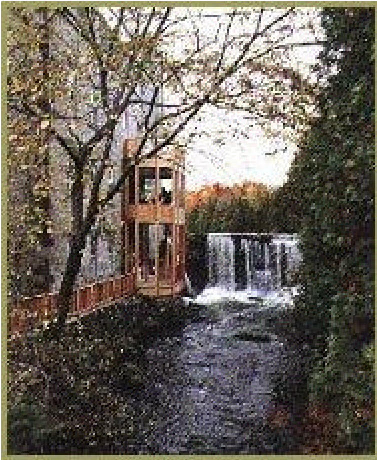


Hospital Pharmacy in the 21st Century

The Millcroft Conference

June 17-20, 1999

Day One
Healthcare in the New Millennium

Looking to the Future

Introduction

Ian Morrison, author, consultant, and futurist set the stage for the conference. Ian is the author of " The Second Curve" and an upcoming book called "Health Care in the New Millennium". His work with Fortune 500 companies has focussed on health care and information technology.

Ian took conference participants through a high level, fast paced analysis of Canadian health care, focusing on comparisons to the U.S. and other jurisdictions. Comparisons to other industries led to speculation about where to look for innovation in health care.

Refocusing at a level lower than the 30,000-foot overview, participants broke into small groups to discuss issues/ opportunities for pharmacy that demand a planned response and to develop innovative strategies to address them.

Barry Fishman, Director of Marketing, Eli Lilly Canada, concluded the day's sessions with a discussion of Lilly's performance management program as an important tool to manage our most valuable resource: people.

Ian Morrison: Second Opinion - Taking the Pulse of Canadian Health Care

Comparisons:

Ian noted "Canada has the best compromise globally between universality and high quality medical care", but it is a compromise that has its problems. The system works largely because of global budget funding but this funding also leads to controlled pressure, especially in times of change. Canada has quietly built some integrated systems whereas the U.S. is noisily undoing its vertical integration.

Health care systems are a product of a country's culture. Canadian values are a lot like most of the rest of the world. Most believe in some form of universality; most believe in equity (except Latin America which is multi-tier); most accept the role of government (health care is a social service); most believe in global budgets and the rationing that goes with global budgets. Surveys show the general public is concerned about wealthy, educated individuals who don't want to "wait in line" for medical services and would like to "buy up" to better access and advanced technology. Technology assessment and innovation are controlled and there is skepticism about the use of markets and competition in health care. Disease care is still the focus and has a strong lobby for funds compared to other determinants of health, e.g. social programs or narrowing income gaps.

At the public policy level Canadians have competing priorities. We believe in a publicly funded system and all that it entails, including balancing interests and access, but we still want open access to a well-funded disease care system, e.g. access to MRIs. This tension leads to conflict and controversy that the media plays a big role in by demonizing the Canadian health care system. However, there is a mismatch between what Canadians think about the system when they have not used it versus when they have. They actually have a better opinion of health care once they have accessed the system.

American values are different. The U.S. has no consensus on equity and universality – health care is not a right. American culture centers on volunteerism and local communitarianism with non-profit health care institutions. Americans are ambivalent about government control over health care and paranoid about the development of monopolies. They love new technology and innovation and use them as surrogates for quality. By nature are they are competitive, even in the face of evidence that competition doesn't make financial sense.

An increasing number of individuals in the U.S. are uninsured as people move off welfare and Medicare to poorly paid jobs that don't provide insurance. Managed care is moving away from defined benefits and

towards defined contribution (i.e. each consumer has a specific dollar amount to spend on health care, rather than access to a range of benefits). Consumers are paying more as employers reduce coverage. The U.S. version of managed care is having quality problems and financial problems and drugs are a significant cost factor. Patients believe that managed care harms quality.

Judging Performance:

The U.S. is number one in health care spending as a share of GDP at 13.6%. Canada is now in 4th place at 9.2% due to funding cuts. Canadians spend about half as much as Americans on health care when adjusted for exchange rates, and cost of living differences ($4,090 vs. $2,095).

Generally, the public supports the current system, as well as supporting a complete rebuilding of the system. In past 10 years, Canadians who think the system should be completely rebuilt have dramatically increased from 5% to 23%, coinciding with significant budget cuts. Forty six percent of Canadians are convinced that recent changes have hurt quality rather than helped it – more than other countries. Interestingly, Canadians had the highest level of knowledge about health care - it appears to be a national obsession.

A major issue in Canada is access to specialists and specialized care, weekend and evening service and waiting times. Waiting times for elective surgeries are the shortest in the U.S. where the main barrier is lack of money/insurance. Although Canada and Great Britain have few financial barriers to health care, in 1998 10% of Canadians spent over $750 per year out of pocket on health care.

Despite these issues, Canada ranked #1 among surveyed countries in terms of the proportion of patients that say their care was excellent. This may have as much to do with expectations as with true quality.

Drugs and Innovation:

Currently 12.6% of Canadian health care dollars are spent on pharmaceuticals. The share of drug costs in the U.S. is expected to go from 5.4% to 8.0% in 2007. The U.S. has experienced an explosion in direct to consumer advertising as companies try to attract consumers directly, bypassing physicians and managed care organizations.

As most pharmaceutical companies believe that they have only 2 years of full market access for a product before the competition takes over, they practice "venture capital" pricing and attempt to recoup all of their costs and make a profit in a very short time.

Other than drugs, physicians are generally technophobes. Canada reinvests about 1% on information technology (IT); the U.S. is in the 2-3% range. Compare that to private industry, which reinvests 10% on IT. Health care in general needs a massive IT investment.

Leadership and White Space - Strategy Innovation in Healthcare:

There have been many fads in health care but not much true innovation. Because health care is conservative, there is a reluctance to innovate. We don't experiment with health care for some very good reasons – trial and error isn't always the way to go. The way to inject innovation is to listen to new voices, have new conversations, new passions, new perspectives, and new experiments. There have been a lot of old voices in health care. In addition, there is no real crossover with other industries and we tend not to get many new perspectives - even our consultants are from within the industry.

Health care is different from other industries. It is highly professionalized and complex, yet it is largely a cottage industry with individual practitioners who are not coordinated (particularly physicians who want to do things their way). This has resulted in enormous variations in clinical practice even in geographically proximate areas. Government involvement is significant, and reimbursement mechanisms haven't changed. Compare this to other industries, such as banks, that are also highly regulated but can still innovate.

There are lessons that can be learned from other industries. For example money has moved from banks to mutual funds in the financial services market; people can trade in money on-line rather than deal with

one physical location. Huge explosions in strategy take place where there is a focus on IT as a platform. For example, the use of HTML as an Internet language has allowed explosion of this medium. Yet a lot of hospitals still have mainframe systems that cannot interact with the PC/ Windows systems on which the rest of the world operates. In the hospital sector there is a chasm between the complex needs for information in health care and the lack of funds to buy and implement the systems. Another lesson is the need for market leaders or thought leaders –people who clearly demonstrate a different way of doing things, e.g. Bill Gates.

Where can we look for innovation in health? One place to look is at the determinants of health to get away from disease care. We need to look at reimbursement mechanisms more creatively, for example, micro fees for service, such as a mini-fee for every hit on a health care web site. Currently, the Canadian system is obsessed with taking money out of the system without putting money back in smart ways that make financial sense.

What are some ideas about how to start invigorating strategy? Take a walk off campus – see what is happening in other industries. Make connections with systems. Start safe experiments. Set up ecosystems for innovation – get a whole enterprise involved in it. Develop metaphor factories – identify ways that to take learning from one market to another. Try viral marketing, for example "Hotmail" gave its product away and grew from zero to 2 million users in 2 years. Use humour, irony and paradox as a tool for understanding.

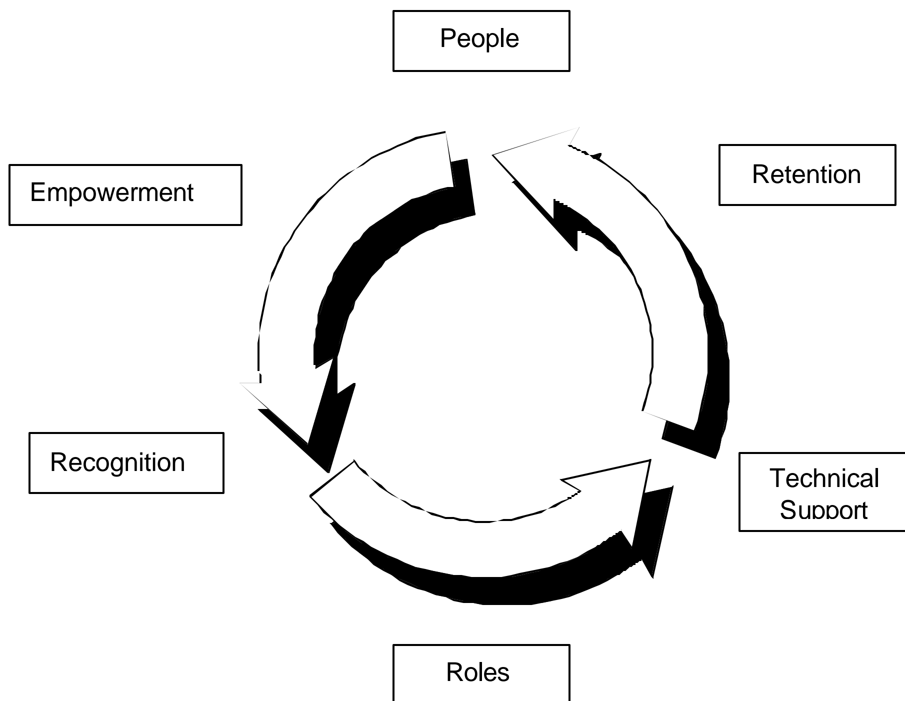
Canadians are left with a number of questions:

How do we make change happen and transform our organizations?
Where do we get new money if we are taxed to the max?
What do we tackle first, e.g. waiting lists or community care?
How do we prevent local customization from undermining national standards?
Measurement, metrics and standards- how do we use these as we move ahead?
What is the role of evidence based medicine and utilization management?
The Canadian health care system is based on our values, which are powerful motivators. How do we harness the "power of purpose"?

Small Group Discussions

Conference participants broke into small groups to discuss threats and opportunities for pharmacy that demand a planned response. Groups reported back and three common themes were identified and developed. Later, participants took the three themes and developed new strategies to address the issues.

1. Human Resource Management, Planning and Development:



Threats
Shortage of pharmacists, for example, 12% of Quebec positions are currently vacant and a position takes 8-9 months to fill. Competition for limited number of residencies. Better clinicians are leaving the profession because they feel limited clinically. If we could remove ourselves from technical functions we could do more direct patient care. Are there good career paths in hospital pharmacy today? Some pharmacists from hospital are moving to Industry because there is a career path and because Industry is expanding. Need leadership to move the system forward – leadership is dispersed across the country and with downsizing in hospitals, the leaders that would do this are no longer there. Hospital pharmacists don't know their position in the labour market – retail and industry can respond more quickly to market pressures.
Opportunities/ Strategies
The number of graduates from universities determines inflow. Saskatchewan exports pharmacists to other provinces. Lobby for more undergraduate pharmacist and residency positions. New grads are more focused on the vision for the future and are getting into the ambulatory field with significant impact. New grads don't see hospital practice as more desirable than community practice anymore. Need to remember that they need to be part of our strategy. Need to let go of some things in order to get more clinically involved. Training and development for pharmacists and technical staff. Passage of some functions to technicians.

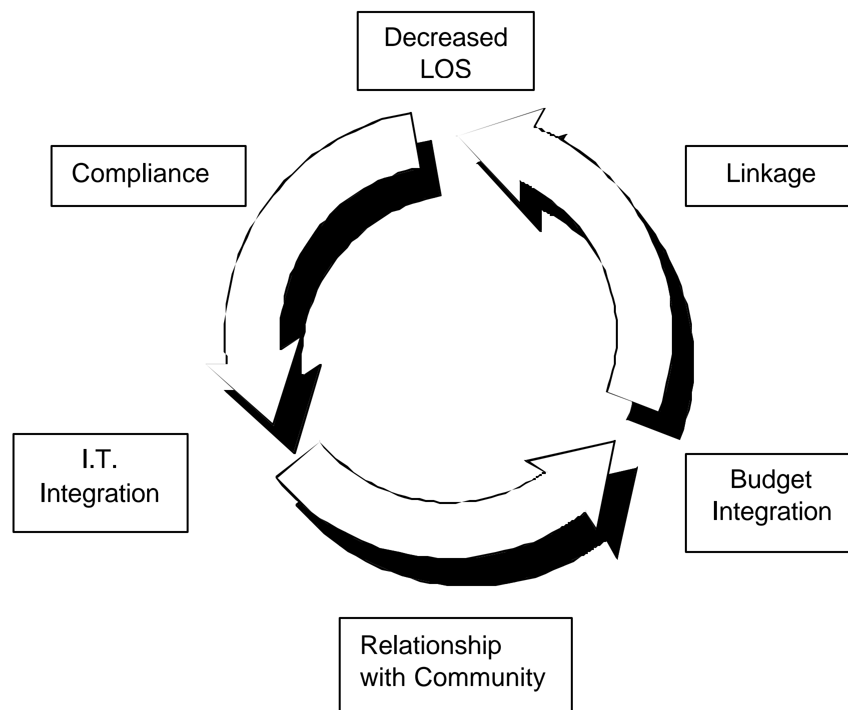
Organized leadership/mentoring process within the profession. Out of country jobs for other perspectives.

Identify skill sets that are transferable to other positions, e.g. leadership. Other career paths - what other roles are there for pharmacists? Try and build career paths.

Virtual continuing education for pharmacists – via the internet.

Pharmacists are well-positioned in hospitals because they understand and can apply technology, they understand the business side and they can interface with MDs on clinical issues. Also, due to their analytical skills, problem solving skills, attention to detail they are able to take on other roles.

2. Shift of Focus to Ambulatory Care and Integration with the Community:



Threats

Population health – what is the role of pharmacists?

The shift to ambulatory care is part of regionalization and continuity of care.

If money in health care is flowing to the community, then the hospitals are following the money. So, the community money doesn't benefit community providers but rather hospitals.

How do we relate to retail providers? Do we need to? Do we need to re-structure pharmacy health care delivery? Have an opportunity to integrate retail and hospital.

Quality of practice across the continuum an issue.

Decreased length of stay (LOS) and patients are more responsible for their medication management – very hard to do pharmaceutical care (PC) when the LOS is this short. Need to work as a team with community pharmacists.

Can we capitalize on the level of trust that the public has in pharmacists? Why is the profession split? Retail pharmacists make money by dispensing drugs. Hospital pharmacists get paid to spend less on drugs. Old baggage of relationships still hangs on – a big challenge.

Compliance is an issue - $20 billion problem with compliance in the U.S. ADRs of drugs when added to compliance get to a $70 billion problem.

Barrier is lack of information, information technology, and budget integration. Drugs are funded outside the global system.

Opportunities/ Strategies

Need to define the “community”.

Use the community pharmacist as a patient advocate and the hospital pharmacist as a consultant specialist (MD model).

Use top talent to be the liaison between community and hospital pharmacy to search out joint projects.

Could separate information/consultation from the distribution function – in both hospital and community sectors. That way, pharmacists could follow their patients regardless of patient location – community or hospital. Problem is one of standards – what is the best drug distribution system in order to get economies of scale and improve the efficiency of the product part of the business? Also requires a re-distribution of knowledge and how it is disseminated across boundaries.

Use IT and automation to radically restructure drug distribution systems, e.g. the Quebec plan where pharmacists are paid for cognitive services. Variation exists between provinces that may be a problem.

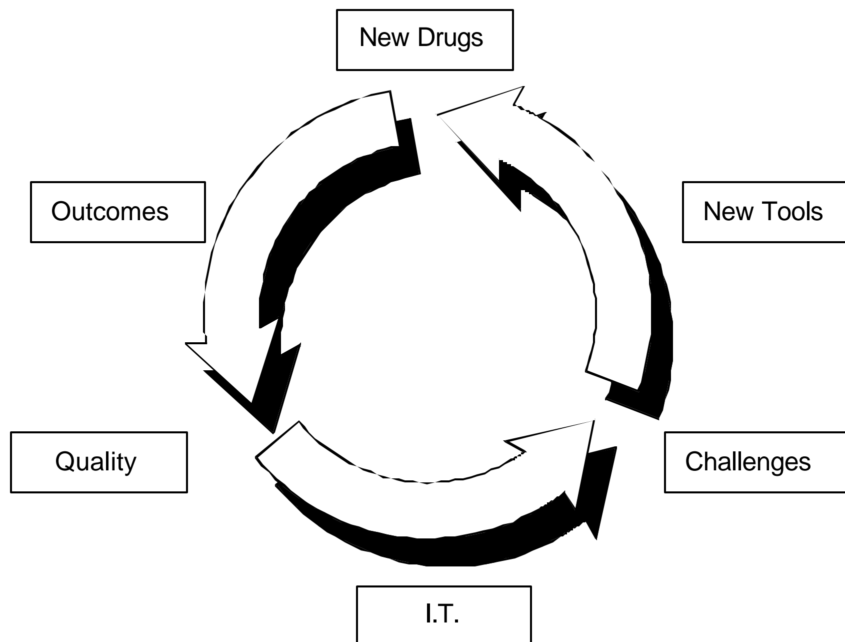
Identify what outcomes the community pharmacist will monitor.

Identify pharmacists as key deciders – need a common vision between community and hospital practice. Need to work with governments.

Information on web sites directed to your community with pharmacist involvement.

Use information technology to transfer care information between hospital and community. Keep patient focus and monitor/follow up patients with respect to outcomes.

3. Technology, Quality and Information:



Threats
Need to identify appropriate indicators for quality and performance and decide how to monitor them. Need outcome information from Provincial databases to really look at outcomes. Need IT info to track individual patients and be efficient. Also, have direct to consumer and direct to government advertising that is creating demand that is not necessarily supported by evidence. Funding silos – drugs are not part of Medicare. Internet Direct to Consumer sales will have a big impact shortly – and heavily influenced by the U.S. How credible is it as a source of info – a lot of info and not much synthesis. Have specialty disease groups on-line. Potential to bypass the traditional health care system – Internet for Health care info and then buy drugs over the internet, e.g. Viagara, herbal medicines. Where is the patient in all of this? "The patient of the past has been an object for us to obsess over. The patient of the future is on the internet, in your face, trying to take control." A good example is HIV patients and the parents of pediatric patients. Imagine these patients, only older as the population ages.
Opportunities/ Strategies
Need a more efficient way to compare us – benchmarking. Standardized data exchange. Standardized care maps could work if we could agree on them. Create a gold standard company. Give free email to all our patients and get demographics this way. Install web cameras in all pharmacies so people can see what pharmacists do. Rent web cameras to patients to see if they are compliant. Connect all of the specialists as a back up for specialized

information and consulting. Could use this to deliver patient education, including reasons for compliance direct to the home. May be a problem with equity since only 45% of households have PCs – could change with technology, e.g. the use of TVs for everything.

Pharmacists could put their seal of approval on certain web sites.

For new patients, a large quantity of information is currently available, but want the information to be top quality. Pharmacy web site could have high quality unbiased information for patients.

Put the health record in the hands of the patient – electronically. Would maintain own standardized record that could be interfaced with any part of the health care system.

Conclusion of Small Group Discussions:

Pharmacy needs to develop an integrated vision for the practice in the next 10 years. It needs to set standards of practice. Then, at that point when pharmacy is exciting, people will be more motivated to see it as a long-term career.

Barry Fishman: Performance Management at Lilly

Barry joined Lilly as a financial analyst and continued in a number of portfolios before his current position as Director of Marketing. He believes that Lilly's culture promotes the development of transferable skills in its key resource - people. Performance management is a big part of human resource (HR) development at Lilly.

Performance management has been used at Lilly for more than 5 years to focus performance of all employees on the key business goals of the organization. There are no HR professionals at Lilly –staff from all over the company rotate through the HR area. Employee surveys over the last 10 years have shown significant gains in terms of how well employees understand how they fit into the organization and how well they understand its goals. There are two aspects to performance management.

Firstly, Lilly uses 360 degree feedback with peer, management, and associate level feedback for every employee every two years. The 360 system is not part of performance management, rather it is used as feedback for development purposes. Employee 360 feedback focuses on specific behaviour rather than on the person. Lilly uses a "STAR" approach - Situation, Task, Action, Result - to elicit behavioral-based information from the individual. A quadrant report ranks performance and importance for each indicator. Evaluators focus on behaviours that are very important and that need improvement. Employees can access a development guide that lists resources, e.g. books, courses, in specific competency areas.

Secondly, performance management plans are linked to the completion of the annual business plan. Salaries are reviewed once a year, in conjunction with market place evaluations. Merit increases are then linked to the achievement of objectives at year-end. Feedback is consistent and on-going (written and verbal). Employees and supervisors meet three times a year to do succession and development planning. Focused development plans are essential because what is right for today is not what is right for tomorrow. Every Lilly employee is responsible for their own development plan, and they have to book the interim meetings with their managers and complete the report at the end of the year that drives merit increases. That way, each employee is only responsible for one evaluation – their own.

In addition to these two performance management tools, Lilly also identifies top tier talent ("high flyers") quickly and puts together fast-track plans for these people. International opportunities are used to develop this talent and take risks by placing them in areas where they have transferable skills.

Ian Morrisson: Summary for Day One

Ian started at 30,000 feet and found that Canada has a good health care system. We still have challenges to meet and we need strategies to face them. Three issues/themes for pharmacy in the future were developed. The HR theme tied in with the discussion of performance management at Lilly. The second theme - integration with the community –illustrates pharmacy's need to get on with developing a common vision and common standards . Information and information technology was the third theme. IT and new drugs will combine to cause fundamental changes in pharmacy over the next 10 years.

If we can manage and innovate around these three themes, we will clarify career paths for our pharmacists, develop leaders and our staff, thus making pharmacy an attractive, satisfying profession to practice.

Day Two
Annual Report: Hospital Pharmacy in Canada Survey and Benchmarking

Good Gets Better

Introduction

Kevin Hall, Regional Director, Pharmacy, Winnipeg Hospital Authority led the group in discussions around the value of the Annual Report survey data. Kevin discussed the format of the 1997/98 report and specifically the new Benchmarking section. The premise of the benchmarking section was that the validity and comparability of the data would be improved if detailed drug cost and staffing data for specialized inpatient and outpatient programs could be reported and analyzed separately.

After a review of the results from the Benchmarking section of the report, Kevin asked the group, “Does it really matter? Is it useful to you? Does it allow you to plan better, promote yourself better?” There was a recognition that the survey is already time consuming to complete and the benchmarking section took about the same amount of time to do as the main survey. Therefore, if it is going to continue, we need to be sure that everyone will fill out the survey so that the information is useful and relevant for the future of pharmacy.

Small groups then looked at two sections of the main part of the report each and discussed which data they felt was useful, what important data was not being collected and what should be removed. Each group was also asked to provide feedback on the value of the benchmarking survey, and to recommend which hospitals it should be applied to (health regions, large hospitals only, or all hospitals). General feedback was also requested on options to complement or replace the current method of data collection, the frequency of data collection and the current format of the Canadian Journal of Hospital Pharmacy (CJHP) supplement.

Small Group Feedback

There was general consensus that the Annual Report information and the special Benchmarking section are important tools for both Pharmacy Managers and Pharmacy students. While some information, such as salaries, may be time sensitive there was agreement that many sections only need data collection every two to three years. The group also wanted more emphasis on clinical services and related qualitative information and less on quantitative drug distribution systems.

There was a consensus that electronic data collection should be pursued vigorously. Discussion of timing did not present any alternatives that were better than the current timetable that has data collection in June. There was recognition that any given section may be important only to some hospitals, but that there was value in continuing with most of the report for trending purposes. Trending questions that do not change from one report to the next could be 25% of the survey and the rest could focus on special topics or specific research areas. Specific recommendations to improve sections of the survey are described in Appendix A. In future years, to keep the survey current, the Board could put out an e-mail to managers asking if there are burning issues that need to be added to the survey. However, the group felt that a permanent Board that is committed to maintaining the survey and report is still needed.

There was agreement that the group would commit to pilot testing new questions to ensure their validity. Many requests in Appendix A were for qualitative information and the Board expressed concern that these questions are difficult and expensive to analyze. A limited use of comment space in specific sections may be helpful in order to develop more direct questions for future years, but this type of data collection would likely be limited. The Editorial Board will review the suggestions for content in the next two months and come to an agreement on what can and will be done.

The group felt that the publication of the report as a supplement to CJHP should be continued since it lends additional credibility to the report and is also cheaper to produce. An ad hoc report would be accepted in electronic format if there were important issues that required more timely data collection – but no more often than every 6 months. Other options for reporting in the future included an electronic database where there is direct comparison to peers’ mean +/- SD. Chapter Three also has the option of doing a special analysis to compare a hospital to a group of peers and there would be a relatively small

fee for producing this special report. Discussion around the anonymity of data and ethics that apply to survey collection lead to the suggestion that a directory could be produced that listed by name all of the hospitals that provided information on specialty programs or technology.

Summary - Tools to Enhance Pharmacy Practice

Ian Morrison summarized the discussions of the two-day session into four pieces that we could move forward with. The first is the survey itself, which has value and could be done every two years. The possibility that measurement error is greater than real changes in data must be considered in determining the frequency of measurement. There are a limited number of time-sensitive questions that are helpful for budgeting purposes. The whole data collection process could be improved by using computers. The group could be polled by e-mail and the Board would electronically manage incoming mail and collate the information using a database. Data would then be available for both look up and data entry real time. Regular surveys could also be sent out via e-mail and filled in electronically to improve the time lines and processing turnaround.

The second piece is the process relative to benchmarking – to take all the information that is collected and transform it into something meaningful. We need a crisp, agreed upon data collection format to encourage consistency in data collection. To build on the data, the idea of a directory is very good because as individuals you can choose to share data beyond the survey itself. There could be a huge value-add for the survey in creating a web-based PowerPoint library of templates for Pharmacy managers to use. The Board could also explore other ways to structure the data and its presentation.

The third component is the meeting of this group. The timing of the meeting could alternate with the formal survey process and be structured with key components – an update of trends in the industry, focus on a theme, and feedback on survey data and methods. The group would need to have a clear mandate and goals for the meeting to be focused and productive and to ensure that there was minimal overlap with national and provincial initiatives.

The fourth component is the vision piece. We need to ask where is the field heading and be proactive. An example would be Vision 2010 – Pharmacy Practice in Canada. The group would look at mega-trends for the profession such as clinical practice and outcomes, patient safety, new technology, program management, new drug distribution systems, pharmacy practice in the Internet age, career paths of pharmacists in the future or pharmacy in the broader community. A statement of the trend, related metrics, key observations and a vision for the future would be developed. The intent would be to galvanize the field and we would need to look at bringing other hospital stakeholders and community pharmacy into the discussion.

Conference Feedback

Conference participants rated the symposium highly in their evaluations, with an average 4.7 out of 5 rating. The strengths of this meeting included:

- “Quality and knowledge of speakers”
- “Future/present health care trends”, “Macro vision”
- “Networking with colleagues”
- “Interactive sessions”

The opportunities to improve the symposium included:

- “More discussion/challenge about the future”
- “Discussion of specific issues and how they are being managed at different sites”
- “Arrival at a consensus or position paper on a theme issue”
- “[More] time to bring issues to a conclusion”

Participants also felt that their practice would change as a result of the symposium. They would:

- “Formalize discussion on continuity of care and liaison with community pharmacists”
- “Talk to more colleages”
- “Collation of data re: benchmarking”
- “Increase focus on people”

In summary, participants felt the time was well spent and offered several suggestions of topics that can be addressed at a future meeting of this kind. In addition the Editorial Board went away with several concrete suggestions on how to improve the Hospital Pharmacy Annual Report so that it better supports the enhancement of pharmacy practice.

APPENDIX A – SUGGESTIONS TO THE EDITORIAL BOARD FOR IMPROVING THE SURVEY

Demographics

- Generally useful information for denominators.
- Specific suggestions for response rate improvement, such as having the Lilly Associates follow up with hospitals that have not responded. Could produce a CD or printed material that would give a Director their data in comparison with peer groups with graphs, etc. in order to have an incentive to participate in data collection.

Clinical Services

- A description of clinical ambulatory programs since this is an emerging area of pharmacy practice.
- Adherence to Drug Use Guidelines as a type of surrogate outcome.
- Specific descriptions of therapeutic interchange programs.
- Some information on the complexity of interventions perhaps using the average time spent on them.
- Qualitative information on care maps, evidence based medicine, and who is involved in them.
- Identify trends in clinical practice.
- Ask if anyone has evaluations of their Pharmacy services by their own staff, by other members of the health care team.
- Could look at Canadian Society of Hospital Pharmacists' Clinical Services study, to see if we could use their approach to collect data.

Drug Information Services

- Computer systems, software and sources of information, e.g. Internet, that are used.
- Specific information on the source of questions – pharmacy staff, nurses, physicians, the public.
- How much drug information time is spent on Pharmacy and Therapeutics committee work, care maps, actual questions.

Drug Distribution - Outpatients

- Drug cost per outpatient prescription should be deleted.

Drug Distribution - Inpatients

- Human Resources broken down by FTE technicians and pharmacists in drug distribution.
- Tools/forms that are used to interact with nurses and doctors such as MARs and related action tools, reordering, stop order and other tools.
- Who does order entry and where does it happen?
- Technician responsibilities, the types of "tech check tech" programs and related quality assurance follow up.
- Outcomes that may be useful include error rates, discrepancy rates for MARs.

Intravenous Admixtures

- Questions that deal with the specific kinds of automation for IV dose production including TPN.

Chemotherapy

- Focus on oncology services, pharmacists' clinical role, and involvement in protocols.

Total Parenteral Nutrition

- Although it is a small section, TPN data is easy to retrieve and good for trending if done every 3 years.

Purchasing and Inventory Control

- Since the data on drug costs is needed for other calculations, this section should be retained.
- Link drug costs with intensity weighting.

Human Resources

- The data on average pharmacy staffing by region is not that useful.

- The breakdown by size of hospital, teaching status, drug distribution system is more useful, but more benchmarking information might replace it.
- The range of salaries for directors needs to be increased.
- Technician/pharmacist ratios, degree of unionization, performance management systems, career ladders, benefits provided, incentives available, hours worked per week and pay scales in relation to other professionals are of interest.
- Paid hours have always been used in the survey, may be more useful to use worked hours.
- Human resource demographics, recruitment and retention.
- Pharmacist satisfaction surveys.

Educational Services

- Expand to reflect teaching of all students: technicians, residencies, undergraduate, graduate. The denominator would be student-days. Information would include reimbursement, how much time is spent in training and how the stipends are spent.
- Ratio of residents graduated to residents employed may be useful.
- Staff involvement in informal education programs. What is the level of support they get, e.g. distance PharmD.

Workload Measurement

- Since there is a poor response rate, it should be replaced with the benchmarking data.

Benchmarking

- Benchmarking section was time consuming to complete, but most people used the data in some way that was more meaningful than the traditional data that has been reported. The group wanted to extend this data collection to all hospitals and suggested that it would be good if it could be simplified. At the moment most regional data is not consistent enough to be grouped together.
- More ambulatory data could be collected.
- Top 20 drugs was only somewhat useful from an overall perspective and was hard for some centres to collect.
- Top 10 drugs by specific program or usage criteria by drug may be more useful.
- Take weighted cases into account.
- Extract clinical and distribution staffing and only break down staffing by specialty program for clinical services since it is hard to do accurately for drug distribution unless you have a satellite.
- It may be useful to pull out information by region or province.
- Need to agree on key indicators and related standards that are monitored regularly in a clearly defined way.
- Clinical outcomes for benchmarking are needed.
- Add cardiology - a section on MI treatment, cardiac catheterizations would be helpful.
- If a template of the questions was available in advance it would be easier to prepare for it.

Other Suggestions

- New section on the use of technology/automation. How are they used? What types of bar-coding applications are there? Specific technology information such as who has which computer systems and if they changing them. Who has Pyxis, ATC, SureMed machines. Use this information to create a directory.
- Continuity of care section as a way of improving our connection with community practice.
- Qualitative/risk information like medication errors and going beyond traditional incident reporting.
- Formulary issues.
- Sharing of business plans.
- Could have practicing clinical pharmacists on the Board and put a white paper together on clinical practice.
- Pharmacy practice research – who is doing it and what are they doing.