Are You Driving Change?
What Is Your GPS?

Hospital Pharmacy in Canada Survey Report
www.lillyhospitalsurvey.ca
# Are You Driving Change? What Is Your GPS?

## Table of Contents:

- Welcome and Introductions ................................................................. 1
- Adoption of Change in Hospital Pharmacy Practise ................................ 3
- Anticipating and Managing Change in the Non-Pharmacy World ............ 7
  - The Nursing Journey: Multiple Practitioners – One College .............. 7
  - Managing Change: Learnings from Optometry .............................. 8
  - You Mean There Are Still Travel Agents? ...................................... 10
- Surviving Change in Hospital Pharmacy – Success Stories and Lessons Learned .......... 12
  - Lean Experience ........................................................................... 12
  - CPOE Experience ......................................................................... 14
  - Core Services Experience ............................................................ 17
- What are the Clinical Pharmacy Key Performance Indicators for Hospital Pharmacy Practice? 19
- Small Group Discussion .................................................................... 22
  - Group Reflections on Change Experiences – Core Services, Technology, Quality Improvement
    - Group One – Core Services ...................................................... 23
    - Group Two – Technology ....................................................... 24
    - Group Three – Quality Improvement ...................................... 25
- Barriers to Change – Feedback on Group Simulation Game .................. 27
- Observations of the Leadership Conference ....................................... 29
- Best Practices for Leading and Facilitating Change ............................ 31
- Managing Editors Managing Change .................................................. 33
- Wrap-up – Ah Ha Moments ............................................................... 37
Are You Driving Change? What Is Your GPS?

Conference Goal:

- Defining the Value of Hospital Pharmacy Services

Welcome and Introductions

CONFERENCE CHAIR
Emily Musing
Executive Editor, Hospital Pharmacy in Canada Survey Report
Executive Director of Pharmacy, Clinical Risk and Quality Patient Safety Officer, University Health Network
Toronto, Ontario

Emily Musing welcomed participants, particularly the many first-time attendees. She invited them to take full advantage of opportunities to network and to share experiences and challenges. She praised all the members of the Hospital Pharmacy in Canada Report Editorial Board for their exemplary work in producing the 2011–2012 Report and invited participants to review the report online (http://www.lillyhospitalsurvey.ca/hpc2/content/rep_2012_toc.asp).

Musing thanked the Editorial Board Members, noting the Report Sections they edited:

- Michele Babich, British Columbia/Alberta – Human Resources
- Carolyn Bornstein, Guest Editor, Canadian Society of Hospital Pharmacists – CSHP 2015
- Jean-François Bussières, Quebec – Pediatric Pharmacy Services, Clinical Pharmacy Services
- Douglas Doucette, Atlantic Provinces – Drug Distribution Systems
- Patricia Lefebvre, Quebec – Evaluating Pharmacy Services
- Patricia Macgregor, Ontario – Technology, Pediatric Pharmacy Services, Benchmarking Indicators-Acute Care Hospitals
- Kyle MacNair, Saskatchewan/Manitoba – Pharmacy Technicians
- Kevin Hall, Managing Editor – Benchmarking, Pediatric Pharmacy Services, Human Resources, Technology
- Chuck Wilgosh, Managing Editor – Pharmacy Technicians
- Emily Musing, Executive Editor - Demographics

Musing thanked Patricia Lefebvre and Michele Babich for their many years of service on the board, as they will each be stepping down after this function, and she introduced two new board members in the audience: Andre Bonnici and Richard Jones. Musing also acknowledged the important contributions of Research Analyst Paul Oeltjen and Executive Assistant Marjorie
Robertson. She also thanked Marjorie Robertson, Carolyn Bornstein, and Patricia Macgregor for their great assistance in organizing this conference. Musing thanked Eli Lilly for the ongoing support of both the survey and the report, as well as for this conference.

Describing the Leadership conference as an event that is always intense and enjoyable, Musing reiterated the invitation for participants to take advantage of both formal and informal opportunities to share experiences and learn from the experiences of others.

Welcome

**SPEAKER**

Lauren Fischer  
*Vice President, Corporate Affairs*  
*Eli Lilly Canada Inc.*  
*Toronto, Ontario*

Lauren Fischer prefaced her remarks by acknowledging the great contributions her predecessor from Eli Lilly Canada, Terry McCool, had made during his tenure. In alignment with the conference *Change Management* theme, Fischer said she hoped to bring some new perspective to the event.

One core assumption about Change Management is that it requires effective leadership, Fischer said. However, the more important basic question is, “What is effective leadership in the face of change?”

At Eli Lilly Canada, the importance of leadership in the face of change is stressed on many different levels. Whether it be described as turbulence, disruption, or discontinuity, she said, there is broad consensus that change is the atmosphere in which successful modern organizations must operate. That can be daunting, particularly in the health care field where the stakes are so high.

In the end, it is left to organizational leaders to help sort out the most effective and rewarding ways to cope with change and to flourish in the face of uncertainty and upheaval. Fischer said the key to developing leaders in a changing environment is to take an *ecological* perspective that values intuition and recognizes the importance of connections and inter-connectedness.

Another critical challenge is to understand how people make sense of the change they’re experiencing, she said. It’s necessary to create space for teamwork and room for imagination.
Leaders require new skills in the face of change, she said. They need to understand what is happening around them and work constructively with organizational anxiety by being empathetic and instilling a sense of hope and confidence in those they lead. “The context may change constantly but the fundamentals of leadership have not changed . . . a few essential truths like credibility, trust, values, lifelong learning, and learning by example.”

In managing change, Fischer challenged participants to have a vision: a short statement of values that is unique, aspirational, and motivational. Addressing the conference’s theme question, What is Your GPS?, she noted, “If you don’t know what true North is, it’s hard to know if you are doing the right things.”

She also underscored the importance of taking time to observe what you and your organization are doing well. Investing time in your own learning is also important.

Fischer pointed out some of the disruptive changes that are currently impacting Eli Lilly Canada, outlining three interesting trends and questions they raise:

- **Biosimilars** – a business that will likely evolve differently than the business of small molecules and questions about whether or not her company should be part of that business
- **Smart Devices** – their evolution is revolutionary; Lilly’s current products don’t connect digitally, but there are devices that can be “smart” and speak to monitoring devices, patients, payers, and other professionals in the system; how will this drive product development?
- **Big Data** – if a capacity for dealing with all the data from smart devices is developed, what analytics will be required and to what end?

Information asymmetry is another new reality for companies like hers, Fischer said. In the past, a company knew more about its own products than anyone else, but the advent of new technologies and new matrices means that is no longer true.

Eli Lilly Canada’s goal is to see challenges through the lens of their overarching objective to produce new and better medicines. Hospital pharmacy leaders in Canada, Fischer concluded, face a similar challenge to address shifts in health care, while holding their broader objectives in mind.
Adoption of Change in Hospital Pharmacy Practice

**SPEAKERS**
Jean-François Bussières  
*Chef, Département de pharmacie et unité de recherche en pratiquepharmaceutique*  
CHU Sainte-Justine  
*Professuertitulaire de Clinique, Faculté de pharmacie*  
Université de Montréal  
Montreal, Quebec

Kevin Hall  
*Clinical Associate Professor, Faculty of Pharmacy*  
University of Alberta  
Edmonton, Alberta

Kevin Hall and Jean-François Bussières presented an overview of a number of major evidence-driven changes, first in the general health care field, then in hospital pharmacy.

In the paper, written by E.A. Balas et al, entitled “Managing Clinical Knowledge for Healthcare Improvement,” the authors tracked the rate of adoption of nine clinical procedures that landmark studies had linked to specific and significant improved health outcomes. Bussières explained that the review showed that it took, on average, 15.6 years for these procedures to be adopted by 50% of practitioners. The procedures studied included flu vaccine, thrombolytic therapy, pneumococcal vaccination, cholesterol screening, mammogram, the use of beta blockers after myocardial infarction, fetal occult blood test, diabetic foot care, and diabetic eye examination. Overall, it took an average of 17 years for research findings to have significant impacts on clinical practice.

The two then undertook to compare the typical trajectory associated with change adoption in pharmacy with change in health care as a whole, concluding that 17 years was, probably, an underestimate of the time required for 50% implementation of innovations such as IV admixture, unit dose, and expanded scope of practice for pharmacy technicians. They then discussed the potential for accelerating the adoption of evidence-based improvements in pharmacy practice.

Bussières used some historical examples to demonstrate the often poor uptake of evidence-based change in health care. He noted that Oliver Wendell Holmes had first advocated handwashing as a means of preventing the spread of disease among pregnant women in hospital maternity wards in 1843. He noted that 160 years later, the rate of handwashing in hospitals still hovers between 60 and 70 percent.
Hall then presented a review of six pharmacy practices whose adoption was supported by scientific literature and reputable studies. Using the *Hospital Pharmacy in Canada Report* (HPCR), the rate of adoption of the various measures was traced. The six practices analyzed were:

- Unitdose distribution service
- IV admixture service
- Use of barcodes in the drug-use process
- Implementation of computerized prescriber order entry (CPOE) systems
- Pharmacy technician scope of practice
- Pharmacist scope of practice

Hall and Bussières reviewed the major scientific papers that supported the advantages and anticipated improved outcomes associated with each of the practices and compared them to their rate of adoption in the most recent HPCR.

Unit dose distribution systems have been shown, since 1968, to reduce errors and increase efficiency. Yet after 44 years, there is still only partial adoption of unit dose systems. In 2012, only 65% of surveyed hospitals used any type of unit dose distribution system, with only 40% using a total unit dose distribution system.

The advantages of centralized IV admixture were published in a landmark 1978 study. The measure was adopted by 50% of those surveyed in 2002 (roughly 24 years after publication). By 2012, the adoption rate was still less than two-thirds, at 64 percent.

Bussières contrasted the use of barcoding in the drug-use process to barcoding in the grocery business. The first barcoded grocery item was a package of chewing gum in 1974. Barcoding has long since been adopted by almost 100% of grocery retailers. However, in hospital pharmacy, the use of barcoding hovers between 2 and 20%, depending on the use. For example, 22% report using barcoding prior to pharmacy dispensing, but only 2% use it to identify the staff member administering the medication.

Hall noted that the first published report citing the advantages of Computerized Prescriber Order Entry (CPOE) was published in 2008 and that studies since then have shown inconclusive results. In 2012, nearly one-third of hospitals have a plan to implement CPOE, but only 9% have done so.
Scope of practice changes for pharmacy technicians have been known to have positive advantages in hospital pharmacy since 1961. After 51 years, the rate of uptake is still less than 50 percent. Similarly, scope of practice changes for pharmacists, allowing them to independently prescribe, were identified as positive contributors to safe and effective drug use in 1976. By 2012, however, the number of hospitals reporting pharmacist prescribing still hovered at around 55 percent.

Hall and Bussières challenged participants to question whether or not pharmacy is truly an evidence-based profession. They presented HPCR findings surrounding the use of a number of measures and interventions and noted that practice change and uptake seem to be highest among the measures with the least evidence-based support.

They also asked participants to explore why change in pharmacy happens so slowly, even more slowly than in healthcare in general. Hall presented some possible explanations for the slow rate of adoption of evidence-based interventions and change. They included limited human and cash resources, competing priorities, lack of leadership, and resistant staff attitudes.

Participants identified several factors that play roles in the slow adoption of change. One observed that significant practice changes like CPOE or unit dose distribution are not the sole responsibility of pharmacists. The complex interplay between different health practitioners complicates the adoption of change and requires a much more sophisticated and institution-wide approach to leadership.

Another significant barrier to change that participants identified was the relative success of existing therapies. New studies come out, indicating better potential results with new interventions, but the old interventions already work fairly well. Pharmacists are reluctant to take a chance on something relatively new and untried. Apparently conservative by nature, they are reluctant to change until they are sure the risk of detrimental outcomes is nearly zero. However, change almost always creates a risk zone during early implementation.

Finally, a participant stressed the importance of ensuring that pharmacists have the skills to be able to manage the changes and have a clear understanding of the complex interplay of change happening on many levels at the same time. She noted that shifting regulations, funding models, norms, and clinical practices require pharmacists to absorb changes on many strata at once and that shifting priorities affect the ability to drive evidence-based changes to pharmacy practice.
Rhonda Seidman-Carlson presented a brief explanation of the different types of nurses overseen by the College of Nurses and their competencies, standards, and controlled acts. She also briefly outlined the history of the different types of nursing practice and how they had changed over the past several decades. One of the great challenges facing the College is that there are actually three different categories of nurse:

- The Registered Nurse (RN), which currently requires a baccalaureate
- The Registered Practical Nurse (RPN), which currently requires a College Diploma
- The Registered Nurse Extended Class (EC), also known as a nurse practitioner, who have even higher educational requirements

The entry to practice competencies and controlled acts are nearly identical for all RNs and RPNs, but the context in which those competencies are appropriately applied is entirely different. In addition, there have been significant shifts and changes in the roles of nurses since the 1980s. This leads to confusion among the general public, healthcare administrators, and sometimes among nurses themselves, Seidman-Carlson said.

The complex interplay of nurses’ roles makes it imperative to utilize each practitioner properly and to their best advantage, she said. To assist in determining the optimum ways to use each type of nurse, the Registered Nurses Association of Ontario (RNAO), along with the Ontario Government (MOHLTC) and the RPNAO, has designed a utilization tool that takes into consideration the environment in which they work, the patient group, experience, knowledge, and likely patient situations.

Adding further complication, a special class of RN, the RN(EC) or Nurse Practitioner, was introduced in 1995. They have additional controlled acts and the autonomy to prescribe, diagnose, and treat patients.

In the early days, after the various changes in classifications, some poor, financially-driven decisions were made in many institutions that viewed RPNs as a less expensive option than
RNs, she said. It soon became apparent that both classifications of nurses could perform the same tasks but not on equally complex groups of patients. “If you define nurses by a list of tasks they can perform, you actually go to the lowest common denominator . . . that approach led us down the wrong road in some cases.”

Over time, the benefits of multiple practitioners with similar knowledge bases began to emerge, Seidman-Carlson said. By using the right nurse in the right context, it is possible to provide the right care at the right time – and sometimes less expensively. Overall, patient care is expanded.

Making the changes in nursing practice has brought its own set of challenges, she admitted. In the beginning “turf wars” were common. There were many environments where practitioners and administrators continued to use nurses from a task-based rather than holistic patient-care perspective. Some administrators saw that RPNs were much less expensive to employ than RNs and used them interchangeably, or replaced RNs to a large extent, in order to save money. In many cases, they’ve had to retreat from those decisions because safety was compromised and patient outcomes affected. Now, the focus has shifted to finding the right practitioner for the right patient at the right time, rather than focusing on finances.

To address the challenges, it has been necessary to conduct research into best practices and develop toolkits and templates for optimum utilization of the profession, she said. It was also important to educate unions and hospital administrators about the subtle but important differences in how each practitioner is best utilized.

Seidman-Carlson stressed that there is no general recipe for creating understanding and motivation for change. Many of the challenges facing nurses are similar to those facing hospital pharmacy. They include financial burdens that create pressure to reduce costs, increased complexity of patients, changes in scope of practice, and changes to other professions. “We need to be good leaders to drive good outcomes in an increasingly complex and inter-mingled professional context,” she concluded.

Managing Change: Learnings from Optometry

**SPEAKER**

Dr. Joe Chan  
Optometrist, Queensway Optometric Centre  
Mississauga, Ontario

**Dr. Joe Chan** briefly reviewed the roles of various eye care professionals in Canada and explored some of the significant challenges that optometrists have faced in recent years. He also
explained some of the strategies that have helped the profession maintain its primary eye care role.

One of the greatest challenges facing the profession, he said, is confusion as to what role various professionals play in providing eyecare and how those roles overlap. Ophthalmologists are medical doctors with a sub-specialty in ophthalmology. They can deliver the full range of eye care but tend to focus on secondary and tertiary care, which often means surgery and other complex interventions. They tend to be situated in larger urban centres and are only accessible to patients through referrals.

Optometrists, on the other hand, are university-trained but are not medical doctors. They provide primary care, doing routine eye exams and prescribing and dispensing glasses and contact lenses. Recent evolution in scope of practice has expanded optometrists’ role to include prescribing a full range of ocular drugs (in all provinces but Manitoba), Chan explained. Optometrists are much more accessible to the general public and often practice in communities that are medically underserviced.

Opticians are college-trained and are qualified to fit and sell glasses, he said. Most of them work in retail environments, and they aren’t authorized to perform any controlled acts, such as assessment, diagnosis, or prescribing. Because both opticians and optometrists sell glasses and contact lenses, they are competitors to some degree, Chan explained. In the past, there was also competition between ophthalmologists and optometrists, but this has decreased with aging population trends. In the current milieu, the two professions are increasingly co-managers of patients with complex conditions like glaucoma, cataracts, and laser vision correction (LVC).

Opticians have traditionally cried foul because optometrists both prescribe and dispense glasses and contact lenses. They argue that an unscrupulous optometrist can upsell to increase her/his profit, Chan said. There is a movement among opticianry to change their scope of practice to allow them to “refresh” eye prescriptions, particularly through the use of automated equipment. He cautioned against this approach, noting that there is more involved in assessing eye health than just using an eye chart to determine whether a patient has 20/20 vision.

The College of Optometrists has instituted a strict set of rules to protect the public and reduce any appearance of conflict of interest, he said. Still, the reality is that optometrists must thrive at treating, prescribing, and dispensing to have a successful practice. In Ontario, optometrists have chosen to present themselves as doctors first. In a competitive marketplace, though, it has been necessary to innovate and stay ahead of the change curve to flourish as a profession.
Increasingly, glasses are viewed as a commodity, and it is not possible for optometrists to compete with large dispensing opticians on the basis of price. Instead, the profession has consciously chosen to focus on building loyalty and a sense of trust, Chan explained.

Chan also described some of the challenges optometrists confronted when eye examinations were de-listed from public health plans over recent years. In general, people between the ages of 20 and 64 years are no longer covered for standard eye examinations. That change forced optometrists to make a case for their profession, to “brand” themselves and present that brand to the general public. Optometrists banded together and contributed eight hundred dollars each to raise awareness of their practices and create a sense of urgency to convince the public it was worth spending their own money for optometric care.

One of the keys to managing disruptive changes in optometry has been the cohesiveness of the group, Chan stressed. “If your profession comes together to choose priorities, there is a way to drive positive change. . . . It starts with a clear vision of where you want to go.”

You Mean There Are Still Travel Agents?

**SPEAKER**
Lynda Sinclair  
Director, Leisure Business Development  
Vision 2000 Travel Group  
Toronto, Ontario

Lynda Sinclair walked participants through the historical evolution of travel professionals and the industry’s response to some major changes and disruptions that have occurred in the last two decades as a result of new technologies and changing corporate practices.

In the early days, travel agents tended to be small family-owned businesses. However, as travel became more sophisticated and corporate travel became more prominent, travel agencies flourished and focused on selling packages and “whole-travel” experiences. Agencies were consolidated and travel became big business.

Originally, travel agents were the gatekeepers of information, Sinclair said. They knew when the trains ran, how long they’d take, where and how to transfer, and all the minutiae of on-the-ground travel. Travel agencies were pioneers at integrating computers into their businesses. As technology has progressed, however, that expertise became widely available to travellers themselves. “The arrival of the Internet shook our world; we had to overcome the threat of the
Internet and use it as a tool. . . . We went from being travel experts to experts at creating memorable moments, offering a concierge service to travellers.”

Around the same time, Sinclair explained, airlines reduced commissions to travel agents and eventually stopped paying them altogether. This created a dramatic shift in the way both customers and agents themselves viewed their role. Travel agents used to sell themselves to the public by stressing that it was free to use their services. Almost overnight in the 1990s, that changed. In order to generate revenue, travel agents had to start charging for their services. That meant it became necessary to turn away unprofitable customers or, in many cases, charge for services that had been provided free for years.

The changes created significant pressure within the industry, forcing individual practitioners and companies to change their practice. The industry created its own websites and focused on positioning themselves as the gatekeepers of great travel experiences. As the amount of information available to the public increased exponentially, the industry began to sell itself as experts at sorting through all the information and helping travellers pinpoint precisely what they wanted.

To cope with the change, Sinclair said, the industry had to make five key changes:

- Developing value and mission statements that gave frontline staff the words they needed to drive behavioural change
- Convincing staff that it was acceptable and necessary to turn customers away if they were not going to generate revenue
- Making decisions about what kinds of products and services were offered
- Changing to a system of fee-based revenue, focused on profit margin
- Compiling financial reports and sharing the numbers with staff

Travel companies were starting to evolve to meet the needs of clients, but they still needed to make the client see the value in what they were paying for, Sinclair said. At this time, there are more than 4,000 travel agents in Canada working to distinguish themselves. Each is trying to decide what their agency does best, so the industry as a whole can get out the message of what it does best. By focusing on differences, people are able to understand particular companies’ strengths.

“Travel agents realized it was time to define our relevance. . . . Our GPS is set to give travellers what they want; luxury is choice, so you design your own holidays,” she said.
The challenge is the same in other businesses, Sinclair concluded. Customers want freedom and flexibility. Relationships with both suppliers and customers drive success. With collaboration and global partnerships, there is room for all.

Surviving Change in Hospital Pharmacy – Success Stories and Lessons Learned

LEAN experience

**SPEAKER**
Janet Harding  
*Director, Regional Pharmacy Services*  
*Saskatoon Health Region*  
*Saskatoon, Saskatchewan*

Janet Harding presented an overview of the introduction of the Lean Management System in Saskatchewan and shared her experiences as a leader working within that transformation. Dan Florizone, the Deputy Minister of Health, is determined to reduce waste and improve quality by creating long-term changes in behaviour, she explained.

To accomplish that goal, about 18 months ago the Deputy Minister engaged the services of Lean Management *guru* John Black. Black has been instrumental in helping health care facilities, such as the Virginia Mason Medical Centre in Seattle, implement Lean Management – an approach based on the Toyota Production System, Harding explained.

Black believes that Lean principles can profoundly enhance patient satisfaction, safety, quality of care, efficiency, and profitability by establishing the organizational infrastructure necessary to achieve sustainable long-term results. Adopting these principles created a “massive” shift in her job, Harding said.

The system being implemented in Saskatchewan is founded on a set of key principles:

- Supporting the strategic alignment of province-wide health system priorities
- Boosting human resource capacity related to quality improvement
- Fostering a culture of safety with a goal of zero defects
- Establishing a measurement and reporting system to support transparency and accountability
Harding confessed that she was skeptical at the early stages of the process, as were many of her fellow leaders and colleagues. One of the key drivers of change that signalled a different approach was the use of so many Japanese terms to signify different elements of Lean management. "Using a different language signalled to people that we were doing something different."

For example, she explained, *kaizen* means “improvement” or “change for the better.” In Saskatchewan, there is a provincial *kaizen* promotion office, as well as district *kaizen* promotion offices, Harding explained. Education is a key component of Lean management systems. To date, more than 9,000 health care workers have had *kaizen* basic training and 800 Saskatchewan health leaders are scheduled to receive in-depth Lean training over the next four years.

Harding said the implementation of the Lean Management System has happened extremely quickly and has prompted major changes in the way she does her own job and the way others up and down the chain of command do theirs.

The interconnected concepts of *hoshin* (direction) and *kanri* (execution) are critical in the process, she said. *Hoshin kanri* requires identifying a common vision, setting short and longer-term goals, tracking progress towards those goals, and changing course if required. For example, one five-year goal is to establish a culture of safety, which includes medication reconciliation. The process begins with diagnostics and review from a pharmacy perspective. Then, the plan is referred to a provincial leadership team that provides feedback and refers it back to directors who further refine it and then send it back to the provincial team. After that, a plan is adopted and rolled out. The key to the success of the process is that it’s well understood by all the participants. The process is transparent and well-defined.

Lean Management is about leadership, transparency, and accountability. At each level of leadership, there is an accountability wall where tasks and systems are measured and assessed. “Staff know this; they see this; they know that we can link what’s being done at a departmental level all the way to the Ministry,” she said.

“Visual Management” is also a key component of Lean Management, she explained. The process allows all involved to tell at a glance what and how various levels are doing with respect to specific tasks. It helps create a daily awareness of important areas of concern and helps provide timely information. Rather than being reactive, staff and managers can be proactive, and the rapid resolution of conflicts and problems is facilitated.
It’s also important to create a safe place for people to go and say “I don’t believe in this yet,” Harding said. “This is transformational change. You have to allow people to express their doubts and find sources of strength. . . . It’s a very integrated model that shows how pharmacy fits in to the broader range of services.”

Another transformational component of Lean Management is the Gemba (literally, “the real place”) walk, she said. On the Gemba, leaders get out of their offices and walk through the operations for which they are responsible. The Gemba and the accountability or visibility wall work in tandem to create meaningful transformation. By getting onto the “shop floor,” leaders show respect for the people who actually do the work, and they are able to identify signs of disrespect in the process. They begin to understand the work better and have a better understanding of problems and how to address them.

The Gemba allows the opportunity to talk to patients and front-line staff, and their insights are invaluable, Harding said. “My job has changed. . . . I don’t feel obliged to find solutions; my job is to mentor and to lead staff, so that they can come up with the solutions.”

Harding concluded by summarizing the key components in the significant change to Lean Management:

- Adopting a single methodology – to learn
- Visible leadership – the Gemba
- Ongoing communication – the more, the better
- Doing, not just planning
- Expecting surprises and resistance
- Measuring change and holding people accountable

CPOE experience

SPEAKER

Monique Pitre
Manager of Pharmacy Clinical Informatics
Infectious Disease Pharmacist, Department of Pharmacy Services
University Health Network
Toronto, Ontario

Monique Pitre described the implementation of Computerized Prescriber Order Entry (CPOE) at University Health Network (UHN) in Toronto as a “massive clinical transformation for the institution that wasn’t fully appreciated when it was embarked on.”
In 2000, she explained, UHN was developing a 10-year strategic plan that focused on patient safety, Pitre explained. Various studies established that errors in drug administration were the most critical problem contributing to adverse effects. These errors included incorrect written prescriptions, illegible orders, incorrect interpretation or transcription, and incorrect administration and documentation of medication.

To reduce these errors and improve patient safety and outcomes, she said, UHN initiated a computerized medication order entry and medication administration record (MOE/MAR). The first pilot project was initiated in 2003. However, the pilot was brought down after only ten days. The experience with that early pilot helped to more clearly identify some of the key components necessary to implement the change successfully. These components included:

- Identifying and engaging champions, including senior hospital leadership
- Involving front-line staff
- Realistically identifying supporters and resisters and working with both
- Being prepared to make necessary changes to your plan
- Specifying measurable goals
- Communicating honestly with stakeholders; the process will not be easy and will change the way they have to work, so let them know what to expect

After the quick discontinuation of the pilot, Pitre said, it became clear that if it took too long to build the system, it would never actually launch. So, the implementation team decided to cluster groupings of departments together and bring them on-line at the same time. They also made it clear that this was not a pilot project any longer but the “new norm.”

There are some important preliminary factors that will contribute to success, according to Pitre. Before you design the system, it’s important to have a clear understanding of workflow; to ensure that everyone has the same understanding and interpretation of paper medication orders; to standardize wherever possible while still highlighting differences and particular clinical needs; and to make adjustments as required. Expect to find pre-existing clinical practice issues of which you were not aware, she said, and be ready to adapt to them as they arise.

Pitre underscored the importance of strong champions from senior hospital leadership. “Your champions have to be people who believe in the project and are credible among their peers; they also have to be tough enough to stand up against opposition from some of them.”
Pharmacists, nurses, and physicians all need to be involved in the project. All of them require dedicated work time to assist the project team in conducting workflow analysis, medication review, and specialty needs, she said.

The implementation clusters were chosen on the basis of the ways in which patients moved, Pitre said, in order to avoid patients going from electronic to paper records or vice versa. That necessitated bringing groups of units on-line at the same time because there is an identified high safety risk in hybrid environments.

As the system was implemented at each stage, there would be kickoff meetings with key stakeholders and weekly follow-up meetings, Pitre said. Ongoing two-way communication is critically important. Staff were provided with 24/7 technical support for a full month after implementation, and there were also clinical support teams. “If you don’t understand the clinical impact of what you’re doing, it’s very hard to advise people on how to do it. . . . This is not an IT project; it’s a clinical transformation.”

Pitre cautioned against expecting CPOE to be a time-saver. It’s important that hospital leadership and front-line staff understand that it may well take more time, at least at first. It’s also important to acknowledge the significant cognitive impact that the loss of paper will have on staff and how CPOE will necessitate adaptations to workflow and the adoption of new mindsets.

There have been some significant benefits achieved through CPOE implementation, Pitre said. Data from 2006 show:

- Over 85% of physicians’ orders were electronic.
- The time from prescription order to medication administration was reduced by 28 percent.
- The time from order entry to pharmacist review was reduced by 26 percent.
- In a single month, the CPOE system generated over 5,000 clinical-decision alerts.

There have also been some downsides, however. Pharmacists’ computer time has increased, and there has been concern that laboratory and diagnostic orders are more difficult to track. In addition, she noted, there is a tendency for people to view electronic orders as more credible than paper orders, and this has discouraged some from using their clinical judgement.
In general, she concluded, UHN has learned from the challenges and mistakes in the CPOE implementation process, and they have developed new processes and teams to help manage changes going forward.

Core Services experience

*SPEAKER*

Susan Kelley  
Pharmacist Manager, St. Joseph’s Hospital  
Horizon Health Network  
St. John, New Brunswick

*Susan Kelley* prefaced her remarks by noting that Horizon Health Network is the largest health care organization in Atlantic Canada, serving New Brunswick, northern Nova Scotia, and Prince Edward Island. It is one of two regional health authorities in Atlantic Canada.

Prior to 2008, there were eight Regional Health Authorities, which were reduced to two. This meant that pharmacy services were amalgamated. As part of a network-wide strategic planning exercise, she explained, Pharmacy Services identified three key regional objectives for 2011 to 2014:

- Optimize the use of existing technology.
- Identify opportunities for improvements in efficiency within current practices.
- Develop pharmacy practice standards for core clinical services.

Kelley outlined various factors influencing hospital pharmacy practice, including funding pressures, patient safety standards, calls for transparency, regulatory changes, technology, the demand for performance measurement, and research.

The focus on core services was driven, in part, by the creation of a new New Brunswick health plan that focused on more transparency around clinical services and performance measures, she said. This dovetailed with some general trends in Canadian hospital pharmacy:

- The demand for services is greater than existing staff resources.
- Service delivery varies between and even within sites.
- Service delivery is not sufficiently patient-focused.
- The profession is in a major shift of business and practice models focused on patient needs and technician-driven distribution systems that are more efficient and cost-effective.
“If we cannot do everything for everyone,” Kelley questioned, “what should our core services be?”

To address that question, the Network undertook to define core clinical services and practice models based on existing evidence and experience; to conduct an inventory of current clinical services and practice models; to seek stakeholder input; and to draft core clinical services standards by mid-2013.

To do so, she explained, a project team was assembled that represented different areas and hospital sites. They began with an environmental scan and literature search and also reviewed the New Brunswick Health Plan, the Horizon Health Network Strategic Plan, and their own Pharmacy Services Plan.

The team defined several guiding principles, among them that clinical pharmacy services:

- Are centred on the patients’ medication-related needs
- Apply to both hospitalized and ambulatory patients
- Refer to patient care and not necessarily the source of that care (e.g., central pharmacy)
- Are supported by safe, effective, and efficient medication use systems
- Are delivered by highly-trained pharmacists and technicians in direct and indirect patient-care roles

In addition, she said the team agreed that the determination of services and priorities should be based on evidence and experience. They defined essential pharmacy services as basic or core services that should be available to all patients and defined enhanced services as those available to only selected patient groups or care areas. The team agreed that it was important to strive for consistent access to enhanced clinical pharmacy services.

In developing the model, Kelley explained, the project team opted to use a pyramid motif because of its simple visual appeal. Symbolically, the pyramid is stable and resilient. Each face was used to represent a key element of the Network’s pharmacy program. The patient was placed at the centre of the pyramid because her/his medication-related needs are central to all pharmacy services. The base of the pyramid is operations and support services, while the sides represent enhanced and essential clinical services.

The project team defined a variety of essential clinical services, she said, including medication order review, drug information, and basic documentation. Medication order review includes
reviewing allergy status and recommending appropriate alternative therapies if necessary, reviewing medication profiles, and monitoring laboratory tests.

The team agreed that enhanced clinical services should be patient-centred and team-based, and that they should apply evidence-informed knowledge, skills, and behaviours. Although the extent of services might depend on staffing levels at a particular site, the team stressed the importance of striving to provide enhanced services consistently to those at the highest risk of medical misadventure.

Enhanced clinical services include all the essential services plus the following activities for patients with complex and/or high-risk medication regimens:

- Medication history assessment
- Medication management
- Participation in patient/team rounds
- Patient education
- Documentation of care in the health record
- Medication reconciliation at admission and transitions of care

Ambulatory patient areas were deemed to be at the highest risk and, therefore, the priority for enhanced clinical pharmacy services, Kelley explained. The project team identified target departments at particular hospitals where enhanced care should be guaranteed. These included hematology, oncology, internal medicine, nephrology, HIV, and transplantation.

Operations and support services include all the routine pharmacy operations and other services that combine to provide safe, effective drug therapy for patients, she said. These are the foundation on which all services are built.

What are the Clinical Pharmacy Key Performance Indicators for Hospital Pharmacy Practice?

**SPEAKER**

*Kent Toombs*
Clinical Pharmacy Manager – Emergency, Neurology, Cardiology
Capital Health
Halifax, Nova Scotia

Kent Toombs began by explaining that the overall goal of the National Clinical Pharmacy Key Performance Indicators (cpKPI) Collaborative/National Consensus Process is “to develop a core
Toombs outlined the key elements of the national consensus process, explained and reported the final results of the national Delphi consensus phase, and summarized the next phases in the national cpKPI process.

The process started in May 2011 with the formation of a working group whose goal was to make connections and share experiences regarding clinical pharmacy activities, Toombs explained. “One of the first questions asked was ‘What’s the most important question to ask?’” There was a great deal of debate about whether the group should explore what clinical activities hospital pharmacists should be doing or what should be measured.

The goal is to develop a full suite of KPIs that are generalizable enough to apply from small to large centres and across different specializations, he said. The cpKPI need to be both translatable and foundations upon which more could be built.

Toombs defined Key Performance Indicators as quantifiable measures that reflect the critical success factors of an organization and quantitative measures of quality. They are important because they elevate professional accountability and transparency, will improve quality of care, and allow for benchmarking.

The process began with an environmental scan to determine what others were doing, both in Canada and internationally in determining cpKPI, Toombs noted. After arriving at a definition of cpKPI, the group identified five pillars:

- Reflecting a desired quality practice
- Metrics with links to direct patient care
- Links to evidence of impact on meaningful patient outcomes
- Pharmacy/pharmacist-sensitive metrics
- Feasibility of measurement

The group also identified four levels of outcomes:

- Level 1: Clinical and Quality of Life outcomes
  - Morbidity, mortality, and adverse events
- Level 2: Surrogate outcomes
  - For example, blood glucose, blood pressure, cholesterol
• Level 3: Measureable variables with an indirect or unestablished connection to target outcomes
  o For example, medication disease state knowledge
• Level 4: Indirect variables
  o For example, patient satisfaction, potential adverse events

The study has been divided into three phases: pre-Delphi, Delphi, and post-Delphi, he continued. The first stage, which was information gathering, took the most time. While there has been some work internationally that mirrors this initiative, there did not appear to be parallel national-level studies of cpKPI.

Toombs explained the key elements of the Delphi process. It is a structured collaborative process, commonly used to develop consensus, and was designed to minimize the influence of more vocal group members by utilizing surveys or questionnaires instead of discussion or debate. The cpKPI Collaborative used a modified Delphi technique that featured three separate rounds of anonymous panellist contributions and one live teleconference.

The groups used three levels of evidence: observational studies, systematic reviews, and randomized clinical control studies. Toombs provided a brief snapshot of some of the key studies that the group examined.

The group ended up with a list of 105 selection criteria for cpKPI, he said. Richard Slavik led the group through an exercise designed to reveal consensus criteria. The result of that process was dubbed the “Slavik 11.” The consensus criteria included that indicators be supported by high-quality evidence, associated with a relevant impact on clinically important outcomes, reflect a role that is best suited to a clinical pharmacist, be attributable to direct patient care, and be specific to pharmaceutical care.

The group used the consensus criteria to arrive at a group of eight critical activity topic areas, named the “Doucette 8,” after Doug Doucette, whose participation in the process was pivotal:

1. Pharmaceutical Care – Integrated (DTP assessment/care plan/monitoring)
2. Medication Reconciliation – Best Possible Medication History (BPMH)/Med History Taking
3. Medication Reconciliation – Admission Reconciliation
4. Medication Reconciliation – Discharge Reconciliation
5. Team (or Patient) Rounds
6. Discharge Patient Education/Counselling
7. Post Discharge Follow-Up  
8. Disease or Drug Specific – Best Practice Quality Indicators

At the end of the modified Delphi process, panellists had reached consensus on eight cpKPI:

- Proportion of patients who receive formal documented discharge medication reconciliation and resolution of identified discrepancies by a pharmacist
- Number (or proportion) of patients who receive formal documented admission medication reconciliation by a pharmacist (combined BPMH)
- Number (or proportion) of patients for whom clinical pharmacists have completed (executed/implemented) a pharmaceutical care plan
- Number (or proportion) of pharmacists who actively participate in inter-professional patient care rounds to improve medication management
- Number of total drug therapy problems (DTPs) resolved by pharmacists
- Number (or proportion) of patients receiving "proactive comprehensive, direct patient care by a pharmacist in collaboration with the health care team" (Makowsky Collaborate RCT Proactive Bundle)
- Number (or proportion) of hospitalized patients who receive medication counselling by a pharmacist at discharge
- Number (or proportion) of patients who have received in-person education from a pharmacist about their disease(s) and medication(s) during their hospital stay

Even after arriving at these consensus cpKPI, Toombs said, there are still many outstanding practical questions. Next steps include the development of a knowledge translation kit, external stakeholder feedback, and the development of a formal pilot project or series.

Small Group Discussion

Group Reflection on Change Experiences – Core Services, Technology, Quality Improvement

On Saturday afternoon, conference participants broke into small groups to explore change experiences in three distinct areas: core services, technology, and quality improvement. The groups reflected on the following four questions:

- What success stories can you share?
- What barriers did you face?
- How did you overcome those barriers?
- What indicators or outcome measures did you use?
Group One – Core Services

The group identified several core-services successes from across the country. These included projects to standardize base practice for front-line pharmacists by reaching a consensus defining core pharmacist activities and trying to discourage non-core tasks, making changes in the scope of practice, and the implementation of a standardized information system across a provincial health system.

Some of the identified barriers were:
- Financial constraints
- Changing educational requirements – the result is that not all staff have the same education level
- Working within collective agreements
- Resistance from nursing and other professional staff – expectations differ about what appropriate pharmacy duties are, and changes in pharmacy practice were viewed as challenges to professional autonomy
- Unclear expectations
- Lack of an adequate aspirational model – nobody is sure what the ideal scope of practice should look like
- Lack of mentoring
- Inability to scale projects appropriately – what works in a large urban hospital may be inappropriate in a small urban setting
- Insufficient resources
- Lack of unified vision
- Lack of buy-in
- Lack of consultative process

Some of the identified actions and strategies for overcoming these challenges included organizational approaches, such as optimizing human resources by fully utilizing pharmacy technicians; providing leadership and appropriate mechanisms for communication of key messages and feedback; linking outcomes to evidence in key messages. Success was also driven by ensuring that changes are patient-centred and that all involved understand the importance of flexibility and compromise. Finding and supporting change leaders was also flagged as important, along with building on early wins and sharing human-level success stories.

The group identified many indicators and measures of success:
- Time spent with patients
• Accuracy of medication reconciliation
• The number of medication histories taken
• Percentage of acceptance of interventions
• Increases in time spent providing direct patient care
• Staff satisfaction surveys
• Accreditation processes
• Sharing clinical statistics with other agencies or hospitals so they can be used to benchmark
• Using external auditors
• Administrative “walkabouts”
• Standardizing formularies and policies
• Checking for policy compliance by using program-specific indicators

Group Two – Technology

This group identified three specific technology-change successes and elaborated on the barriers to success, means of overcoming those barriers, and key indicators for each project.

The first project was an electronic Medication Reconciliation project. The original pilot for the project was shut down after only two months. After identifying and addressing the project’s flaws, the large urban hospital is about to “go live” in a few days.

Some of the barriers that prevented success included poor buy-in and involvement of senior management, poor physician participation, duplication of work because of a hybrid paper-electronic system, and the fact that the new system was more time consuming.

Those barriers were overcome by bringing more senior management into the planning and steering of the project, encouraging physician participation by paying them to participate in feedback sessions, developing a way to print electronic records so the risk of hybridization is decreased, and being honest about the likelihood of increased time commitment – at least in the early stages of implementation.

The second project presented was the implementation of a uniform Pharmacy Information System across 20 hospitals in Manitoba.

This project faced many barriers which included privacy and regulatory issues, a disconnect between those involved in the planning process and those responsible for implementation,
different pharmacy operations models at different sites, the lack of authority for the project lead, and a general lack of resources.

These barriers were addressed by developing a strong, honest relationship with the IT contractors so they understood the financial constraints and worked within them. In addition, resources were reallocated when it was necessary to support regions that were having difficulty. Success depended on ensuring that staff at the individual sites felt empowered, which required frank and open communication with senior leadership and change leaders at individual sites.

There were no actual outcome measures for this project because there was a broader regional amalgamation after its implementation. However, the system provides a good base for moving forward and all of the smaller sites now appear to be performing better.

The final technology project presented was the introduction of a robot unit-dose system at a three-site hospital within a very short timeframe (18 months).

The short time for implementation was the source of the greatest challenges. Facilities required significant renovations, which had to take place while they continued operation. There was a significant shortage of pharmacists and “human side” issues, such as fear of job loss, technology, or significant changes in job duties.

To overcome the barriers, the change leaders took time to plan thoroughly and identify the main impacts in advance, even though the time constraints were significant. By being proactive and anticipating pushback, it was possible to keep those affected from panicking and resisting change. The project also had strong administrative support and benefited from formal project and change management plans supported by extensive interdisciplinary teams.

Unfortunately, because there were no metrics in place before the project began and the rush to implementation was so great, there were no specific outcome measures put in place. However, participants said, the fact that the project was implemented in such a short period of time without any loss of staff or support is a measure of its success.

**Group Three – Quality improvement**

This group reflected on four different success stories from different regions of the country. They included a Medication Reconciliation in-depth evaluation, Lean process improvement for
medication order entry, the centralization of total parenteral nutrition (TPN) production in one region, and the implementation of a unit-dose system at a series of small rural hospitals.

Similar barriers to success were identified, even though the projects were so different from one another in substance and scope. They included:

- Leadership changes
- Lack of understanding of the model
- The failure to involve all stakeholders and the failure to involve them early enough in the process
- The disconnect between using a system versus a pharmacy focus
- Lack of common goals and leadership
- Lack of standardization and standard processes
- Failure to engage pharmacists so they felt involved and integrated into the projects
- Inadequately defined expectations, which can lead to exaggerated fear of failure
- Reluctance of pharmacists and other professionals to accept the evidence driving the changes

Some of the approaches that helped overcome these barriers included:

- Having staff conduct audits to create a sense of “ownership”
- Bringing patients into the process
- Bringing physicians “on board” through “train the trainer” exercises
- Clearly defining expectations
- Building on successes using a staged approach because small successes drive big buy-in
- Securing senior executive authorization and support for necessary budgetary allocations
- Giving feedback so that stakeholders understand how and why success is happening

There were specific outcome measures designed for each of the identified projects. For the Medical Reconciliation project, Med Rec audits were used to determine the quality of completion and to identify which staff have completed the process. The analysis of daily entries on the Medication Administration Record (MAR) was used to evaluate the medication order entry project. With the TPN production process, the measures were audits of processing, temperature ranges, and appropriate delivery and turn-around times. For the unit-dose system implementation, the appropriate outcome measure was deemed to be the number of beds covered by the system.
Participants in all groups underscored the importance of collaboration, communication, standardization, and leadership, acknowledging that budgetary constraints have increased the necessity of doing things differently in order to forge ahead and lead change.

**Barriers to Change – Feedback on Group Simulation Game**

*Speaker*
Jean-François Bussières  
Chef, Département de pharmacie et unité de recherche en pratiquepharmaceutique  
CHU Sainte-Justine  
Professurstitulaire de Clinique, Faculté de pharmacie  
Université de Montréal  
Montreal, Quebec

On the first evening of the conference, participants engaged in a small-group simulation exercise, led by Jean François Bussières. The role-play exercise, entitled *The Mindgame*, assigned each participant a different pharmacy role, personality characteristics, personal values, and biases. This information was not shared among the players. Using coloured toy building blocks, teams were assigned the task of discussing and deciding how they could/would improve the current pharmacy practice model by altering the relative weight of each of four pharmacy domains: drug distribution services, clinical services, research, and management.

Bussières presented an overview of that simulation game on the last day of the meeting. To contextualize the exercise’s outcomes, he shared John Paul Kotter’s model, *The Eight-Step Process for Leading Change*. Kotter is a leadership expert based at Harvard School of Business. His model is based on the premise that a new methodology of change leadership is required to successfully react to appropriate windows of opportunity to drive positive change.

Kotter’s eight steps for successfully leading change are:

1. Instill a sense of urgency  
2. Build a guiding coalition  
3. Create a vision and supporting strategies  
4. Communicate  
5. Remove barriers and obstacles  
6. Create some quick wins  
7. Keep on changing  
8. Make sure change sticks
Bussières and several participants questioned whether Kotter’s seventh step was realistic. One participant noted that, although it may take an average of seventeen years for changes to reach significant levels of implementation in hospital pharmacy in Canada, the actual culture is one of massive change at several levels at once. Even though individual changes happen slowly, the number of changes at once is overwhelming and requires a break at times to allow organizations, leaders, and staff to regroup and revitalize. Bussières agreed, stressing the importance of pharmacy leaders recognizing and addressing the stress that change places on institutions and staff.

As part of the simulation exercise, participants were asked to rate the relative importance of 35 identified barriers to change in hospital pharmacy. The weighted results of those surveys were tabulated and presented to participants on the last day of the meeting. They were ranked in the following manner:

- Lack of leadership
- Lack of common vision
- Lack of clear game plan or strategic vision
- Lack of clear communication throughout the implementation
- Lack of formal support from the management team to make the change a real priority
- Lack of strategic support from the hospital
- Lack of culture conducive to change
- Lack of feedback/support/encouragement from the management team
- Lack of collaboration
- Lack of a sense of urgency

There is still very little literature specifically pertaining to change management in hospital pharmacy, Bussières said. The Hospital Pharmacy in Canada Report provides information that can be used to track certain trends, and there are many articles evaluating new practices but little with regard to the management of the changes behind the practices.

In the bigger picture, the results that new practices bring are not as important as the tools used to support and implement those practices, according to Bussières. “The interpretation of change depends on whether it is observed from a micro or a macro level . . . Is it a basic practice change or a philosophical change?”

The simulation game results ranked “Identifying barriers to change” as 20th in importance. Bussières argued that for change to be successful, the barriers must be identified much earlier in the process and acknowledging them early is a key leadership role.
He also noted that “lack of consideration of previous change failures” ranked at the bottom of the identified barriers in the simulation. He cautioned that the failure to recognize, acknowledge, and learn from past failures was a threat to successful change leadership in hospital pharmacy.

If you observe changes in pharmacy from its inception several hundred years ago, Bussières said, the current rate of change uptake does not seem slow. In fact, it is dizzyingly fast. “You, as pharmacy leaders, must act as filters for some of the stress that overlapping changes bring . . . Transparency is important and it is good practice but too much information can overwhelm . . . The way to manage change well is to manage information responsibly.”

Observations of the Leadership Conference

SPEAKER
Lynne Gallacher
Senior Vice President, Organizational Excellence Solutions
HORN Training and Consulting
Toronto, Ontario

Building on Jean François Bussières’ introduction of Kotter’s eight-step model for change, Lynne Gallacher reviewed some of the specific issues raised throughout the conference and put them in the context of Kotter’s steps.

Kotter’s first step, she reminded participants, is to establish a sense of urgency. This can be a challenge for hospital pharmacy because much of what is already in place works. There’s no major crisis at hand but, at the same time, there’s an endemic fear of doing any harm. That can be paralyzing and makes it all the more critical to create urgency and understanding around the need for particular changes.

Gallacher reminded participants of the experiences shared from non-pharmacy fields that had been forced to undergo radical changes. It doesn’t appear that the pressure for radical change is present with many changes in hospital pharmacy. “The human challenge is how to convert intention to action . . . We are hard-wired to do what is safe; it takes conscious energy to say we’re going to do things differently.”

It is critical to identify the need for change, she said, challenging the feasibility of maintaining the status quo. It’s equally important to reinforce the consequences of the status quo versus the desired change. “Highlighting the dangers of the status quo positively drives change.”
Kotter’s second step is to form powerful guiding coalitions. Gallacher noted that participants had frequently identified the lack of dedicated project teams or senior executive buy-in as barriers to change. Strategies for success must include support from the most senior levels and must be broadly based. The changes that stick are usually driven by active senior leadership whose involvement goes back to the roots of the project. To be successful, it is necessary to create a concise articulation of your desired future state and to get broadly based buy-in of that articulation.

Once that vision is in place, Kotter’s fourth step is to communicate it. Gallacher noted that there is a false tendency to view communication as an event rather than an ongoing organic process. “For messaging to be effective, it must connect with hearts and minds . . . The more we communicate, the more we connect with our sense of purpose, the more alignment is created.”

She encouraged hospital pharmacy leaders to brand things. “If you have a big initiative, brand it; make it a thing because then it takes on a life of its own . . . then use all existing communication channels instead of wasting time trying to create new ones.”

Kotter’s fifth step is to empower others and remove obstacles, Gallacher continued. The key to this step is anticipating the barriers and proactively addressing them. Ensure that all participants are educated and equipped to deal with new roles or behaviours and continue to engage a broad base of stakeholders in the solutions.

The next critical step in driving change is to plan and create short-term wins, Gallacher said. When trying to promote a culture of change, it’s necessary to plan short-term goals. Clear actions and interim milestones should be identified. When they are achieved, she said, positive energy and additional momentum are created and drive further change. Showing demonstrable progress keeps people positively engaged.

Finally, Gallacher stressed the importance of Kotter’s final step: institutionalizing new approaches. It is critically important to make change stick and to make it sustainable so that it lives on, she said. “Ask yourself, what is the burning need for change in your hospital; ensure it is something you can see vividly . . . What is it that you passionately believe in and what is standing in your way? . . . Then ask what can you do to move that obstacle and leverage what you already know will work.”
Best Practices for Leading and Facilitating Change

**SPEAKER**

Lynne Gallacher  
Senior Vice President, Organizational Excellence Solutions  
HORN Training and Consulting  
Toronto, Ontario

**Lynne Gallacher** returned to Steps Two through Five of Kotter’s process for guiding successful change and provided some useful and concrete tools for participants to bring home with them.

Great change leaders self-manage, support and empower their team members to act, frequently communicate their vision for change, and build broad organizational support, she summarized. The ability to self-manage is pervasive and impacts our ability as leaders to do all the other things necessary to drive change. “Leading others starts with leading ourselves.”

One of the ways to manage yourself is to manage your “self-talk,” she said. Self-talk is informed by our beliefs and causes us to draw conclusions that lead to emotional responses. It impacts our actions. If you are feeling negative, there are assumptions in your mind that are causing you to act or not act. Sometimes when leaders must manage or drive change, they are themselves doubtful, Gallacher said. If you don’t believe in the change, you won’t be able to drive it. This is where is becomes important to self-manage self-talk.

The first step is to stop the negative emotions and actually stop the self-talk that is holding you back. Then, she urged participants to challenge their assumptions and begin to see the situation in a different light. Finally, it’s necessary to choose the proper course of action as opposed to reacting to negative, defeatist self-talk.

Gallacher quoted John Kenneth Galbraith to stress the importance of motivating and empowering those around us:

> All of the great leaders have had one characteristic in common: it was the willingness to confront unequivocally the major anxiety of their people in their time. This, and not much else, is the essence of leadership.

David Rock, co-founder of the NeuroLeadership Institute created SCARF – a model for collaborating with and influencing others that identified five core needs that motivate us, while also acting as triggers:
- Status – our relative importance to others
- Certainty – our ability to predict the future
- Autonomy – our sense of control over events
- Relatedness – our sense of connection to others
- Fairness – our perception of the fair exchange between people

Gallacher challenged participants to start by asking themselves where they are most motivated and, conversely, where they are most threatened by the potential loss of something. This can help assess tolerance for change and helps us to understand the underpinnings of our struggles with change.

She described several different personality types with respect to change and asked participants to think about where they fit on the spectrum. They included:
- The Deflector: it’s not me; someone else is to blame
- The Victim: poor me; why does this have to happen to me
- The Personalizer: it’s me; it’s all my fault the plan has failed
- The Naïve Optimist: no problem; it’s all under control
- The Agent: here’s what needs to be done, so here’s what I’m going to do

The majority of participants identified as personalizers. Gallacher said this was unusual, as it is most common for around 70% of people to identify as deflectors or victims, while only 10% identify as agents. She stressed that having insight into yourself helps us to overcome personal barriers to change and helps us to understand and motivate those on our team.

Empathy is a critical component in leadership, she continued. It helps people “get on board” with change as it is possible to see things the way they see them. Empathy builds connectedness and improves communication. Empathy towards others stops damaging self-talk because when people feel heard, they’re more receptive to what others have to say. The reality is that pushing hard for something doesn’t make success more likely, it makes pushback more likely. “The best way to make sure you’ll be heard is to make sure you’re listening . . . The more we make something about the other person’s agenda, the more influential we will be.”

To be successful, empathy must be balanced with our own goals, Gallacher said. As leaders, we have a purpose, so we have to leverage our goals with our empathy. If we are either too empathic or too purpose-driven, our chances of success are less than optimal.
Gallacher concluded by encouraging participants to strategize before they try to start to build buy-in for change. She challenged them to ask: Who is influential? What motivates them? How do they feel about your proposition? How can you influence them? The best way to drive change is to leverage the support of people with high levels of influence because they’re the ones with the most potential to help drive change.

Managing Editors Managing Change

**SPEAKER**

Kevin Hall  
*Clinical Associate Professor, Faculty of Pharmacy*  
*University of Alberta*  
*Edmonton, Alberta*

Kevin Hall presented a review of the responses to several questions from the most recent *Hospital Pharmacy in Canada Report* and briefly discussed some of the trends revealed. He also invited participants to provide any feedback they might have regarding possible changes, additions to, or deletions of survey questions prior to the publication of the next survey. In addition, he outlined some of the data gathered from the pharmacists’ and technicians’ surveys that were included in the 2011–2012 survey.

Hall began by presenting the data on the use of IV admixture from 1991 to the present. In the 1991 survey, 15% of hospitals said they used IV admixture for more than 90% of beds. By 2012, that number had risen to 65%. Hall described this as a fairly slow increase over a long timeframe and asked participants to question why it seems to take so long to adapt to changes even once they’re known to have positive outcomes.

Next, he presented data on drug distribution systems, noting that the trend is clearly toward the use of automated dispensing cabinets. He observed that this change seems to be occurring more rapidly than is common in hospital pharmacy.

Similarly, he said the adoption of automated dispensing cabinets has been increasing very rapidly.

Computerized Prescriber Order Entry (CPOE) implementation, on the other hand, does not seem to have changed significantly from survey to survey, Hall said. Despite the fact that nearly one-third of those surveyed say they have a CPOE plan, the implementation level is still less than 10% and has been nearly static over the last five surveys.
The incidence of technicians checking unit dose trays spiked dramatically between 2002 and 2006, he said, then levelled off. He attributed this to the extreme shortage of pharmacists during that period. “If we approached every issue with the resolute determinedness that we did the increase of technicians’ duties, we’d see more convincing and rapid change,” he said.

The percentage of time pharmacists spend in clinical services versus drug distribution is slowly increasing, he noted, but there is still a long way to go before the optimum evidence-supported balance will be reached.

Hall noted that bar coding is the single technology that has been identified as having the biggest potential impact on patient safety. Yet, the most recent survey results reveal little increase in its implementation, except for the verification of drug selection prior to dispensing.

Hall also presented a brief review of the progress on various CSHP 2015 targets that were first established around 2001. Those targets were evidence-based goals that were believed to be achievable by 2015.

“In 100% of hospitals and related healthcare settings, pharmacists will ensure that medication reconciliation occurs during transfers across the continuum of care.”

<table>
<thead>
<tr>
<th>Target: 100% of hospitals</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On admission:</td>
<td>On Transfer:</td>
</tr>
<tr>
<td>2010</td>
<td>69%</td>
</tr>
<tr>
<td>2012</td>
<td>85%</td>
</tr>
</tbody>
</table>

“The medication therapy of 100% of inpatients with complex and high-risk medication regimens will be monitored by a pharmacist.”

<table>
<thead>
<tr>
<th>Target: 100% of hospitals</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Results 2010 Survey:</td>
<td>5%</td>
</tr>
<tr>
<td>Results 2012 Survey</td>
<td>10%</td>
</tr>
</tbody>
</table>
“75% of hospital inpatients discharged with complex and high-risk medication regimens will receive medication counselling managed by a pharmacist.”

<table>
<thead>
<tr>
<th>Target: 75% of hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results 2008 Survey:</td>
</tr>
<tr>
<td>Results 2010 Survey:</td>
</tr>
<tr>
<td>Results 2012 Survey:</td>
</tr>
</tbody>
</table>

“90% of hospital pharmacies will participate in ensuring that patients hospitalized for an acute MI will receive an ACE inhibitor at discharge.”

<table>
<thead>
<tr>
<th>Target: 90% of hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results 2008 Survey:</td>
</tr>
<tr>
<td>Results 2010 Survey:</td>
</tr>
<tr>
<td>Results 2012 Survey:</td>
</tr>
</tbody>
</table>

“90% of hospital pharmacies will participate in ensuring that patients hospitalized for an acute MI will receive a beta blocker at discharge.”

<table>
<thead>
<tr>
<th>Target: 90% of hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results 2008 Survey:</td>
</tr>
<tr>
<td>Results 2010 Survey:</td>
</tr>
<tr>
<td>Results 2012 Survey:</td>
</tr>
</tbody>
</table>

“80% of hospital pharmacies will conduct an annual assessment of the processes used for compounding sterile medications.”

<table>
<thead>
<tr>
<th>Target: 80% of hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results 2008 Survey:</td>
</tr>
<tr>
<td>Results 2010 Survey:</td>
</tr>
<tr>
<td>Results 2012 Survey:</td>
</tr>
</tbody>
</table>
“75% of hospitals will use machine-readable coding to verify medications before dispensing pharmacies will conduct an annual assessment of the processes used for compounding sterile medications.”

<table>
<thead>
<tr>
<th>Target: 75% of hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results 2008 Survey: 13%</td>
</tr>
<tr>
<td>Results 2010 Survey: 17%</td>
</tr>
<tr>
<td>Results 2012 Survey: 20%</td>
</tr>
</tbody>
</table>

“For routine medication prescribing for inpatients, 75% of hospitals will use CPOE systems that include clinical decision support.”

<table>
<thead>
<tr>
<th>Target: 75% of hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results 2008 Survey: 7%</td>
</tr>
<tr>
<td>Results 2010 Survey: 6%</td>
</tr>
<tr>
<td>Results 2012 Survey: 9%</td>
</tr>
</tbody>
</table>

Hall asked participants to consider why changes occur so slowly and how it is possible to justify the slow pace at which hospital pharmacy is adopting evidence-based changes.

Next, Hall presented some highlights from the Pharmacy Technicians’ Questionnaires circulated with the last survey. He noted that the data was collected anonymously to encourage candor. The identifiers included province, years of experience, and background only.

Nearly all (93%) of those surveyed said that they believed they possessed the knowledge and skills to be solely responsible for drug distribution once a pharmacist has reviewed and released a prescription for processing. There were similar high levels of acceptance (84%) that pharmacy technicians should be directly responsible and accountable for their actions or their failure to act, Hall noted.

In many cases, Hall noted, technicians said that they were less comfortable checking the work of other technicians than in their own ability and competence to perform tasks, such as CPOE, unit-dose or multi-dose packaging, and preparing IV admixtures. There was only tepid confidence (65%) in their ability to prepare oncology admixtures.
Technicians also expressed a lack of confidence in their ability to collect and assemble lab test results (38%), pamphlets and documents for patients prior to release (55%), and medication schedules prior to release (53%).

Hall asked if there were areas where participants felt there was insufficient data to make good decisions or to support necessary decisions and changes. Some of the identified needs were for data on small hospitals with fewer than 50 acute-care beds; information on how the leadership structure in hospital pharmacy is changing, and the extent to which other managers are involved; pharmacy-related data on post-discharge bouncebacks; what roles those with PharmDs are filling; what sorts of key practice indicators people identify, and how they intend to use them.

Wrap-up – Ah Ha Moments

Emily Musing thanked attendees for their participation and enthusiasm. She said the conference had provided her with tools to help deal with upcoming challenges and changes. “If there’s one constant in life, it’s change . . . As pharmacy leaders, we have the potential to stand up and lead this change, but this is risky; we stand a better chance when we have the tools needed to steer and drive change.”

Musing thanked all the conference speakers and support staff for making the meeting a success and extended a special thanks to Eli Lilly Canada for their continued support. She reminded participants that the next round of surveys would be distributed in mid-2014 and looked forward to that process.