Millcroft Hospital Pharmacy

Leadership Conference

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2011 Canadian Hospital Pharmacy Leadership Conference:

Creating a Vision for Hospital Pharmacy Practice in Canada

Hospital Pharmacy in Canada Survey Report
Millcroft Inn, Alton, ON
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Creating a Vision for Hospital Pharmacy Practice in Canada

Conference goals:

- How does hospital pharmacy integrate into the health care system?
- How can we build a care delivery model to contribute to the health care system / environment?

Welcome and Introductions

CONFERENCE CHAIR

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

Emily Musing welcomed participants. She said the conference provided an opportunity to make new connections and strengthen existing relationships with colleagues from across the country. She thanked Eli Lilly Canada for its ongoing support of the Hospital Pharmacy in Canada Survey and Report. Eli Lilly provides guidance and insights while affording the editorial board freedom in overseeing the report and developing a future vision.

Musing introduced the members of the Editorial Board: Michele Babich, Carolyn Bornstein, Jean-François Bussières, Patricia Lefebvre, Patricia Macgregor, and Iain Smith. Janet Harding would be leaving the board after 10 years and five surveys. Musing also introduced Chuck Wilgosh and Kevin Hall, managing editors of the Report, and thanked Paul Oeltjen, who collects and analyzes report data, and Marjorie Robertson, who provides administrative support for both the Report and the Millcroft Conference.

Innovation in Health Care

SPEAKER

Terry McCool
Vice President, Corporate Affairs
Eli Lilly Canada Inc.

Innovation will be the key to managing and improving health care in the future, Terry McCool said. The future success or failure of the health care and the life sciences sectors depends on things that are happening today and in the immediate future. Through innovation, hospital pharmacy can play an expanding leadership role in the reform of the health care system.

Health care costs continue to grow faster than the economies of most developed nations. In members of the Organisation for Economic Co-operation and Development, costs have grown 2% faster than gross domestic product over the last 50 years. McCool said health care is a victim
of its own success: health care is better, so people live longer, creating more demand for more medical interventions.

While people are living longer, straining the economy and health care systems, the global economy is stagnating. This places an increasing tax burden on young people. At the same time as patients want high quality care and access to life-saving or life-enhancing drugs and technologies, taxpayers want lower costs.

Health care is politicized and divisive, McCool said. Health care is the largest employer in the country and significant reform could have a profound impact. However, the government lacks the political will to make necessary changes.

Canada’s health system is population-based but individual patients determine overall outcomes. Outcomes are not only controlled by physicians but by patients themselves, as is the case with chronic diseases. What doctors say is good for patients often differs from what patients want. To change that model, patients must be consulted. Innovation makes it possible for people to talk to each other and offer mutual support.

Innovative technologies are also the key to timely access to care. Coordination of information-flow is crucial to successful health care. Improving patient engagement through health records allows patients to manage their own health care and lifestyles and reduces the likelihood of errors.

McCool noted that Sunnybrook Hospital in Toronto is using cloud-based software called MyChart™ to help patients manage their own health and care with great success.

People desire independence and better quality of life at home. Team-based approaches can focus on improved outcomes and help patients navigate home care and other services.

The focus of physicians must shift from acute episodic treatment to improved outcomes, McCool said. The focus of medical education should also shift from acute to chronic care. The current system is too rigid, with too much interference by ministries of health into day-to-day operations. As medicine continues to become more and more specialized, success depends on utilizing other health care professionals, such as pharmacists.

Innovation in health care is a dynamic process, McCool said. It can lead to improved health care, which creates wealth and economic development. Wealthy countries, in turn, have more to spend on health care. In Canada, however, a wall has been created between those who benefit and those who innovate. Regulation and the length of time it takes for patients to access new drugs and technologies are profound barriers to improved health outcomes.

McCool said there are both internal and external challenges in pharmacy, as the industry spends too much and produces too little. New technologies have the potential to make health
care more sustainable, affordable, and accessible. There has never been a more compelling case for the value of biopharmaceutical research.

Though the demand for drugs to treat diseases like Alzheimer’s, diabetes, and cancer increases, regulators are requiring longer and more complex trials. The challenge is to continue to evolve regulatory practice as science evolves. In Canada, the risk-benefit equation has been replaced by a focus on risk and cost-effectiveness.

Alzheimer’s and dementia have the potential to bankrupt the system unless treatments are found soon and we start building more and better long-term care facilities, McCool said. The treatments for those diseases are going to come from labs like Eli Lilly’s.

Eli Lilly has transformed itself into a fully-integrated pharmaceutical network that tries to leverage what it does well while attracting new research molecules. By developing innovative networks like the Chorus Group, it has been possible to manage more molecules at once while sharing the risk and expertise more globally, McCool said.

The company has also created funds to attract new molecules, called the Mirror Portfolio. If Eli Lilly decides not to pursue a particular molecule, it is made available to other companies to put on the market. At the same time, the company has reduced its size by consolidating support services in certain regions and outsourcing some transactions to other companies.

There is a lesson here for health care, McCool said. For too long Canada has avoided difficult discussions about which responsibilities should fall to the public insurer and which to the individual. He said the Canada Health Act must be revisited.

He said there is great potential for pharmacists to participate in new and innovative ways, and to be catalysts for positive change. He encouraged participants to use this meeting’s forum to continue to move in that direction.

Setting the Frame

Cost, Quality, and the Sustainability of the Health Care System

**Speaker**

Adalsteinn Brown  
Dalla Lana Chair, Public Health Policy  
University of Toronto

Despite perceptions and arguments to the contrary, health care works, said Adalsteinn Brown. In the current financial climate, cost and capacity are serious problems and there has been little success in reining in cost growth. It is possible to do much more with what we already have by focusing on quality improvement (QI), but there are limits to how fast capacity can be increased in the current system without some significant and profound changes.
“The system is pretty frayed right now,” Brown said. “In some ways it’s because we’re doing good things, not bad things.” To demonstrate this point, he cited the common belief that we are in the middle of a diabetes epidemic. Soon one million people in Canada will have the disease. In fact, Brown said, there are more people living with diabetes because treatment is better and people are living longer. Epidemiological evidence indicates that while prevalence (the total number of cases) increased by nearly one-third between 1995 and 1999, incidence (the number of new cases reported each year as a share of population) remained relatively stagnant.

While it is true that an unhealthy population has increased risk factors for developing this largely behavioural disease, the real cause for the epidemic is rooted in the ever-improving success of disease treatment.

“Success feeds the need for more care with little financial or political opportunity to shift the system towards prevention and dealing with the broader determinants of health,” Brown said.

Brown presented data on per capita health care spending in Ontario from 1975 to 2009. The cost-growth curve is steep from 1975 to the beginning of the recession in the early 1990s. The next several years saw the imposition of “draconian measures designed to cut costs.” These included the social contract, clawbacks, physicians’ salary caps, reductions in medical school places, hospital bed closings, and other cuts. Costs actually stopped rising.

However, the real results, a few years later, were a significant loss of trained personnel and a huge crisis of confidence in the system. Consequently, even in the face of the current global recession, politicians are reluctant to slash health care spending.

“The easy thing to do from a policy perspective is to stop spending as much . . . when you have to think of what to do beyond cuts, our system does not have the managerial mechanisms to make the necessary decisions.”

The perception that increases in health care spending are largely the result of labour costs is incorrect, Brown said. Although nearly half a million Ontarians are employed in the sector, labour costs increase only 1–5% annually, while the costs of supplies, drugs, and equipment increase 810%. This makes it much more difficult to control costs, he said, because it is not a question of doing less or paying people less; it is necessary to make decisions about what is actually being done.

The same trend is apparent in long-term care. One reason for increased spending is that, as the population ages, the system is dealing with sicker people. At the same time, our dominant approach to care is changing. Lifestyle modification and pharmaceutical approaches are increasingly more common.

Despite increased spending and different approaches to care, errors and quality problems persist. Hospitals frequently measure success by length of stay, Brown said. However, fewer re-admissions and complications would have a much more profound impact on costs than shorter
stays. “Despite being one of the highest per-capita health care spenders, Canada is only a middle performer in terms of mortality due to medical misadventure.”

In a recent survey of leading systems around the world, Ross Baker looked at several factors, including leadership, quality, patient focus, work force engagement, and capacity for improvement. Brown’s group surveyed Ontario hospitals and other health care organizations to see how those elements were being put into practice and then extended these best practices throughout the system using the Excellent Care for All Act.

There are many interesting things being done at many different hospitals but no hospital is doing everything well, Brown said. “The one thing that is not contagious in our hospitals is successful quality improvement practices. We don’t seem to share them.”

Although all participants at the conference had participated in a quality improvement initiative in the last two years, Brown noted that in most of the health care systems it was more common for one in 20 people to be actively engaged in QI projects, despite the fact that evidence clearly links quality improvement to decreased costs.

Changing practices as physicians age is another daunting trend in the health care system, Brown said. Studies show that doctors tend to decrease the size and scopes of their practices after they reach 55 years of age. By 2015, 20% of physicians will be over 65 and nearly half will be 55 or older. Doctors are aging at the same rate as the population and, even with more medical schools or changing standards for foreign-trained doctors, a shortage is inevitable.

At the same time, other health care professionals—including nurses and pharmacists—are younger. This means it is almost certain that every other professional group will be doing more while doctors are doing less. Even that will probably not be enough, Brown said. In two or three years the number of Canadians over 65 will be greater than the number under 15. “All of a sudden, all the people who pay for the system will be outnumbered by the ones using it.”

Brown identified another phenomenon that is rarely accounted for in terms of health care costs. Many Canadians have taken care of a sick loved one in the last year, which costs the economy about $30 billion in lost wages and other costs. By 2030, that cost will rise to $63 billion because the intensity of care provided informally at home will increase. In other words, a large portion of the costs associated with our health care system are uncounted and informal.

The daunting question is “Where may we go from here?” Brown said. Some simple things can be done to improve quality in the system. Many leadership initiatives are already in place, including quality committees, QI plans, and compensation linked to quality. In Ontario, Alberta, and British Columbia, there is movement toward patient-based payment. The experience of other jurisdictions suggests this measure alone, if done properly, leads to significant cost and wait time decreases, and dramatic increases in productivity and quality. Linking funding to quality is a good step, Brown said, but it is not enough.
The responsibilities of various health care professionals will change, he predicted. Doctors will spend longer in specialty programs. Nurses will have more academic credentials. The role of pharmacists will also change, as the focus shifts from supply side controls and costs to quality improvement.

Policy frameworks must support, rather than hinder, innovation, Brown said. “People need to stop thinking about how they’re doing things and think about where we’re going… so policy frameworks have to avoid over-regulating the system.”

The system must take advantage of social media and other technological advances, he said. Canadians are among the biggest Internet users internationally. More and more people are turning to the Internet and social media like Twitter for health information. Yet ensuring patients get accurate information electronically is not supported by the health system. Currently, the system will not even pay doctors to give email advice to patients. Leaders in health care must decide if e-health is going to be more than a simple record-keeping system.

“All of it sounds dismal,” Brown concluded. “But there’s a lot of hope and a lot of light. We need to decide what we want in the system and then decide how to get there. Right now, there is no big plan, no strategy.”

The system is neither too big nor too complicated to have a strategy with meaningful ways of measuring success across professions, he said. “You can’t succeed on the basis of things you can’t measure and you can’t measure things if you don’t know what it is you are trying to achieve.”
Transition

Impact on Pharmacy and How Pharmacy Can Have an Impact

Speaker

Kevin Hall
Associate Professor, Social and Administrative Pharmacy
Faculty of Pharmacy and Pharmaceutical Services
University of Alberta

Kevin Hall presented selected data from the 2009/2010 Hospital Pharmacy in Canada Report, which is now available online. (http://www.lillyhospitalsurvey.ca/hpc2/content/home.asp)

He asked participants to consider the current format, contents, and structure of the survey. “Does the survey tell us what we should be doing as we move forward or are there some things that should be measured differently?”

Hall said the 72% response rate to the survey is phenomenal and allows the survey to capture over half of the country’s hospital beds and an even larger proportion of beds in teaching hospitals. Small hospitals are not represented (inclusion criteria is 50 acute-care beds), but response to the last several surveys has remained fairly static across different sized hospitals, regions, and teaching versus non-teaching hospitals.

The survey captures data in the following key areas:

- Profile of outpatient clinical pharmacy services
- Profile of inpatient clinical pharmacy services
- Clinical practice models
- Evaluation of clinical pharmacy services
- Clinical pharmacy competencies
- Pharmacists’ prescribing rights
- Support from technicians for clinical activities
- Respondents’ priorities versus level of service
- Respondents’ priorities versus evidence of value

The survey also identifies four distinct practice models: drug distribution centred; clinical practice centred; separate clinical and distributive practice; and integrated drug distribution and clinical practice. Hall noted that surveys in the United States exclude the clinical practice-centred model. In Canada, however, that model is in play in 13% of respondents’ hospitals. The most common practice model is integrated drug distribution and clinical practice at 62%, while
the separate clinical and distributive model and the drug distribution centred model accounted for 5% and 20% of hospital practices respectively.

Hall asked participants to consider whether integrated drug distribution and clinical practice is the model pharmacy leaders want to see in the future. If so, he asked whether the combination of regulated pharmacy technicians and automation will negate the need for the pharmacists’ involvement in the drug distribution system.

Most survey respondents said hospital pharmacists have an important role in clinical practice, but only 31% said they evaluate clinical pharmacy services. If hospital pharmacy continues to be more involved in clinical practice, then systematic and consistent evaluation is important. Hall asked participants to consider how to assess clinical practice in the future to determine which services provide the best patient care.

Hall said that the services with the most clearly demonstrable positive outcomes, such as admission drug histories and in-service education, do not appear to be prioritized. He said there is a discrepancy between the priority assigned to certain activities and the evidence to support those activities.

“Pharmacists always argue that their services are essential, an integral part of the health care system,” Hall said. Yet some decisions seem to be based more on pharmacist preference than on evidence.

Hall questioned whether pharmacists are adequately prepared for the rigours of clinical practice. “Pharmacists are trained that everything must be perfect and precise, and then they’re sent out and asked to make clinical decisions based on uncertainty, which is an incredible challenge.”

Today’s competency requirements differ from those of the past. Part of the solution is to attract people who are more comfortable dealing with the subjectivity and uncertainty of clinical practice, and to adjust the training for new pharmacists. Another part is to develop competencies in practicing pharmacists through in-service training.

Although pharmacists have the right to dependently and independently prescribe in many jurisdictions and circumstances, the uptake has been fairly low; it’s a little higher in hospital settings. Hall asked participants to consider whether pharmacists would ultimately assume responsibility for drug therapy management.

Unit-dose centralized drug distribution systems dominate both acute and non-acute beds in the survey, he said, accounting for 58% and 60% of distribution respectively. Technology and automation, managed by pharmacy technicians, may represent the drug distribution system of the future. This is underscored by survey findings about the increasing scope of technicians’ activities. The line between technicians’ and pharmacists’ role is unclear and whether pharmacists are prepared for their evolving roles remains to be seen.
The human resources section of the survey determined that pharmacists now make up 39% of pharmacy departments, compared to over 50% just a few years ago, and pharmacists are increasingly performing clinical tasks (47% versus 40% for distribution tasks).

The supply of trained pharmacists appears to have stabilized, Hall said. Vacancy rates are lower than in the past and a larger number of people are entering the field, while foreign-trained pharmacists are also more prevalent. There may be a surplus of pharmacists in the future, particularly if roles do not expand.

The survey’s findings regarding technology were interesting, he said. Pharmacists almost unanimously support technology with built-in intelligence and use some of its most basic capabilities. However, technology is used less often for more sophisticated tasks. Respondents said they were discouraged because physicians rarely change orders after receiving pharmacists’ advice or alerts were so frequent that responding to them was not practical.

The number of sites that have implemented Computerized Physician Order Entry Systems is still relatively small, although it has increased by five to a total of 13 since the last survey. However, many hospitals have not installed interfaces with the pharmacy department or enabled two-way communication. The same trend seems to be true with smart infusion pumps.

“We seem to be spending money on expensive technology, then dumbing it down so that it will let us continue doing what we’ve always done,” Hall said.

Hall noted that the future role of pharmacists will likely require experiential training, but he questioned whether there was clarity about how that training would be accommodated and whether new models of structured experiential training should be pursued.

He challenged participants to consider the implications of the evolving role of hospital pharmacy, where to place resources, and how to define and address key priorities for the future.
The U.S. Perspective

American Society of Hospital Pharmacists' Pharmacy Practice Model Initiative

**Speaker**

Carolyn Bornstein  
Canadian Society of Hospital Pharmacists 2015 Project Coordinator

Carolyn Bornstein presented an overview of the Pharmacy Practice Model and Initiative (PPMI) in the United States and a summary of the outcomes from the 2010 Pharmacy Practice Model Summit, at which she was the only non-American participant. The Summit encouraged hospital pharmacists to be leaders and innovators and to incorporate the appropriate pharmacy practice models into their strategic planning processes. Pharmacists received concrete recommendations for guiding the evolution of pharmacy practice so that it is economically viable and linked to better patient outcomes.

The current reality in the United States is that only half of patients receive pharmacists' care, Bornstein said. With health care reform, there will definitely be more patients to deal with and new pay-for-performance models that will transform the way pharmacists must do their jobs. The PPMI’s goal is to “develop and disseminate a futuristic practice model that supports the effective use of pharmacists as direct patient care providers.”

Bornstein said, “The essential message was: ‘let’s design our future before someone else does it for us.’”

The PPMI aims to describe optimal pharmacy practice models that ensure safe, effective, efficient, and accountable medication care, Bornstein said, while acknowledging that unique models work for individual institutions or systems. The overall objectives are to identify core services in each pharmacy department, foster understanding and support for optimal practice models, identify key technologies and specific actions to support those models, and determine the best tools and resources for implementing them.

U.S. pharmacies adhere to three practice models:

- Drug distribution centred model
- Clinical specialist model
- Patient centred integrated model

The clinical practice-centred model, as it is understood in the Canadian context, is not among the defined U.S. models. Currently, Bornstein said, one-quarter of U.S. hospital pharmacists work with the drug distribution model, while nearly 65% work in the patient-centred integrated model. In the future, the American Society of Hospital Pharmacists (ASHP) predicts, the drug
distribution model will decrease to only 4%, while the integrated model will increase to represent nearly 84% of practice.

Participants at the Summit identified a set of over-arching principles, rooted in the commitment that all patients have a right to pharmacists’ care, Bornstein said. Recommendations dealt with specific services, technology, roles and responsibilities of technicians and pharmacists, training, and change management.

The Summit identified the following key messages:

- Pharmacists should be champions, leaders, and innovators.
- Every pharmacy department should review its deployment of resources and identify gaps.
- Key summit recommendations should be part of departmental strategic planning.
- Pharmacy practice models should be economically viable.
- Success stories should be shared.
- Hospital pharmacy must lead change or change will be imposed by others.

The challenge will be to translate recommendations into practice, Bornstein said. The summit identified several key areas where careful attention is warranted. These include defining clear work flow objectives with delegated task-oriented work, installing appropriate technology, identifying new roles for technicians, investing in pharmacist education, collaborating, sharing best practices, and customizing practice models with defined consistent outcomes.
Care Delivery Models

1. What is the Optimal Prioritization of Hospital Pharmacists' Professional Activities in a Collaboratively Developed Best Practice Model?

**Speaker**

Olavo Fernandes  
*Director of Pharmacy—Clinical, University Health Network, Toronto*

Olavo Fernandes reviewed the process of designing a hospital pharmacy best practice model developed at the University Health Network (UHN) in Toronto. The multi-faceted framework for prioritizing professional practices is evidence-based and can be generalized to other settings and institutions.

Often practice models present hospital pharmacy activities from a top-down perspective, he said. The widely-inclusive collaboration process at the University Health Network captured the interactivity of various roles in the hospital setting laterally as well as from the bottom up.

Pharmacy practice has evolved over hundreds of years, Fernandes said, but a particular set of factors influence modern practice that necessitate dynamic change.

Some of the factors influencing hospital pharmacy practice include:

- Scope of practice and regulatory changes, including pharmacists allowed to prescribe medications and order lab tests
- Changes in the health care system, including regionalization
- The expanding role of pharmacy technicians and their regulation
- Use of technologies, such as CPOE (computerized physician order entry), bar-coding, robotic dispensing, and wireless devices
- New evidence regarding clinical pharmacy services and patient outcomes
- Education and teaching, including competency based standards, residencies, and PharmD curriculum changes

Fernandes said hospital pharmacists today are faced with overlapping, and sometimes competing, professional priorities. These include pharmaceutical care, patient safety, the use of evidence-based medicine, computerized order entry, medication reconciliation, hospital accreditation, and varying provincial practice legislation. As a result, pharmacists need to objectively assess and realign patterns of practice, particularly in light of current and probable future resource limitations. An optimal practice model must meet the needs of a range of stakeholders: patients, health care professionals, students, staff, funders, and society in general.
“The key question is what we should start with in contemporary hospital pharmacy practice. What are the parameters that will influence us? What is the ideal state we need to move toward and how do we bridge the gap between here and there?”

Both front-line practitioners and pharmacy leadership helped define the role, scope, priorities, and accountability of hospital pharmacists from all of the relevant perspectives, he said. They were challenged to create an “optimal” model that could be customized for each of the UHN’s three sites and that accounted for local priorities, resources, and perspectives.

To accomplish this, the following five-step practical framework was adopted:

- Collect feedback from front-line pharmacy workers through focus groups and an online survey to ensure engagement and a sense of grass-roots ownership of the process.
- Collect pharmacy leadership feedback, including five-year strategic planning.
- Conduct an assessment of pharmacy literature.
- Harmonize and reconcile the process and its outcomes in a systematic way.
- Engage departments, front-line staff, patients, external peers, and leaders in a broader validation process.

Fernandes cited research that established which pharmacy practices lead to meaningful change in patient outcomes. In a large U.S. observational study of nearly 3 million patients in 885 U.S. hospitals, C.A. Bond and Cynthia Raehl determined that admission drug histories have the greatest capacity to reduce patient deaths, accounting for one-fifth of all the reduced mortality attributed to specific pharmacy practices. Pharmacist participation in CPR teams and on medical rounds was associated with about half as much reduced mortality. Drug use evaluation, on the other hand, was a clinical practice at nearly all the hospitals reviewed but it was associated with just over 1% of reduced patient deaths.

These findings are fairly consistent with those of P.J. Kaboli, who defined five clinical activities that positively affect patient outcomes in a 2006 study. These included: attendance on medical rounds; patient interviews and assessments; medication reconciliation; discharge counselling; and follow-up after discharge. Other studies indicated that the same core clinical practices led to reduced post-discharge hospital and emergency department visits, and fewer adverse drug events.

“Investigators underscore that pharmacists, physicians, and nurses need to work as a team, together with the patient, to make the most positive difference,” he said. Recent studies demonstrate the success of team approaches and the positive impact pharmacists have within those teams.
Having assessed relevant studies, stakeholders created different sets of imagery to reflect comprehensive hospital pharmacy practice, Fernandes said. The first is a “Pharmacy Globe View.” It presents the departmental vision, aligned with hospital priorities and domains. The second is the “Tree View,” an organic depiction of the many dynamic activities and roles within the pharmacy department. Another image is a “Pyramid View” from the perspective of the pharmacist. This image establishes a series of three levels of priority in clinical and operational activities and demonstrates how each level of activity builds upon the base below it.

In the pyramid, Fernandes said, Level 1 is composed of base activities focused on patient care and is the minimum acceptable level of vital activities during periods of reduced staffing. Level 2 is composed of those base activities plus certain core functions, while Level 3 is the optimal level, the level at which the hospital pharmacy department strives to operate. It includes all the Levels 1 and 2 activities plus teaching, full pharmaceutical workups and participation in research.

Another novel visualization tool was a “wordle,” composed of a series of interlocking words patients had associated with excellent pharmacy practice. Still another used a road map to outline the current state and future goals of hospital pharmacy practice.

Overall, Fernandes said, both the outcomes and the process itself were of great value. “We are on a journey and there will be challenges and differences of opinion along the way. . . . We have the opportunity to create the future. The priorities we set now will influence what pharmacy looks like in the future.”

2. Pharmacist Practice Expectations: Weighing Value and Setting Priorities

Speaker
Nick Honcharik
Regional Pharmacy Manager, Professional Practice Development
Clinical Manager, Adult Critical Care & Rental Programs
Winnipeg Regional Health Authority

Nick Honcharik presented an overview of the ongoing development of Pharmacist Practice Expectations at the Winnipeg Regional Health Authority, which began in 2003. While there were several differences from the design of the University Health Network’s process and practice model, he said there are critical similarities.

Consider a pharmacist returning to a busy ward after a weekend off, responsible for 30 complex patients and many competing priorities, Honcharik said. Pharmacist Practice Expectations are guidelines to help provide the most effective care possible, using the best available evidence.

The aim of practice expectations is to standardize and prioritize practice activities across acute care sites, while providing a tool for self-evaluation, and assisting in the orientation and
education of staff. The process for developing the expectations was consultative and included front line staff, pharmacists, and managers. Because staff were uncomfortable calling the priorities “clinical standards,” the term “expectations” was used instead and voluntary rather than mandatory self-assessments were established.

The initial working group collated existing site-specific policies and clinical tools regarding pharmacists’ practice expectations and used them to develop a list of core (must do) and desirable (should do) activities. Using this framework, a series of focus groups at individual acute care sites established consensus about the practice activities and their rankings, Honcharik said. This list is evolving, he said, but the practice model could apply to other areas beyond acute care.

The hospital’s Medication Safety Working Group asked that the priorities in the “living document” be revisited on the basis of maximizing patient safety. The initial group identified several goals for all acute care sites:

- Decentralized role for pharmacists
- Pharmacist rounding with patient care teams
- Pharmacotherapy monitoring
- The provision of drug information
- Selective patient interviews
- Selective patient education

Honcharik said some of the activities were chosen because clear evidence supports their impact on improved patient outcomes. However, in other cases, there is support in medical literature but no hard scientific evidence. Ultimately, he said, the group chose activities believed to diminish adverse events.

Thirteen core activities for pharmacists were identified:

- Identify and resolve drug-related problems (DRPs)
- Individualize treatment, particularly in light of high-alert medications, pharmacokinetic issues, and organ function issues
- Carry out rounding
- Conduct monitoring and follow-up
- Disseminate drug information to patients and doctors
- Enhance continuity of care within site
- Conduct selective patient interviews to clarify allergy issues at order entry
• Maintain documentation
• Ensure order entry is completed
• Review medication order (triage)
• Provide formal consultations
• Investigate medication errors
• Conduct medication reconciliation at intake and discharge

The group also identified desirable activities on a lower priority for fully staffed days. Honcharik said these included preparing therapeutic plans, providing selective patient interviews and education, educating health professionals, researching drug use management and non-urgent drug information, ensuring continuity of care between acute care sites and community pharmacies, reviewing medication administration records, and conducting regional or site initiatives.

Honcharik presented targeted activities that addressed high-alert medications, including opiates and aminoglycosides. The activities were designed to provide monitoring and follow-up to minimize the potential for patient harm, while ensuring high-alert medications address the patients’ broader issues.

One challenge was to establish a list of priorities that would assist pharmacists in applying the practice expectations. “The greatest, most comprehensive list in the world is useless if it is not applied,” Honcharik said.

From the outset, the Pharmacist Practice Expectations were presented as activities pharmacists should strive to accomplish. The list provides an opportunity for self-reflection and a tool for self-development. Pharmacists can’t do everything all the time, Honcharik said. They assess the urgency of any given situation to determine how much time to spend on particular activities and whether to seek assistance. Communication across the whole patient care team is important. Adaptations to the list were made for particular areas of acute care.

Originally, the practice expectations were voluntary, Honcharik said. Over time, though, there has been pressure—even from front line staff—to make them mandatory. To that end, several Practice Directives have been developed. For example, there is a specific directive on individualized medication therapy to adjust dosage for kidney dysfunction and another on the pharmacists’ obligations regarding medication allergy documentation.

Recent changes in management structure improve support for the Pharmacy Practice Expectations. Regional clinical practice teams have been developed, based on where they work. Clinical practice teams include pharmacists, clinical resource pharmacists, and clinical managers. A Clinical Practice Council and Regional Education Team have also been established.
Their objective is to give pharmacists the maximum amount of time to provide improved patient care.

The practice expectations have been in place for nearly six years, Honcharik said, but they are constantly being refined and re-ordered on the basis of the best possible scientific evidence. In the future, he anticipates a greater shift to mandatory from voluntary compliance and better assessments of clinical programs.

“Whatever you come up with, know you’ll need to adjust as you go based on experience, staff input, clinical team input, and newly emerging evidence,” he said.

**Small Group Discussions**

*Defining Your Pharmacy Practice Model*

In breakout groups, participants defined and designed their ideal pharmacy practice model (PPM) by focusing on a set of key questions about what services to provide, to whom those services should be provided, the roles of technicians and technology, education and research, and the best ways to support those models.

Participants universally stressed the importance of ensuring that hospital pharmacy practice is patient-focused with a high degree of clinical activities. Pharmacy practice must be supported by well-trained technicians, modern pharmacy technologies, and clear well-defined lines of communication. The “dream” hospital pharmacy practice ensonces pharmacists in the middle of the direct care team, providing patients with a continuum of services from intake to follow-up after discharge.

Although all groups reported that increased clinical services were critical, some identified the ideal model as the clinical practice-centred model, while others opted for the integrated drug distribution and clinical practice model. One group said the most important issue was changing the name of the practice model, so that it included the words “patient-centred,” to ensure that vision motivated every aspect of the practice.

“Patient-centred pharmacy has to be integrated throughout the health service in terms of planning and pharmacists need to be involved in making decisions. The greatest emphases must be on quality, patient needs, ethics, and outcomes,” a participant said.

However, given the real limitations of available resources and pharmacists’ time, several participants stressed the importance of prioritizing care for patients on the basis of the complexity of their medications or medical conditions.

All groups favoured a decentralized working model that allows pharmacists to be in the wards as much as possible. One group limiting participation in drug distribution while strengthening order entry review to ensure therapeutic appropriateness. Pharmacist involvement should start
as early in the patient’s stay as possible, ideally with medication reconciliation on intake, but the “med rec” at discharge is critical. “If there is a medication error on intake, there’s time to catch and correct it, but once a patient leaves the hospital they’re on their own; reconciliation and counselling at discharge can really save lives,” a participant observed.

An ideal distribution system would be staffed by technicians and enabled by technology, all groups agreed. Technicians should be well-trained and credentialed and be supported by advanced technology with enhanced decision-making tools. That technology should include Computerized Physician Order Entry (CPOE), bedside verification, Smart Pumps, bar-coding, hand-held devices, and automated IV systems and dispensing cabinets.

Building technology into the system from the start is much less costly and more effective than adding it later, participants said. In the ideal PPM, that technology is fully utilized. This includes ensuring that decision-making tools are enabled, and two-way communication systems installed. Several participants said pharmacists should be the professionals who update and input information into CPOE systems and other “smart” technologies.

Participants said that it might not be practical for smaller hospitals to provide pharmacy access 24 hours per day. To address this gap, several recommended grouping smaller hospitals together in regional or “virtual” hubs, so that they could share resources and provide round-the-clock services, such as order entry review.

There was general support for enhanced scope of pharmacists’ duties, including both dependent and independent prescribing authority. As one participant said, “As long as we are limited to giving advice only, we are missing important opportunities to increase patient safety because we can’t control whether our advice is taken or how quickly it’s acted on.”

PharmD curriculum must be improved to prepare new graduates to fulfill more complex clinical responsibilities, all groups agreed. Robust residency and orientation programs are an important part of this process. “Education programs need to teach people to be decision-makers, not folks who don’t know how to deal with uncertainty.” In-service education for existing staff also should be supported, both financially and through leadership.

The ideal PPM is committed to strong and ongoing research to equip pharmacy leaders and other decision-makers with the tools they need to make appropriate, evidence-based decisions. Groups identified ways to ensure adequate resources for the various models proposed. These included using all available evidence to underscore the value of enhanced modern hospital pharmacy to decision-makers and making sure to align practice models with institutional goals. Outcomes should be measurable so pharmacists can report back to decision-makers about what is working and what needs improvement.
“The idea is not to stop at a vision of where you are now, how far you might get or, even, where you want to go, but to put down some meaningful milestones. Then, it’s our role to determine all the things that should be put in place to get there,” said a participant.

**Marketing Our Vision**

**Developing Effective Advocacy and Communication Plans**

*Speaker*

**Sheila McEachen**
Senior Vice President
Cohn & Wolf, Toronto

Sheila McEachen presented a practical overview of how to successfully lead or participate in developing strong, effective advocacy and communication plans.

McEachen said the advantages of creating a detailed plan or program include the following:

- Clear and established objectives
- Continuous communications rather than “firefighting” or crisis communication mode
- Realistic measurable objectives and points of reference
- A work schedule and a blueprint for future planning

“Although the tools we use have evolved tremendously, communication is still just a two-way exchange of information,” she said. “And advocacy is just using communication to effect change—on behalf of your profession, on behalf of patients, on behalf of the institutions you represent.”

McEachen encouraged participants to consult others, particularly members of target audiences, when developing a plan. Involving others from the outset generates the best and widest possible knowledge and encourages creativity, while securing early buy-in from target audiences.

Once a vision is clear, the next step is to gather the team together, McEachen said. Review the situation and people’s experiences. Take the time to figure out what you know and what you need to know. Then assign appropriate tasks to team members and ensure they are accountable.

Context is important, she said. Understand the challenges and opportunities that exist, the precise objectives and target audiences of each activity, and the different goals for each respective audience. Success must be defined, to show when a problem has been solved or a goal reached.

Good research is the foundation of a good communication or advocacy plan, McEachen said. While formal research is critical, less traditional research sources like the mainstream media,
and chat rooms are also important. Establish a good sense of the landscape surrounding the program direction, and then define target audiences and their influencers. Those with high profiles who are well-aligned with the message are the ideal audience because they can help build momentum in the early stages of the program. However, high profile people who do not agree with the message are also important targets because changing their views will profoundly affect the views of others.

A situation analysis creates context for the plan, clear measurable objectives, target audiences, and unique goals for each audience. A SWOT analysis (strengths, weaknesses, opportunities, and threats) is the foundation for developing a strategic approach that outlines guiding values and opens the way for creative solutions. From that foundation, develop concrete strategies that lay out how objectives will be accomplished and provide a broad overview of what is to be accomplished.

The creative concept, McEachen said, is the transition from strategy to tactics. Essentially, it is the story or message to be conveyed. Succinct key messages, which address each target audience, must be defined and the overall “story” shaped. That story should define the problem and the solution and provide a call to action. All messages should have proof points to provide the rationale for the changes or actions being advocated.

All tactics should relate back to objectives and strategies and have concrete outcomes attached to them, McEachen said. They should be presented in logical order. A critical path should be established to outline the steps required to execute each tactic and establish timelines.

Finally, both qualitative and quantitative analyses of outputs, impacts, and outcomes at various time points before, during, and after the campaign will evaluate not just whether the outcomes are reached but also whether they have the desired impacts. Both hard costs and time must be considered in the budget, including the costs of evaluation, as well as a contingency plan to deal with institutional changes.

Conference participants then followed McEachen’s directions to develop mini-plans to “bring their visions to life.” They were asked to:

- Define objectives
- Choose key target audiences and define the behaviour to be influenced or elicited
- Define the call to action and some sample tactics

“Ask yourself, who must you engage. What do you want them to do? How will you communicate with them to achieve buy-in? What will you say? How will you know you’ve succeeded?”
Groups identified various objectives during the exercise. These included expanding to round-the-clock pharmacy services, instituting bedside medication verification, and securing additional resources to expand pharmacy coverage in critical care units.

All groups underscored the importance of leveraging key target groups, such as nurses or administrators to create early buy-in and momentum for their plans. They also advocated using both objective and experiential data to influence target audiences and decision-makers.

McEachen said participants should take advantage of existing expertise and tools within their institutions, such as in-house journals and public relations departments.

“Remember, this is about telling your story,” she said. Make sure key messages are succinct and memorable, whether you’re speaking to staff, policy makers or patients. Be able to tell your story in a concise way: problem; solution; call to action. . . . Then make those key messages your mantra.”

Simulation Game / Reflections

Jean-Francois Bussières
Chef, Département de pharmacie et unité de recherche en pratique pharmaceutique
CHU Sainte-Justine
et Professeur titulaire de Clinique
Faculté de pharmacie, Université de Montréal

Participants took part in a simulation exercise to design pharmacy services. They worked in small groups to achieve consensus about how to weight particular activities. Each group had stickers to represent particular activities in five areas of hospital pharmacy: distribution, clinical, teaching, research, and management. They assigned relative weight to each of the activities by placing the stickers on a poster, with the restriction that they could only use 60 stickers in total. At the end of the exercise, individual participants filled out an evaluation and their own personal weightings for each of the practice areas.

Jean-Francois Bussières led the exercise and collated and presented the results, along with a selection of comments and feedback from individual participants. No group had questioned the restriction to 60 stickers. All had accepted the wisdom of that limitation and the particular practice activities identified.

“I don’t pretend that we can do whatever we want as pharmacists, but sometimes it might be better to question the rules as they’re given,” Bussières said.

He challenged participants to question both what and why they prioritize. With limited resources in a constantly changing environment of evolving professional aspirations and legal requirements, prioritization becomes more important.
He said that pharmacists tend to be idealistic and to try to do everything, which drives the wrong choices. People define optimum levels based on different criteria—legal requirements, patient needs, scientific evidence, trends, or some other combination of factors.

In their pharmacy service designs, participant teams included from 58% to 88% of the activities in the exercise. There was a remarkable variance between individual rankings and consensus-based team rankings. While most teams had assigned weight to each of the designated pharmacy activity areas, two of eight had assigned no weight to a research component.

Every team, save two, assigned more weight to clinical activities than distribution. However, the percentage of weight varied between 24% and 50% for clinical activities and 11% and 37% for distribution activities.

The simulation exercise underscored the need for a clear and transparent process with relevant stakeholders to arrive at a hierarchy of principles that reflect shared values, internal and external obligations, evidence-based data, and good sense. That process must yield a comprehensive understanding of the current and desired future environment, a realistic plan for achieving it, and a top-to-bottom validation process.

Bussières said he would compile and correlate the data for the exercise for inclusion in a future scholarly publication.

Summary and Wrap-Up

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

“It is obvious the health care environment is facing many pressures and changing priorities,” Emily Musing said. “We have an opportunity to ensure that pharmacy plays a key role in these transitions.”

This meeting provided ideas, expertise, and motivation to help participants move forward as leaders enhancing the role of pharmacy during these transitions. She invited participants to take advantage, not just of new ideas they may have heard, but of new networks and connections they had developed over the course of the meeting.

She thanked support staff, speakers, and participants for all they had done to make the conference a success and concluded with her own “call to action.”

“We know what needs to be done. We have clear visions about what pharmacists and our own departments should be doing. You have been put into leadership positions because the people
around you see that you have the potential to be leaders. Use it. Do something about it. Lead your staff, and the region, and the profession into the future you’ve identified.”