanding and anticipating the challenges in moving from a project to a program and proactive early planning were integral success factors in preparing CCO to build an in-house team and an application that could be sustained.

With the base structure, expertise and capacity in place, the WTIP will be able to optimize the foundation of the WTIS to continue to support the government's Wait Time Strategy.

The team is currently working on building the system functionality to support the reporting requirements for the MOHLTC's new ER/ALC Information Strategy. Reducing waiting periods for alternate levels of care (ALC) will address a systemic problem that contributes to bottlenecks in emergency rooms (ERs) due to a lack of available patient beds in hospitals. The hope is to be able to move patients out of hospitals faster into alternate care facilities and in turn, ease the pressure currently facing ERs in Ontario. The WTIP's aim is to begin reporting this "Wait 3" data from Beta sites by mid-2010, with full province-wide reporting by spring 2011.

In line with the focus on managing performance, the WTIP is placing greater emphasis on supporting hospitals in better utilizing data at the grassroots level. The WTIP considers this an area where it can offer greater support through the sharing and implementation of best practices. Recognizing that this can be accomplished only through joint ownership with clinicians and hospitals, the WTIP will seek to strengthen these cooperative relationships.

Moving forward, the priorities and pressures for the WTIS will continue to be directed by input from the field. Feedback



from clinicians and other end users on what data are important to them will help inform the way the data is reported and how the system and operations program will evolve.

On a broader scale, CCO's efforts to strengthen the organization in order to support the WTIP have also provided the platform for the organization to support other access to care programs and e-Health initiatives, such as the ER/ALC. As of January 2009, at the request of the MOHLTC and e-Health Ontario, CCO assumed executive sponsorship of the Critical Care Information System, Emergency Department Reporting System and Surgical Efficiency Targets Program. Similar to the WTIP, these programs are currently being transitioned and will be absorbed into the organization's CIO portfolio.

The ability to consolidate operations and reporting for multiple provincial programs under one umbrella provides a valuable opportunity to gain a more fulsome view of improvement opportunities across the continuum of care. CCO will continue to explore opportunities to partner on IM/IT initiatives to increase integration between the WTIS and other information systems, with the objective of improving access to care and further supporting the province's e-Health agenda (Figure 1). As the healthcare system and user demands continue to evolve and as new business opportunities continue to come into play, CCO is well positioned to respond.

About the Authors

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