Introduction
Healthcare organizations and systems around the world lag far behind banking, manufacturing, travel and other industries in their use of information management/information technology (IM/IT) to deliver high-quality products and services. Across Canada, healthcare organizations, as well as governments, understand that information and information technology are needed to deliver quality care and to sustain our publicly funded health system. However, insufficient funding, few experienced resources, lack of strong leadership and absence of clear business/clinical rationale have restricted innovation and advancement in the use of IM/IT to improve healthcare delivery and patient outcomes.

Ontario’s Wait Time Information Strategy
Ontario, in particular, has struggled in its attempts to implement IM/IT strategies on a wide scale. Its large size (12.5 million people), diverse geography and complex health system (155 independently operated hospitals, 20,000 physicians and 14 Local Health Integration Networks [LHINs] overseeing, but not managing, the delivery of care) create an especially challenging environment in which to execute province-wide IM/IT strategies effectively. The Wait Time Information Strategy, developed between January and March of 2005 to support the Ontario government’s commitment to reduce wait times for selected healthcare procedures, is an example of a province-wide IM/IT strategy that has dramatically improved health outcomes.

Success Factors
A number of key factors led to the success of Ontario’s Wait Time Information Strategy, and can be effectively applied toward the development of other multi-stakeholder IM/IT initiatives in healthcare. These success factors include:

- Political focus and commitment
- A clear business/clinical imperative driving the investment in IM/IT
- Strong leadership and a single point of accountability for swift decision-making
- Input from the best and brightest
- Grassroots clinical involvement
- Clear articulation and management of scope
- Riding the wave of investment

Each factor is described in the following sections.
Political Focus and Commitment
In November 2004, Ontario Premier Dalton McGuinty made a commitment to the public to reduce wait times in five key services areas by December 2006. This political commitment to address a significant problem for Ontarians – long waiting lists for surgery and diagnostic imaging – coupled with a hard deadline, drove the importance, urgency and timelines for developing and implementing an IM/IT strategy. In addition, politicians fully understood the necessity of having reliable information and information technology to achieve the desired results. The former Minister of Health, George Smitherman, articulated this when he said, “Prior to our wait times initiative we had no information to track how many procedures were being performed in Ontario’s hospitals, and no way of knowing how long people were waiting.”

The importance of the Wait Time Information Strategy was clearly recognized and reinforced by political, bureaucratic and project leaders throughout its development and execution. This was demonstrated in quarterly meetings the Premier and Minister of Health and Long-Term Care allocated to receive progress updates on the strategy. The near real-time data collected, even in the early days, enabled the government to make more informed decisions to further improve access to care, thereby fulfilling their commitment to the citizens of Ontario.

A Clear Business/Clinical Imperative Driving the Investment in IM/IT
IM/IT investments can only be successful if they address clearly identified business problems. The underlying business imperative for any healthcare IM/IT strategy must relate directly to improvements in care and outcomes for patients. It takes significant upfront effort to pinpoint the core problem, recognize the roadblocks standing in the way of making change, and clearly articulate the desired results. Ensuring these are well understood is fundamental to the development of an effective IM/IT strategy.

The business imperative driving the Wait Time Information Strategy was the excessively long wait times for services in the province, which were preventing Ontarians from getting the timely and quality care they needed. This issue was widely recognized and a growing concern across the healthcare system and for the citizens of Ontario. The mandate for the IM/IT strategy, therefore, was to determine how technology and information could support the reduction of wait times and contribute to better management of patient wait lists, the monitoring of wait times and the identification of improvement areas. Some of the roadblocks that were causing long waits included a lack of transparency in clinicians’ wait lists, not knowing who held the information or what it would take to share data. More specifically, the Wait Time Information Strategy needed to help fulfill the following critical components of the government’s overall Wait Time Strategy.

- a “pay for performance” model linking funding for participating hospitals to the number of procedures performed and thereby increasing system capacity;
- building on the accountability of hospital boards and management for managing access to care;
- the development of consistent standards (access targets and priority assessments) for care, regardless of patient geography;
- putting wait time information in the hands of patients and empowering them to manage their own care; and
- demonstrating accountability to the public and providers through regular and open reporting of results.

Each of these goals were ultimately achieved through the implementation of the Wait Time Information Strategy and collection of reliable and standardized wait time information.

Strong Leadership and a Single Point of Accountability for Swift Decision-Making
Any massive undertaking requires strong leadership and a clear point of accountability. This is particularly true in the healthcare industry, where the use of IM/IT is not yet fully mature. The Wait Time Information Strategy would impact a wide spectrum of stakeholders – business, clinical and consumer – throughout healthcare, making accountability and leadership vital. Effective leaders set a clear and simple vision and articulate why it was important to achieve by focusing on implications and benefits to all stakeholders. Strong leadership also includes open and regular communication with stakeholders to ensure they understand what you are going to deliver, when you will deliver it and how progress will be measured, creating a level of transparency and engagement in the initiative.

The success or failure of the Wait Time Information Strategy rested squarely with, then CIO of CCO, Sarah Kramer, who was appointed as the Lead. As the single point of accountability, the Lead was able to make rapid decisions backed by the robust strategy to drive the initiative forward. The Lead also applied a framework for communicating these decisions and their outcomes to the project team and relevant stakeholders. This transparency ensured that all parties were always “in the know” and held them to budget, timeline and scope commitments. The Lead made it a priority to address stakeholder feedback in a timely and open manner so that momentum and engagement
was maintained throughout implementation. By demonstrating strong leadership in these critical areas and at critical times, the Wait Time Information Strategy Lead was able to sustain ongoing support for the initiative and create a strong sense of collaboration through the process.

**Input from the Best and the Brightest**
To develop an effective IM/IT strategy, input, ideas and support need to be solicited from many stakeholders and experts from different specialty areas. This requires real engagement of all participants, with two-way dialogue, not just lip service. It requires a willingness to seek advice from many, but still be able to make firm decisions, understand the consequences of those decisions, be prepared for criticism and remain open to (not afraid of) criticism and feedback.

For the Wait Time Information Strategy, advice was sought from a variety of thought leaders, technology experts, information experts, healthcare leaders and clinical experts. These stakeholders were consulted early and often to gather information, inform recommendations, define business and data requirements, and start to build the support network for executing and implementing the chosen strategy. Decisions were always made with the input of all stakeholders and communicated to all, even if a consensus could not always be achieved.

The establishment of the WTIS Steering Committee in January 2005 was a driving factor in the success of the strategy. Composed of health IM/IT leaders, hospital administrators and clinician representatives, healthcare organizations, government and eventually LHINs, the panel’s role was to advise the Wait Time Information Strategy Lead on the development and implementation of the strategy, and to share responsibility for championing it and engaging healthcare workers in the field.

This strategy development team worked with other health system partners such as the Institute for Clinical Evaluative Studies, the Canadian Institute for Health Information, the Ontario Hospital Association and individual hospitals to ensure that the information strategy appropriately addressed business and clinical requirements, including data standardization and data quality. The involvement of these third-party organizations also provided a channel for the team to hear about the impact of the strategy on other areas of the health system.

Finally, experiences of other jurisdictions that have instituted wait time strategies (e.g., the Saskatchewan Surgical Care Network, British Columbia Provincial Surgical Services Project, the Western Canada Waiting List Project and the UK National Health Service) were closely studied. The team carefully reviewed the lessons learned about standardization, implementation, governance and management from these programs, and applied them as appropriate in developing and implementing the Wait Time Information Strategy.

**Grassroots Clinical Involvement**
A key element of Ontario’s Wait Time Strategy was the concerted use of Clinical Expert Panels to guide the efforts to reduce wait times and improve access to care. Panels were established for each of the five initial service areas – cancer surgery, cardiac procedures, cataract surgery, hip and knee replacement and CT and MRI scans – with a mandate of providing expert advice and recommendations on policy and regulatory changes, building system capacity, optimizing efficiencies in the system and information technology requirements.

Each of the Clinical Expert Panels flagged the importance of information to monitor wait lists, identify bottlenecks and support ongoing performance improvement efforts. They highlighted the need for standard definitions for access to care and for collecting a minimum data set on which performance could be baselined and monitored. The panels also articulated specialty-specific issues that needed to be considered and addressed. Panel members were consulted at various points during development of the Wait Time Information Strategy.

Panel chairs became important champions for the overall Wait Time Strategy, including the need for information to drive reductions in wait times. In many cases, even four years later, these chairs continue to be strong and vocal supporters of the strategy. Many other panel members and clinicians also became advocates of the program and used their leadership to garner support and drive adoption among colleagues.

Ultimately, the success of any IM/IT strategy in healthcare depends on clinical adoption. The adoption process starts during development of the strategy; therefore, it is critical to engage clinicians – the actual users – early. By doing so, the likelihood of getting clinical buy-in increases significantly. For the Wait Time Information Strategy, engaging clinicians throughout the planning and development process also brought forward more individuals who were willing to serve as clinical champions. This demonstrates that by investing in a small number of grassroots leaders early, clinician engagement and adoption can grow exponentially.

**Clear Articulation and Management of Scope**
With many priorities within healthcare competing for resources,
it is essential to stay focused on your clearly articulated mandate and keep scope manageable. Through the requirements gathering process and development of the Wait Time Information Strategy, there were numerous problems identified that needed to be solved. The team had to be highly disciplined in managing and balancing additions to scope to ensure original commitments and timelines were still met and results and progress could be demonstrated early – all of which proved essential to getting incremental stakeholder buy-in for implementation. Importantly, the team built the strategy in a way that left room for expanding scope as timelines and resources allowed.

In addition, the Wait Time Information Strategy team looked closely at efforts already being undertaken by some hospitals and health-related organizations to monitor wait times and provided recommendations on how to align these activities with the overall provincial strategy. Some activities were recommended to be stopped; others were continued and adjusted to coordinate with the Wait Time Information Strategy. Misaligned activities and objectives would have resulted in disjointed efforts and ineffective use of resources. The framework, direction and clarity provided through the Wait Time Information Strategy enabled all stakeholders to focus on the same goals and to support – and hold one another accountable – for achieving them.

Riding the Wave of Investment
The Ministry of Health and Long-Term Care (MOHLTC) provided a key financial incentive for hospitals and clinicians to participate in the wait time program. Hospitals, which had been asking for more financial support in order to increase operating room capacity and surgical volumes, received funding from the MOHLTC. Through Hospital Accountability Agreements (for a description of these agreements, see page 22), hospitals agreed to use the Wait Time Information System (WTIS) to report wait times and ensure that incremental surgical cases would not take place at the expense of other non-priority services. Failure to meet these conditions led to recovery of the allocated funding and diminished the likelihood of these hospitals to receive subsequent wait time funding. It was imperative that action be taken in cases where accountabilities were not met.

Clinicians wanted to be able to manage their wait lists more effectively and, through the WTIS, would have the data to make the case for additional OR time so that they get more patients treated. Many, however, were skeptical of the value of the WTIS and/or already participating in one of the few local or regional initiatives trying to address the wait time issue. Wait time funding provided the important initial incentive to get clinicians engaged in the provincial program and using the WTIS.

Conclusion
While large-scale IM/IT strategies are not unique in healthcare, few have been successfully executed. The rapid development and implementation of Ontario’s Wait Time Information Strategy has become a rare example of what can be achieved when the right elements are brought together. Today, as a result of the strategy, 86 hospitals and over 3,300 clinicians are using the Wait Time Information System to collect accurate and timely wait time data and applying it to improve access to healthcare services. The experiences of the Wait Time Information Strategy offer many valuable lessons and tactics that can be applied to other clinical areas pursuing the effective use of information and information technology to improve patient care.

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About the Authors
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