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Environmental Scan of Pharmacy Technicians

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Introduction

At the Annual General Meeting of the Canadian Pharmacists Association (CPhA) in May 2001, a resolution was passed by the membership regarding pharmacy technicians. The resolution is stated as follows:

WHEREAS the roles and responsibilities and expectations of practicing pharmacists are changing in response to healthcare demands, and

WHEREAS pharmacy technicians provide technical skills related to preparing, labelling and providing medications, thereby allowing pharmacists more time to meet the healthcare needs of their patients,

BE IT RESOLVED that the Canadian Pharmacists Association (CPhA) research, review, and make recommendations to the profession on the roles and responsibilities, training and certification of pharmacy technicians, and

BE IT FURTHER RESOLVED that CPhA work closely with pharmacy stakeholders and the Canadian Association of Pharmacy Technicians (CAPT) to develop and establish standards and guidelines to allow technicians to assume appropriate responsibilities within pharmacy.

This paper is intended to survey what is currently being done to address these issues, within Canada, and in other comparable countries. The background provided by this environmental scan will serve as the initial point to appropriately address the issue of pharmacy technicians on a national level, and position CPhA to take the lead in developing and establishing guidelines to allow pharmacy technicians to assume suitable responsibilities in pharmacy practice.

Background

The issue of pharmacy technicians is one that CPhA has addressed previously. CPhA hosted a national workshop in 1995 entitled “Advancing the Role of Pharmacy Technicians: A Key to Pharmaceutical Care”. Issues relating to pharmacy technician tasks, training, certification and competency assurance were discussed. The outcomes of this workshop suggested CPhA should take a leadership role in developing roles and responsibilities, and that the development of a national, voluntary certification examination should receive highest priority. Other outcomes were the development of a core curriculum, delegated tasks list, and national accreditation program for pharmacy technician training programs.

In 1997, CPhA produced a draft of a pharmacy technician national curriculum outline, which was intended for discussion purposes. The curriculum had four broad sections: fundamental knowledge and skills of pharmacy practice, drug preparation and distribution, procurement and retailing, and a work practicum.

In 1998 CPhA conducted a small survey to assess attitudes and feasibility of expanded roles for pharmacy technicians. In the survey, the following results on key issues were compiled:

- 81% of respondents felt that there was no uniformity in pharmacy technician training.
- 82% of respondents felt that technician certification should be pursued as a national voluntary certification program.
- 83% of respondents felt that CPhA should play a role in the development of a national certification program.

These results are no surprise, as pharmacists are looking to free up their time spent performing technical and dispensing functions, in order to devote more time to performing cognitive functions and performing pharmaceutical care in the interest of their patients. The pharmacy technician is the obvious solution. Technicians are already an integral part of the day to day functioning of pharmacies across the country. The desire to ensure competency of technicians comes from the fact that there is little uniformity across the country in the training available for pharmacy technicians.

Possible training venues are experience acquired on-the-job, technician training programs offered through various community and business colleges, training programs offered by employers (usually national chains) and through at home learning programs. These courses of study are currently not regulated to ensure standard outcomes or practice competencies, and as such, the abilities of technicians may be inconsistent. In order for pharmacists to feel comfortable delegating as much responsibility as is legally allowed, they must be assured that the technician is competent to perform these tasks accurately and efficiently.

In 2000, Human Resources Development Canada (HRDC) and CPhA released a document entitled: “A Situational Analysis of Human Resources Issues in the Pharmacy Profession in Canada”. This report identified a need for further study into what pharmacy technicians are currently doing, and how they may be used to relieve the pressure on pharmacists by the current shortage. The HRDC report noted that little information has been systematically gathered on the role of pharmacy technicians in Canada, including whether their current education and certification arrangements are sufficient to ensure that pharmacies efficiently and safely dispense medications.

The background information necessary to study pharmacy technicians in depth is lacking, since there is no central registry for pharmacy technicians in any province. Also, the report presented survey information on wages for both pharmacists and technicians. The survey indicated that on average, a college-trained technician will only make \$1.00 more than an on-the-job trained technician. Also, technicians employed in a hospital make 25% more a year than their counterparts in a community setting with equal training. This result shows that even though formally trained technicians may be better equipped to assume certain responsibilities, employers are not consistently bestowing a financial reward in recognition of the extra training. One thing to note, however, is that pharmacy technicians in hospitals are unionized, which brings about the higher wage due to collective bargaining.

The study also concludes that with the pharmacist being a member of the medical team in hospitals, much of the dispensing work is falling to pharmacy technicians. But, there are barriers to this expanding role, one of which is the lack of standards and certification of pharmacy technicians.

The HRDC report also addressed the issue of training for pharmacy technicians. The report notes that there are no formal training requirements for pharmacy technicians in any jurisdiction in Canada,

though some employers, especially hospitals, prefer candidates with a formal education. Even though the graduates of these programs are typically not recognized by their employers for their accomplishment, community colleges continue to supply the training.

Eli Lilly publishes an annual report on drug costs and pharmacy staffing in Canadian hospitals. While most of the conclusions reached in the 1999/2000 report are echoed in the HRDC report, one fact of interest is that of the responding hospitals, technicians comprise 43% of the pharmacy staff, while pharmacists account for 42%. The report indicates that the large number of vacant hospital pharmacist positions has necessitated that technicians take on additional responsibilities to do the tasks that these pharmacists would have been doing. There has been an increase in the prevalence of “tech-check-tech” (TCT). Some of the products now being checked by technicians are unit dose packaging, compounding and cardiac arrest trays. However, one startling figure indicates that while some hospitals are implementing TCT systems, only 52% of them have an in-house certification program. This is a safety concern, unless there are other avenues to pursue to ensure the competency of the staff performing these functions.

With this brief overview of recent Canadian investigations into the need for expanded responsibilities for pharmacy technicians, there are two feasible options to ensure the quality of pharmacy technicians and provide recognition for those technicians who have reached the standards set out. One option is to accredit pharmacy technician education programs of sufficient quality to meet the needs of today’s pharmacy practice environment. Another option is to establish a certification program, either voluntary or mandatory, to assess the abilities of the technician, regardless of method of education. In conjunction with the institution of either a certification or accreditation program, would be the need to develop national guidelines on the roles and responsibilities of the pharmacy technician that could be adapted into each provincial pharmacy regulatory authority. Of course, the fact that pharmacy is a provincially regulated profession makes the implementation of national guidelines or standards more of a challenge.

National Landscape

Currently in Canada, there is no body with the mandate of accrediting technician-training programs. The Canadian Council for the Accreditation of Pharmacy Programs (CCAPP) is the body that currently accredits the nine university pharmacy programs in Canada. By extension, it seems reasonable that they would also accredit the technician programs. CCAPP has already been in contact with the Association of Canadian Community Colleges (ACCC) to accredit their programs, in an effort to stem the threat of courses in private colleges that may not be as comprehensive.

On a national level, there are several groups which have an interest in promoting recognition for technician abilities, in the interests of technicians, pharmacists and public safety.

The Canadian Association of Pharmacy Technicians (CAPT) is a voluntary organization of pharmacy technicians. Since membership to CAPT is voluntary, and there are no regulatory bodies that require registration, this number does not account for all technicians in Canada. CAPT operates chapters in each province, and nationally the association has 600 members. CAPT was formed to promote recognition, communication and education of pharmacy technicians throughout Canada.

Among the objectives for the organization are to establish a standard of knowledge and skills for pharmacy technicians and to gain recognition as a vital component in the delivery of health care. However, the current small size of the organization limits the amount of time and money that can be invested in promoting their cause. For this reason, taking a leading role in any national initiative will be difficult. However, this is the association that represents the main stakeholder, and must be involved in any further discussions regarding pharmacy technician duties.

The National Association of Pharmacy Regulatory Authorities (NAPRA) has developed model standards of practice for pharmacists, which the individual provincial regulatory authority may choose to adapt. These guidelines are somewhat vague with respect to what may or may not be appropriate duties for technicians. Pharmacist duties were listed, followed by the statement that pharmacists may delegate or assign tasks to persons the pharmacist deems appropriately trained and qualified; as long as the delegation does not contravene any laws. Also included in the model standards of practice is a section stating that the pharmacist is professionally responsible for pharmacy support personnel, and responsible for ensuring the staffing ratio of support personnel to pharmacists is conducive to quality patient care. Also, the pharmacist must ensure that the support staff is trained, supervised and assumes responsibility according to an appropriate division of tasks.

The Canadian Society of Hospital Pharmacists (CSHP) is the national voluntary organization of pharmacists who have an interest in hospital practice. It has over 2500 members in provincial branches across the country. As hospital practice tends to be more progressive in the utilization of pharmacy technicians, it follows then that CSHP is also a group interested in the progression of technician job functions.

In 2001, CSHP published a position statement supporting the role of the pharmacy technician in the provision of pharmacy services to allow pharmacists more direct patient care. In 1992, CSHP produced "Guidelines for the Delegation of Functions to Pharmacy Technicians and Other Support Personnel." This document outlines appropriate education and training for technicians who are taking increased responsibility, tasks which must be performed by a pharmacist, tasks which may be delegated, and a program to ensure the quality of the tasks performed by technicians. In 1994 CSHP published "Guidelines for Hospital Pharmacy Technician Training Programs." This document provides broad recommendations as to what a suitable pharmacy technician program should entail. The guidelines are not specific in naming institutions or appropriate curriculum, but give broad objectives to be completed in a training program, whether in-house or academic.

Hospital pharmacy practice tends to be much more specialized than that in community pharmacies. In hospitals, the skills required of technicians are more defined. In the most advanced hospital practices, technicians will have to be proficient in every area of drug distribution. The tasks associated with each technician position are defined, and technicians will often be rotated through the positions on a weekly or monthly basis. The technicians may also specialize in the sterile preparation area, where they would rotate through positions with specific tasks assigned to the position.

Hospitals also may use the tech-check-tech system, where one technician will fill a prescription, unit dose tray or ward stock cart, and another technician who is certified to check technician work in that situation will provide the final check and release the drug from the pharmacy for use. In the tech-

check-tech system, the pharmacist is involved in screening the prescription against the patient's profile, verifying the medication order as entered and providing clinical services. In this sense, the pharmacist is used only to provide services requiring professional judgement, while the technicians are performing the technical and distributive tasks. By allowing for this distinction between pharmacy tasks, the pharmacists are used in their area of expertise, and the technicians are doing what they have been trained for, which allows for a more efficient use of human resources, and therefore time and money.

In community practice, there is much more confusion surrounding the role of the technician. Oftentimes they are not given specific stations to cover or tasks to do in the course of a shift. The management may not have defined what is or is not expected of them on-the-job. In one store, there may be a disparity between what technicians can and cannot do, simply depending on which combination of pharmacists and technicians are working. One thing is for sure, technicians in community practice do not enjoy the structure of defined tasks that their hospital counterparts do. Tech-check-tech does not occur in community practice, and most pharmacists are apprehensive of giving too much autonomy to the pharmacy support personnel. One area of community practice where a well-trained pharmacy technician may be an asset is in the submission of third party claims. If a claim has a problem, a technician is equipped to resolve the problem, leaving the pharmacist with more time to consult with patients and doctors.

The issue of pharmacist liability is one that makes most pharmacists reluctant to allow their technicians to assume additional responsibilities. Currently in Canada, pharmacists are ultimately responsible for all tasks carried out by technicians. Hospital pharmacies have managed this restriction by setting protocols in place for technicians to follow, with the pharmacy manager responsible for ensuring quality control via internal audits at a predetermined number of times per year. This seems to work well for hospitals, whose standards of practice are mostly supplied by CSHP. But for community pharmacies, whose practice is ultimately ruled by the individual provincial regulatory authorities, such latitude is not granted.

The wording of current legislation uses the terminology "direct" or "personal" supervision. Perhaps a definition of these terms to the practicing pharmacists may allow more comfort to pharmacists who wish to delegate responsibilities, or a distinction for levels of supervision. Once pharmacists no longer feel restricted by the legal terminology, or the law allows for some of the legal responsibility to lie with the technicians, delegation of tasks in community pharmacy may be easier for pharmacists to accept.

Provincial Landscape

Provincial regulatory organizations are responsible for ensuring that pharmacy is practiced safely in order to protect the public. The public most often does not make the distinction between a pharmacist and any other support personnel in the pharmacy. To the public mind, anyone working behind the counter of a pharmacy has had adequate training and exhibits pertinent knowledge to ensure that medication is dispensed properly. It is for the public's protection that there must be a mechanism to register, regulate, certify or hold accountable all personnel involved in drug distribution. The provincial regulatory organizations currently do not have the power to regulate anyone other than pharmacists. It is for this reason that voluntary programs will have to be

instituted. The technicians may opt to become certified, with the hope that employers will recognize the value of a technician that is certified for meeting set standards and reward them with increased responsibility or wages.

A distinction that should be made is to determine the difference between the terms pharmacy technician and pharmacy assistant. The use of the word technician in other professions usually indicates the completion of an accredited course, achievement of certification or a registered status. In pharmacy however, the word technician is often used to describe any non-pharmacist in a pharmacy who assists in dispensing. Any person may call himself or herself a technician without having completed a technical certificate. Using terminology consistent with that used in other health professions will make discussions regarding pharmacy support personnel easier.

Different provinces have taken different approaches toward expanded roles for technicians. Most have not addressed the issue at all. Some have established roles and guidelines, but have no certification. So far, Ontario and Alberta are the only two provinces to develop voluntary certification programs.

Ontario

In 1996, the Ontario College of Pharmacists (OCP) designed and implemented the first voluntary pharmacy technician certification program in Canada. One thousand technicians have become certified since then. Pharmacy technicians wishing to become certified must first submit an application to have their pharmacy credentials evaluated. The credentials accepted are quite specific, but broadly fall under the categories of trained at an OCP recognized technician training program in Ontario, trained at a technician training program outside of Ontario, or on-the-job trained with a minimum time service and compliance with technician tasks outlined by OCP. Once the credentials are approved, the technician must then apply to write the certification examination. Once the exam is written and passed, the technician now has *Certified Pharmacy Technician (CPhT)* status. Only residents of Ontario may apply for the certification process, OCP has a nation wide trademark to the CPhT designation.

In order to implement such a program, OCP had to develop information for the pharmacist on the role of the pharmacy technician, define an appropriate skill set, decide which functions could be delegated, and develop standards and guidelines.

Alberta

In Alberta, the provincial chapter of CAPT initiated the campaign to instate a voluntary certification program in their province. The Pharmacy Technician Certification Board of Alberta (PTCB-AB) was created to administer the certification process. The Board consists of five members, one of which is a pharmacist and program director of the Red Deer College technician training program. The remaining members are technicians trained through a college program, except for one, who was trained on-the-job. The technicians also have a variety of experiences, in hospital, retail, non-traditional environments, and a new graduate.

The certification exam had its first sitting in July 2001. The exam was written by 42 technicians,

over half of whom are having their fees paid by their employer. Approximately two thirds of technicians writing the exam were from the retail sector. Of the technicians who wrote the exam, there were four failures, two of them because they did not pass the calculation component. The average mark on the exam was 83%.

In November, they will be expanding the number of testing sites to six, with 25 tests at each site. This initiative is different from Ontario's for two reasons: the technicians themselves initiated the process, and PTCB-AB foresees itself expanding into other provinces to issue certifications, whereas OCP prefers to only certify Ontario residents.

The Alberta College of Pharmacists (ACP) has been consulted throughout the development of the PTCB-AB via twice yearly meetings. A representative from ACP was also invited to write the trial examination to help identify weaknesses. ACP has stated that it endorses the principle of technician certification, if not this specific exam.

ACP is in a preliminary stage of research into the issue of pharmacy technician accountability. Even though the technicians have taken it upon themselves to define their own credibility, ACP sees their role at this point in a broader sense. They are interested in what is happening in other jurisdictions, but are not acting on their own to address the issue. They are waiting to see what comes of the issue on the national stage first. ACP is interested in a differentiation between a voluntary certification program and a mandatory registration program.

These two programs have different processes, different outcomes and different costs associated with their implementation. Voluntary certification would function as a mechanism to recognize curricular achievements and competencies, but the pharmacist still carries the ultimate responsibility for the services rendered and the drug dispensed. In the scenario with mandatory registration, the technician would be accountable for the pharmacist-delegated tasks s/he performs. This would be the more difficult scenario to implement, as it involves legislation.

Currently in Alberta, there is a window of opportunity to include pharmacy technicians as a health professional in the Health Professionals Act. This Act is currently being drafted, and includes 28 health professions, which are separately responsible for writing their own regulations. This would be the ideal time to include pharmacy technicians as professionals in their own right, and implement changes in legislation, and by extension, modernize pharmacy practice.

To make a comparison, licensed practical nurses or nursing assistants are a separately regulated profession in most provinces, it would not be such a stretch to have pharmacy technicians regulated as well.

The current regulations for the practice of pharmacy in Alberta were last revised in the 1980's and are outdated. These regulations state only what a non-pharmacist may do, and what a pharmacist must do.

British Columbia

The College of Pharmacists of British Columbia (CPBC) does not include technician regulation as part of its future vision. Since BC law, like most other provinces, does not permit regulation of pharmacy technicians by pharmacists, CPBC intends to ensure a quality standard of technician

ability by another method in the meantime. Within the next year, they will develop a statement of competencies to distribute to pharmacy managers as a tool. One intention for the use of this tool is for managers to evaluate job applicants. Also, the tool will be sent to BC technician training programs, notifying them that this is the standard by which new graduates will be judged when entering the work force. This method does not impose any formal registration or certification, but leaves the responsibility on the individual pharmacy managers to ensure quality support personnel in their pharmacy.

In addition, CPBC is expected to facilitate and guide the creation of a pharmacy technician regulatory organization, by the end of 2004. However, the largest barrier to eventually regulating pharmacy technicians by an independent organization is the fact that there is no active CAPT chapter in BC. Any initiative regarding regulation of pharmacy technicians would obviously have to include this important stakeholder group. If the technicians do not appear to want this change, it may be difficult to implement.

Currently in BC, there are some documents supporting an expanded role for technicians. Standards for delegation of technical functions, standards for pharmacy technician verification, and standards for pharmacy technician verification of sterile products have been published.

Manitoba

In the spring of 2001, members of the Manitoba Pharmaceutical Association (MPhA) passed a motion to allow pharmacists to delegate technical duties to another person in an institutional setting. These changes have yet to be passed into law.

Provision is made within these changes for three levels of “non-pharmacist” pharmacy workers. The first level is simply an assistant, a person working in a pharmacy with a low level of dispensing or technical responsibility. The next level is a technician, who will be registered and certified by the MPhA. Only those registered with MPhA may be considered technicians. Criteria must be met in order to become a registered, certified technician, including passing an examination. Once the criteria have been met, they can assume a heightened responsibility related to dispensing. A brief outline of activities which can be delegated is included in the draft document. Once a technician, additional responsibilities can be assumed, with proper training and pharmacy manager supervision, to become a checker, to have limited communication responsibilities with prescribers, and to compound parenteral solutions. Of course, even with delegation, the pharmacist is still responsible for evaluating the quality of work of those performing the delegated tasks.

As the legislation in Manitoba currently stands, there is only provision for tasks that may be carried out by a person other than a licensed pharmacist. There is also a ratio of pharmacists to such persons (1:1+1 in community settings, and 1:2+1 in institutions), so that a pharmacist is not supervising too many of these people at once. The regulations do not identify that other person as “assistant” or “technician”. Also, the current regulations have no restrictions on who may call himself or herself a pharmacy technician. The intent of the proposed changes to the legislation is for implementation in the hospitals first, with adoption in the retail sector once the membership assesses the impact such a program may have.

New Brunswick

The New Brunswick Pharmaceutical Society (NBPhS) does not currently have any documentation or policies supporting expanded roles for pharmacy technicians. At this time, they have no intention of revising their pharmacy act, but are waiting for a national initiative. If a national certification program were to be developed, they would support its development and recommend adoption by its members. They are aware of the desire of the province's pharmacy technicians for recognition, and have been approached to design accreditation or certification programs. They are not interested in assuming that responsibility, as it is not in their mandate. In hospital practice, tech-check-tech is not a common practice, but the hospital pharmacy directors of New Brunswick have drafted a document outlining appropriate tasks for delegations within their pharmacies. This document is still being revised.

Newfoundland

The Newfoundland Pharmaceutical Association (NPhA) has drafted guidelines for the pharmacist to follow on the role of the pharmacy technician. These guidelines are similar to those already in effect in Ontario. These guidelines outline which tasks a technician may perform to assist the pharmacist in preparation of prescriptions, clerical activities, inventory management, and communication. NPhA has also suggested a pharmacist to technician ratio of 1:1+1 to allow an acceptable level of supervision. NPhA is currently revising a document authored by the province's hospital pharmacy directors to establish protocols for delegation to technicians. Newfoundland currently has no other provision in their legislation or regulations for delegation of tasks to technicians, and tech-check-tech is not a common practice in Newfoundland hospitals.

Nova Scotia

In Nova Scotia, no document has been generated on roles, responsibilities, and appropriate tasks for delegation. For the most part, the duties of technicians are interpreted by what is not present in the pharmacy act. Tasks that must be performed by a pharmacist are stated, and any tasks not listed are assumed to be appropriate for pharmacy support staff to do. In Nova Scotia, the Nova Scotia Pharmaceutical Society (NSPS) and the Pharmacy Association of Nova Scotia (PANS) have been approached by the provincial chapter of CAPT to set up a certification program. However, the province has not made a decision yet on how to proceed. They are waiting for another body, such as CPhA to take the lead on the issue. Initially, Nova Scotia supports the idea of a voluntary certification program, with expansion as necessary as the program grows. Among their membership, there was some preliminary dissatisfaction expressed on examining the technician issue, but the dissatisfaction has disappeared as pharmacists are starting to realize that there is a supply and demand issue about pharmacy technicians and pharmacists.

Prince Edward Island

The Pharmacy Act in PEI only outlines what a pharmacist must do, and has no provision for what appropriate tasks are for support personnel. In addition, there is no ratio mentioned, or policy documentation. Approximately eight years ago, the Prince Edward Island Pharmacy Board (PEIPB) conducted a survey jointly with Charlottetown's Holland College, to assess the need for pharmacy

technicians in practice settings. At that time there was no need determined, and Holland College opted not to implement a technician training program. In the fall of 2001, CompuCollege is starting a technician training program in Charlottetown, which will be the province's first academic technician training program. Up to that point, all support personnel in pharmacies were trained on-the-job.

Quebec

Quebec is similar to most other provinces in that there is no provision for pharmacy technicians in their law. They do have a list of technical functions, which are appropriate for delegation, included in their standards of practice. A non-pharmacist may perform any technical task, but the term "technical task" has not been identified. There is no minimum educational requirement to work in a pharmacy, just a minimum age requirement of 18. Also, in Quebec, the term technician is reserved for those with a diploma from a college, similar to lab technicians. Quebec is looking into a pharmacy assistant registration process for the future.

In the 2001 May/April issue of *L'Ordonnance*, the journal for l' Ordre des Pharmaciens du Québec, results from a survey of their members was published addressing the issue of support for l' Ordre's intention of allowing delegation of container content verification in community settings. The majority of respondents expressed reservation of adapting such a system in community settings, so the board decided to maintain the status quo and not allow delegation of verification in community settings. Procedures already in place in institutional practice are not affected by this decision.

Saskatchewan

The Saskatchewan Pharmaceutical Society (SPhA) has provisions in its regulations for pharmacy technicians to the extent of what is included in the NAPRA standards of practice for pharmacists. The list of functions outlined by SPhA primarily distinguishes between technical and cognitive, and the pharmacist must still supervise the technical functions. Technicians are accounted for in a ratio, and in the Association's by-laws. In Saskatchewan, the pharmacy technician must have had a minimum of high school training with math and science courses. Technicians must have formal training, but this may also include on-the-job training.

Evidently, there is no consistency across Canada with respect to pharmacy technician roles, responsibilities, educational standards, or regulation. Some provinces are starting to move forward on the issue, albeit slowly. Others are waiting for a national initiative to commence. The first step in many instances is defining tasks that may be carried out by technicians with either delegated authority, or little or no pharmacist supervision. The main obstacle for each province to consider implementing a certification or accreditation program is time and money.

International Landscape

Other English speaking countries of comparable economic status and history of pharmacy practice are already well established in pharmacy technician certification and/or accreditation.

United States of America

The US has an organization which administers a national voluntary certification exam, and an organization which accredits pharmacy technician training programs. The American Society of Health Systems Pharmacists (ASHP) has had a role in both of these processes. As early as the 1960's, ASHP has taken an interest in the role and education of support pharmacy personnel. Currently, ASHP has a pharmacy technician category of membership, and is the body that accredits pharmacy technician education programs. The accreditation of pharmacy technician education programs started in 1983, and there are currently over 80 schools accredited to provide pharmacy technician education in the US. ASHP has also provided a model curriculum to assist in reaching accredited status.

The Pharmacy Technician Certification Board (PTCB) was established in 1995 by the American Pharmacists Association (APhA), ASHP, the Illinois Council of Health System Pharmacists (ICHSP), and the Michigan Pharmacists Association (MPA) to independently create and administer certification exams. The certification exam covers three main areas: assisting the pharmacist in serving patients, medication distribution and inventory control, and participating in the administration and management of pharmacy practice. The exam is administered by the Professional Examination Service, and is therefore psychometrically sound and legally defensible. Since 1995, 86,000 technicians have been certified. The certified pharmacy technicians are starting to become recognized as a valuable asset in the workplace, as evidenced by the number of employers supporting the examination for their employees, including Walgreens, Eckerd, CVS, and K-mart.

The PTCB is the fastest growing credentialing organization in the US. In addition to employers recognizing the achievement of certified technician status, some of the state pharmacy boards are recognizing the heightened competencies associated with certification. Four states require PTCB certification, and another four use PTCB certification as a prerequisite for additional responsibilities, for an increased pharmacist to technician ratio, or in lieu of CE for renewal of registration.

The National Association of Boards of Pharmacy (NABP) has also taken an interest in technician issues. The role of NABP is similar to that of NAPRA, it cannot dictate changes in law, but can facilitate change by developing national models. The NABP has called for a national system for verifying technician qualifications and to add technician information into their disciplinary clearinghouse to share information between states. Twenty-five state boards of pharmacy have the authority to discipline technicians. Thirty states require that pharmacy technicians be registered, meaning the state pharmacy board has their name, address, and place of employment. Twenty-six states require that pharmacies have a technician training manual specific to their practice setting, and maintain records of their technicians' completion of the training program. Also, with regard to state laws requiring ratios of pharmacists to technicians, only one state has a ratio of 1:1, but 15 have no ratio. Eliminating a set ratio is theoretically a good step, but only if the technicians are receiving proper training.

The United Kingdom

The Royal Pharmaceutical Society of Great Britain (RPSGB) issued an instruction that all medicine

counter assistants (similar to clerks or cashiers in the pharmacy, very little dispensing function) should be trained to recognized standards by 1996. A result of this declaration was the creation of a distance learning program by the National Pharmaceutical Association (NPA), a national voluntary association, with a membership primarily comprised of pharmacists in independent stores. This program, called Pharmacy Interact for medicine counter assistants, has been quite successful, winning a National Training Award and training more than 30,000 people. They partnered with a marketing firm and a financial backer from the pharmaceutical industry. The program was initiated in 1995, and is a series of eighteen learning modules that can be completed over a period of nine or eighteen months. The modules have readings, work-based activities, and a multiple-choice test. Pharmacy Interact trains assistants in product knowledge, selling medicine, and identifying situations for pharmacist consultations.

The RPSGB has also declared that all pharmacists are to write and implement Standard Operating Procedures (SOP) for their pharmacies by January 1, 2005. These SOPs are intended to cover all aspects of the dispensing process. This requirement is being introduced by RPSGB as a strategy for risk reduction. These SOPs are also intended to help regulate those working in support of pharmacists by specifying what should be done, where it should be done, who should do it, and when. The SOPs will clarify roles, and enable delegation, among other intended benefits. It then follows, that all staff involved in prescription preparation be trained to a minimum standard, which is separate from the SOP. In a letter accompanying the RPSGB guide for writing SOPs, the fact that non-pharmacists are not allowed to perform an accuracy check is pointed out. The letter states that the council believes that after training and accreditation for accuracy checking, a technician would be as competent as the pharmacist, and this policy needs to change to reflect the progression of pharmacy practice into technical and professional domains. The letter also requests member feedback, by the summer of 2001.

The UK has a system of National Vocational Qualifications (NVQ), which are competency-based qualifications assessed against National Occupational Standards (NOS). To achieve an NVQ, programs of learning and workplace assessment are necessary. NVQ's have levels related to work performance roles, for example, level I includes routine and predictable tasks, level II involves greater individual responsibilities, level III recognizes competency in skilled areas which require complex and non-routine tasks, and competence at a supervisory level. Pharmacy technicians fall under the NVQ Level III category, and pharmacy assistants are at NVQ Level II.

The dispensary assistant course trains the student in procedures and legal aspects of working in a pharmacy. The course is six months in duration, but is not recognized by RPSGB as achieving the outcomes required for minimum standards. However, after completion of this course, the credits can be transferred into the first year of the dispensing technicians NVQ, recognized by the RPSGB. The dispensing technicians course is called Pharmacy Services Level 3 NVQ, and is two years duration. The knowledge required by completion of this course appears to be similar to what Canadian pharmacy technicians learn in formal technician education programs, in that the topics of physiology and pharmacology are addressed. The course also involves performance evidence collected in the workplace to show that the student's competency reaches the minimum required occupational standard, which would be similar to experiential rotations, with the exception that the student is actually employed by their practice site. There are no academic or age requirements for these programs. All non-pharmacists involved in dispensing medication must have completed this course by 2005.

In the summer of 2001, the Council of RPSGB will be discussing whether or not to change its current policy to allow a trained technician to self-check in the dispensing process, provided that the prescription has been clinically assessed by a pharmacist at some point in the dispensing process. Self-checking by non-pharmacists is currently not covered under the NVQ Level 3 qualifications for pharmacy technicians, and would require additional training. This is something similar to what is occurring in Canada, when hospitals evaluate and certify technicians for tech-check-tech. However, as in Canada, the issue of corporate and individual liability weighs on the mind of some pharmacists, as the pharmacist would still be responsible for any errors made past the pharmacist's initial assessment.

Some universities and hospitals are already providing a course for technician accuracy checking. The course is 2-3 days, and covers lectures on legal and ethical issues, as well as communication skills. Checking practice is also discussed, followed by an exercise in checking 1500 items. An exam follows, which includes an interview, a review of the technician's checking log, and an examination of 20 checked items. After the examination, the technician is on a probationary period of 2-4 weeks where they are gradually introduced to unsupervised checking.

Australia

By North American standards, there are very few pharmacy technicians. There are pharmacy assistants, but there are little or no formal qualifications needed to be a pharmacy assistant. In Australia, like in Canada, the state or territory governs pharmacy practice. All states have introduced formal career structures for pharmacy assistants.

The Pharmaceutical Society of Australia (PSA) is an educational, ethical, and professional association for community pharmacists. The PSA has published a policy on the use of dispensary assistants/technicians. The PSA endorses the use of suitable trained dispensary assistants/technicians, and agrees that using appropriately trained technical staff in dispensing increases professional contact time between the pharmacist and patient. Tasks may be delegated according to written procedures, but the pharmacist still remains responsible.

The Pharmacy Guild of Australia (PGA) is an association of pharmacy owners. They have developed a national training course for pharmacy assistants. The course consists of 47 modules, and deals with product knowledge, pharmacy operations, customer service, and marketing. It is a distance education program, completed in the workplace under the manager's supervision. The course delivers accredited, nationally recognized training, and the opportunity to reach four successive grades of competency.

National and state initiatives in Australia were the motivation for PGA to develop training for pharmacy assistants. The Australian Industrial Relations Commission decided that all career paths should be reviewed and classified. All levels of government decided that Australia should change to a competency based training system with national consistency. The PGA has decided to provide the framework for national recognition of the nation's pharmacy assistants with this nationally accredited, competency based training course. This training course is designed to comply with the Australian Qualification Framework (AQF), to deliver credentials for accreditation by state vocational education.

New Zealand

The Pharmaceutical Society of New Zealand (PSNZ) does have documentation specific to pharmacy technicians, and a pharmacy technician is defined in their pharmacy regulations. Pharmacy technicians must hold a certificate issued by PSNZ, in addition to a National Certificate in Pharmacy (Technician) which is a registered qualification of the New Zealand Qualifications Authority. In order to achieve this National Certificate, competencies that are commonly encountered in hospital and community practice must be met. The training to meet these competencies includes on-the-job experience and a self-study program, and there are no previous educational qualifications necessary to start study. Pharmacists in the workplace shoulder the responsibility for teaching, with the competency assessment provided by The Open Polytechnic of New Zealand (TOPNZ). PSNZ provides support for the pharmacist and ensures the training is of a satisfactory standard. The length of the course is dependant on the student, as it is a self-study course, but the average student, working full time and studying in the evenings, is expected to take three years to complete the course.

PSNZ has also outlined the expected role of a pharmacy technician to its pharmacists. It expects their pharmacists to relinquish tasks related to products, so the pharmacists can have time for patient oriented activities. However, technicians still are only permitted to count or pour- no measuring, compounding, or generic substitutions are permitted. The pharmacist still bears all the legal responsibility, and must ensure appropriate quality control.

In addition to the National Certificate in Pharmacy (Technician), there is one with an assistant designation. This qualification covers the basic requirements for all people working in a community pharmacy. It is designed similar to the Technician certificate, in that it is self-study, flexible, and assessed by TOPNZ. The assistant certificate has been designed to allow easy transfer of credits toward completion of the technician certificate.

Summary

This overview of select English speaking first world nations shows that Canada may be lagging behind in ensuring the competency of pharmacy support personnel to expand their role. The US has accreditation of training programs and voluntary certification, but very few States have laws stating credentials required by technicians. The other British Commonwealth countries surveyed have implemented regulatory or legislative changes to ensure proper training to defined standards, with accreditation of these programs by a vocational or pharmacy body. The regulatory changes do not appear to directly address expanded roles in practice, and in some instances the tasks actually completed by the technicians or assistants are no different from what Canadian technicians may do. The laws do offer the additional benefit of assured competency.

The primary goal of studying the landscape of pharmacy technician roles and education across the country and the world is to gather information so Canada may proceed in an appropriate manner in ensuring pharmacy support personnel competency. The 1998 survey conducted by CPhA indicated that the favored course of action was to implement a national voluntary certification program, similar to what is administered in the US and Ontario. This course of action will see the fastest results, as

there are readily available examples of such a program to allow adaptation to a Canadian national program, and there are many parties willing to become involved in or endorse this initiative. One drawback to this approach is that it does not compel pharmacy managers to hire only those technicians who are certified, or to financially recognize those technicians who have achieved this level of recognition. If the regulatory bodies were to include such a provision in their standards of practice, then the certification may have more value.

Accreditation of training programs is another way to ensure competency of pharmacy technicians. Accreditation of programs will be time consuming and expensive. But until legislation changes to mandate that only graduates from recognized pharmacy technician training schools could assume heightened responsibilities in pharmacies, the value of graduation from such a program is uncertain.

Many pharmacists would agree that a well-trained pharmacy technician is essential to an efficient pharmacy. Within the pharmacy profession, there is still resistance to allowing technicians to participate fully in the dispensing process. This may be due to the fact that some pharmacists are unaware of what their technicians may be capable of. By certifying individuals or accrediting institutions, and addressing pharmacy technician roles and responsibilities in provincial pharmacy regulations, the pharmacist can be sure that the technician knows what to do, and what not to do. The pharmacist won't have to fear legal repercussions if the technician is permitted to do some things with little supervision.

Pharmacists should be encouraged to have guidelines within their pharmacies to make all staff aware of appropriate tasks for all support and professional employees. A more defined job description and list of responsibilities should help significantly with confusion and inconsistencies that may be seen within the pharmacy depending on which combination of pharmacists and technicians are working.

Given today's fluid pharmacy practice environment, it is important for pharmacists to take action in securing the pharmacy technician as an important part of the pharmacy and health care team. By defining expanded roles for pharmacy technicians, pharmacists are solidifying their own commitment to a patient oriented practice, and recognizing the importance of their partners in providing safe and efficient drug therapy.

Next Steps

There are four issues that warrant further investigation in Canada: certification, curriculum and accreditation, legal accountability, and defined technician roles and responsibilities. Certification and accreditation will help to ensure the competency of technicians. Legal accountability and a defined skill set will allow the pharmacist to feel more confident in allowing technicians to assume heightened responsibility. As long as pharmacists are bearing the sole responsibility for dispensing the product in the eyes of the law, pharmacist opposition will still be felt. The involvement of the provincial regulatory authorities to bring about changes in the law or to register technicians will be essential.