It's time for more pharmacy leadership from within

John A. Bachynsky, PhD, DPharmSci(Hon); William N. Tindall, PhD, RPh

Introduction

The *Canadian Pharmacists Journal (CPJ)* has been a guidepost and trusted recorder of matters important to Canada's pharmacists for a century and a half. Its contributing authors and editors have diligently helped pharmacists navigate through many seas of change. *CPJ* presents pharmacists with articles by contributors who advocate high professional standards, adopt innovation and promote working together. One of *CPJ*'s best-known contributors was Professor Arnold Whitney (Whit) Matthews (1902-1992). As director and professor of pharmacy at the University of Alberta, Matthews was highly respected for his leadership style, known today as "leading from within."

In 1944, Matthews wanted to motivate Canadian pharmacy school faculty to create a mandatory 4-year degree program as entry into the profession, and to do this he used the following words during the first meeting of the Canadian Conference of Pharmaceutical Faculties (CCPF): "I am certain that 1944 will eventually be pointed to as the period of a renaissance in pharmacy. Surely it can be said that this time is propitious and that probably at no other time since pharmacy began to be organized in Canada was there a greater time for constructive thinking and development. So . . . let us now determine what will come out of these discussions, something of real and lasting value in which each and every one of us will take pride in future years."¹

Shortly after, Matthews left the University of Alberta and showed he could lead from within when he upgraded the professional and scientific pharmacy program at the University of British Columbia, beginning in 1952. (Incidentally, Matthews showed more of his leadership skills by twice serving as president of the Canadian

Arnold Whitney Matthews

Pharmaceutical Association and as a leader in the sports world.) But what was Matthews thinking when he said 1944 was a "propitious" time? What issues would pharmacists have been facing in 1944 in order for him to call those times a "period of renaissance"? Certainly, the issues then are not the same as today, or are they?

Pharmacy as Canadians once knew it

Canadians witnessed only a slow pace of change in the operation of their pharmacies, from the time of the country's founding until after World War II. While the first pharmacy regulatory organizations began soon after Confederation, pharmacy was still an occupation relying heavily on its apprenticeship system. There was little "coursework" being taught at this time, and the few courses that existed took place in the evening so pharmacy apprentices could continue to work during the day. Gradually, the number of courses increased, with links to universities. Even in Matthews's time, a pharmacist did not require a great deal of theoretical or academic

knowledge until compounding was replaced by manufactured dosage forms. This shifted not only the pharmacists' workload but also their image as professionals. This happened because as pharmacists did less and less "compounding" and more and more "dispensing," many perceived them as not true professionals because they saw dispensing as only having one responsibility—to carry out the orders of a physician, while refraining from discussing the therapeutic effects of any medication with the patient, this being the exclusive privilege of the prescriber. However, leaders within pharmacy, like Matthews, saw the proliferation of manufactured drug products as an opportunity for legitimizing the profession.

Matthews showed his "leading from within" style by championing the pharmacy school faculty to engage in research helpful to the pharmaceutical industry and develop new curricula for training pharmacists as "scientists." Then, as scientists, pharmacists could be taught how to interpret medical literature and help the public understand the proper use and safety issues of new drugs proliferating into the market. By the early 1950s, it was common to see formalized college course work taught in pharmacology, biopharmaceutics, pharmaceutical chemistry, biochemistry, physiology, microbiology, pharmacokinetics and others, as part of a standardized Bachelor of Science in Pharmacy (BSP) degree, and making Matthews's dream a reality. Thus, baccalaureate programs became the standard in the 1950s until Canada had built 8 university schools offering their versions of the BSP degrees, 6 in the English language and 2 in French. It would be a few more decades until 2 more were added—Memorial University (2003) and University of Waterloo (2008). However, 2 big questions still remain: has the preoccupation with "dispensing" manufactured drug products led to today's loss of professional autonomy for pharmacists? And second, has pharmacy's leadership continued the type of "constructive thinking" that addresses Matthews's 1944 clarion call for "achievements considered of real and lasting value"?

In 1950, another pharmacy leader was Eugene Charles Elliott (1874-1960). When Elliott spoke before the American Council on Education that year, he stated that "the outstanding factor determining the future of pharmacy is fundamentally moral in nature."² Thus, a third question for

today's pharmacists is, are the issues that pharmacists face today still moral in nature? The following are but 7 of the many complex arenas in which today's pharmacists are still struggling with being in "propitious times" and with having to deal with "moral issues."

1. Pharmacy practice

Pharmacy ownership was not a big issue in Matthews's time, other than physician ownership. Back then, Canada's rural and urban populations were being served by small local pharmacies, wherein one male or female pharmacist kept long hours and few staff. Schools of pharmacy at this time attracted students with an entrepreneurial bent. In those days, it was common to see an owner-pharmacist and likely one staff pharmacist operate a pharmacy during its many hours of serving the public. A staff pharmacist in the early 1950s would have been pleased to earn a salary of \$5000 per year.

Matthews could not have predicted the decline in the number of independent pharmacies or seen the growth in pharmacists finding careers in hospital pharmacies, especially as clinical specialists. In Canadian teaching hospitals, the opportunities for pharmacists to be divorced from dispensing responsibilities have grown tremendously, and many hospitals offer postgraduate residencies to help grow the skill sets of specialty pharmacists. In these hospitals, the assignment of drug distribution to pharmacy technicians helped pave the way for pharmacists to become more involved in patient care and to be working as members of the health team. Back then, Matthews and Elliott would have found it hard to imagine this much involvement in patient care but would applaud the growth in a pharmacist's ability to be more successful and innovative.

2. Pharmacists becoming employees

It was once a requirement that to operate a pharmacy, one had to be a pharmacist with a controlling financial interest. Today, however, that control by entrepreneurial pharmacists has largely been replaced, as employee pharmacists "manage" a pharmacy, but ultimate control of it may reside within a corporate organization, such as a wholesale, manufacturer, retailing, marketing, consumer advocacy and insurance organizations and others. For example, Matthews and Elliott could never have imagined the growth of mail-order pharmacy and third-party insurance

and government programs, or even the proliferation of corporate pharmacies that today employ many pharmacists. Additionally, Matthews would have been aware that change usually happens in any system when a new activity can be created to meet a perceived need and also be a financially sound opportunity for its innovators who assume some risk for undertaking it. While employees can be risk takers and innovators, the incentives to do so are not the same now as they once were. Thus, pharmacy today has a dearth of those leading from within who can show their colleagues how to think outside their comfort zones and risk innovating, especially if they truly want to help people with their medication needs. Also, since most of today's pharmacists are employees, that creates an impact on who is recruited into the profession, as well as those who will be available to take on the many mantles of its leadership.

3. Pharmacist compensation

Pharmacies are not being paid in the same way as they were decades ago. In Matthews's time, prescriptions were usually priced to earn a 40% markup so the gross margin would be large enough to cover operating expenses and leave a suitable net profit. A good pharmacy could survive on 20 to 30 prescriptions per day, relying on front-store sundry sales for 80% or more of total revenue. Today, it is the government or insurance programs that set reimbursement rates for pharmaceuticals and pharmacy services, as if they are purchasing a "commodity" and one that has to be heavily discounted so they can stay within a fixed budget. This has 2 effects: 1) smaller margins means the pharmacy has to survive on a higher volume of prescriptions, with 200 or more prescriptions per day being common, and 2) there is also intensive price competition in front-end merchandise, forcing pharmacies into niche markets such as home health supplies and cosmetics. Thus, today's compensation schemes reward the pharmacist on his or her ability to maintain a high dispensing volume, rather than on his or her provision of care and service. The removal of pharmacists from dispensing decisions has become even more acute as formulary systems are used as a means of cost control for third-party drug programs. Because compensation/reimbursement to a pharmacy is based on the sale of a product to its ultimate consumer, it is an outdated retail model that has resulted in the pharmacists' economic livelihood being

threatened by other retailing enterprises, such as automated dispensing machines, physician assistants and nurse practitioners dispensing from in-house pharmacies in medical practices, chain stores and quick-stop medical centers, private and government-run mail-order pharmacies, drive-in kiosks, buying groups and co-ops. However, not all of these business models are to blame for the economic woes of pharmacies. When a pharmacy's image is portrayed to the public as one offering convenient location, long hours, free delivery, mail order, short waiting times and the availability of an array of not-so-special non-pharmaceutical products, then pharmacists are teaching the public that a pharmacy is nothing more than one more retail establishment.

4. Pharmacist education and manpower

Once the baccalaureate curriculum became the standard throughout the land, it was not long before new arenas of educational need began to rise. Thus, internships, residencies and specialty areas have been proliferating over many decades as new areas of practice and opportunity have developed in such arenas as genetics, geriatrics, neonate, nuclear, nutrition, oncology, pediatric, pharmacotherapy, psychiatry and more. All these arenas have kept pace with advancements in therapy, and this created demand for certification and recertification programs, plus expanded time spent in formal education. Additionally, by mandating postbaccalaureate education with continuing professional education (CPE), a new industry has been created. Lately, aspiring Canadian pharmacists have seen their curricula morph into the longer Doctor of Pharmacy (PharmD) program. This latest curriculum extension was advocated as a means to make the pharmacist a health team player—a "contemporary, compassionate, creative and scholarly pharmacy practitioner, educator and researcher"³ delivering the enhanced scope of practice called for by the Canadian health care system.⁴ These are scenarios neither Matthews nor Elliott could have imagined back in 1944, especially seeing the growth of the pharmacy technician position, which was first created to help pharmacists and is now being credentialed to "accurately dispense prescription medications."⁵ Today, however, there are those, especially in provincial government, who question the many variations in pharmacy curricular content and its push to the entry-level PharmD degree as "credentialing creep."

With demand for pharmacy services growing because of third-party and government programs and when gaining admission into pharmacy schools is a much more intense activity than it was 70 or so years ago, it's clear, as the National Association of Pharmacy Regulatory Authorities has stated, "It's an exciting time for a new age in health care to expand the scope of duties for both pharmacy technicians and pharmacists."⁶ Without a doubt, however, Matthews would agree that the narrow era he saw of the pharmacist-scientist is over. He also could not have imagined pharmacists choosing between a wide array of career options never seen before, especially providing and monitoring medication therapy services. However, Matthews would also agree the PharmD curriculum is the right step towards making pharmacists independent clinicians. Additionally, he might argue that the length of time and expense to do so might be worrisome, but he would approve the dramatic shift in the formalization of the pharmacist's practical education, seeing it improve from its days of loosely structured apprenticeships to highly structured clerkships and internships.

5. *Shifting population demographic*

After World War II, Canadian pharmacists served a relatively young population; however, since then, they have been dealing with an aging population that is living longer and is healthier than in the past. While this trend, based on chronic rather than acute care, has changed the health system, it also means pharmacists must be ready to help patients with medication needs whether they are ambulatory or in extended-care facilities. It's no secret an aging population is reaping the benefits of modern science, but this also creates a number of problems for pharmacists who, as they serve a growing Canadian population taking multiple medications for various reasons, are finding more and more opportunities to intervene as health care practitioners. Additionally, Canada is not as homogeneous as it once was, leading pharmacists to develop skills to deal with socioeconomic disparities as well as religious and cultural differences affecting drug usage.

6. *Pharmacist licensure and provincial regulatory bodies*

For decades, when pharmacists got their licence to practise, they hung it on the wall of the

pharmacy in which they worked. They needed that physical space and its address as a place in which to practise. This is still true today, but medication therapy management should enable any pharmacist to provide a service devoid of dispensing a medication. Thus, pharmacists will not become truly independent practitioners until the time comes when they can practise their medication skills and be reimbursed when outside the physical constraints of a pharmacy.

Additionally, the growth of the Pharmacy Examining Board of Canada (PEBC) and its impact on reciprocity was something that Matthews had worked towards (he later became its registrar). In 1964, PEBC came into existence as the certification agency designed to create and administer a uniform assessment of the qualifications and competency of those who wish to practise pharmacy and also to be the basis for allowing reciprocity of licensure among the provinces. Today, PEBC certification exists for pharmacy technicians as well, and PEBC certification is accepted in all provinces except Quebec. Thankfully, all provinces still retain a practicum or internship program of a much shorter duration than in Matthews's day. However, Matthews would also be surprised to see the subjects currently listed in the 76-page syllabus that PEBC uses to describe the content and context of its examination. It covers areas such as biomedical science, pharmaceutical sciences, clinical sciences in pharmacy practice, professional practice skills and behavioural and administrative pharmacy.⁷

7. *Issues of encroachment on traditional roles by other health service providers*

New health care providers, such as physician assistants and nurse practitioners, have also evolved and along with many other primary care providers now have prescribing privileges. This has had some impact on pharmacy, but it has provided pharmacists with a role in coordinating medication histories. Pharmacists have also expanded their scope of practice and have earned places on integrated care teams. Pharmacy technicians have also become more valuable now and sit in on some of the same continuing education programs as the pharmacists who supervise them, as some have assumed roles in providing information to patients.

What has caused pharmacists to lose much of their professional autonomy?

It may be that pharmacy, like other health professions, attracts those who want to help people. Thus, being “nice to people” has left pharmacists vulnerable, often because of a naive belief that others with the same special interests will “do the right thing” and also take care of their interests as if they were doing it themselves. Thus, the incursion into pharmacy independence by manufacturers, other corporate businesses, third-party insurance firms and so on has made it more difficult for pharmacists to remain independent. One outcome of leaving professional decisions about pharmacy to “others” is that it has created the easier option of being an employee rather than an entrepreneur. This, in turn, causes policy decisions regarding patient care to be influenced by non-health care businesspeople, committees with little pharmacy input or other health professionals outside of pharmacy, where decisions are made in offices distant from the patient. Governments have also been major players in initiating health and drug programs with little pharmacy input.

How can a worthy profession move itself toward a brighter future?

Many of today’s pharmacists believe they are under siege and thus look to pharmacy organizations to take up a more active role in recruiting and training leaders. Unfortunately, this need rules out use of provincial licensing bodies, as their first mandate is to protect the public by setting and enforcing minimum standards of practice rather than expanding and protecting pharmacy’s future. Today’s practising pharmacists must cope with an urgent and demanding workload in which they must process a deluge of information, meet continuing demands to solve problems and constantly be aware of changing responsibilities and workplace regulations, all while interfacing with unseen bureaucracies. This is not conducive to lifting up their eyes from the dispensing counter and looking at the broader picture of health care and pharmacy’s place within it. Pharmacists are also overwhelmed with announcements by governments, professional societies, industry, advocacy groups, insurance agencies and others, all bringing proposals for change, many of which they know intuitively will never materialize. Even when such proposals do materialize, the

contributions of pharmacists are often ignored, and this in turn deadens their desire to respond with thoughtful and helpful input, especially if they are employees who are not compensated or given relief time to engage in such activities.

Pharmacists know too well that a major health issue in Canada is *public* access to medications. But the current pharmaceutical benefit system is inequitable, bureaucratic and isolated from the rest of health care system. Many pharmacists are managing drug benefit programs with restrictive formularies that focus on budgets rather than on improving health outcomes. Too often, pharmacy organizations urge their pharmacist members to work within the current system of care rather than advocate for the more fundamental issue of access to care. In any developed country, like Canada, access to appropriate medications and professional guidance in their appropriate use would seem reasonable and logical, so why then aren’t more pharmacists taking up leadership positions and helping their colleagues act on this opportunity?

Pharmacy and the need for “leadership from within”

In order to effectively take pharmacy through another era of “propitious times” and deal with issues considered “moral in nature,” more people will need to behave as Matthews and Elliott did and lead from within. Such leadership will help pharmacists find the means to meet today’s political challenges, difficult business times and threats to their autonomy from forces outside their profession. As a self-governing, autonomous, learned and respected profession, pharmacists need all the internal leadership they can muster if they want to effectively champion anything that raises their professional stature and its fundamental mission of helping patients. But how does someone like a pharmacist skillfully and effectively lead from within? Leadership has been described as a 4-step process⁸:

Step 1: The vision and education within a pharmacy curriculum should help pharmacists solidify their career goals. Leading from within then starts when pharmacists develop their self-awareness to such a high level that they understand their personal strengths, weaknesses, beliefs and philosophy about life as well as why they became pharmacists.

Step 2: Pharmacists with high degrees of self-awareness next passionately and resolutely commit to a means to best apply this self-inventory to influence “others.” Others could mean participation in pharmacy practice research. Influencing others can also mean serving as a clerkship preceptor helping a young person find the aspiration to enter the profession or becoming a staff pharmacist wanting to develop a new clinical service. In essence, pharmacists must make a commitment that they want to inspire, influence or lead others, including those from professional and/or social organizations, government, local business or any other sphere of influence.

Step 3: Leading from within next requires pharmacists to develop both an accurate understanding of the forces of change within a society as well as create a well-developed empathy for the needs and perspectives of all stakeholders.

Step 4: While many pharmacists have good ideas about what their profession may need, this is not enough to lead; they must then apply all their skills to motivate others into acting. This is best done using tangible, discreet and measurable written action steps, then finding the means to share that plan with others affected by it and finally sharing with them what success will look like.⁹

Perhaps one good reason that leadership from within any profession is lacking during “propitious times” and when the “issues are moral in nature” (Table 1) is because many do not believe true leadership from within can exist on a small scale. For example, not every pharmacist has to be head of an organization to be its leader. Leadership does occur even when one pharmacist makes a commitment to help a patient stop his or her opioid addiction or stop the abuse of a prescribed drug. This is true leadership at its best. Just imagine what many pharmacist leaders could do to help Canadian society at a time when headline news is rampaging on about the burden caused by drug abuse.¹⁰ This is true leadership from within, but on a smaller scale. Thus, every pharmacist has an opportunity to lead from within even if it’s done by leading one patient at a time.

TABLE 1 Why leadership from within can fall short

1. Failure to accept leadership as a skill that can be learned
2. Failure to believe leadership is more than a top-down issue
3. Failure to put aside defeatist and unrealistic thoughts
4. Failure to see other leadership they can emulate
5. Failure to plan and make a commitment
6. Failure to realize leadership begins with baby steps

The way forward

In today’s fast-paced, quickly evolving society, it would appear that pharmacists have allowed too many outside interests to dictate their future. Today, Canada has over 39,000 pharmacists who earn little recognition for their ability to improve a patient’s quality of life and do so while holding down total health care costs. As skilled and motivated pharmacists are being educated and trained to deliver patient-centred and multidisciplinary care, there is much to be done before all pharmacists will be able to provide Canadians an efficient and effective level of pharmaceutical care or medication therapy management and be compensated for it. Many perceive the Canadian health system as being wasteful, uncoordinated, inequitable and so complex it has been diminishing its potential for quality outcomes at a time when drug expenditures in Canada are increasing and when 60% of that increase is due to increasing consumption, 20% due to development of new drugs, 10% due to an aging population and 10% due to population growth.¹¹ Thus again, we have another “propitious time” when access to medication and its management by skilled and well-trained pharmacists would create positive outcomes by offering services that allay much of what is wrong within the system.

Professional societies have an obligation to help pharmacists better market their public message and to help with reimbursement issues. Is there not a wider role for them to shine a brighter light onto newer pharmacy practices such as those that require active participation in bundled services, or those that show pharmacists actively and effectively working with other care providers, or just simply promoting the measured outcomes of a pharmacist involved in

patient care? The public has shown they are supportive of innovation in pharmacy and in health care, and they do want to see health care change, but they worry such change is being driven by political goals rather than patient needs.

The manner in which pharmacists address today's "propitious times," with leadership from within directed at issues that are moral in nature, will determine their place in a uniquely Canadian social experiment—universal health care for all. Leadership from within will also determine whether pharmacists will become team

players and empowered independent practitioners whose skills help people with medication usage. Doing nothing means they will remain the most underused health professionals. It is only by a few leading the many that they will achieve what Matthews described as "something of lasting value in which each and every one" can take pride, especially a role in new compensation schemes that pay them for outcomes rather than products. The current environment is truly another "propitious time" for moving the profession to a bright and fulfilling future. ■

Dr. Bachynsky is professor emeritus in the Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, Alberta. Dr. Tindall is professor emeritus in the School of Medicine, Wright State University, Dayton, Ohio. Contact jbachyns@ualberta.ca.

Author contributions: W. N. Tindall wrote the initial draft of the article. It was reviewed and revised by J. A. Bachynsky. Both authors participated in final revisions and editing of the article and approved the final version.

Declaration of Conflicting Interests: The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Funding: The authors received no financial support for the research, authorship and/or publication of this article.

References

1. Association of Faculties of Pharmacy of Canada. A history of the Association of Faculties of Pharmacy of Canada: the first fifty years. Available: https://www.afpc.info/sites/default/files/AFPC_History_Book.pdf (accessed Sept. 5, 2018).
2. Elliott EC. The general report of the Pharmaceutical Survey, 1946-49. Washington (DC): American Council on Education; 1950.
3. Stony Brook School of Pharmacy and Pharmaceutical Sciences. The PharmD Program. Available: https://pharmacy.stonybrookmedicine.edu/student/pharmD_program (accessed July 16, 2018).
4. University of Toronto Leslie Dan Faculty of Pharmacy. The PharmD program. Available: <https://pharmacy.utoronto.ca/programs-and-admissions/pharmd/> (accessed July 16, 2018).
5. Shoppers Drug Mart. Key pharmacy technician responsibilities. Available: <https://jobs.shoppersdrugmart.ca/job/SHOPA005O168933/Pharmacy-Technician> (accessed July 16, 2018).
6. HealthcarePathway.com. Pharmacy technician schools in Canada. Available: <https://www.healthcarepathway.com/pharmacy/pharmacy-technician-canada.html> (accessed July 15, 2018).
7. Pharmacy Examining Board of Canada. Available: https://www.pebc.ca/index.php/ci_id/3374/la_id/1.htm (accessed July 7, 2018).
8. Steidle GK. Leading from within: conscious social change and mindfulness for social innovation. Cambridge (MA): MIT Press; 2017.
9. Kouzes J, Posner B. Encouraging the heart: the leadership challenge. San Francisco (CA): Jossey-Bass; 2003.
10. Weeks C, Howlett K. Prevalence of opioid drugs skyrocketing in Canada. *Globe and Mail* 5 April 2016.
11. Mossialos E, Wenzl M, Osborn R, Anderson C. 2014 international profiles of health care systems. The Commonwealth Fund, New York. Available: www.commonwealthfund.org/publications/fund-reports/2015/jan/international-profiles-2014 (accessed Sept. 9, 2016).