Perspective of Manitoba Pharmacists
on Entry-Level Practice Competencies

by

Rehana Durocher

A Thesis submitted to the Faculty of Graduate Studies of
The University of Manitoba
in partial fulfilment of the requirements of the degree of

MASTER OF EDUCATION

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Abstract

Qualitative focus group methods were used to explore the perceptions of community pharmacist preceptors on changes and challenges they expect to face in practice, and on the knowledge, skills, and attitudes needed in responding to the challenges. Participants expressed the opinion that practice was evolving towards clinical patient services, but that change was impeded by structural barriers associated with community pharmacy’s product-focused model and difficulties in finding appropriate continuing professional development opportunities for maintaining competency and acquiring advanced credentials. They stated that while students entering the profession are well prepared for practice, in many cases they were not able to use many of their skills in community practice settings. Given that obstacles to implementing clinical services may be inherent to community pharmacy’s retail structure, rather than the education standards of entry-level practitioners, it is suggested that more comprehensive studies be conducted before instituting major curricular changes in Canadian pharmacy programs.
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Dedication

for Rémi

who showed amazing patience along this journey
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CHAPTER ONE

The Profession of Pharmacy

The question of how to best educate professionals is one that has been debated since the emergence of the Western university in medieval times. Although these institutions originally arose out of a desire to provide training for those entering the professions of theology, law, and medicine (Casper, 1996), over time universities came to increasingly focus on the pursuit of “pure knowledge” in natural sciences and the arts. This, in turn, has led some to question the role of professional schools in the academy (Gregor, 2000). While this was taking place, the nineteenth century saw the formal rise of new professions, such as pharmacy (American Conference of Pharmaceutical Faculties, 1999), who sought the legitimacy gained through the requirement of a university-based education. Moreover, while a university degree does satisfy one of the commonly accepted requirements of a professional education (Wilensky, 1964, as cited in Hepler, 1987), there are stakeholders within the professions who continue to question whether this is the best means of preparing an individual for professional practice (Casper, 1996).

If, as some might argue, professional education legitimates itself primarily through practice (Hansen, 2004; Holland & Nimmo, 1999; Knowlton, 1991; Schwinghammer, 2004), it follows that the primary role of professional faculties such as pharmacy, medicine, nursing, dentistry, engineering, and law is to graduate new pharmacists, physicians, nurses, dentists, engineers and lawyers. While it is true that professional schools are increasingly involved in traditional scholarly activities and research (Holland & Nimmo, 1999; Knowlton, 1991), their raison d’être would remain
the “production” of new professionals needed to fulfill the mandate the profession avowed with the public in exchange for practice exclusivity in dealing with a specialized body of knowledge (Beck, Thomas, & Janer, 1996; Commission to Implement Change in Pharmaceutical Education, 1993a). That being the case, the question arises as to who is ultimately responsible for deciding what future professionals are learning through curricular programs and what influence various stakeholders have in making these decisions. The success of inevitable change in a profession, like any organizational change, occurs only through the dedicated efforts of individual members of the profession (Davies, Spence Laschinger, & Andrusyszyn, 2006; Wilkinson, 1998). Hence, what role(s) should individual practitioners play in determining curricular change and how do they affect acceptance of new practice models and standards?

In light of ongoing discussions taking place involving pharmacy educators and various external stakeholders looking at the future of pharmacy education and practice, I set out to explore the perspectives of some of the individuals who might be affected by changes in pharmacy education curricular standards. These changes centre around the pharmacist providing medication management and self-care services along with health promotion information, carrying out clinical interventions, and participating in therapeutic decisions, in addition to drug distribution or dispensing services. My goal was to explore the views, opinions, ideas, and perceptions on changes and challenges which a sub-group of Manitoba community (retail) pharmacists (staff and managers) face now, and expect to face in the foreseeable future. I also sought their opinions on the
necessary knowledge, skills and attitudes needed by entry-level practitioners to respond to the identified changes and challenges.

Community pharmacists as a group currently make up the majority of practitioners in Manitoba (864 out of 1155, 74.8%) and nationally (over 71%) (NAPRA, 2006) and I would not expect these figures to be reduced in the near future given the expansion of pharmacy practice in the retail sector (Jennings, 2005). They also define pharmacy to the average individual (Lemieux-Charles, 2003; K. Taylor & Harding, 2003) and the services they provide and the knowledge they display set the de facto standard for what the public expects of a pharmacist. That was one of the reasons I chose community pharmacists for this study. Given the study’s limited scope and resources, reducing the participant population to a manageable size was an essential element. It was therefore decided to look at the perspectives of a specific subgroup of community pharmacists, namely those who had been preceptors of undergraduate pharmacy students and/or pharmacy interns in the two years preceding the study.

There were other, more specific reasons for selecting this subgroup. It is made up of individuals who, as preceptors, assist in the socialization of pharmacy students, where in this context socialization is defined as “the process by which an individual selectively acquires not only the knowledge and skills of the profession, but just as important, the appropriate behaviors, attitudes, and values” (Beck et al., 1996, p. 122). In pharmacy this involves the development of practical skills and the integration of theoretical knowledge into actual patient care. By passing on behaviours, attitudes, and values, preceptors are in a position to influence the standards by which future practitioners will practice. I also
selected this subgroup since I am assuming that since these individuals have volunteered
to serve as preceptors in the recent past, they may have a greater interest in pharmacy
education than the general practice population, and might therefore be more likely to
volunteer to participate in a study dealing with entry-to-practice education. A more
complete discussion of the selection process is presented in Chapter Three.

Defining Professionals

A discussion of changes in professional standards and practice needs to begin by
defining what is meant by the term “professional”. As Smith and Knapp have indicated,
the terms “profession” and “professional” are commonly used in such wide ranging
context that “that it is difficult to produce definitions that are relevant and widely
accepted” (1992, p. 108). They then go on to suggest that one way to clarify the meaning
would be to chose an occupation that is widely accepted as a profession, such as
medicine, and compare its characteristics to the occupation under discussion; in this case, pharmacy.

One might also consider the basic definitions used in the English language. The
Oxford English Dictionary (OED) Online (Simpson, 1989) defines a professional as one
who is “Engaged in one of the learned or skilled professions, or in a calling considered
socially superior to a trade or handicraft”. It in turn defines a profession as

A vocation in which a professed knowledge of some department of learning or science is
used in its application to the affairs of others or in the practice of an art founded upon it.
Applied spec. to the three learned professions of divinity, law, and medicine.
Perhaps more in keeping with my thesis, however, is the description of a profession provided by Cogan (as cited by Maudsley & Strivens, 2005, p. 535-536) who states:

A profession is a vocation… founded upon an understanding of the theoretical structure of some department of learning or science, and upon the abilities accompanying such understanding … applied to the vital practical affairs of man. The practices … are modified by knowledge of a generalized nature and by the accumulated wisdom and experience of mankind… The profession… considers its first ethical imperative to be altruistic to the client.

Larson (1977, p. x) identifies two sociologically core characteristics of professions which she states as having “… special competence in esoteric bodies of knowledge linked to central needs and values of social system” and being “… devoted to the service of public, above and beyond material incentives”. She then goes on to list attributes which help define a profession, namely having: a body of knowledge and techniques which professionals apply in their work; a service orientation; distinctive ethics; the privilege of self-regulation granted by society (social sanction); and autonomy and prestige.

In addition to the privilege of self-regulation, society grants a number of professions the privilege of exclusivity. For example, one cannot legally practice law, medicine, dentistry, engineering, or pharmacy in Canada without the sanction of the respective self-regulatory bodies. Self-regulation also grants another very important privilege to many professions. That is, the ability to set and enforce standards of practice by defining the general attributes required by practitioners to fulfil professional
competencies. Defining standards of practice in turn sets standards of professional education, including the entry-to-practice education standards for students graduating from professional faculties at universities (National Competency-Based Standards of Practice Working Group, 2003).

In general, the three core characteristics needed if a group is to rightly be called a profession include:

1. an established autonomous system of self-regulation;
2. governance by a code of ethics, including aspects of social responsibility and devotion to the public good; and
3. practice guided by a specific and substantial body of knowledge.

These are consistent with professional attributes expected of Canadian pharmacists, that is, they must consistently (National Competency-Based Standards of Practice Working Group, 2003):

1. accept responsibility for actions and decisions;
2. demonstrate respect for others;
3. provide professional pharmacy care to individual patients that complies with ethical guidelines governing the profession [each provincial regulatory body developed its own code ethics];
4. maintain appropriate inter-professional relationships;
5. provide care and services that place the best interest of patients before their own self-interest;
6. strive to improve professional competence through the use of appropriate learning;

7. demonstrate personal and professional integrity;

8. undertake non-pharmacy practice-related activities that are consistent with their status as a health professional; and

9. avoid bias or conflict of interest.

Members of the Professions

Members of a profession generally form a community which shares a relatively permanent affiliation, identity, personal commitment, specific interests, and general loyalties. These communities are built around professional associations, professional schools and self-administered codes of ethics (Larson, 1977). While professional bodies are made up of many stakeholders, a closer look would show that they may be primarily divided into three large sub-groups.

Figure 1 presents a conceptual illustration of the pharmacy profession, showing the major sub-groups of a self-regulating profession, namely: regulators, educators, and practitioners. It should be noted that students have been deliberately left out of this figure. While they play a vital role in the continuity and renewal of any profession, their roles and their relationships with other members of the profession is complex and including a full discussion here would dilute the focus of the thesis.

The sub-groups shown in Figure 1 play their respective roles in order to fulfil the mandate of the three core characteristics of a professional group, that is, devotion to public good, social sanction, and a specialized body of knowledge. The sub-groups are all
made up of members of the profession with different primary roles and responsibilities for which they are accountable. These roles and responsibilities are not mutually exclusive and some members may serve important functions in two or more categories. The double-ended arrows used in this figure are meant to indicate that each of the subgroups is affected by the others and that changes initiated by one sub-group may impact on the entire organization. While Figure 1 specifically illustrates the structure for the profession of pharmacy in Canada, it is applicable to most of the healthcare professions, as well as engineering and law, since they have similar basic professional governance and regulatory structures.

Figure 1 Conceptual Framework of the Profession of Pharmacy
Pharmacy regulators are charged with the responsibility of establishing and maintaining an autonomous system of self-regulation. They derive their authority from the public through provincial legislation (for example MPhA, 2006). While governments, both federal and provincial, are involved in the approval and regulation of drug products handled by pharmacists, they retain an “arm’s-length” relationship with the profession regarding matters concerning practice. On behalf of the public, from which they derive their authority, the regulators have a legal obligation to establish, monitor, and regulate practice standards for individuals and practice sites and are responsible for disciplining those who violate accepted standards. They also establish the minimum standards for entry-to-practice by stipulating the academic and practical training requirements, and/or registration examination(s) that an applicant must complete to meet the standards of qualification for entry into practice, and for higher levels of practice if they exist (for example, cardiology or psychiatry in medicine). In the case of pharmacy, this group does not prescribe specifics within pre-licensure educational programs, but requires the pharmacy education programs to be accredited by another, recognized body.

Members of the regulatory sub-group are largely drawn from the professional practice community and many are unpaid volunteers. The public is represented on the board of the regulatory group through the government appointment of lay members. The appointment of persons from outside of the profession is a reflection of a professional governance body’s mandate of serving the public interest. The current Act (MPhA, 2006) stipulates two lay members on the eight person MPhA council, but does not lay out the
criteria by which the government chooses these individuals or how they will function to bring a public perspective to the issues that they face.

Healthcare professionals in Canada are normally educated in the professional faculties of the country's universities. These faculties are accredited by bodies which serve to maintain consistent national standards, ensure the quality of professional education, and support of the growth and development of educational programs and professions (Lemieux-Charles, 2003). These bodies are made up of academics and other representatives of the profession. The academic accreditation process is meant to ensure that the outcomes and standards required by regulatory bodies and the public are met. The design of curricula, program set-up, and teaching methods is generally determined by individual schools or faculties, hence the curriculum and how it is delivered may vary from education program to education program across Canada. Educators are the faculty members at accredited institutions who teach prospective professionals from a specialized body of knowledge that they have developed and maintain, some by virtue of their practitioner standards. The curricula they design and deliver are primarily meant to prepare students for entry-level practice (Accreditation Council for Pharmacy Education, 1997; Beck et al., 1996; Commission to Implement Change in Pharmaceutical Education, 1993a; Schwinghammer, 2004). Some faculty members also maintain a professional practice, in addition to their teaching, research, and other university duties.

The final group illustrated in Figure 1 is made up professional practitioners. These are the individual members of the profession with the primary mandate of providing services for the public good in an ethical and socially responsible manner. They are the
public face of the profession, the interface between the profession and the public (K. Taylor & Harding, 2003; Zellmer, 2005). As such, one might expect practitioners to be in a unique position to gauge what the public expects from the profession. Likewise, the practice standards of practitioners can influence public expectations by defining a de facto norm which the public may come to expect as the best service available (Zellmer, 2005). Just as some members of the regulatory and academic sub-groups may maintain a pharmacy practice, some members of the practice group actively participate in the education of pharmacy students. By acting as preceptors, practitioners serve as mentors and role models and assist with the socialization of students in practice settings. Some are also directly involved in teaching at universities. The curriculum committees of most faculties of pharmacy will also often have one or two practitioners as members in order to bring another viewpoint to the table. Others may be asked to sit on committees related to specific programs or initiatives where their input may be required (Perrier, Winslade, Pugsley, Lavack, & Strand, 1995).

Practitioners can also influence the success or failure of practice and/or educational innovations and changes simply by the degree to which they incorporate the changes into their personal practice model. Implementation of new learning is further complicated by the fact that in some professions, such as pharmacy, practitioners may find employment in a variety of settings (K. Taylor & Harding, 2003). For example, pharmacists are employed in retail outlets, hospitals, long term care facilities, government departments, and pharmaceutical companies (Jennings, 2005). In such cases these individuals may have allegiance not only to their profession but to employers, who may
or not share the ideals of the profession (Smith & Knapp, 1992; K. Taylor & Harding, 2003; Zellmer, 2005).

In the context of the profession of pharmacy in Manitoba, which is the focus of my thesis, the regulator is the Manitoba Pharmaceutical Association (MPhA). As mentioned previously, they are granted their authority by the public through provincial legislation, specifically the Manitoba Pharmaceutical Act (MPhA, 2006), and enabling regulations. The educator of prospective pharmacists in the province is the Faculty of Pharmacy at the University of Manitoba and the Faculty’s program is accredited by the Canadian Council for Accreditation of Pharmacy Programs (CCAPP).

Finally, for the purpose of my thesis, I am focusing on individuals in the profession who provide direct service(s) to the public on a regular basis. In Manitoba, these individuals hold a patient-care license issued by MPhA and, to maintain a practice, they must maintain minimum requirements for practice hours and continuing education (MPhA, 2006). Although other licensed pharmacists and other members of the profession provide valuable services to society, they fall outside the scope of this thesis. As indicated earlier, in order to have a group of the size consistent with the scope of a qualitative study of this type, I have narrowed the focus further and worked with a subgroup of pharmacists practicing in community retail settings who have served as preceptors of undergraduate students and/or pharmacy interns in the two years preceding the study. Reasons for choosing to study this group of pharmacy practitioners are presented in depth in Chapter Three of this thesis.
Evolution of Pharmacy as a Profession

Wilensky (1964, as cited in Hepler, 1987, p. 374) has listed the steps that an occupation passes through as it professionalizes. Once the members consider that their occupation has attained social value (Larson, 1977) they strive to have their status legally recognized by society (Smith & Knapp, 1992). In order to establish a profession, members must:

1. engage in the occupation full-time;
2. establish university-based standard curricula;
3. form a professional association;
   a. redefine core tasks “upward” [increasingly cognitive], delegate technical tasks to others,
   b. experience conflict within profession with the “old guard”, and
   c. experience conflict with neighbouring occupations,
4. agitate politically to win legal support (legal protection of occupational name, exclusion of outsiders, licensure); and
5. establish formal code of ethics to eliminate the unqualified and unscrupulous, to reduce internal competition, and to emphasize the service ideal.

This is an ongoing, rather than a one-time process. As Taylor and Harding (2003, p. 143) have stated “Professionalism is a social state in a continual process of change.”

As a profession changes in order to meet its obligations to a changing society, it must “re-professionalize” with each major change it goes through (Hepler, 1987; Holland &
Pharmacy in North America has gone through this process a number of times since it developed as a profession in the 1800s. An overview of this evolution is presented here to provide a context for the discussion currently underway concerning changes to pharmacy education and practice. The overview looks at pharmacy in the US since a search of the literature, discussed in Chapter Two, did not discover historical documentation on the Canadian experience. I would argue that using US information is relevant, however, since the Canadian profession shares many elements with its US counterpart and tends to follow the US model when introducing changes (Hill, 1999), as was the case for pharmaceutical care. Canadian pharmacy curricula are also heavily influenced by the US and until fairly recently there was mutual recognition of each other’s entry-level degree programs (Vlasses, 2004).

In the period between the mid-1800s and the late 1990s, the (US) pharmacy profession’s primary orientation moved from manufacturing, to compounding, to distribution, then to a more clinical role, and finally to the current pharmaceutical care model (Holland & Nimmo, 1999). Pharmacy in Canada has followed much the same path, albeit often lagging behind changes in the US by a few years at each step. Figure 2 shows a timeline for the major changes which Holland and Nimmo (1999) delineated for the professionalization of US pharmacy.

Stage 1: Manufacturing  In the mid-1860s, pharmacists, who were more commonly referred to as chemists or druggists, created medicines according to their own recipes. They then prescribed and sold them from their own dispensaries. At that time pharmacy had a clearly defined social value and both product and process were valued
Patients sought pharmacists’ guidance on selection and use of medicines.

Figure 2  Five Stages Of Major Change In Pharmacy Practice

Stage 2: Compounding   By the 1870s, the emergence of the pharmaceutical industry resulted in an increasing number of pharmacists relinquishing their manufacturing role. Pharmacists were now mixing pre-manufactured drugs according to a prescribed recipe, that is a prescription. Pharmacy continued to have a clearly defined social value and patients still came to pharmacists for medications and guidance on the use of medicines in self-care (Holland & Nimmo, 1999). That being said, while the pharmacist enjoyed public respect, the profession of pharmacy was at times under fire for
lacking the fundamental characteristics of a profession (American Conference of Pharmaceutical Faculties, 1999; Hepler, 1987).

**Stage 3: Distribution** The early 1950s witnessed fundamental changes in the way pharmacy was practiced and the beginning of diverging paths for community and hospital pharmacy. The community pharmacy was effectively reduced to a point of distribution for the pharmaceutical industry. During this phase the focus on the product remained but a role for the pharmacist in the healthcare process was lost, and as a result the community pharmacist lost social purpose (Holland & Nimmo, 1999).

At the same time the activities of hospital pharmacists were becoming more varied as their primary role moved to providing support for the management of drug products. Their duties came to include drug distribution, management, large-volume compounding, and participation on pharmacy and therapeutics committees. The emphasis, however, remained on the product (Holland & Nimmo, 1999).

**Stage 4: Medication counselling and clinical pharmacy** During this stage, hospital pharmacy added clinical pharmacy to its role of supporting drug distribution. Hepler (1987, p. 373) has characterized the development of clinical pharmacy as “an attempt to restore past losses of function from industrialization...” In the clinical pharmacy model hospital pharmacists helped physicians make the best decisions about medications. Physicians maintained responsibility for medication therapy outcomes while pharmacists, with their specialized knowledge, provided a supportive role (Holland & Nimmo, 1999). Clinical pharmacy may be viewed as a start of restoring social value to hospital pharmacy.
While this was taking place in institutional settings, in community pharmacies pharmacists had added medication counseling and advising on the use of non-prescription medications to their role. While this did enhance their role, it did not restore their social value and professional respect to what had been the case until the 1950s (Holland & Nimmo, 1999).

Stage 5: Pharmaceutical care  It was clear to many by the 1980s that pharmacy could not maintain the status of a healthcare profession on the basis of technical functions such as dispensing and drug management (Commission to Implement Change in Pharmaceutical Education, 1993a; Holland & Nimmo, 1999; Knowlton, 1991). The proposed solution to this dilemma was the adoption of a practice model put forward by Hepler and Strand (1989), which is known as pharmaceutical care (PC). Pharmacists practicing PC assume responsibility for the outcomes of medication therapies. Products remain a necessary and important component of practice, but their role is secondary to that of the therapeutic outcome (Holland & Nimmo, 1999). PC is a multi-step process involving work with the patient and other healthcare professionals to design the best therapy, minimize adverse effects, and monitor effectiveness (Hepler & Strand, 1989). It can be a complex and labour-intensive process.

Some would argue that while “the last ten to fifteen years have witnessed much experimentation with the concepts and principles of pharmaceutical care practice”, PC as a standard of pharmacy practice in all settings is still a work-in-progress in terms of implementation (Cohen, Nahata, Roche, Smith, Wells et al., 2004, p. 2). The figure from Holland and Nimmo (1999, p. 1759) reproduced earlier in this section shows hospital and
community pharmacists joining a common path of PC in the early 1990s. Some suggest that the reality is that, with respect to PC, there still exists a significant gap between community and clinical practice settings (Lawrence, Sherman, Adams, & Gandra, 2004). While some aspects of PC have been worked into practice in institutional settings, it is likely that something approaching full implementation of the model would only be found in larger teaching hospitals with the resources to support it. The success of introducing PC in community practice has had mixed results (Cohen et al., 2004; Holland & Nimmo, 1999) and it is still often considered unworkable by many in community practice (Droege & Assa-Eley, 2005; Lawrence et al., 2004).

The failure of PC to become broadly accepted as a standard model of practice does not come as a surprise to some. Perrier et al. have suggested that Hepler and Stand's (1989) model was visionary and "...does not address either the barriers preventing this practice or an implementation plan which is necessary for gradual changes in individual practice." (Perrier et al., 1995, p. 114). They contend that curriculum design must take this fact into account and faculty members teaching the model must be aware of barriers to its implementation which exist in practice settings. Austin and Duncan-Hewitt (2005, p. 383) go further and state:

...academic pharmacy (and particularly the idealized view of pharmaceutical care frequently described) may be seen as out-of-touch with reality and not necessarily related to day-to-day experiences of pharmacists since academic pharmacists and professors often practice in idealized, atypical settings such as tertiary care institutions.

Since, as was illustrated at the beginning of this section, professionalization requires the establishing of a university-based curriculum to train new professionals
Profession of Pharmacy

(Wilinsky, 1964 as cited in Hepler, 1987, p. 374), it follows that re-professionalization would require establishing a curriculum that reflects and supports a new practice model (Perrier *et al.*, 1995; Smith & Knapp, 1992). What contributions can each of the various stakeholders in the profession make regarding the design and content of a new professional curriculum? It is important that the result of this process is a workable and broadly accepted program for educating future pharmacists and, by extension, renewing the profession (Perrier *et al.*, 1995). A failure at this stage of pharmacy’s evolution has the potential of putting in question its future as a profession.

*T*heats to *Pharmacy’s Professional Status*

As will be discussed in greater detail in Chapter Two under the section *Pharmacy as a Profession*, the status of Pharmacy as a recognized profession has been questioned on a number of occasions in the past (American Conference of Pharmaceutical Faculties, 1999). Some have attributed this to a lack of a clear model of practice which would be recognized by the public, as is the case for dentistry or medicine. While it was hoped that PC might provide that model, as the American Association of Colleges of Pharmacy Argus Commission have indicated, pharmaceutical care is “not yet the standard of care across the practice of pharmacy” (Cohen *et al.*, 2004, p. 2). Taylor and Harding (2003) have pointed out that although the public and the state currently recognizes pharmacists to exercise professional judgement, without a clear and valued model of practice, pharmacists risk jeopardizing this relationship and thereby, in turn, their professional status. Smith and Knapp have referred to this as needing to render “an individualized, unstandardized service directly to clients” (1992, p. 108).
They go on to discuss how the potentially conflicting business and professional concerns of pharmacists in commercial (retail) settings, where the majority of pharmacy is practiced (Zellmer, 2005), have the potential of confuse the public regarding professional status. Pharmacists are seen by many of their clients as the agent through which a drug is obtained, rather than experts who contribute to needed professional services. Furthermore, while pharmacists would portray themselves as drug experts, they are seen as sharing authority over the drug with the prescribers. This may lead to conflict and the inability, on the part of pharmacists, to fully assume the drug expert role (Smith & Knapp, 1992). This viewpoint is echoed in the recent Canadian Pharmacists Association’s Blueprint for Action, which noted that “Community pharmacy businesses needs to implement significant change in order to respond to the evolving roles of pharmacists” (2006, p. 26). If changes do not take place in community pharmacy, and a practice model that the public sees value in is not adopted in the near future, there are serious questions regarding the profession’s status in that area (K. Taylor & Harding, 2003).

**Educating Professionals**

Casper (1996, p. 71) has written “From their very beginning, universities have performed the teaching role, especially in professionally training lawyers, theologians and physicians. It could be said that in the early centuries this is what universities were mostly about.” There are those who would suggest that this may still apply in the case of professional schools and faculties (Beck *et al.*, 1996; Commission to Implement Change in Pharmaceutical Education, 1993a). If one accepts this argument, it would follow that
professional schools exist to produce new professionals and that students enter faculties of pharmacy with the main expectation that when they graduate they will be prepared to enter the profession of pharmacy. Likewise, pharmacists in practice would look to the university to put out graduates who are competent and who will help the profession advance and renew itself. University faculty would be expected to train students to meet the needs and expectations of the profession.

In reality, the situation is far more complex. Students enter pharmacy schools for a variety of reasons, many of which may change before they graduate (K. Taylor & Harding, 2003). A study by Wigger and Mrtek (1994) examined the attitudes of students entering pharmacy as a profession. They reported that reasons for choosing pharmacy included: clinical pharmacy was a stable profession where they could work with patients and other health professionals; pharmacy provided many career opportunities in a flexible environment with time for family and providing a mix of business and medicine; it provided many career opportunities for those interested in natural sciences, pharmacology, chemistry/biology, pharmacognosy, and patient education; community pharmacy provided the opportunity to own community pharmacy and thereby mix science, community, and family interests; and pharmacy is seen as a humanitarian profession where one can use natural sciences in helping people and educating patients to attain self fulfillment.

The pharmacy practice community is very diverse with some members holding viewpoints which are disparate, if not contradictory, from those of the majority of their colleagues. Recent examples of this can be found in the, at times heated, discussions
Profession of Pharmacy

concerning aspects of the Continuing Education Learning Portfolio ("Petition Against the Learning Portfolio", 2004), which is required for licensure in Manitoba, and the controversy surrounding International Prescription Services (IPS), aka. “Internet”, Pharmacies ("International Prescriptions Service (IPS) Pharmacies: Recent developments", 2003). Such differences in opinions and viewpoints are not new (Prince, 2003; Smith & Knapp, 1992; Wingfield, 2006), nor are they unique to pharmacy (Miller & Brody, 2001). Professions are made up of individual members who do not make up a single, homogeneous entity but where the members may hold widely differing views on many topics.

Pharmacy faculty members see their roles reaching well beyond the production of new professionals and extending into the shaping of the future of practice and the profession through what they teach (Chalmers, Adler, Haddad, Hoffman, Johnson et al., 1995; Draugalis, 2004; Littlefield, Haines, Harralson, Schwartz, Sheaffer et al., 2004). Furthermore, in the Canadian context of publicly funded universities and healthcare there are also societal and funding issues which must be considered (Romanow, 2002).

As society changes, professional practice is continually challenged by the impact of changing expectations of society, information and technological advancements, and the need for new skills. This may be particularly the case for healthcare professionals. Healthcare has been a major issue on the Canadian political agenda in the last decade. Dimensions of the debate have included a shortage of healthcare professionals, increased waiting times for healthcare services, patient safety, inter-disciplinary collaboration in primary healthcare, and spiralling healthcare costs. These were subsequently extensively
studied by a Royal Commission headed by Roy Romanow (2002). These challenges place increasing demands on healthcare professionals regarding ongoing learning needed to deal with change. It is therefore incumbent on educators, both at the entry-level and postgraduate levels of professional training, to attain and maintain standards of education that correspond to the contemporary, and future, needs and challenges of society.

Curriculum review, development, and change are on-going processes in all university faculties, and the professional faculties are certainly not immune to the need of these activities. In light of current societal issues surrounding the healthcare system, however, professional faculties may be feeling more intense pressures to change than their counterparts in the so-called core faculties, like Arts and Science. Pharmacy may be, to some degree, facing even greater pressures given that drug-related costs are identified as the fastest rising portion of government health budgets (Romanow, 2002).

Partly in response to these pressures for review and change, pharmacy educators and representatives of various stakeholder groups have gathered in Toronto on two occasions in the last two years to discuss the future of pharmacy education and practice (Managing the Change to Entry Level PharmD in Canada, Toronto, 12 November 2004, T. Brown, Chair; Louise Perrier et Associés, 2005). Along with representatives from Canadian faculties of pharmacy, presenters of position statements included provincial regulators, representatives of chain drug store employers, Canadian Pharmacists Association, and representatives of hospital pharmacists.

One group which appears to have been relatively underrepresented as a block at these meetings was community pharmacists practising in retail settings. This is not to
imply that community pharmacists were in any way excluded from participating. Rather, it was more likely a case of their lacking representation. There were individuals present at the meetings who were employed in the community retail sector at the time, but the published proceedings (Louise Perrier et Associés, 2005) identified them as individuals rather than representatives of any specific groups, and they did not make any formal presentations.

Although community (retail) pharmacists are the largest group of practitioners in pharmacy practice in Canada, with 74% of licensed practitioners in Manitoba and comparable numbers in the rest of the country (NAPRA, 2006), they do not have a national body to exclusively represent their interests. Community practitioners may belong to the Canadian Pharmacists Association (CPhA), a national voluntary body that represents all pharmacists. The CPhA does not speak for a specific group, and although it had representation at the two meetings I attended, to the best of my knowledge it did not survey its members on the issues prior to attending. This differs from the situation for hospital pharmacists who are represented nationally by the Canadian Society of Hospital Pharmacists (CSHP). The CSHP, also a national voluntary body, and its local chapters did work to keep their members informed and did prepare a position paper on the topic of moving to a new entry-level standard ("Information Paper On The Potential Impact Of Implementing An Entry-Level Doctor Of Pharmacy Degree In Canada", 2002). The Canadian Association of Chain Drug Stores, the employer group which did attend the meetings and presented a position statement, represents retail chain pharmacies and not the pharmacists they employ.
While they may not be directly represented in on-going discussions on the future of the profession, if for no other reason than their numbers, community pharmacists employed by the retail sector in Canada will be (as will be discussed under the Research Questions section which follows) among those most greatly affected by any changes in pharmacy education and practice (Canadian Pharmacists Association, 2006) and for that reason alone it would seem that their perspectives merit consideration. That being said, community pharmacists make up a very diverse group and it would be challenging to have a single national representative body speak for all. As mentioned earlier, membership in the national Canadian Pharmacists Association is open to all pharmacists, regardless of practice setting, and as such it does not directly represent any particular group. Community pharmacists may also belong to voluntary provincial associations, such as the Manitoba Society of Pharmacists or the Ontario Pharmacists' Association, but these groups are again open to all practitioners and as such should represent all views.

While all licensed pharmacists must meet provincial practice standards, they practice in a broad spectrum of settings and operate with a variety of organizational standards and protocols. Figure 3 presents a breakdown of the various types of pharmacy currently practiced in Manitoba (see Appendix 1 for a more detailed description of the various groups shown in the Figure 3). Using industry-standard definitions to categorize community practice according to setting (Jennings, 2005), we see that there are some seven separate types of practice. Although all, with the exception of International Prescription Services (IPS), or Internet, pharmacies, share many practice characteristics, there may be significant differences in many others and in the philosophies of practice.
As might be expected from a group with such a broad membership, Manitoba community pharmacists have demonstrated different perspectives on various professional issues ("International Prescriptions Service (IPS) Pharmacies: Recent developments", 2003, "Petition Against the Learning Portfolio", 2004).

**Figure 3. Categories of Pharmacy Practice**

Community pharmacy is often cited as the area lagging in the adoption of the Pharmaceutical Care (PC) model of practice (Cohen *et al.*, 2004; Knowlton, 1991; Nimmo & Holland, 2000; Zellmer, 2005). PC is a patient-focused model where the patient, pharmacist, and other healthcare professionals work as a team to develop and deliver a drug therapy that will result in the best possible patient outcome (Hepler & Strand, 1989). This model was endorsed by regulators and academics well over a decade
ago and is practiced, to various degrees, in many institutional settings. Many community practitioners report, however, that they do not have a clear picture of how this “new” practice model is to fit into the realities of their current, largely dispensing-based practice situation (Droege & Assa-Eley, 2005; Lawrence et al., 2004). This is in spite of the fact that the benefits of PC have been reported in a number of studies and reviews (Cohen et al., 2004; Dunphy, Palmer, Benrimoj, & Roberts, 2005; Sokar-Todd & Einarson, 2003). While pharmacists themselves are able to conceptualize the benefits of providing PC, it has been suggested that they lack the appropriate models to overcome certain barriers to change (Cohen et al., 2004; Droege & Assa-Eley, 2005; Dunphy et al., 2005). As a result, the level of adherence to the PC practice model varies widely among practice sites (Cohen et al., 2004; Holland & Nimmo, 1999). The experiences of PC adoption in community pharmacy practice should be used to inform any plans that suggest a new practice and/or education model be developed for pharmacy. In order for change to be effective, it must be workable at the point of interaction between the public and individual practitioner. Hence, I feel that it is important that significant community input be considered from pharmacists employed in the retail sector when contemplating the modification of the existing, or the development of any new, practice model.

I think there is another reason for seeking significant community pharmacy input before proceeding with changes in the profession. The community pharmacist is the most widely recognized professional image of pharmacy; they define pharmacy to the average individual (Lemieux-Charles, 2003; K. Taylor & Harding, 2003). The services they provide and the knowledge they display set the de facto standard for what the public
expects of a pharmacist. The implicit contract with the public requires that this professional knowledge to be utilitarian; otherwise it is redundant. It is assumed that practitioners possess the critical awareness and practical knowledge to identify the functions and responsibilities required for entry-level practice and are able to identify how prospective practitioners should be educated to respond to the needs of contemporary practice (Perrier et al., 1995).

Finally, the opinions of community pharmacists employed in the retail sector should be considered if any proposal includes a change in the practice model and/or a change in the credentials required for entry-level practice. Before time and resources are invested into new endeavours, it is important to determine if the change is needed and can be supported in the current practice setting(s) (Perrier et al., 1995). These individuals may be valuable in providing practical knowledge of circumstances surrounding previous attempts at implementing new services or practice models in community practice. They may also help those looking to initiate change by helping them to gain an understanding of the relationships or interactions that are important in fostering implementation and assessing the impact of associated variables, including both barriers and facilitators to practice change. These questions must also be investigated in order to meet the requirements of Health Canada’s new process for managing proposals for changes to credentials for entry-level health care practitioners (2004). Under this process, it will be the responsibility of the profession wishing to change its entry-level credentials to provide “demonstrated evidence of public need and benefit in consultation with employers and other impacted stakeholders” (Health Canada, 2004, p. 1).
While I stress the importance of seeking community pharmacy input in the decision making process, I am not diminishing the difficulty of capturing opinions from such a diverse group. The diversity within community pharmacy makes it a difficult group to study. This may in part account for the scarcity of material in the literature dealing with the perspectives of pharmacists in community practice on entry-level education and credentials. As discussed in the Literature Review in Chapter Two, neither of three major published literature reviews dealing with community pharmacy studies in the last four decades listed any publications on community pharmacists’ perspectives on entry level education and credentials (Dunphy et al., 2005; Roughead, Semple, & Vitry, 2002; Sokar-Todd & Einarson, 2003). This lack of prior knowledge implies that any proposed study must first be exploratory in its focus at attempting to define issues from a small sub-group (Creswell, 1998; S. J. Taylor & Bogdan, 1984).

**Research Questions**

Curricular change that incorporates elements that may result in a potential change of credentialing or practice would have significant implications for all those associated with the profession of pharmacy (Austin & Duncan-Hewitt, 2005; Zellmer, 2005). The Canadian Pharmacists Association (2006) and the Pharmacy Guild of Australia (Dunphy et al., 2005) have both released reports discussing the impact of major practice change on community pharmacy. They indicate that it would necessitate practising pharmacists assuming new roles and adopting new practice models while maintaining busy careers. Those providing continuing professional development would face challenges in designing
and delivering appropriate materials to pharmacists looking to upgrade their skills and knowledge. Community pharmacies would have to adopt new business models and would face significant human resources challenges. Change would necessitate the introduction of new information and communication technologies, which pharmacists would have to learn about and adapt to. All of this is expected to test the financial viability and sustainability of community pharmacies as they adapt to new ways of doing business.

In a situation where major curricular change is being proposed, some sort of assessment would appear to be vital because of its likely impact on curriculum development and implementation, faculty development, and pharmacy practice (Perrier et al., 1995). Those being affected by the change should be aware of what is happening and the reasons for doing so. They should also be provided with an opportunity to voice their concerns and opinions in a meaningful way. As Fullan and Stiegelbauer (1991, p. ii) have stated "If reforms are to be successful, individuals and groups must find meaning concerning what should change as well as how to go about it".

While the views of existing practitioners, patients, and other stakeholders must also be assessed at some point, in this study I focused on practising community pharmacists. This population would be significantly affected by a change in entry-level credentials or practice standards and hence, so would their services to the public. I also feel that this group is a source of important practical reasoning and predominant forms of knowledge and concerns on how pharmacy is practised.

Specifically, I undertook a qualitative investigation of what a sub-group of Manitoba community pharmacists perceive to be the educational requirements for
someone entering community practice. Within the context of their everyday practice and experience, I sought to examine their perspectives on the competencies required to practice their profession now, and in the foreseeable future. My target group was staff pharmacists and pharmacist-managers who have served as preceptors for undergraduate students on experiential rotations or recent graduates on pre-licensure internships, or who have supported other pharmacists in these endeavours. There were specific reasons for choosing this group. The OED Online (Simpson, 1989) defines a precept as “One of the practical rules of an art; a direction for the performance of some technical operation; a rule” and a preceptor as “One who instructs; a teacher, instructor, tutor; A physician or specialist who gives a medical student practical training.” The definition applies equally well to students in other healthcare professions. Preceptors play a vital role in the training of healthcare professionals by exposing students to the “art” of practice, that is the nuances of practice that cannot readily be dealt with in a classroom or laboratory setting, like dealing with a problem patient in a high-stress situation. Generally, pharmacists volunteering to train students are considered role models and the sites at which they practice are thought of as model sites in the profession. I therefore felt that this group was in a position to assist pharmacy curriculum designers judge the relevance of program changes. The fact that these individuals had precepted students in the past also indicates an interest in pharmacy education and the future of the profession. I hoped that this interest would translate into a willingness to participate in my study.

For the remainder of this thesis I will refer to this group as Community Pharmacy Preceptors, or CPP for short. Participants were recruited from the six sub-categories of
community pharmacy highlighted in Figure 3 and described in Appendix 1. Members of the IPS subgroup were not recruited since IPS pharmacies do not generally serve as experiential sites, and as such, these pharmacists would not likely have served as preceptors in recent years.

My aim was to compare the CPPs' perceptions with educational outcomes prescribed for entry-level pharmacy programs in Canada (AFPC Advisory Committee on Curricular Change, 1998, 1999). The specific goals of the project were to investigate the following questions:

1. What are the perspectives of CPPs, currently practising in community (retail) settings, on the delivery of pharmaceutical care, now and in the near future?\(^1\)
2. What are the major challenges CPPs will face concerning this issue?
3. What competencies are needed now, and in the near future, in responding to these challenges?
4. How should entry-level practitioners be educated to respond to the identified changes and challenges?
5. How do the perceived competency needs of CPPs compare with those articulated for the Canadian entry-level requirements?
6. What are the implications of the level of agreement between CPPs' perceptions and prescribed entry-level competencies?

\(^1\) After the first focus group session the term “delivery of pharmaceutical care” was dropped and replaced by “delivery of pharmacy services”. Reasons for this are discussed in the Methods chapter.
Summary

The foundation of a profession is its specialized body of knowledge, which members of the profession are obliged to use in ways that benefit society, and in exchange the public grants them privileges such as exclusivity of practice and social status (Larson, 1977). In the case of the profession of pharmacy, the specialized body of knowledge deals with the drug-related needs of patients in society (Perrier et al., 1995; Smith & Knapp, 1992). This body of knowledge is not static, and it and the profession of pharmacy in Canada have evolved through a number of phases over the last century and a half (Hill, 1999). There was a phase, beginning in the 1950s, when some have suggested that pharmacy as it was practised in the community retail setting began to lose its way as a profession (Holland & Nimmo, 1999). While pharmacists in hospitals were trying to establish themselves as experts on all drug-related matters, those in the community were focusing on the drug product rather than the patient and their professional credibility began to be called into question.

To address these problems and enhance the profession in all settings a new model of practice was put forward in the 1980s aimed at moving the profession from a product-based to service-based focus (Hepler & Strand, 1989). The model, known as Pharmaceutical Care, was visionary and was quickly accepted by the academics and regulators as the new basis for professional pharmacy practice. Curricula were redesigned and new standards of practice were drawn up. Unfortunately while the practice model found broad theoretical acceptance, it did not have an implementation plan that would
overcome the barriers preventing its full implementation in practice, especially in community settings (Perrier et al., 1995).

Various attempts have been made to address this lack of implementation (Dunphy et al., 2005; Sokar-Todd & Einarson, 2003). Many have focussed on education and curriculum since it was assumed that pharmacists in community practice lacked the knowledge, skills and confidence to deliver PC. Unlike many of their hospital-based colleagues who had completed post graduate degrees and or residencies, the formal academic education of most community pharmacists ended with an entry-level baccalaureate degree. A decision was made in the US to move all entry-level pharmacy programs to a professional doctorate, known as a PharmD by the year 2000, in the hope of addressing this perceived lack of knowledge, skills and attitude (Commission to Implement Change in Pharmaceutical Education, 1993c). The jury is still out on whether this was the solution (Cohen et al., 2004).

Discussions have also taken place in Canada concerning changes in pharmacy education and/or practice models aimed at dealing with the failure of PC to gain full acceptance in practice settings (Canadian Pharmacists Association, 2006). Educators, regulators, and representatives of the pharmaceutical industry, chain drugstores, and hospital pharmacists have taken part in the talks. Although community (retail) pharmacists make up the largest group of practitioners in Canada (NAPRA, 2006), they make up a diverse group (Jennings, 2005) and, as such, often lack formal representation in these discussions. There is also very little in the published literature describing studies where the opinions of community practitioners were sought on what type of education
was needed to overcome the barriers to PC implementation (Sokar-Todd & Einarson, 2003). Therefore, the aim of this study was to sample the perceptions of a small sub-group of community pharmacists on the changes and challenges they observe in contemporary pharmacy practice and on the entry-level standard of education needed to meet those challenges.
CHAPTER TWO

In this chapter, I provide a discussion of the two phases of the literature review conducted for this thesis. This includes a discussion of professional faculties in the university and of the profession of pharmacy, with emphasis on community pharmacy’s place in the profession. Also presented is the research context of this project with a historical discussion of entry-level pharmacy education and requirements.

Literature Review

In qualitative research, the literature should be used inductively so that it does not direct the questions asked by the researcher (Creswell, 1994). The research begins with a general question the researcher wishes to address and an initial literature review looking for related work, and if necessary, information on the methods to be used. As data is collected and analyzed and themes begin to emerge, the literature is revisited to clarify some aspects of the process and compare the results of the analysis with similar work, if it exists.

In keeping with this premise, my initial literature review focused on finding publications on qualitative methods and reviews of related work that has been done in pharmacy and allied health fields. In the literature review, I looked at several general categories of “profession”, “professional education”, “professional doctorate/Pharm.D.”, “professional curriculum”, “student professionalization”, “professional socialization”, and “curricular change” in various combinations. Searches were carried out on the CINAHL (1982 - present), Allied and Complementary Med (1985 - present), ERIC (1966
- present), MedLine² (1966 - present), and Social Sciences (1983 - present) full text and International Pharmaceutical Abstracts (1970 - present) databases available through the University of Manitoba Libraries, as well as Google and Google Scholar Internet searches. The bibliographies of relevant publications found in the initial electronic searches were examined to find other relevant works. A number of standard textbooks were also consulted, especially with regards to qualitative methods and focus groups.

The extent to which these areas were reviewed further was aided by the focus group data. The second literature search was conducted after the data were analyzed and themes extracted and was focused on material related to the themes. This phase was conducted primarily using the internal University of Manitoba Libraries Google Scholar (Google Scholar, 2005) search engine. This tool had been significantly upgraded since the first search was carried out in 2005 and now links its search results directly to the University’s full text resources. This effectively eliminates the need to search the individual databases, such as CINAHL, Allied and Complementary Med, or ERIC.

Material found in the second stage of the review was compared with the themes which emerged from the data analysis. A discussion of the comparison is presented in Chapter Five.

The Professional Faculty

In order to join what are commonly known as the professions, namely medicine, law, engineering, nursing, dentistry, and pharmacy, a student must usually complete a prescribed program of study. In addition to traditional classroom and laboratory work,

² Now found as part of the PubMed database.
these programs may include pre-service training, such as external clerkships, and are normally followed by a period of internship and qualifying exams. Except for the clerkships, the prescribed programs of study are now almost exclusively taught in university settings, which, as Gregor (2000) has pointed out, places the university in a somewhat ambiguous role. Professional faculty are expected to train students for a specific, well-defined career path, whereas the traditional goals of a basic, or core, university faculty is the pursuit and transmission of "pure knowledge, unsullied by consideration of practical application" (Gregor, 2000, p. 50). He suggests that this makes for a curious symbiotic relationship where the professions need the university for the status it gives them and the university needs the professions for political and economic reasons, but where neither has ever been totally comfortable with the arrangement. As Austin and Duncan-Hewitt (2005, p. 383) have put it:

As universities have evolved towards large, bureaucratized institutions increasingly governed by financial needs and constraints, professional schools have become both cash cows and sacred cows; the former because professional school tuitions frequently subsidize other programs within an institution, and the latter because professional schools inevitably bring a measure of prestige and cache to an institution.

While the professional faculties have tried to adjust to their marriage of convenience with the university, they have also had to deal with complaints from the professions that they are out of touch with the realities of professional practice (Austin & Duncan-Hewitt, 2005; Craig, Clarke, & Amerinic, 1999; Dahlgren & Pramling, 1985; Gregor, 2000).

Barnett, Becher, and Cork (1987) have looked at models for professional preparation of pharmacists, nursing, and teachers in the UK. They have suggested that the
design, maintenance and assessment of courses oriented towards particular professions should be effected through a collaboration between academic and professional communities. Such an arrangement gives rise to questions concerning who will determine what specific skills, knowledge, and attitudes are needed for entry into the profession, who has the responsibility for deciding what skills are to be taught, what knowledge is required, and what attitudes should be adopted. Professional practice evolves, which raises further questions on how, or if, the academic curriculum should reflect the changes. Even though practitioners and academics share a commitment for education, each group has its own set of perspectives and needs. One view would be that academia should bear the responsibility of influencing the profession through the introduction of new models of practice into the curriculum, and by extension professional practice. On the other extreme would be the assertion that professional faculties’ role is to train students according to the dictates of the profession.

The ideal model would likely lie somewhere between these two extremes, where the model is developed through a collaboration between academia and the profession. As Barnett et al., (1987, p. 61) have put it:

The resulting model of professional education could be described as a partnership model. In essence it involves the practitioner as the main contributor to the initial development of practical skills and the tutor [academic] as the main contributor to the development of intellectual skills.

This sentiment has been expressed more recently by Austin and Duncan-Hewitt (2005) in their discussion of a community of practice in pharmacy education that includes academics, students, and practitioners. Given the number and diversity of the pharmacy
stakeholder communities, however, this may be a daunting task (Holland & Nimmo, 1999; Zellmer, 2005).

Pharmacy as a Profession

Like every other profession, it is important for pharmacy to constantly reflect on its role in contemporary society. As societal expectations change, the profession needs to revisit its goals. A century ago many people considered the pharmacist to be the local expert on all things medicinal (Holland & Nimmo, 1999). That expertise was not, however, necessarily recognized by other healthcare professionals. As late as 1915, Abraham Flexner suggested that pharmacy should not be considered a profession since the pharmacist’s only responsibility was to carry out a physician’s instructions (Flexner (1915) as cited by American Conference of Pharmaceutical Faculties, 1999, p. 102). As a result, in 1918 the US Surgeon General’s Office denied pharmacy the status of a “profession” and pharmacists could not be commissioned in the US Armed Forces, as were other scientifically trained personnel such as physicians or engineers (American Conference of Pharmaceutical Faculties, 1999). American schools of pharmacy, through the American Conference of Pharmaceutical Faculties, responded to this professional exclusion by instituting and requiring the study of sciences as a basis for graduation from pharmacy programs (Hepler, 1987). It was felt that in order for pharmaceutical education to gain acceptance as one suitable for a healthcare profession, it had to convert its empirical and descriptive teaching disciplines, which focused on service to the patient in the preparation of medicaments, into theoretically organized scientific paradigms that could be applied in the production of medicaments. To that end, in the early to mid-
1900s, the service-based courses which had been the norm of a pharmacy education, were replaced by those applying more physical (hard) science in the teaching of pharmacy students.

While Canadian pharmacists may have enjoyed a somewhat higher level of professional respectability – the Manitoba Pharmaceutical Act was passed in 1878 creating the Manitoba Pharmaceutical Association (MPhA) as the licensing and regulatory body for pharmacy in the province, and pharmacists were originally taught in space rented at the medical school – Canadian pharmacy education followed the US model of an increased emphasis on the physical sciences (Hill, 1999). This change in educational focus was accompanied by a transfer of the responsibility for educating pharmacists from the MPhA to the University of Manitoba in 1914, where course work emphasized topics such as chemistry and toxicology and over time the two year apprenticeship requirement was replaced with the present-day experiential program (Historical Committee, 1954; Steele, 1999).

This transition to a pronounced scientific orientation of pharmaceutical education (in the 1940s through 1970s) was helped and in some ways driven by the pharmaceutical industry and governments who naturally encouraged, through funding and grants, the development of new drug products (Hepler, 1987; Knowlton, 1991). This has resulted in a curricular shift to where the support for the development of social science-based skills needed for the provision of pharmaceutical services (versus provision of a product by prescription) to persons needing medicines has effectively disappeared to make way for the pure science program (Hepler, 1987; Holland & Nimmo, 1999; Knowlton, 1991). The
result was the graduating of pharmacists whose focus was on the product, not the patient. With the development of a pharmaceutical manufacturing industry, the pharmacist no longer produced medications, but simply distributed them. As a result, this highly technical task, which is increasingly becoming automated, cannot sustain the professional status of pharmacists (Droege & Assa-Eley, 2005; Harding & Taylor, 2000; Novek, 2002; K. Taylor & Harding, 2003).

Pharmaceutical Care In 1989, the North American academic community put forward a new pharmacy practice philosophy called pharmaceutical care (Hepler & Strand, 1989). The model was promoted as a mechanism for pharmacists to meet the challenges of finding a new niche. Under this new paradigm, the pharmacist’s role shifts from a provider of drugs to that of a highly-trained healthcare professional possessing needed information on complex and potentially dangerous medications and a willingness to use their knowledge and skills to ensure that the patient receives the best possible pharmacotherapy (Droege & Assa-Eley, 2005; Holland & Nimmo, 1999).

In the early 1990s, pharmacy faculties in North America proceeded to change their curricula, including community-based experiential components, to reflect this new brand of pharmacy practice. Many community (retail) practitioners and pharmacy owners were slow at adopting this new way to practice, saying it was unworkable in their practices and continued with their product-orientated distribution model of practice (Droege & Assa-Eley, 2005; Lawrence et al., 2004; Nimmo & Holland, 1999). They cited factors including lack of time, inadequate compensation for the increased workload, and lack of confidence in performing PC tasks as reasons for not adopting new standards
Not only has the old distribution model of pharmacy practice remained to this day, it has advanced to a new level of sophistication with the advent of Internet pharmacy ("International Prescriptions Service (IPS) Pharmacies: Recent developments", 2003). This has left pharmacy leaders in Canada, and especially in Manitoba, locked in legal and ethical battles with some practitioners.

Another reason pharmacists may be reluctant to change is that they are well rewarded under the current model of practice. The lack of a monetary incentive for implementing a change, especially a change that may represent significant effort to implement, may result in pharmacists having little desire to change their role in the health care system (K. Taylor & Harding, 2003; Zellmer, 2005).

Community pharmacy’s role It must be pointed out here that this is not meant to imply that the community-based (retail) pharmacy practice community is being deliberately left out while academics and regulators set the agenda. What I refer to as the practice community is a broadly based group with diverse, if not often divergent, opinions. While there are certainly members of that community with a keen interest in education, both pre- and post-graduate, many practising pharmacists pay little or no heed to the educational standards for the profession. Some tend to have no interest until issues, like changes in practice standards or entry-level credentials, appear that might have a direct effect on them or their livelihood. There are some pharmacists within the community for whom it would appear that a pharmacy degree is a requirement for securing a good job or conducting business rather than something associated with healthcare (Droege & Assa-Eley, 2005; Nimmo & Holland, 1999). Their academic
concerns would seem to centre around the shortage of graduates needed to fill shifts in their enterprises and the lack of familiarity those graduates have with specific computer-based dispensing systems in use at their businesses.

In late 2004, a symposium was held at the University of Toronto where academics, regulators, and other stakeholders discussed the future of pharmacy education in Canada with emphasis on proposals to move to an entry-level Pharm.D. degree (Managing the Change to Entry Level PharmD in Canada, Toronto, 12 November 2004, T. Brown, Chair). At the meeting the Canadian Association of Chain Drug Stores (CACDS) presented a position statement on professional doctorate programs which revolved around the reduction of graduates entering the "labour market" and professional doctorate graduates possibly favouring clinical work over dispensing. This is not to imply that the shortage of pharmacists is not an important point to consider, but change in credentialing is a far more complex issue than shortage of pharmacists (Lemieux-Charles, 2003). Regardless of the causes, these opinions of pharmacy practice are a reality of pharmacy as it is presently practiced today in many places.

Many of these pharmacists suggest that academics are out of touch and do not understand the realities of practice (K. Taylor & Harding, 2003) and there are some within the academic community who would say there is some truth to their statements. Austin and Duncan-Hewitt (2005, p. 383) have stated:

academic pharmacy (and particularly the idealized view of pharmaceutical care frequently described) may be seen as out-of-touch with reality and not necessarily related to day-to-day experiences of pharmacists since academic pharmacists and professors often practice in idealized, atypical settings such as tertiary care institutions.
These academics too often practice “in settings that may seem remote and unlike most traditional pharmacy practices” (Austin & Duncan-Hewitt, 2005, p. 383). The result may be an environment which is not necessarily best suited to the learning and development needs of students who will spend at least some of their careers in community practice. As Knowlton (1991, p. 366) has put it:

Community pharmacists were probably among the leaders in the milieu of highly educated folks with a significant reserve of unapplied information. We had learned a lot which did not have much relevance for practice, and thus had a lot we could forget without damaging our practice.

The criticism evident in this statement is not new in education, nor is it exclusive to the profession of pharmacy; it is a recurrent theme found in kindred disciplines, such as nursing, medicine, dentistry, and engineering. Dahlgnen and Pramling (1985) have described mismatches between education program content and the nature of the professional demands in first year practice, as perceived by graduates in business administration, engineering, and medicine. In that study engineers and business administrators complained about being under-utilized because their jobs called for application of only a small portion of the knowledge and skills learned at school. They also claimed that the theories taught by their teachers were too simplistic to be useful in dealing with the ambiguities of actual practice settings. Physicians expressed needs to reorganize knowledge acquired in medical school, shifting from sub-discipline orientation to an emphasis on more common clinical problems (Dahlgren & Pramling, 1985).
Research Context

The mismatch between the current realities of the practice setting and academic expectations can lead to an undermining of any curricular initiative. Newly graduated pharmacists are educated to practice pharmaceutical care, only to find themselves in situations where the practice setting does not accommodate these expectations (Droege & Assa-Eley, 2005; Lawrence et al., 2004). This level of disharmony between curriculum and typical practice settings tends to create a high level of frustration among both the new graduates and students currently in programs (Lawrence et al., 2004). It also illustrates the influence the practice community has on the effectiveness of a faculty’s teaching program (Perrier et al., 1995). Giroux and Penna describe this as a “hidden curriculum” which is “the unstated teaching of norms, attitudes, and values to individual students through the process of meeting with the expectations of the institution and/or organization” (as cited by Cook, 1991, p. 1463).

If, through their part-time jobs or experiential rotations, students are convinced that certain parts of the curriculum are irrelevant to contemporary pharmacy practice, they will treat them as academic exercises that have importance only until the particular course is successfully completed (Wigger & Mrtek, 1994). Given the influence the practice community can bring to bear on students and new graduates, it would seem logical that if curriculum content is to be more than an academic exercise and make its way into contemporary pharmacy practice, it must be accepted as relevant by those currently in practice. We cannot expect that after teaching students new models of practice they will be able to go out in the community and convince their more senior
colleagues to change the way they have practised for years and adopt a new way of doing things (Austin & Duncan-Hewitt, 2005).

Entry-level Pharmacy Education

With questions surrounding the acceptance of pharmaceutical care in community practice still being actively debated in some circles (Droege & Assa-Eley, 2005; Lawrence et al., 2004), pharmacy in Canada finds itself on the verge of undertaking another major change in how practitioners are educated (Mansour, Brown, Mailhot, Marleau, Mitchell et al., 2004). Discussions are currently taking place within and between Canadian faculties of pharmacy and various stakeholder groups on revising and/or transforming their existing entry-level baccalaureate programs (B.Sc. Pharm.) in order to meet emerging challenges (Canadian Pharmacists Association, 2006; Louise Perrier et Associés, 2005).

What is meant by entry-level? The OED Online (Simpson, 1989) defines entry-level as “The basic level at which a given activity, employment, etc., may be entered into; the level of attainment necessary for employment, admission to an academic course, etc.” In the context of pharmacy, the US Commission to Implement Change in Pharmaceutical Education described entry-level as two major concepts: “(i) the entry position is the position for ‘beginners’ in pharmacy; and (ii) the person occupying the entry (beginning) position possesses an identified and described set of knowledge, skills, attitudes and values” (1993b, p. 378). Although the commission operated within the US context, their definition resonates well in the Canadian pharmacy education system (Hill, 1999). In this country, the Canadian Council for Accreditation of Pharmacy Programs and provincial
pharmacy regulatory bodies have prescribed a set of standards individuals require prior to entering pharmacy practice (Canadian Council for Accreditation of Pharmacy Programs, 2002). In the context of my thesis, entry-level refers to those standards, namely the minimum level of education, skills, attitudes, values and credentials currently needed to obtain a license to practice pharmacy in the province of Manitoba.

*A Brief History of Pharmacy Education in Manitoba*

It should come as no surprise that as the profession evolved, so did the entry-level requirements for pharmacy practice. Like most professions, pharmacy in Manitoba has grown from an apprenticeship model, following a pattern not unlike that followed in the US (American Conference of Pharmaceutical Faculties, 1999; Commission to Implement Change in Pharmaceutical Education, 1993c; Hepler, 1987). In the late 19th century, new pharmacists in Manitoba would have taken a few courses at a medical college, likely in Ontario, to supplement their apprenticeship. With the granting of professional status in 1878, the Manitoba Pharmaceutical Association began to regulate the education of pharmacists. This evolved from apprentice pharmacists taking a few courses at the Manitoba Medical College, through taking courses taught directly under the auspices of the MPhA in space rented from the Medical College, to the decision in 1898 to build the Manitoba College of Pharmacy where students were taught prescribed courses by faculty hired by the MPhA. As time went on, Manitoba pharmacy continued on a path similar to that in the US and the MPhA began to forge links with the University of Manitoba. This began with prospective pharmacists taking courses at the University to supplement those from the MPhA (circa 1902) and ended with the transfer of responsibility for educating
Manitoba pharmacists, and the building housing the Manitoba College of Pharmacy, in 1914. Pharmacy education at the University began with offering courses to complement apprenticeships, evolved into a diploma program and in 1940 the University of Manitoba offered a Bachelor of Science in Pharmacy degree program (Historical Committee, 1954; Steele, 1999). (The history of pharmacy education in Manitoba is presented in greater detail in Appendix 2)

*Entry-level Degree Requirements*

The requirements and learning outcomes for that entry-level degree have changed many times since pharmacy became a profession in Manitoba. The University of Manitoba currently offers a five year program leading to a B.Sc. (Pharmacy) degree ("Undergraduate Program", 2006). The program offers four years of pharmacy courses following a pre-requisite year of which includes courses in chemistry, calculus, and written English.

The profession of pharmacy, like most other professions in Canada, falls under provincial jurisdiction. However, partly in response to governments looking to reduce inter-provincial barriers and redundancy, and partly as a means of promoting the profession, pharmacy began moving towards national standards of education and entry-level testing in the early 1990s (Hill, 1999). Therefore, while details of course content and structure are determined by the faculty curriculum committee and individual course instructors, they follow guidelines and learning objectives laid out by national organizations representing faculties of pharmacy across Canada (AFPC Advisory Committee on Curricular Change, 1998, 1999).
B.Sc. Pharm. programs currently offered in Canada are designed to meet the educational outcomes laid out by the Association of Faculties of Pharmacy of Canada (AFPC) in 1998 (AFPC Advisory Committee on Curricular Change) and 1999 (Ibid.). The educational outcomes laid out by the AFPC are:

1. meet patients' drug-related needs;
2. assume legal, ethical and professional responsibilities;
3. provide drug and drug use information and recommendations;
4. educate about drugs, drug use and health promotion;
5. manage drug distribution;
6. understand practice management principles;
7. apply the principles of scientific inquiry to contribute to the profession and society.

In addition, they indicate a set of “General Outcomes Required of a University Graduate and Educated Citizen” that the graduate of a recognized pharmacy program should meet. These include:

1. knowledge and thinking abilities;
2. planning abilities;
3. communication abilities;
4. values and ethical principles;
5. self-directed learning abilities;
6. professional identity;
7. citizenship.
Undergraduate programs and curricula are reviewed for accreditation on a five-year rotation by the Canadian Council for Accreditation of Pharmacy Programs (CCAPP). Faculties whose programs do not meet the AFPC standards may be granted a conditional accreditation of less than five years, or may even be denied accreditation until their program is revised. Students graduating from a CCAPP accredited program are expected to have acquired the knowledge and skills needed to pass the requisite pre-licensure exams. While they must still complete an internship before they may be licensed to practice, someone who has completed a B.Sc. Pharm. program is presently assumed to have acquired the knowledge and skills needed to practice pharmacy at an entry-level in any practice setting in Canada.

Discussions have begun in both academic and practice circles asking if the B.Sc. Pharm. entry-level standards are adequate for practice in a modern healthcare system. Drug therapy has become the primary mode of treatment in western medicine, and drug therapies often involve elaborate cocktails of powerful, and increasingly expensive, medications. There is a movement to have only the most serious conditions treated in hospital with the resultant shift of responsibility for complex medical conditions to community-based agencies. Medications once only available with a prescription are now available for anyone to purchase, leaving the pharmacist as the only healthcare professional to advise on and monitor their use. The most recent example of such a change was the decision to make emergency contraceptives available without a prescription. Dispensing this product not only requires pharmacists to be knowledgeable
in therapeutics, but increases the need for competent ethical decision making. Changes such as these are placing additional responsibility on pharmacists.

As a result, the question arises as to whether current entry-level standards are adequate for meeting the new challenges. The executive summary of an April 2005 meeting held in Toronto on the topic of the future of pharmacy education and practice in Canada implies that they are not. It states that “In order to respond to future trends and evolving pharmacist responsibilities, education will change to elevate the role of the pharmacist by enhancing patient care expertise” (Louise Perrier et Associés, 2005, p. 3). While it does not provide a detailed plan for achieving this goal (not something one would expect from a one day workshop), among the things it does suggest are increased experiential learning/training and a greater role for practitioner preceptors.

*Entry-level Pharm.D.* One proposal being considered for addressing the challenges faced in pharmacy practice is transforming existing Canadian baccalaureate programs (B.Sc. Pharm.) into ones where the entry-level degree granted will be a professional doctorate (Pharm.D.). Members of the Canadian pharmacy community discussed this idea at a one-day workshop entitled “Managing the Change to Entry-Level Pharm.D. in Canada” held at the Faculty of Pharmacy at the University of Toronto (2004, 12 November, Tom Brown, Chair). In the 2004-2005 academic year all seven English Canadian faculties of pharmacy offered a five year (1+4) B.Sc. Pharm. program, while the two faculties in Quebec offered a six year (2+4) B.Sc. Pharm. Consideration is being given to moving to a six year (1+5) Pharm.D.
This entry-level Pharm.D. must be distinguished from the two year post-BSc professional doctorate degree which has been offered in Canada at the Universities of Toronto and British Columbia since the early 1990s. This degree, which is also called a Pharm.D., is an advanced degree for the development of pharmacotherapy specialists. These individuals develop therapeutic knowledge and skills in a highly specialized area, predominantly with an acute care emphasis (critical care, oncology, infectious diseases, and so forth) and generally seek employment in institutional settings. An entry-level Pharm.D. is a generalist program in the same way as is the current B.Sc. Pharm. (See Appendix 3 for a comparison of Canadian pharmacy degree programs).

The discussions at the November 2004 symposium dealt largely with the perceived need to move to a Pharm.D. entry-level program. Various stakeholder groups, including pharmacist professional associations, regulatory agencies, and employer associations, attended and spoke at the symposium as part of the discussion on these changes and their implications. The discussion included defining what an entry-level Pharm.D. is and how it would differ from the currently offered post-baccalaureate Pharm.D. (Brown, 2004), and presentations by various stakeholder groups on the issue of entry-level Pharm.D. and the effect of the changes on their members. At the time the meeting was held, only the Université de Montréal, had decided to implement an entry-level Pharm.D. program and many faculties were just beginning to consider the change
and its implications. Montréal plans to offer the new program starting in 2006\(^3\) (Green, 2005; Mailhot, Binette, Couture, Lamontagne, Laurier \textit{et al.}, 2004).

Advocates of the entry-level Pharm.D. cite factors including the increasing complexity of pharmacotherapy and the resultant need for pharmacists with greater skill sets (Mailhot \textit{et al.}, 2004). They also point to a general trend in many healthcare professions to raise entry-level practice credentials. Another factor influencing change is the move made in 2000 by US pharmacy schools to offer a six year entry-level Pharm.D. as the sole accredited professional program in pharmacy (Commission to Implement Change in Pharmaceutical Education, 1996). In June of 2002, the United States Accreditation Council for Pharmacy Education (ACPE) voted to recognize the accreditation decisions of the Canadian Council for Accreditation of Pharmacy Programs (CCAPP) with respect to professional programs leading to a baccalaureate degree in pharmacy through June 2004 (Canadian Council for Accreditation of Pharmacy Programs, 2002) In June 2004, however, ACPE decided not to extend this recognition beyond June 30, 2004. The reason for not extending recognition of the Canadian baccalaureate program was given in a news release from the ACPE board: “The decision to adopt the Pharm.D. as the sole accredited professional degree was an important one for U.S. pharmacy, and for the public we serve. Continued recognition of CCAPP accreditation actions relating to a baccalaureate degree would not have been consistent with this decision...” (Vlasses, 2004, p. 1).

\(^3\) It was announced in August 2006 that the start of the new program was being delayed until September 2007.
Some in the Canadian pharmacy education community feel that lack of US recognition of Canadian programs represents a potential hardship for graduates of our baccalaureate programs (Hill, 1999; Mailhot et al., 2004). Aside from reducing employment opportunities in the US, it might restrict access of Canadian graduates to specialty training programs south of the border. They would argue that we must offer students a program which is equivalent to that in the US. A change of this magnitude would, however, have profound implications for all those associated with the profession, including practising pharmacists and employers, present and future pharmacy students, and the faculty and staff of pharmacy faculties (Canadian Pharmacists Association, 2006).

Partly in response to Montréal’s decision to start a program, the Association of Deans of Pharmacy of Canada (ADPC) directed the Association of Faculties of Pharmacy of Canada (AFPC) to develop educational outcomes for entry-level Pharm.D. programs (R. Caldwell, Director, Association of Deans of Pharmacy of Canada, personal email communication to R. Durocher, 23 November 2004). This led AFPC to strike a task force, which released a draft set of outcomes in a report (Mansour et al., 2004) which was distributed to Canadian pharmacy faculties, schools, and colleges with a request for feedback. ADPC also asked the Canadian Council for Accreditation of Pharmacy Program (CCAPP) to develop standards for entry-level Pharm.D. programs in order to achieve the AFPC outcomes.
Entry-level Practice Requirements

Current regulations stipulate that someone seeking to hold a license to practice pharmacy in Manitoba must hold a degree in pharmacy from a recognized institution, have passed the national board exam of the Pharmacy Examination Board of Canada, which includes the Objective Standard Clinical Exams, and completed an internship approved by the Manitoba Pharmaceutical Association (MPhA), the body which sets the standards for and regulates the profession in the province (MPhA, 2006). Non-Manitoba and non-Canadian applicants may also be required to pass a jurisprudence exam and provide proof of citizenship and language proficiency. Individuals meeting these criteria are eligible to obtain a license allowing them to practice pharmacy. This entry-level credentialing privileges the practitioner to legally coordinate and provide pharmaceutical care in all pharmacy settings in Manitoba, including community, hospital, long-term care, homecare, and so forth, and to provide care for all types of patients with all types of diseases. The credentials required for specific pharmacy positions may of course go beyond holding a practice license and include minimum experience levels, specialized training, and/or post-graduate degrees.

Summary

Over the past one hundred and thirty years, pharmacy education in Manitoba has evolved from an apprenticeship supplemented by a few courses taken at a medical college to a nationally-accredited, professional degree program offered only at the University of Manitoba. Many changes in pharmacy education were driven by changes in the profession of pharmacy as it also evolved in response to both internal and external
pressures. More recently, educational changes were introduced by academia with the goal of introducing new models of practice.

Discussions have begun on plans to make significant changes in how pharmacists are educated in Canada, possibly leading to changes in entry-level credentials through the introduction of a Pharm.D. to replace the existing B.Sc. Pharm. Such changes would have profound implications for all those associated with the profession, especially those in professional practice (Canadian Pharmacists Association, 2006). Active participation of practitioners, including community practitioners, would be vital to the success of any plan of this type and it can be argued that this would be best achieved by involving practitioners at the early stages of the process so that they may contribute their unique knowledge and gain a sense of ownership of whatever plan is developed.
CHAPTER THREE

If the statement that professional education legitimates itself primarily through practice (Hansen, 2004; Holland & Nimmo, 1999; Schwinghammer, 2004) holds true, it would follow that meaningful change in professional education can only come about after careful examination of professional practice. I would further argue that such an examination can only take place with active participation of those in practice since they are in a unique position to describe strengths and shortcoming in their practice milieu. Major curricular change, and especially change that results in modifications to practice credentials, standards, or models, would have extensive implications for all those associated with the profession of pharmacy and have an impact on curriculum, faculty development, and pharmacy practice (Canadian Pharmacists Association, 2006; Roy, 2004).

It has historically been the case that the academic community drives and galvanizes educational change (Penna, 2003) in conjunction with regulatory bodies while most practitioners remain uninvolved until changes in practice are to be implemented. There are signs that this is occurring to some degree in the educational changes discussions currently underway. Other than a few short editorial pieces in trade papers (Green, 2005; Hanley, 2005) and association journals (Roy, 2004), little information on entry-level credential changes has been made available to most practitioners and as a result I suspect few are aware that such a change is being considered. It would also appear that draft standards for a new entry-level doctoral program were prepared with little input from practitioners. While it may be argued that it is part of the role of
academia to develop and set curriculum and by extension influence practice standards, I would suggest that unless practitioners are consulted on the need and/or feasibility of any planned changes, challenges will exist in seeing curriculum change eventually be reflected in everyday practice. I believe some of the problems currently seen in the widespread implementation of the pharmaceutical care model may be attributed to factors including lack of consultation with practitioners and their support for the change at the time.

My study was designed to explore the perspectives of pharmacists on practice competencies needed within the context of everyday practice and experience. As was discussed earlier, and illustrated in Figure 3, pharmacists practice in a variety of settings, including institutions, industry, academia, government, and a variety of retail community settings. While the views of all practitioners, patients, and other stakeholders must also be assessed at some point, in this study I sought the opinions of practising community pharmacists, since this population would seem to be under-represented in most discussions taking place. I focused on practitioners who have served as preceptors of undergraduate students in experiential rotations or recent graduates in their internships since I am of the opinion that this group of practising community pharmacists is in an excellent position to articulate the current entry-level educational needs of practice, how those needs are changing, and how well those needs are being met by the current baccalaureate programs.

In particular, I sought to investigate what major challenges are faced by pharmacists in the delivery of pharmaceutical care and the competencies needed, now
and in the foreseeable future, in responding to these challenges. Particular attention was given to identifying competencies that would impact entry-level training. The research was conducted using qualitative methods to seek out the perspectives of the participants.

My underlying research questions included:

How do the perceived competencies of CPPs compare with the educational outcomes stipulated for entry-level programs of pharmacy faculties in Canada?

What are the possible implications of the level of agreement between CPPs' perceptions and those of the faculties?

The research methods used in this study are presented under the following headings:

1. Research Design
2. Focus Group Interviews
3. Data Collection
4. Data Analysis
5. Steps to be Taken to Enhance the Trustworthiness of the Study
6. Role of the Researcher

Research Design

The literature review described in Chapter Two did not reveal any publications describing cases where practitioners' input was sought when redesigning entry-level pharmacy programs. The searches only uncovered a few publications where the input of practitioners in the US or Canada was sought in either the development of speciality practices or programs through which practising pharmacists are able to upgrade their credentials (Johnson, 2000; Joyner, Pittman, Campbell, & Dennis, 1997; Knowlton,
Thomas, Zarus, & Buttaro, 1998; O'Loughlin, Masson, Dery, & Fagnan, 1999; Perrier et al., 1995; Spino & Chin, 1985).

I am aware of only one unpublished study where a focus group was used to gain the perspectives of a group of clinical associates (C. Mailhot, l’Université de Montréal, personal email communication to R. Durocher, January 26, 2005). Clinical associates are practising pharmacists involved in the experiential learning program at the Faculty of Pharmacy at Université de Montréal. The data acquired in the study were incorporated into the Université de Montréal’s internal strategic planning process for the faculty’s doctoral entry-level pharmacy program, which was planned for implementation in September 2006 (Mailhot et al., 2004).

Given that there is little published information on this topic, I chose to use qualitative methods in this study. This form of research is especially useful for exploration and discovery (Crabtree & Miller, 1999; Creswell, 1998; Merriam, 2002). The research is meant to describe, understand, characterize, and explain the participants’ thoughts and experiences.

In a situation where the goal of the research is to explore participants’ perspectives, it is impossible at the outset for the researcher to determine the precise content and scope of the data to be generated. Choosing qualitative methods has provided a mechanism to address this issue since they have frequently been described as an iterative process (Barbour & Barbour, 2003). It is inherently flexible, with the potential to change or shift emphasis. During the project, study participants may play a significant role in alerting the researcher to further issues that merit investigation. The tools used in
qualitative methods, such as a focus group topic or interview schedules, tend to be open-ended and evolve throughout the course of the study (Barbour & Barbour, 2003).

Context is an important element in helping to understand the background behind peoples' thoughts and experiences. Qualitative methods are appropriate tools in this study since one of their hallmarks is the element of context and the ways in which features of a specific situation or setting impact upon the issue under study (Barbour, 2000). Rather than assuming meaning, it allows the researcher to explore how participants make meaning of a given phenomenon.

Because of the nature of its scope and scale, qualitative research cannot provide evidence on prevalence, prediction, cause and effect, or outcomes. Hence, its findings are not statistically generalizable (Barbour, 2000). Rather, this method provides in-depth, contextualized accounts and offers explanations. Qualitative procedures would therefore be effective in determining the nature of the perceived needs for entry-level pharmacy practice, but would not be able to determine the extent of the perceived needs. The question of extent is beyond the scope of this study and would be best addressed in a follow-up study, should it be justified on the basis of this work.

Another defining feature of qualitative research is that it does not aspire to objectivity but rather recognizes the impossibility of eliminating researcher bias in the data collected and on the subsequent data analysis. Qualitative traditions have, therefore, developed processes of incorporating and accounting for the researcher's role in the research process. These are generally referred to as reflexivity (Crabtree & Miller, 1999). In qualitative research it is accepted practice for the researcher to explain his or her
assumptions, biases, or connection to the phenomenon or participants of the study. This is important in this study since I am a member of the community being studied (see the section on the Role of the Researcher later in this chapter).

In any type of research, the researcher aspires to produce valid and reliable information in an ethical manner. There are a number of strategies developed in the qualitative tradition to ensure consistency and dependability of the data. Strategies such as audit trail and member check are some of the techniques used. These strategies and others will be discussed in detail later in this chapter under the heading Enhancing the Trustworthiness of the Study.

Focus Group Interviews

Four focus group interviews were conducted for the study. A focus group is described as "a group of individuals selected and assembled by researchers to discuss and comment on, from personal experience, the topic that is the subject of the research" (Powell et al., 1996, as cited by Gibbs, 1997, p. 499). A moderator or group facilitator, whose role is to provide clear explanations of the purpose of the group, helps participants feel at ease, facilitates interaction between group members, and guides the discussion (Dawson, Manderson, & Tallo, 1993; Gibbs, 1997). In cases where sufficient resources are available, the focus group may also have an observer and an assistant. The main task of the observer in an audio-recorded session is to note the non-verbal signs or body language that the group demonstrates (Dawson et al., 1993). The assistant generally helps with the hosting of the session.
An observer was used in my study and she also assisted with hosting the session. The observer is a pharmacist and a close, working colleague of mine. She is an experienced note taker and has participated in students debriefing sessions for which I was the group facilitator. These are sessions where students have an opportunity to share their fieldwork experiences in a semi-structured manner. She also has extensive experience chairing committees and meetings at various levels. The observer made notes on the non-verbal signs and body language that the group demonstrated during the interview. Data analysis relied on the transcribed information from the audio recording and these notes were used to enhance the transcripts.

As discussed earlier, the goal of the project was to gain the perspectives of the participants on the research topic. The primary goal was not to observe participants’ behaviours in their natural settings and to learn what life is like in the studied setting, but to get the participants to articulate their thoughts and experiences on the study topic. Furthermore, this type of method would be impractical since some behaviours, such as decision-making, are unobservable and the issue of privacy of pharmacist-patient interaction would preclude direct observation (Morgan, 1997). Given the characteristics of pharmacy practice, I determined that the qualitative method of using participant observation would not be appropriate. This leaves one-on-one interviews and focus groups as the most viable methods.

I chose to proceed with focus groups rather than one-on-one interviews for a number of reasons. One of the goals of this study was to obtain several perspectives on the topic being studied. I felt that the interaction of participants in a focus group would
provide the richest data by allowing me to gain insights into the participants’ shared understandings of the issue, something that would not be accessible through one-on-one interviews. One-on-one interviews may limit a participant’s description to one specific practice. Focus groups should provide breadth to the discussion and group synergy may expand the participant’s contribution. Group interaction is the hallmark of the focus group method (Morgan, 1997).

Selecting Focus Group Participants

A purposive sampling strategy was used to select participants for the focus groups. This strategy is recommended for carrying out in-depth analysis of a central issue, in this case the perceived entry-level needs for pharmacy practice. It is used with small numbers of individuals or groups for understanding human perceptions, problems, needs, behaviours and contexts (CEMCA, 2002).

My goal was to recruit volunteer community (retail) staff pharmacists and pharmacist-managers who have served as preceptors, or supported preceptors, of undergraduate pharmacy students over the last two years. Community pharmacists have been chosen to participate in part because they represent the largest practising group (74%) in Manitoba, when compared to the second largest group, hospital pharmacist (21%) (NAPRA, 2006). I am also of the opinion that these individuals represent a legitimate source of practical knowledge that would assist pharmacy administrators to judge the relevance of any program changes. I feel that working with students at various levels of the current baccalaureate program has provided these pharmacists with a unique
understanding of the different aspects of professional development in a community practice setting. 

I planned to recruit both staff pharmacists and pharmacist-managers working in community settings since I suspect that although they work in the same practice settings, they are likely to have somewhat different views on what is important for entry-level practice. While pharmacy is a healthcare profession, community pharmacies are also businesses. Along with concerns for their patients’ health and welfare, the pharmacist-manager must also maintain the profitability of the pharmacy if it is to continue operation. I suspect that this may give them a slightly different view on entry-level skills and credentials than those of the pharmacists they employ.

There is another reason for choosing this group for potential participants. In the current B.Sc. Pharm. program (AFPC Advisory Committee on Curricular Change, 1998, 1999), and in the draft guidelines for a new entry-level doctoral pharmacy program (Mansour et al., 2004), experiential learning is an integral component of the program. The accreditation standards also require that a portion of the experiential learning take place in community practice settings. In the University of Manitoba pharmacy baccalaureate program approximately fifty percent (9 of 19 weeks) of experiential learning occurs in community practice settings. Although the draft Pharm.D. guidelines do not state the number of experiential weeks required under such a program, it is expected to rise significantly. The Université de Montréal Pharm.D., for example, calls for 40 weeks of experiential learning (Mailhot et al., 2004). Some of this increased time would undoubtedly involve community pharmacists as preceptors.
Finally, although community pharmacists make up the largest single practice group, they are the least organized in terms of having a voice at the educational change table. While hospital pharmacists, chain store owners and others have been surveyed by their respective organizations and had some input in recent educational change discussions, community pharmacists would appear to have been underrepresented. Since they would appear to be in a unique position to articulate the competencies required for practice in their setting, and thereby help define a starting point for the educational requirements for entry-level practice, their input would be a valuable addition to the debate.

*Entry into the field.* Potential study participants were identified from a list of preceptors and pharmacies published annually by the Faculty of Pharmacy, University of Manitoba and distributed to all registered Manitoba pharmacists by the Manitoba Pharmaceutical Association (MPhA). The list is compiled and published to help recognize the contribution these individuals and their employers' make to the faculty's teaching program. Eighty pharmacists were selected from the list on the basis of geography. That is, since there was no funding available for travel, only practitioners working in Winnipeg, or within a short drive of the city, were contacted. These pharmacists were sent a letter of invitation, along with written information outlining the study, which included information about the study and myself (see Appendices 5 and 6). The material was sent to each potential participant's place of employment.

It was recognized from the start of the study that there were limitations associated with using the list published by the Faculty of Pharmacy. Since the list used was
Methods

compiled for publication in June 2004 and it is fairly common for community practitioners to move between pharmacies, it was expected that the list might not reflect the current place of employment of the preceptors when the invitations were mailed in early August 2005. Furthermore, the information found in the Faculty list did not indicate whether the individuals were staff pharmacists or pharmacist managers at the time the list was published. Using a publicly available list of all Manitoba pharmacies (MPhA, 2005) which is updated annually by the Manitoba Pharmaceutical Association, it was possible to identify those individuals listed as managers as of June 2005. The assumption was made that individuals not listed as a manager on this list were practising as staff pharmacists at this time. This did not preclude the possibility that someone who was a manager in 2004 had since relinquished that role.

Using this process, it was possible to determine that sixty five percent of the pharmacists on the faculty’s preceptor list were pharmacist managers. It was also determined that of the eighty preceptors contacted by letter, forty were female, resulting in a 1:1 male:female ratio of potential participants for the study. Table 1 provides a breakdown characterizing the individuals who were sent letters (see Appendix 1 for a description of the practice settings).

The response to the initial invitation to participate was poor, with a total of six pharmacists responding to the letter within two weeks of it being sent out. Of these, five expressed interest in the study while the sixth indicated that they were unable to participate because of other commitments.
Table 1
Summary of general characteristics of CPPs sent letters

<table>
<thead>
<tr>
<th>Type of Practice Setting</th>
<th>Gender</th>
<th>Position in the pharmacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banner Franchise Chain</td>
<td>Male</td>
<td>Manager Staff</td>
</tr>
<tr>
<td>Mass Merchandise Supermarket</td>
<td>Female</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>37</td>
</tr>
</tbody>
</table>

Given the low response rate to the letters, it was decided that it was necessary to increase the awareness of the research project using the other methods outlined in the research proposal. The ethics submission to ENREB included documentation for alternative recruitment procedures should the initial process prove inadequate. To increase pharmacists’ awareness of the project, regional representatives of five of the major pharmacy franchises/chains in the Manitoba, the Manitoba Society of Pharmacists, and the Manitoba representative of the association representing independently owned pharmacies were contacted and asked to run an ENREB-approved advertisement directed at their members (see Appendix 5 for a copy of the ad). All of the organization agreed to assist with the request. Unlike the case of the initial letters, this method informed nearly all the pharmacists in Manitoba, including non-preceptors of the project. Approximately ninety percent of the licensed pharmacists in Manitoba are members of the Manitoba Society of Pharmacists and would have received the issue of Communications, the association’s journal in which the ad was placed. As a result, the vast majority of

pharmacists in the province were exposed to material containing information on my
research project.

A total of three individuals were added to the list of those who expressed interest
in the project as a result of the awareness campaign. Of these, two practiced in rural
settings and had not been contacted in the initial letter mailing because of the problems
arising from a lack of funding, which were discussed earlier. The third individual had
been sent a written invitation but did not remember receiving it.

The low response rates for both written invitations and advertisement necessitated
my contacting potential participants by telephone to verbally extend an invitation to the
study. Individuals who had been extended a written invitation, but who had not
responded, were contacted at their place of employment. Pharmacy phone numbers were
obtained from the publicly-available MPhA list (MPhA, 2005). An attempt was made to
contact each of the non-responding preceptors from the original eighty-person list via this
route. In the end, I was able to reach a total of thirty-eight people. In most cases it took at
least two phone calls, a good number of which were late in the evening, to reach these
individuals. Most were not available on the first call because the pharmacy was busy or
their shift had been changed.

Table 2.
Summary of characteristics of CPPs interested in participating

<table>
<thead>
<tr>
<th>Type of Practice Setting</th>
<th>Gender</th>
<th>Position in the pharmacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banner</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Franchise</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Chain</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Mass merchandise</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Supermarket</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Male</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Female</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Manager</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Staff</td>
<td>6</td>
<td>11</td>
</tr>
</tbody>
</table>
My telephone campaign enjoyed somewhat greater success than the letters and the advertisement, and resulted in another fifteen pharmacists expressing an interest in participating in the focus groups. Drawing on the total pool of twenty-four individuals, I scheduled four focus group sessions and sent out agendas and copies of the informed consent form to those who had indicated they would attend a given session (see Appendices 7 and 8). Table 2 provides a breakdown characterizing the individuals who indicated an interest in participating in the focus groups.

Participants

The research protocol used in this study was approved by the University of Manitoba Education and Nursing Research Ethics Board prior to recruiting any participants (see Appendix 4 for information on ENREB submission). A total of sixteen pharmacists, from four different types of community retail setting, (see Table 4) participated in the study. These individuals had precepted undergraduate pharmacy students in the two years prior to the study. Two of these individuals were from rural settings, one is currently a owner/manager and the other had retired from an owner/manager position a month prior to participating in the study. The total group consisted of eight males and eight females and their years of experience in community pharmacy practice ranged from forty-nine years to two years. All of these individuals had practiced exclusively in community settings since they joined the profession. Also, all except one of the participants held a B.Sc. Pharm. from the University of Manitoba. The exception had obtained their B.Sc. in Pharmacy in another province and subsequently went on to earn an MBA.
These individuals held a mixture of managerial or staff pharmacist positions. The original plan was to have three groups of staff pharmacists who precepted undergraduate pharmacy students in the last two years and one group of manager pharmacists who precepted undergraduate students directly or whose staff pharmacists have precepted undergraduate students within the last two years. It is suggested that homogeneity in background allows for more free-flowing conversations among participants within groups and facilitates analysis that examines differences in perspective between groups (Morgan, 1997). I was unable to achieve this plan because problems in recruiting participations made it impossible to schedule this type of homogeneity and yet secure an acceptable numbers of participants for the sessions.

Data Collection

Data were collected in four focus group sessions which were conducted between the first week of September and the end of November 2005. Of a total of eighty community pharmacists invited, sixteen participated in the study.

Focus Group Settings

The location for the focus group sessions was the conference room at the University of Manitoba, Faculty of Pharmacy. This room was chosen for its accessibility and availability. All of the sessions were conducted in the evening because neither I or any of the participating CPPs was available during the day as we are all employed in full-time positions. I do not think that this factor had any major impact on participation. Meeting at this time of day is commonplace for pharmacists since most continuing professional development sessions are held in the evenings and or on weekends. I did not
choose weekends, however, because most potential participants had indicated that
weekends were not a good time for them. Specific factors influencing participation were
to schedule sessions on weekdays, not including Fridays, and in a timeslot that was not
too close to the end of the “day shift”. Additional considerations were to schedule the
sessions at a location where parking was convenient and no additional cost incurred by
the participants. This made the location and time convenient since there was no cost
associated with parking at the University during the evenings. The setting was also
conducive to focussed conversation because of privacy and appropriate atmosphere
(factors such as temperature, lighting, noise and so forth).

Compensation was not provided to any of the participants for their involvement in
the focus group sessions. Since many of the participants were coming to the sessions
directly from their workplace, however, I provided a light meal (pizza and dessert) prior
to the interviews. I found that the light meal also gave the participants an opportunity to
interact and created a relaxed atmosphere for the interview. The Manitoba
Pharmaceutical Association accredited participation in the sessions for two continuing
education points, as is common for sessions of this type.

Focus Group Process

Four focus group sessions were conducted for the study. Most of the sessions
were approximately two hours. The sessions were conducted between the first week of
September and the end of November 2005. This was done in order to be as
accommodating as possible to the CPPs invited to attend. The first session was not
scheduled before September since some individuals were returning from summer
holidays and the last session was planned to avoid the start of the Christmas season, a
time that is busy in the retail sector and when individuals may not be available.

An attempt was made to enlist a total of eight or nine individuals for participation
in each focus group. While this is in keeping with suggested practice described in the
focus group literature, it proved difficult to schedule. In the end, groups had a total of
four or five out of the seven or eight CPPs who agreed to participate. Each focus group
had CPPs withdraw, often at last minute, for a variety of reasons. As a result all focus
groups had fewer participants than anticipated. The last focus group had only two
participants; initially, I wanted to cancel the session but on reflection I decided not to.
This decision was made because I felt that the two participants should be given a chance
to share their views on the issue at hand, given they had taken the time to come to the
session. Fortunately, these individuals showed a lot of interest in the subject matter and
the sessions proved to be very interesting. Session attendance is shown in Table 3.

Table 3.
Focus Group Attendance

<table>
<thead>
<tr>
<th>Date</th>
<th>Focus Group</th>
<th>CPPs who indicated they would attend</th>
<th>CPPs who attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1, 2005</td>
<td>1</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>October 18, 2005</td>
<td>2</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>October 26, 2005</td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>November 22, 2005</td>
<td>4</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

It turned out that the number of participants in most sessions was reasonable
because each participant had a high level of involvement. Larger groups may have
resulted in some participants not having an opportunity to fully express their views and/or necessitated longer sessions than originally planned for. It was also the case that the CPPs who did attend the sessions were fairly evenly distributed among the main types of community practice types in Winnipeg. There are very few Independents left in the province so I was not surprised that there was no one from this group, and no Supermarket pharmacists attended, although two had indicated they would attend. Table 4 summarizes the general characteristics of the community pharmacist-preceptors who took part in the focus groups.

The focus group sessions were audio recorded on digital media, with prior consent of the participants. Along with the pharmacist participants, an observer and I were present at the focus group sessions. I facilitated the discussions and the observer made notes of non-verbal communication and points of interest. At the end of each session I also made reflective notes on the process of the focus group and my perceptions as to how each session went.

At the start of the interview I introduced the context and nature of the research, provided assurances of confidentiality of the participants' response, and informed the participants of their right to refrain from answering any of the questions and to withdraw from the study at any time. Participants were initially asked to introduce themselves, and then this was followed by a number of general, open-ended questions from an interview guide (see Appendix 9). This was done to abide with the grounded theory methodology stance of limiting the influence on the participant of any information from literature review or previous theoretical constructs of subject at hand held by the researcher
It was also meant to put the participants at ease, to establish a rapport between the participants and the interviewer (me), and to explore the feelings, attitudes and perceptions that underlie the participants' positions on the subject matter. I remained attentive to the time, guided the discussion using the questioning areas and probes in the interview guide, encouraged contributions from all participants, and monitored atmosphere of the discussion. At the end of each session I thanked participants for coming and having shared their perspectives.

**Table 4.**

*Summary of the general characteristics of the study participants*

<table>
<thead>
<tr>
<th>Focus Group</th>
<th>Types of Practice Setting</th>
<th>Gender</th>
<th>Position in the pharmacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Banner Franchise Chain Mass merchandise</td>
<td>Male Female Manager Staff</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>3 1 1 0</td>
<td>3 2</td>
<td>4 1</td>
</tr>
<tr>
<td>2</td>
<td>1 1 2</td>
<td>3 2</td>
<td>3 2</td>
</tr>
<tr>
<td>3</td>
<td>0 4 0 0</td>
<td>1 3</td>
<td>4 0</td>
</tr>
<tr>
<td>4</td>
<td>1 0 0</td>
<td>1 1</td>
<td>1 1</td>
</tr>
<tr>
<td>Total</td>
<td>5 6 3 2</td>
<td>8 8</td>
<td>12 4</td>
</tr>
</tbody>
</table>

After the first focus group, the second question was removed from the original interview schedule (see Appendix 9). This question dealt specifically with the pharmaceutical care model and was meant to add clarification to the main questions on change and challenges in pharmacy practice. It resulted, however, in participants spending time debating and defending “their model” of pharmaceutical care. Given the focus of the thesis project was not on the model of practice I felt it was necessary to
remove the question to help refocus the discussion on the changes and challenges and
time management of the sessions. Furthermore, in grounded theory methodology, it is the
incoming information from the participants that sharpens the focus of the research and I
felt that removing the question was a valid move.

Data Analysis

Data collection within quantitative and qualitative paradigms operates on a
different set of dimensions and assumptions. Lincoln and Guba (1985) discussed four
dimensions of data processing which were first proposed by Goetz and Le Compte
(1981). These dimensions are: deduction – induction; generation – verification;
construction – enumeration; and subjective – objective.

Deductive analysis begins with a theoretically based hypothesis to be confirmed
or negated; the data are defined a priori by the hypotheses to be tested or deduced from
them. Inductive analysis begins with the data, from which the hypothesis and theory are
derived by inductive reasoning processes. The second dimension, verificatory inquiry
attempts to verify or falsify propositions or hypotheses that have been arrived at
elsewhere, while generative inquiry attempts to discover constructs using the data as
point of departure. The third dimension, constructive analysis, is a process of abstraction
whereby units of analysis are derived from the data. Enumerative analysis uses
previously defined units and subjects them to systematic counting or enumeration.
Finally, the fourth dimension is subjective – objective. This dimension is not referring to
the subjectivity or objectivity of the inquirer (Lincoln & Guba, 1985). In objective
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analysis, categories derive from the terms brought to inquiry by the investigator; in subjective analysis categories are derived from respondents' own terms.

Goetz and Le Compte (1981) described the analytical technique of the four dimensions as a continuum. The quantitative data will tend to fall to the deduction-verification-enumeration-objective ends of the continua, while qualitative data processing tends to be inductive, generative, constructive, and subjective. The process of data analysis in qualitative inquiry is not one of data reduction but "essentially a synthetic one, which the constructions that have emerged (been shaped by) inquirer – source interactions are reconstructed into meaningful wholes" (Lincoln & Guba, 1985, p. 333).

Data analysis is an ongoing process in qualitative research, and data collection and analysis go hand-in-hand. This process involves three distinct stages ongoing discoveries, coding the data, and discounting of findings (S. J. Taylor & Bogdan, 1984).

Ongoing discovery occurs during the simultaneous processes of data collection and data analysis. The researcher becomes intimately familiar with the data and begins to identify emerging themes and developing concepts. During these developments, I made reflective notes and observer comments. Also at this stage, some big broad categories were identified to develop preliminary concepts and propositions. This activity was minimal, however, because of a practical issue, that is, transcribing the focus sessions took longer than anticipated. I also heeded the advice of Bogdan and Biklen (2003) for novice researchers in qualitative research to be mindful of the simultaneous data collection and analysis process. The reason for this advice is that they feel that the novice
researcher may not yet have the “theoretical and substantive issues that are displayed” (Bogdan & Biklen, 2003, p. 148).

Coding data is an analytical tool for handling large amounts of data. It is a systematic process of developing and refining interpretation of the data and occurs after the data collection has been completed. It involves bringing together and analyzing all the data relative to major themes, concepts, and propositions. The constant comparative method advanced by Glaser and Strauss (Strauss & Corbin, 1990) is a coding method suggested by Lincoln and Guba (1985). It involves taking one piece of data and comparing it with all others that may be similar or different in order to develop conceptualisations of the possible relations between various pieces of data. This process continues with the comparison of each new interview or account until all have been compared with each other. This method of coding was considered in this study. However, the specific method of coding emerged and evolved as the research proceeded.

The final stage of data analysis is referred to as discounting data. While this may sound negative, it involves interpreting or considering the data in the context in which they were collected. It is an assessment of the credibility of the data. Taylor and Bogdan (1984) suggested that a quick review of data and asking oneself certain questions should be adequate for most researchers. These questions centre on the following points: the extent to which the data is based on solicited versus unsolicited comments, the role of the researcher in the setting, and the effect of other participants present in the setting. Other factors to be considered are the direct versus indirect data, source, and an acknowledgement of one’s own perspective of the research components. I have
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considered these factors and they are summarized in the following section *Enhancing the Trustworthiness of the Study*.

**Procedures**

Verbatim transcripts were produced from the audio recordings as soon as possible after the focus group sessions were held. Although advanced arrangements were made with a transcriptionist prior to the focus group sessions, it still proved difficult to have the recording transcribed in a timely fashion after each session. As a result it was necessary to employ three individuals at various stages of the process. Once received, the transcripts were checked for accuracy by carefully reading them over while listening to the recordings of the sessions. They were then enhanced with written notes related to non-verbal features of the focus group atmosphere, including setting, body language, and tone. Steps were also taken to protect the identity of the participants in the field notes and other materials through the use of pseudonyms and codes.

The data were analysed used coding procedures advanced by Strauss and Corbin (1990). Analysis begins with careful reading of the transcript line-by-line, key words and phrases are bolded, and then these key words are written in the right-hand margin of the transcript. I also wrote self-reflective memos and analytical memos in the left-hand margin of the transcripts. The self-reflective memos document my personal reactions to the participants’ narratives and the analytical memos are the questions, speculations and emerging theory. Data were analysed for interpretation and key themes related to participants’ views, opinion, and ideas on the issue of educational needs of entry-level pharmacy practitioners. The codes were then entered into an electronic file. As analysis
proceeded, these codes were compared with new and previous data and similar codes were grouped. Each group was labelled by category and I worked to define each category. Generally, codes and categories are sorted, compared, and contrasted until saturation occurs, that is, until the analysis produced no new codes or categories. Throughout the analysis process differences and similarities within group and across groups were sought.

All data collected in the course of the study are securely held at my home behind locked doors. A summary of the general themes of the collated session data will be provided to participants in either hardcopy or electronic form, as per their indicated preference.

Enhancing the Trustworthiness of the Study

In the qualitative research paradigm, trustworthiness is the terminology used to describe the ‘credibility’, ‘transferability’, and ‘dependability’ of qualitative data. It entails the extent to which conclusions and implications drawn from the data and presented by the researcher match the realities of the participants. Trustworthiness is always a major concern in both the design of the research and in the results it has yielded. Given that in qualitative research the researcher is the primary tool, several biases can be present in the research process, all of which can subsequently affect the trustworthiness of the data. In the quantitative research paradigm, the rigour of the research is assessed by evaluating the design and results for their ‘validity’ and ‘reliability’. Within the qualitative research paradigm, ‘validity’ and ‘reliability’ are replaced with ‘credibility’, ‘transferability’ and ‘dependability’ (Creswell, 1998; Lincoln & Guba, 1985). In this
study, various steps were taken to reduce bias and enhance the trustworthiness of the process.

One such step was the use of progress checks made with members of the thesis committee. Discussions on the research design and emerging findings with a colleague who is an experienced researcher and familiar with the qualitative paradigm also helped in enhancing the credibility of the research through peer and colleague debriefing and checking. My own subjectivities and biases were kept in check by reflecting on these at the outset of the data collection (see section following, Role of the Researcher). In this reflection, I have provided comments on the past experiences, orientations, and biases that have likely shaped the interpretation and approach of the study.

Triangulation is the use of multiple methods and sources for data collection (Creswell, 1998). In this study, participants were recruited from different types of pharmacy retail organizations (independent, franchise, chain, and so forth). Although an attempt was made to have sessions with different groups of participants, namely staff and manager pharmacists, the logistics of securing adequate numbers participants to conduct focus groups made this goal unachievable. Instead the focus groups were made up of a mixture of these two groups.

Transferability of qualitative research parallels the term external validity in the quantitative paradigm. This factor was enhanced by a combination of factors, including thick description, which includes providing details of participants, setting and context of the study (Creswell, 1998; Lincoln & Guba, 1985). This detail description provides the reader with as complete a protocol as possible to determine whether the findings can be
Methods transferred to another setting because of shared characteristics. Also included is a statement of limitations, which can be found in a later section in this thesis.

The dependability of qualitative research parallels reliability in quantitative research. Merriam (2002) lists several factors which influence dependability. These include the use of established and documented protocols of the process and stating one’s assumptions, biases, and theoretical orientation. It is important to provide detailed accounts of methods and procedures for data collection and analysis and an accurate and comprehensive data set. To that end, an abundance of participants own words have been included in the Findings, Chapter Four. The factors enhancing the dependability of the study are addressed in this chapter and include a detailed description of the research method, articulation of my assumptions, and a detailed description of data collection protocol and analysis.

Role of the Researcher

One of the defining characteristics of qualitative research is the role of the researcher as the primary instrument of data collection and analysis (Creswell, 1998; Frankel & Devers, 2000). This inherent characteristic challenges the researcher to reflect and articulate his or her own biases and characteristics towards the study (Frankel & Devers, 2000). It is incumbent upon the researcher to take steps to avoid overlaying his or her perspectives on the study data collected from the participants. Hence it is important for researchers to articulate their assumptions, experiences and worldview of the study in question. This process is labelled as “the role of the researcher” or more recently “reflexivity” – “the process of self-examination” (DePoy & Gitlin, 1998, p. 311).
Therefore, it is necessary for me to share my background and perspectives, as they relate to this study. One of the issues that I am mindful of is the fact that I am working within “my own professional culture” in this study. How might this intimate knowledge of the culture blind me to potential insights? This is a question that I am acutely aware of and hopefully, with constant reflection and other appropriate steps, I was be able to ensure the trustworthiness of the data collected and analysed in this study.

I wear two hats in the pharmacy community, that of a licensed practitioner in professional practice and that of a teacher at the Faculty of Pharmacy. Although I spend more of my time at the faculty, I find that my thinking on entry-level pharmacy education is most heavily influenced by my practitioner role. In the time that I have held a license to practice, this role has spanned different cultures in different types of settings. Specifically, at various times over the last twelve years I have been employed as a pharmacist consultant on a community-based research project, dispensing pharmacist for an outpatient program at a hospital, community pharmacist in a retail setting, and my current practice position as a hospital pharmacist with a focus on palliative care. My role as a pharmacy practitioner has supported my teaching role and has led me on the path of an intellectual journey in which I find myself preoccupied with a number of questions. These include, how can we educate professionals in a way that they will acquire the needed professional knowledge, skills and attitude? How do we determine what entry-level pharmacists need to know for a given practice setting to be confident, competent, and caring practitioners? Can an academic program meet the needs of every type of
practice, and if not, how do we decide which type of practice is important to emphasize?

And finally, who decides what is important in terms of professional education?

As discussed elsewhere, in the early 1990s an attempt to reshape pharmacy practice was made with the introduction of the pharmaceutical care model (Hepler & Strand, 1989). It was promoted largely by academics and regulators of the profession and, in my opinion, the model has never been adopted in community practice. A study I conducted as an undergraduate student (Durocher, 1994), and my subsequent years of professional practice and instruction, has led to my perspective that changes in professional pharmacy education must include input from members of the practice community at every step of the process if the professional curriculum is going to be successful in educating competent, confident and caring graduates who will advance the profession. I think that the adoption of new roles and responsibilities by pharmacists is often impaired is the lack of consensus within the pharmacy community regarding the profession’s goals.

Finally, my interest in this project lay in both the topic and the method. I had a personal goal of developing skills in qualitative research methods. While qualitative research has long been a mainstay of education and the social sciences, it has only recently begun to make inroads into education and practice in the health sciences (Barbour, 2000; Bligh, 1998; Stacy & Spencer, 2000). As someone educated largely in the scientific realm where quantitative research reigns, I am intrigued by “research approaches that preserves the complexity, storminess, and wealth of the lived experiences from which the questions arise” (Crabtree & Miller, 1999, p. xi). I see qualitative
methods as having immense potential in pharmacy for investigating problems ranging from how students are “professionalized” to why patients do not follow the instructions on a prescription. I expect that skills in this area would serve me well regardless of what path my career may take.

Ethical considerations. In any research project ethical considerations are necessary elements of the research process. This particular project used human beings as participants, and although the participants were not subjected to any experimental treatments or interventions, the need for protection of privacy and integrity of the participants is an important ethical dimension which needed to be considered. The research protocol used in this study was approved by the University of Manitoba Education and Nursing Research Ethics Board (see Appendix 4) prior to the commencement of any activities involving participants, including recruiting activities.

Confidentiality was the primary ethical concern throughout this project. While I do not believe that the topics discussed in my thesis project were particularly controversial, as a practicing pharmacist I am very much aware of the fact that pharmacy in Manitoba is a small, and to some degree closed, community where nearly everyone knows, or at least knows of, everyone else. Community pharmacy also tends to have a high staff turnover which is accompanied by pharmacists moving in and out of management roles. Someone who was a manager last year could conceivably have someone they once managed becoming their manager. The last decade has also seen increasing corporate ownership in the retail pharmacy environment and corporate structures sometimes limit the views an employee may make public. For all of these
reasons I felt is was very important that I assure all the CPPs associated with my project that I would make every effort to ensure that nothing in my thesis or any subsequent publications would contain any information that could identify them as a participant.

This process began with an explicit assurance of confidentiality being included in all written correspondence (see Appendices 5 and 8 for examples of a recruiting letter and the Informed Consent Form). I also made a point of stating this point in any telephone conversations and repeated my assurance to participants prior to starting each focus group interview.

Informed consent was an ethical tool used in the study. Prior to participating in any focus groups, all participants were given a letter outlining the context, purpose, and nature of the research and formally requesting their written informed consent as a participant. A signature on an “Informed Consent Form” (See Appendix 8) was taken as an explicit agreement on the part of the participant to take part in one focus group interview session with the researcher and a number of other CPPs and to allow the data to be used in further analysis and reporting. A signed Informed Consent Form was also taken as an acceptance of my assurances of confidentiality and an agreement to respect the confidentiality of other participants.

In transcripts, reports, and other field notes, all participants were referred to by a pseudonym. In the thesis, participants are referred to only by pseudonym. Quotes from focus group transcripts used in my thesis are linked to a particular participant in a group through a simple coding system, for example F1A would link to participant A in focus group 1 where the participant letters were randomly assigned to group members. This
system is meant to provide a linkage between the result presented and the raw data while maintaining confidentiality. The letter assignments are known only by me. All descriptions or paraphrasing used for illustrative purposes in writing or reporting were made generic in terms of organization, unique personal identifiers and gender identification. Upon completion of writing, transcripts and all other documentation associated with the project are filed at my home in a safe place until all articles arising out of the research have been accepted for publication, after which time all transcripts and documentation will be destroyed.

Summary

In this study, I used qualitative research methods to explore the perspectives of community pharmacists on issues of entry-level competencies needed for practice. The study used focus group interviews with staff pharmacists and pharmacist-managers who were preceptors of undergraduate pharmacy students over the last two years. The objective of the study was to identify themes and concepts related to competencies needed for entry-level community pharmacy practice through inductive analysis, using the procedure advanced by Strauss and Corbin (1990), and to compare these with the educational outcomes stipulated for accredited baccalaureate pharmacy programs in Canada.
CHAPTER FOUR

Perspectives of Pharmacists

In this chapter, I review the findings deduced through my data analysis. I begin with a broad description of the makeup of each of the four focus groups and the CPPs who participated in them. This is followed by a discussion of the themes which arose from the data, along with illustrative quotes extracted from the transcripts.

In presenting the themes, my primary concerns were maintaining the integrity of the perspectives put forward by the CPPs, while at the same time protecting their confidentiality. While verbatim quotations have been used wherever possible, to enhance confidentiality and readability, the quotes have occasionally been modified with respect to names or phrases of speech that may identify an individual. All names used in this thesis are pseudonyms.

Focus Group Participants

Protecting the identity and confidentiality of the CPPs who participated in the focus group discussions is a paramount consideration in presenting these findings. That being said however, in order to present the findings in their proper context, it is necessary to provide some broad descriptions of the makeup of the focus groups. This is important for a number of reasons. Since we are all influenced by our surroundings, one would expect that to some extent a given CPP’s views on pharmacy might be influenced by where they practice and how long they have done so.

Another point to consider is how the group makeup may have influenced the group dynamics and hence the degree of participation and openness in discussions.
Morgan (1997) has pointed out that discussion tends to be the most free-flowing in groups that are relatively homogeneous. Given the challenges encountered in simply recruiting enough CPPs to participate in the focus groups, however, scheduling sessions in order to maximize homogeneity was simply not possible. Sessions were scheduled with the aim of having a sufficient number of CPPs attend. Table 4 in Chapter Three presents a summary of the general characteristics of the focus group participants. The remainder of this section presents broad descriptions of the characteristics of each group that may have influenced the CPPs views and/or responses along with general descriptions of the discussions and what flowed from them.

**Group 1**

The five participants in focus group 1 were among the most experienced of the CPPs who took part, with three having practiced for more than two decades. All had met before and some knew each other going back to when they were pharmacy students. Four are currently pharmacy managers and the fifth has been a manager in the past. Three of the managers own their pharmacy and the other owned theirs before selling to a chain and assuming a managerial role in the organization.

This later point might account for the "entrepreneurial spirit" displayed by many in the group through their comments regarding marketing and self-promotion. While they felt that the current product-based practice model is not sustainable and that the current remuneration model will not support clinical services, they also felt that change was taking place and were introducing new services into their own practices. They believed that proper marketing was important if these initiatives were to succeed. They also felt
that corporate pharmacy was hindering the evolution of the profession in that, in their opinion, corporations would not adopt a new practice model until convinced it was more profitable than the current one.

Group 1 also expressed a great deal of interest in the education of pharmacists and the effect it has on the future of the profession. This did not come as a surprise given all group members are actively involved as preceptors in the Faculty of Pharmacy’s Structured Pharmacy Experiential Program (SPEP) at all levels. They have seen many students over the years and had well thought-out opinions on the abilities of students and entry-level practitioners. While they felt new graduates had excellent clinical skills, they also felt some lacked the attitude and skills needed for providing patient care services.

Discussion in this session was animated and free flowing with all CPPs participating fully and enthusiastically expressing their opinions on the questions I posed. My task was to steer them on to the next topic rather than prod for responses. In fact their enthusiasm for the discussion was more than I had anticipated and the session ran beyond the two hours I had scheduled, and would have continued longer if I had not suggested we bring it to an end after my recorders were full.

Group 2

Membership in the second focus group was the least homogeneous of the four sessions. The five participating CPPs came from all four of the community pharmacy subgroups which took part and this was the only session where pharmacists working in mass merchandise environments were present. There was a broad spectrum of age/experience represented, ranging from a recent graduate to someone retiring after
nearly five decades in the profession. Three of the CPPs were currently managers, one had been a manager in the recent past, and one was a staff pharmacist. I got the impression that none of the participants knew each other.

This was the least forthcoming group in terms of active participation in the discussion and I was often required to address the current question directly to some members of the group before they would offer an opinion. The discussion was respectful, but restrained, and became somewhat tense at times when clearly opposing opinions were expressed, as was the case when the topic of corporate pharmacy came up.

Possibly because of the corporate affiliation of some participants, the opinions on corporate pharmacy ranged from it being a death knell for the small independent pharmacies to being a needed force to promote pharmacists. While the group felt the profession was evolving towards patient-focused services, they also had more comments on educational obstacles to adopting clinical services than any other group. They also had relatively little to say about the role of the pharmacist or on most matters concerning students. This may be related to the fact that while all the CPPs had been preceptors, their experience was not as extensive as members of the other groups.

Group 3

This was the most homogeneous of the four groups. All four members were managers of franchise pharmacies and all knew each other. Three of the participants had been practicing for decades, while the fourth had graduated relatively recently. All were active preceptors in the SPEP program, normally taking students in all years of the program.
As was the case in the first session, the discussion was animated and free-flowing. Participants all responded eagerly to my questions and followed up with discussions among themselves. The group was convinced that practice was evolving towards clinically oriented pharmacy services and stated that they were working them into their own practices. They agreed with the need to constantly upgrade their education to maintain competency and meet new challenges but did not see education as a barrier to introducing clinical services. Members of the group stressed the need for a recognized form of credentialing for pharmacists who raise their skill levels in specialized disease management areas, such as diabetes or asthma. Some members of this group had already acquired such specialized training, while the others had plans to do so in the short term. It is interesting to note that they reported that their aspirations of upgrading their skills was supported by senior management in their organization. Despite that fact, however, they considered corporate pharmacy to often be at odds with the goals of the profession.

One of the primary concerns expressed by this group was ensuring that students admitted into pharmacy have excellent communication skills and an empathetic attitude. They felt some students were being attracted to the profession by the lure of high wages rather than any desire to do public good. CPPs in the group also felt that the current curriculum in pharmacy does not adequately support community practice.

Group 4

This session was almost cancelled when only two of the five CPPs who had said they would attend showed up. I decided to go ahead with the session since I felt not doing
so would be unfair to the people who came. Despite the low turnout, the session went well with good discussion.

One of the CPPs was a manager while the other was a staff pharmacist who has been a manager in the past. Both are heavily involved in the SPEP program, normally precepting a number of students each year. One participant has been in practice for over 25 years while the other for about five. They had also met on occasions previous to the session. Much of the discussion focused on continuing education, or more precisely, continuing professional development, to maintain competency and meet the challenges associated with the evolution towards clinical services. They also discussed the importance of admitting the right candidates to the faculty and what they perceived as a lack of curriculum support for community pharmacy.

Themes

The focus group discussions followed two broad lines of questions (see Appendix 9 for the Interview Schedule). The first was meant to explore the informants’ perspectives on the changes and challenges the profession of pharmacy is facing today and in the foreseeable future. The second question addressed whether entry-level practitioners have the knowledge, skills and attitude needed to address the perceived changes and challenges. While the themes presented here did primarily arise out of discussions stimulated by the questions, they often appeared more globally as well, redeveloping as part of other discussions. All of the themes, except three, also arose in all four focus group sessions. The exception was session four, which had a small number of participants.
It should be noted that although the quotes presented here are attributed to a particular individual, in some of these cases one or two members of the focus group articulated the same point while other members shared an opinion or agreed with nods. This was especially evident in focus groups 1 and 3. For the sake of brevity, only one, representative quotation was selected to present the ideas put forward in each case.

Changes and Challenges

The first part of the focus discussions dealt with the changes and challenges the pharmacy profession is facing the knowledge, skills and attitudes practicing pharmacists needed to address the challenges. It should be noted that during the focus group discussions, and the subsequent data analysis, it was not always possible to distinguish changes from challenges. These elements were in many ways interlinked and participants often discussed the two “in the same breath”. This does not come as a surprise and one would expect a praxis to exist between the two; change is often accompanied by the challenges faced in dealing with it. Likewise, change is often the response to challenges, as would be the case for example, if standards of practice changed in response to the challenges posed by more complex drug therapies. That being said, there were some key changes identified as distinct elements. These included: an increased role of technology and an increasing role for technicians; more demands from the public for pharmacists’ services; and increasing complexity of drugs on the market.

Seven categories on changes and challenges participants perceive the profession of pharmacy is facing today and in the foreseeable future emerged from the data. They are presented here according to the number of times they arose in the analysis, starting
with the highest frequency and proceeding to the lowest. This was chosen as a means of presenting the data and is not meant to imply that higher frequency implies higher importance. Within a given focus group, however, the number of times a theme was identified does bear a relation to amount of discussion which took place on that particular topic. This may be interpreted as the level of interest the groups members had in the topic or the importance they attached to it. The categories and the frequencies with which they occurred in each session are listed in Table 5.

**Evolution Towards Clinically Oriented Pharmacy Services**

When the participants were asked about changes and challenges facing the profession of pharmacy, their response most often was concerned with an evolution away from dispensing and towards more clinically oriented patient services, such as disease management (for example, dealing with asthma and diabetes).

What I’ve noticed is the sophistication of pharmacy as a profession has changed. When we graduated basically we were out there just to fill prescriptions... Over the years I’ve noticed pharmacists become much more confident in terms of their professional skills. F2D

I think we all have to be more patient-oriented and patient-focused. Because I find that those that think of the patient more are the ones that get more stuff done and get more pharmaceutical care done. F3C
Table 5.

Frequencies at which themes were identified in each focus group

<table>
<thead>
<tr>
<th>Focus Group</th>
<th>FG1</th>
<th>FG2</th>
<th>FG3</th>
<th>FG4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of participants</td>
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<td>5</td>
<td>4</td>
<td>2</td>
<td>16</td>
</tr>
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**Practice Changes and Challenges**

Evolution towards clinically oriented pharmacy services

<table>
<thead>
<tr>
<th>Theme</th>
<th>FG1</th>
<th>FG2</th>
<th>FG3</th>
<th>FG4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational obstacles to adopting clinically oriented pharmacy services</td>
<td>15</td>
<td>17</td>
<td>20</td>
<td>5</td>
<td>57</td>
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<tr>
<td>Corporate vs. professional vision of the role of the pharmacist</td>
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<td>7</td>
<td>14</td>
<td>2</td>
<td>31</td>
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<tr>
<td>Lack of clarity about the role of the pharmacist</td>
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<td>5</td>
<td>13</td>
<td>0</td>
<td>28</td>
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<tr>
<td>Outdated remuneration model for pharmacy services</td>
<td>13</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Inter-professional relationships</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>Business vs. profession models of practice</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>12</td>
</tr>
</tbody>
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**Knowledge, Skills and Attitudes of New Graduates**

Admitting the right candidates to professional education

<table>
<thead>
<tr>
<th>Theme</th>
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<th>FG2</th>
<th>FG3</th>
<th>FG4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>education</td>
<td>16</td>
<td>8</td>
<td>23</td>
<td>9</td>
<td>56</td>
</tr>
<tr>
<td>Disharmony between practice and curriculum</td>
<td>7</td>
<td>11</td>
<td>14</td>
<td>9</td>
<td>41</td>
</tr>
<tr>
<td>Graduating students have adequate entry-level knowledge and skills</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>Marketing professional services / deficiency in the curriculum</td>
<td>10</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>13</td>
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</tbody>
</table>
The participants felt that change will be driven in part by external factors such as more public demand for pharmacists’ clinical services, such as in-depth counselling, therapy monitoring, and disease management.

People actually just come and say “Can I just see you in the room?” They know we have the room and we can sit down and talk... F1B

In our pharmacy there has definitely been an increase (in demand for clinical services) since I graduated. F1B

I just see society, as you⁵ said, not wanting to wait eight hours in the emergency room. I think the evolution is going to happen where more and more people are coming to the pharmacist, which is a positive thing, but we need to be well equipped... F2C

That’s where the counselling comes in. We’re getting into - the baby boomers are demanding the knowledge and the education on their medication... That’s the direction we should be going. F3D

I think the public awareness is there to push you to do that as well... In terms of patient care for the future I envision pharmacists making house calls; literally going through medicine cabinets and helping people sort out the stuff that’s expired. F4A

Definitely I think that people are asking for more time with pharmacists, even over the last four years that I’ve been working, having more people coming in and asking questions... F4B

The CPPs also cited the increased role of technology and the increasing complexity of drugs on the market as factors driving the evolution of the profession.

⁵ The “you” in this statement refers to one of the other focus group members, not the researcher or observer.
So, if we only want to do the dispensing, pharmacy is going to be out of the way and machines are going to take over... If you don’t, in 10 years I can tell you that there is a lot more computer or whatever, people are pushing for central fill and they will take over, and nurses are prescribing right now, and we are not using pharmacy knowledge and professional side. F1E

I think there has to be, just because as you say, our jobs can be automated, and there has to be and I think there will be. F1B

We have whole classes of drugs that did not exist when we graduated. There are so many classes of drugs that exist and so many things being monitored and so many things being charted these days... F1A

A number of participating CPPs expressed the opinion that the evolution towards more clinical pharmacy services will be aided, and accompanied, by an increasing role for technicians. They felt that well-trained and certified technicians could assume many of the technical tasks associated with dispensing, thereby freeing up the pharmacist for a more patient-focused role.

...the role of a technician has really increased in the last five years. ...the technicians are a lot more better trained, and we do let them do a lot of things, and not worry about that. We are trying to focus more on those cognitive issues. F3C

Could you imagine having two licensed techs that can do all the birth control, that can send out things that are not necessary for us to check. We don’t need to do any of these kinds of things, and that would save a whole bunch of time too... Like, okay, can’t a technician do that?” F3D
Finally, while the participants saw these external factors necessitating the evolution away from the pharmacist’s current primary role of drug distribution, they felt it was incumbent on practitioners to be proactive and start moving out of the dispensary.

Where do I see pharmacy in the future? We definitely have to get out of the dispensary.

F1C

Again, we have to get them away from the dispensing function... the fact that there has been so little change in our practice now, says that we are moving like a glacier towards this. We have all the capability but I don't see it changing it very fast. F1D

Educational Obstacles To Adopting Clinical Pharmacy Services

This category describes the participants’ feelings about practicing pharmacists’ current level of skills and knowledge and how they must continuously strive to educate themselves on developments that affect their practice. Some spoke of the challenges in maintaining competency in light of the changes underway.

I think one of the huge issues that I’ve seen is our ability, ...to assess that information becomes very important, and what information is garbage, for example, what information is just a big sales pitch, and what information is important to both your practice and your patient. F4A

...compared to these new ones coming in, I don't have the knowledge that they do. F1E

One of my greatest barriers is the struggle to maintain competency, it's just crazy... I would like to think that I am not alone for my quest of knowledge and my quest for competency. F1C

They felt that in order for pharmacists to embrace more clinical services, such as disease management, there is a need for educational upgrading beyond what might be expected to maintain their current level of competency.
We are being thrown into, we got a lot drugs right away and that could make it very tough, because the person comes in and they have nothing, and all of a sudden they hand you a script for 6 drugs. F1D

I see our profession heading in that direction... and because of that we have to develop very specific skill sets. Just look with emergency contraception, I know my skills needed to increase considerably. F2D

Well I think sometimes we don’t have the expertise, because... the last four years I’ve spent working on upgrading my education basically and I think that anybody that’s graduated in the 1970’s needs to do that. F3D

I think we have to keep up with practice guidelines. I think the issue of hormone replacement therapy, for example, one day it’s good and one day it’s bad. It’s something that we have to be very cognizant of, and the fact that it’s a huge impact overnight, on your practice... F4A

Along with the need to upgrade their skills, participants indicated a need for a recognized credentialing system that would indicate that the holder has achieved a recognized level of competency in an area.

There needs to be some type of a proof to the client that you are going to be dealing with that you are competent, that you passed exams or whatever, but you are not self declared as being proficient unless you have like a diabetes designation or asthma designation or something that proves what you are worth in a concrete way. F1C

I mean I graduated in 1987 and this year I’m writing my certified diabetes educator and I’m going to do that and market it. So we have to get to that understanding that we can’t make excuses. F3C
Corporate vs. Professional Vision of the Role of the Pharmacist

The “corporatization” of retail pharmacy (Harding & Taylor, 2000; K. Taylor & Harding, 2003) was an often-cited change in practice that a number of participants expressed concern about. Corporate ownership of community pharmacies has increased significantly over the last decade. Some participants’ comments indicated that they felt that the corporate vision is often at odds with their professional aspirations.

I could never in my corporate setting right now go out and start charging, it is absolutely not allowed... Now I am under a corporate policy, which is extremely different and extremely black and white, there isn’t the vision there. There’s a corporate vision, but the corporate vision is not a vision of flying, it is a vision of maintenance and conformity...

F1A

So when a corporate boss comes to me and says, “This is how we do it here”, I say, “Well this is how I do it, and this is how I will do it for you”. You know, they can fire me and they don’t have to hire me. I have a choice. I understand that pharmacists wear two hats; the professional hat and the business hat, but I want whomever I’m working for to understand that my professional hat is by far the most important one. Not that the other one’s important but that one is much, much more important to me. F4A

Just as an example, they had one come out not that long ago when certain prescription drugs would pop up, a little screen would pop up on our pharmacy computer saying to recommend these supplements to come along with it, and they were really wanting us to push this. And I said, “I’m not going to push this. If it’s not a benefit to the patient, I just won’t”. F4B

The participants suggest that corporations will not be interested in having their pharmacists provide clinical services until they are convinced that their provision is as
profitable as filling prescriptions. They feel that corporate pharmacy places profit before the patient.

Well when you are trying to do so many prescriptions you are told not to OTC counsel, not to counsel new prescriptions. So where’s that... it really contravenes all of the regulations and guidelines. F3A

Cutbacks, but you know what they’re doing, they’re looking at wage-dollars per prescription. F3C

Like you can’t have corporations that are pushing out 500-600 prescriptions a day and give their staff bonuses – the managers get bonuses on how many prescriptions are being filled... unfortunately pharmacy has become a money issue... F3C

But what’s BrandX pushing right now? Cutbacks. Bottom line, priorities.” F3D

These views were expressed in the light of what some felt was the disappearance of smaller Independent pharmacies and the introduction of an entirely different practice philosophy.

We were bought by a small chain and then by a big chain and the difference is the corporate mentality. F1D

It is interested to note, however, that not all the participants saw the corporate vision as a negative or challenging one. Some have come to accept that the corporate pharmacy is a way of the future for the profession and are looking to find solutions within that system.

So my philosophy is if this is the card that you’re dealt with, work with it to make it better and provide a more positive role, from a professional spin on that bigger environment. Because my store sells anything from Tylenol to gum to drugs, doesn’t mean that I should try and reduce my professional image on it. F2C
There was also an opinion expressed that corporate pharmacy has been good for the profession in that pharmacists have benefited through better wages and benefits.

We have to be careful before we beat up the big stores because they did a lot of things for our profession. They created a ton of jobs, and they got the salary scales up there. F2D

Lack of Clarity About the Role of the Pharmacist

This category highlights the participants’ feelings regarding the public’s perceptions of the pharmacists’ role in the health care system. Pharmacists, who have traditionally been seen as dispensers of products, are now trying to change their image to one of providers of specialized services. After a half a century of selling products and giving away services, many expressed the view that it is hard to change the public’s perception to the point where they might be willing to pay for clinically oriented services rendered by a pharmacist.

I have children who don’t know what we do. F1A

I think we have to educate the public, to educate the corporations, we have to make them see that this is what we do and this is worth the money. F1E

Some felt that part of the profession’s image problem had to do with being too accessible. Pharmacists have traditionally always been available to provide the public with free advice on minor healthcare matters. As pharmacists deal with more complex therapies and pharmacies get busier, this is an expectation that can no longer be satisfied.

It is not just free, it is the time issue. “Well I don’t want to go sit in a walk-in for 2 hours, so I thought I would just bop in here”. They won’t even line up at the in and out... They get a little ticked at times because they can’t just walk up and access you in their attempt to avoid a doctor or a line up for 2 hours. F1A
...it seems like the patient population I deal with mostly is they want their information right then and right now. F3B

... we’re so accessible to the point that we’re too accessible. F3C

Like you can’t just phone a doctor and ask them any bloody question in the world. F3C

The participants felt that pharmacists had to actively begin educating the public of their evolving role in the health care system and the services they can provide.

You have to respect my profession and what we do behind the counter here, and understand the concept of actually receiving the medication. I think that’s where the pharmacist really has to take the ownership of the profession and how they deliver that to the public. F2B

But first we have to teach the people that we are professionals... Right. Would they ever swear at their doctor? F3D

Outdated Remuneration Model For Pharmacy Services

This category is used to describe the participants’ views on the remuneration system that is currently in place for retail pharmacy services. The system reimburses pharmacists for activities that are focused on the dispensation of products and which are technical in nature while, as pointed out in the previous section, they give away advice for free.

I mean how can an independent pharmacy, who runs an established and a professional family pharmacy, provide the services required unless he can be paid for it? F2A

... because people phone and it is free and people come in and its free. You are constantly giving out advise left, right and center and then you don’t get reimbursed but you are being torn in all different directions for free advice. F1B
...it's a vicious circle because you have to provide the service to get paid for it, but you're not going to provide it until you have some reimbursement. F3D

...you got to get so many scripts done, and so you don't have time to take this person and sit down with them and review all their meds, and how often do they get to offer that to people. F1D

Some CPPs pointed out that there are aspects of the current model that are actually a disincentive to change.

...they're making over ten grand a year in bonuses based on the number of scripts they fill out. F3C

They also pointed out that there is no system in place for remunerating or rewarding pharmacists for clinically oriented services, such as assisting patients with disease management. In fact at this point offering clinical services is a "loss leader" for many pharmacies.

If you take the time to sit down with that person, you are creating a shortage in the pharmacy dispensary right away if you don't have extra person that's charging for those services. But since we are not charging, we are doing something for free, but leaving everyone else short, behind us. F1B

...but how we are going to get that done, and get reimbursed for it, and get paid it for it. We are almost going to have be like doctors who are paid for by the patient and given them 10 minutes of our time as opposed to as 'I have get out a hundred scripts today',...

F1D

So, now you are under the constraint of if I spent time doing this, no reward there, so should we be charging for every little consultation? F1D
If I spend a half an hour with you, then those 10 patients, I need another pharmacist to look after them, so I have to pay that pharmacist, so you have to pay me for that pharmacist. F1E

I’m hoping they see it as a value but I think it’s also because you can’t run any business with a loss leader, whether it’s pharmacy or selling shoes, or pop or whatever. F2C

*Inter-professional relationships*

If pharmacists are to begin offering clinical services, they will be doing so in collaboration with other healthcare professionals. For example they may monitor a complex drug therapy they worked with a physician or nurse-practitioner to develop. This category describes the participants’ feelings that other health care professionals are especially slow at recognizing the contribution that pharmacists can make to the outcomes of patient therapies. While this is partly due to pharmacy’s longstanding image as a business rather than a healthcare profession, it also involves issues of professional “turf battles”. For example, some physicians have been known to take great offence to pharmacists’ input into patient’s drug therapy.

I think a lot of the physicians are the barriers, as far as you want to make change in the person who spends a lot of time and you think of something, then the physicians are definitely a big barrier to some of those ideas. F1B

The other challenge is physicians are not used to pharmacist’s consultations and then telling them “This is what we found with your patient” and telling them, you know “if I can suggest this type of change” - there is some resistance from some physicians. F1E

I think a lot within the medical professional like doctors, more so doctors, and sometimes nurses, they don’t see our role. F2C
The CPPs in the focus groups also had ideas on how these barriers might be overcome.

... and changing the role of the pharmacist because you can change the role of pharmacist in the minds of the people that are graduating from faculty of medicine and dentistry. Like there, that's where it's going to make a difference... F3C
I think if you want to go from there to working hand and glove with the physician, I think extended care practice nurses is going to be a first step for us. I think that's going to have to come first. F4A
Maybe that's a place where this could start from, you know, start with this type of thing, and whether it gets to the doctor just diagnosing and the pharmacists choosing which medications to use from there. F4B

Some of the participants indicated that in some cases they are earning the respect of their peers. In cases where pharmacists have been providing extended clinical services over a length of time the sentiment is often different from the rejection often encountered.
And the doctors don't know, they'll say, "Go ask your pharmacist". I've heard that from so many people. F2B
The fact is, we are recognized by our peers, we are recognized - I have a wonderful medical team that I work with and they value our services and they value our input. I value their input as well, so we exchange views and we exchange philosophies and what not. F1C
Some doctors know that I can do this and they have been referring their patients to me because they are saying "I have no time for half an hour, you should go see Dixon. This is his fee." F1E
Business vs. Professional Models of Practice

The final category in this section on changes and challenges is at first glance similar to an earlier one discussion corporate pharmacy. While that theme dealt with what the CPPs perceived as an external corporate force, this one deals with the reality that community pharmacy is a retail business and that the business aspects often overshadow the aspirations of pharmacists. It also expresses the participants’ comments that the current business model of retail pharmacy does not support the evolution of pharmacy services.

...you know they keep talking about making appointments and people coming in and you doing one-on-one. In the real world that would be nice but, in retail when you’re talking productivity and what not,... F3A

Like I try to make an effort to do that, but unfortunately the business aspect of community pharmacy kind of tarnishes it. F3B

So for years and years I concentrated on the business side of things and not what I need to do as a pharmacist. F3D

The current business model is based on pharmacists providing products rather than clinical services, and as a result, productivity is measured by the number of prescriptions filled rather than services rendered.

...and reading stories of pharmacists that try to make a difference, that kind of gets you going but then once again you fall back. You know, third party plans, bottom line, productivity, we have to have this many prescriptions done per hour and money per hour and what not. F3B

I think the problem that we have is, especially in a community pharmacy, every community pharmacy looks at it from the business point of view - how many scripts we...
can do, so that how much money we can make and everybody is afraid of charging their professional services. F1E

I bet you all of us here do an amazing job at counselling, but you know what? There’s also the business side of things where prescriptions have to get filled up and this person can’t eat, and... Unfortunately I think that is a tough balance to do in pharmacy, where we’re driven by business and you’ve got all these people waiting and how do you deal with it all... F3C

Entry-Level Knowledge, Skills And Attitude

Having addressed the changes and challenges facing community pharmacy practice, the second part of the focus group sessions asked what knowledge, skills, and attitude are needed by entry-level practitioners if they are to adequately meet those challenges. The CPPs also expressed their opinions on how well the learning objectives of the current B.Sc. Pharm. program (AFPC Advisory Committee on Curricular Change, 1998) are preparing new graduates for community pharmacy practice.

Four categories emerged from the data in response to the second set of questions. As was the case for the previous section, these are listed in order of frequency, high to low, and shown in Table 5.

Admitting the Right Candidates to Professional Education

Perhaps this category is best summed up by the hiring philosophy one participant indicated that is used by some pharmacy employers, that is “hire for attitude, train for skills”. When asked what was important for new graduates entering the profession, almost all of the participants at some point mentioned the “right” attitude. This indicated the feelings held by many participants that some people recently graduated from
pharmacy schools appear to have chosen pharmacy for other than professional reasons. Individuals were cited as lacking sincerity, empathy, and being unwilling to accept professional responsibilities.

I think it’s all attitudinal. You can come out of any faculty and institution with all the knowledge and all the practical experience you want, that you have to complete before graduation, but if you don’t have the right mindset after graduation, that’s not going to go anywhere, in my opinion. F2B

In terms of attitude, some are good and some are not. A lot are coming out with a very high opinion of themselves. I’ve seen that a couple times where they think they’re too good to count or too good to ring in things. F4B

Some felt that some students were drawn to pharmacy primarily by the lure of the financial rewards they would likely reap upon graduation.

These 4+’s coming in are not to serve; they are not for self-gratification. The attitude in these 4+’s coming in are for financial gain... But how do you grade empathy? F1A

Participants stressed the importance of communication skills in practice and they felt that the admission process should be redesigned to identify poor communication skills.

It’s not what you tell the customer, it’s how you tell ‘em. You’ve got to make it relevant to them, you’ve got to make it that they can understand it, it means something. You can’t just recite the textbook. F1D

So if you can’t communicate then, it doesn’t matter how much knowledge you’ve got, you’re going nowhere. F3A

I know people who can study for exams and get good marks, but they don’t know how to communicate. F1E
This sentiment was often couched in their suggestions that an interview process should be part of the admissions process.

I totally agree. I think there are some faculties that don’t even communicate as much as we do as professionals that have interview processes. F1B

The other thing is I’ve been talking to a few community pharmacies and pharmacists, and they all think that we should put the interview process... F1E

...but I really feel that before admission to pharmacy there should be an interview program. F2A

You can’t make somebody that they’re not. But at the entrance level there is some – you should be able to weed out – like pharmacist’s should have certain qualities. F3A

... then I’ve had some students that have come through in the last four or five years and I know the standards are high to get in, and their communication skills are horrible... I’d love to see an [admission] interview panel. F3C

I believe it’s like our motto for hiring, you hire for attitude and train for skill. It’s attitude. You cannot change attitude. How do we mould them? How are we going to make them do this or that? You’re not going to. That’s where an interview process comes in and you try to pick ... F3C

“'I think one of the first questions that you had to do with attitude, and I think you’d pick that up very quickly in an interview. I would ask someone, ‘What brings you into pharmacy? What are some of the factors that you have thought about to come to this faculty?’” Even if they’ve read the answers on the internet somewhere or whatever, I think you can probably pick up a fair bit. F4A
Disharmony Between Practice and Curriculum

This category describes the participants’ frustration regarding the fact that recent graduates often lack the opportunities to use their university-acquired knowledge and skills in contemporary community practice. The current focus of daily retail practice is filling as many prescriptions as possible, which leaves little time for more patient-oriented services such as disease management and drug therapy monitoring.

We’re not out there to be the drug counter, you know, count five pills at a time, give your medication, get the money, and so on. Our main focus was pharmaceutical care, especially in our last year... So we all came out, we graduated with a really high focus and we thought, “We’re going to make a difference”, and then you go out into the real world. F3B

I am seeing also that pharmacists are coming out prepared to do a lot that they are not able to do in the retail pharmacy... I wonder after they graduate how many are getting to do this in very much depth at all. F1D

...but the biggest challenge I’ve faced from a graduate to a full-fledge practicing pharmacist right now, is to apply the knowledge that we learned at the university and to use it wisely with each patient and a colleague or a physician... F2B

No, I don’t use – like we spent four years in school and I don’t think we use nearly half of that knowledge... F2E

The focus group participants indicated that in some cases students are encountering these problems even before they graduate.

Students are coming to me, second-year students, complaining... that too much time to do curriculum, experiential, whatever, but I think they don’t have enough time to apply these kind of things. F1E
Graduating Students Have Adequate Entry-Level Knowledge

This category presents the participants' opinions on the level of knowledge and skills possessed by new graduates entering community practice (retail pharmacy). The general consensus of the participants was that the recent graduates have all the clinical knowledge and skill they need.

I think from my point of view, that the new grads that are coming out of university, they have a pretty good education. F1E

Pharmacists have a lot of information in their head, but we also have to have the ability to go look for information. I think that the new graduates are definitely equipped. F1D

I think in terms of knowledge, students, interns are definitely well-prepared, especially for community pharmacy. I won't really go into hospital, but in terms of community they definitely have the knowledge that they need. F4B

Some felt that new practitioners often have more clinical knowledge than many practicing community pharmacists.

The capability is there, the knowledge is fantastic and maybe that is why we don't get paid more than them because of the current knowledge... F1D

Despite their having adequate clinical knowledge, however, some CPPs stated that in their opinion the entry-level pharmacists often lack the skills needed to apply that knowledge.

I think they have a good basic knowledge, but I am not sure they know how to think of the big picture sometimes. F1A

...some of the students that I have seen at my pharmacy, they don't know how to apply the clinical education. F1E
They've always had the knowledge, but they've been challenged with someone coming in with high blood pressure and diabetes and they want a sinus medication. F2C

...they might have the knowledge, they might be great at communicating, but... they're going to need some years of experience. F3A

I'm working with a couple of new students right now, and um, they – there's challenges there. I'll definitely say – there's a difference between a pharmacist that has more experience versus a newer pharmacist, because there's totally different sets of expectations and their roles within the pharmacy. F3C

*Marketing Professional Services / Deficiency in the Curriculum*

This category is used to describe the sentiment expressed by the participants that while new graduates have the clinical knowledge and skills, they lack the tools for marketing their professional services to the public, insurers, and other healthcare professionals.

...You know, you have to market yourself, you have to market your services... F1C

You have to create value. Anything that anyone sells to anyone, if you create enough value for that service or that product, whether you are buying a house or visit with the pharmacist... F1B

Participants attributed this shortcoming, which is shared by the majority of practicing pharmacists, to lack of business and marketing training in the curricula of pharmacy faculties.

But we did not learn to do that (market services) in school. F1B

That I think is valuable for the students. And I think a couple of years ago, A invited me and M about our pharmacy business thing and we did that one hour each type of thing,
and that really made them see what’s really out there and what we do and what they are expected of. F1E

One point must be noted concerning this particular theme. While the topic was raised by other groups, it was of particular interest to the members of focus group 1. As mentioned earlier, this was the most entrepreneurial group, with a number of pharmacy owners interested in promoting new services.

Summary

The themes presented in this chapter emerged from the data after analysis using the methods described in Chapter Three. The themes indicated that the participating CPPs felt that community pharmacy needed to evolve away from dispensing towards more clinical, patient-focused services. While some felt this was happening very slowly, all felt that changes was inevitable, in spite of the challenges they felt were impeding progress.

The participants indicated that they felt that entry-level pharmacists have clinical knowledge that is more than adequate for present-day community practice. They felt that many had problems, however, in applying that knowledge to real-life practice situations. Their greatest concern regarding new graduates had to do with attitude. Many CPPs felt that some students are choosing pharmacy strictly for financial reasons and lack the proper attitude, empathy, and communication skills needed to deliver patient-focused services.
CHAPTER FIVE

This chapter discusses some of the implications of the findings derived from the focus group data and presented in Chapter Four. To put the findings in context, I also discuss some of the study’s limitations and strengths. Finally, some ideas for future research are presented.

The community preceptor pharmacists (CPPs) who participated shared many well articulated perceptions and opinions on the challenges facing contemporary practice. There was a consensus that as a result of both external and internal pressures, community practice was evolving towards recognition of the need for a more clinical, patient-focused model. There was also agreement that the pace, and to some degree the direction, of this evolution was being influenced by factors over which members of the profession had little control, such as the corporatization of community pharmacy and remuneration models based on product distribution. While participants felt that maintaining an adequate and up-to-date level of clinical knowledge presented a challenge, they felt it was a manageable one.

There was a consensus among participating CPPs that the level of clinical pharmacy knowledge held by graduates of the program currently in place at the University of Manitoba was more than adequate to meet the needs of community pharmacy for the foreseeable future. Many expressed the concern that new graduates were often frustrated by the fact that they were unable to use many of skills they acquired in school. Several CPPs also expressed the concern that some recent graduates do not have the attitude needed for providing proper patient care.
Implications

These points are discussed in greater detail later in this chapter.

Limitations and Strengths of the Research

As was discussed in Chapter Three in the section on Research Design, qualitative research is meant to describe, understand, characterize, and explain the thoughts and experiences of the participants. Because of the nature of its scope and scale, however, it cannot provide evidence on prevalence, prediction, cause and effect, or outcomes and its findings are not statistically generalizable (Barbour, 2000).

The process of selecting participants into the focus groups is known to introduce biases into the data. Participants were not selected randomly from the general Manitoba community pharmacy population, but were recruited from a list of preceptors. This group was chosen since it was assumed that their participation in a preceptorship program may indicate an interest in the pharmacy education process and, by extension, an interest in participating in a study concerning pharmacy education. All participants were self-selected volunteers and it is not known how their characteristics and perspectives may differ from those who either were not invited to participate or decided not to attend.

There are limitations inherent in the research design based on recruiting volunteer participants for this study. The sample of participants was small, sixteen out of a population of about seven hundred and fifty licensed community pharmacists in Manitoba, and as such is not statistically representative of community pharmacists at national, regional or even local level. This means that it is not possible to generalize the data collected to the larger population. For example, while the majority of CPPs in the study agreed that the current, product-based remuneration model was impeding the
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evolution towards clinical services, it cannot be assumed that this opinion is shared by the
majority of community pharmacists in the province, or even the majority of those in the
preceptorship program. It does, however, indicate a possible area for future study.

The number of participants is not large enough to allow for any disaggregation of
the data into detailed community pharmacists sub-groups, such as franchise, independent,
chain, and so forth. However, patterns of the participants’ perceptions may be used with
cautions to make inferences about perceived challenges or knowledge, skills, and attitudes
such as, outdated remuneration model, or need for admissions interviews. Where
significant differences are observed in the data, participants’ characteristics may be
expected to help explain these differences. For example, the different perceptions on
whether corporatization of community pharmacy is at odds with the profession’s vision
of the future may be correlated with where a CPP is employed. Again, while the answer
to this is beyond the scope of this study, it does indicate a possible area for future work.

One of the strengths of qualitative research is providing in-depth, contextualized
accounts and offering explanations and I feel that in this study qualitative procedures
were effective in determining the nature of challenges facing community pharmacists in
Manitoba and the perceived needs for entry-level pharmacy practice. While the study
does not provide information on the extent of the challenges or the perceived needs, nor
can the findings be generalized to any other group of pharmacists, it does provide insights
into the views of a group of practitioners who are actively involved in the profession and
in training new members of the profession.
Implications

The CPPs who participated in the focus groups offered well thought-out perceptions and opinions on community pharmacy practice and the education of pharmacists in Manitoba. Analysis of the transcripts led to the themes and findings presented in Chapter Four. From these findings it is possible to draw a number of implications, which are presented in the following sections.

Changes and Challenges

All CPPs who participated in the focus groups indicated that community practice has changed since they graduated and were licensed. This was the case whether they had been in practice for fifty years or for two. They cited three main forces driving these changes: rapid changes in drug therapies and new classes of drugs being introduced, rapid introduction of new technologies for dispensing, and increasing public demand for more clinical pharmacy services.

Study participants indicated that staying current with modern drug therapies and new pharmaceuticals being released was becoming increasingly challenging. Some reported that within a few years of their entering practice they were dealing with new classes of drugs which were unknown when they were students. This would imply that acquiring the knowledge and skill to deal with these rapid changes in therapies is best dealt with through post-graduation continuing professional development rather than adding material to existing entry-level programs. The CPPs felt, however, that while they had the skills and basic knowledge needed to stay up-to-date, they often found it difficult to find appropriate continuing education (CE) materials to do so.
Participants also stated the importance of having access to continuing professional development opportunities to upgrade their knowledge and skills beyond an entry-level degree in order to specialize in specific practice areas, such as diabetes or asthma management. They indicated that they felt it was important that pharmacists who attained and maintained such expertise be recognized through some sort of credentialing system, such as differential licensing similar to that of physicians. Such a system has been proposed by others. For instance, Zellmer (2005, p. 263) has written:

Pharmacy should develop a similar system to distinguish between practitioners who are qualified only for traditional practice roles versus those who have demonstrated the knowledge, skills, and abilities for advanced practice, such as collaborative drug therapy management. This system would assure the public that pharmacy has a mechanism to verify the competence of individual practitioners for advanced roles and provide a framework for compensation for such services.

The importance of quality continuing professional development (CPD) for professionals and challenges faced in providing it to practitioners has been discussed in the literature (Accreditation Council for Pharmacy Education, 2005; McNamara, Duncan, & Marriott, 2005). As the pace of change in professional practice increases there will be increased requirements for appropriate CPD and an accompanying need for investigations into ways to develop and deliver the material in a timely and efficient manner. To quote a background paper on pharmacy in Canada recently released by the Canadian Pharmacists Association (CPhA) (2006, p. 22):

To move forward, the pharmacy profession will need... To develop CPD and practice support programs for pharmacists seeking to implement new services, specialty practices
or new practice models. CPD is imperative so that existing pharmacists have the opportunity to enhance their skills to participate in new pharmacy roles.

New technologies and an increasing role for pharmacy technicians were also cited as driving change in community practice. Bar coding, pill counters, and other automated systems are making many tasks associated with the dispensing process obsolete. Certified and licensed pharmacy technicians can check that the correct drug was dispensed as well as a pharmacist and, at a lower cost. This would imply that pharmacists must assume a role other than that of dispensers of products if the profession is to survive (Canadian Pharmacists Association, 2006; K. Taylor & Harding, 2003).

Participating CPPs also indicated that change in practice is also being driven by patient demand. Patients today are better educated than previous generations and have ready access to a vast amount of health-related information. They want to know what they are being treated for and the details of their therapies. Many are no longer satisfied with being handed their prescription and an information sheet along with a few words regarding the medication and its combination with food and are demanding in-depth consultation on ways to manage their health. The CPPs felt that by filling this demand pharmacists could use many of the skills they gained in school, but were seldom able to use in practice, and at the same time move out of the dispensary before technology moves them out. A number of participants also indicated that they felt that if pharmacists do not assume the role of therapeutic consultants, other professionals, such as nurse practitioners, are ready to do so. The implication which arises is that community pharmacists’ window of opportunity for changing the dominant model of community practice and assuming the role of healthcare professionals is closing and unless
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Pharmacists act soon they may find their role reduced to that of dispensing technicians while others assume the role of pharmaceutical consultants (K. Taylor & Harding, 2003).

The need for pharmacists to move out of the dispensary is not a new idea by any means (American Conference of Pharmaceutical Faculties, 1999; Holland & Nimmo, 1999; Zellmer, 2005). It was one of the motivations for the development of the pharmaceutical care practice model (Beck et al., 1996; Hepler & Strand, 1989; Knowlton et al., 1998) and for the move in the US to an entry-level Pharm.D. program (Commission to Implement Change in Pharmaceutical Education, 1993c). The need for change is also a major theme of the recent CPhA background paper on the future of the pharmacy profession in Canada (Canadian Pharmacists Association, 2006).

While the participating CPPs indicated that there are pressures to change the current model of community pharmacy practice, they also pointed out that there are a number of obstacles impeding change. One of the basic problems is the community pharmacist's image. After decades of selling drugs and giving away advice on minor medical problems, it is challenging to convince patients that pharmacists can provide valuable healthcare services worth paying for. Likewise, many other healthcare professions see community pharmacy as a business, not as an allied profession, where they send patients to purchase products, not to receive specialized healthcare services (Edmunds & Calnan, 2001). This would imply that community pharmacy must change its image before pharmacists will be able to assume a new role in the healthcare system. To again quote from the recent CPhA Background Paper (2006, p. 16):

To move forward, the pharmacy profession will need... To develop and implement targeted advocacy and communication strategies to promote acceptance of new future
roles for pharmacists. Focus first on improving pharmacists' perception of the value they bring. Additional strategies should involve other health care professional groups, particularly those who may be resistant to pharmacy role change, such as physicians. Advocacy strategies should also be directed to the public and consumers of pharmacy services to ensure that pharmacists are viewed as essential in the same way as physicians and nurses.

As pointed out by the study participants, this will involve educating the public and other healthcare professionals on the skills and knowledge pharmacists have and demonstrating how the profession can contribute to the healthcare system. While this problem has been recognized by the profession, there appears to have been little study aimed at determining the extent of the problem or defining what might be best done to deal with it. A 2003 review of thirty two years of the literature (Sokar-Todd & Einarson) discovered only three reports of studies looking at clients opinions of the pharmacist's role and only seven on clients' attitudes and perceptions towards pharmacists and pharmacy services in Canada. The authors of the review also looked at the international literature and suggest the lack of study is not limited to this country.

Although the focus group participants were for the most part optimistic that the public and other healthcare professionals would eventually come to recognize the value of a new, enhanced role for pharmacists, they were less convinced that some of the other barriers to adopting a new practice model could be as easily overcome. Their concerns centered on the fact that community pharmacy is a retail business and current business models may be at odds with the goals of the profession. Many CPPs felt that the current remuneration model was outdated since it is based on product sales rather than
professional services and is therefore a disincentive to pharmacists providing clinical services. This is especially true in light of the fact is that filling prescriptions in high volume is a very profitable enterprise under which pharmacists are very well paid. As more of the dispensing role is passed on to licensed or certified, but lower paid, technicians, filling prescriptions will be even more profitable. Therefore, as long as community pharmacy remains a retail business, the pharmacist remuneration model will only change when a business case can be made for having pharmacists provide specialized clinical services that are more profitable when compared to having them sell pharmaceutical products (K. Taylor & Harding, 2003).

The business situation is further complicated by the increased external corporate ownership of community pharmacy. While there was not complete agreement among the focus group participants on the question of whether this was a completely negative phenomenon, there was a consensus that smaller, independent pharmacies are disappearing in most urban, and some rural, settings and being replaced by large corporate pharmacies which are often part of a supermarket or mass-merchandise company. In the corporate structure the pharmacy is a department like any other and the pharmacists may report to a manager who knows little about pharmacy and has no interest in their profession or its goals. Some participants felt corporate pharmacy can put pharmacists in a conflict of interest since a corporation’s obligation is to its stockholders whereas the pharmacists’ is to their patients. There was a consensus among the CPPs that adopting a patient-focused practice model will be difficult to achieve unless it is shown to be more profitable than the current one.
The idea of a conflict between the business of community pharmacy and pharmacy the healthcare profession is not a new one and has been discussed in the literature for many years (Chalmers et al., 1995; Cooksey, Knapp, Walton, & Cultice, 2002; Denzin & Mettlin, 1968; Knowlton, 1991; Kronus, 1975; Resnik, Ranelli, & Resnik, 2000; Zellmer, 2005). Although community franchise and chain pharmacies have been around for many years, the large corporate pharmacy is a newer phenomenon which some find troubling. Harding and Taylor (2000) refer to it as the “McDonaldisation” of pharmacy and warn that the corporate structure could eventually lead to the elimination of the need for pharmacists in the dispensing process and the accompanying effects on the profession and the education of pharmacists (K. Taylor & Harding, 2003).

So while the focus group participants expressed the opinion that community pharmacy is beginning to recognize the need for moving to patient-focussed clinical services, many felt that there were substantial challenges impeding the profession’s move towards that goal. Most felt, however, that change must take place for community pharmacy to survive as a profession, and that to work the change must be initiated and driven by members of the profession. Some practitioners have started to introduce change into their own practices, but bringing about change on a level that would influence corporate pharmacy would require a “buy-in” by a large majority of community retail pharmacists. That would require a significant change in perspective since, as Zellmer (2005, p. 259) has pointed out:

Pharmacists are well rewarded under their current method of practice, and there is ample reason to doubt that they will muster the desire and determination to transform their role in health care. Moreover, pharmacists are pegged with a well-entrenched stereotype that
creates limited public expectations; it is easier to simply meet this low benchmark than create and fulfill a higher one.

Entry-level Education

The community pharmacist preceptors who participated in the focus groups were unanimous in the opinion that graduates of the current entry-level baccalaureate pharmacy programs have a level of knowledge and skills which is more than adequate to deal with the clinical challenges in community pharmacy now, and in the foreseeable future. Some even felt that new graduates may in fact be over skilled for practice under the current product-distribution model and that this was leading to frustration, and possibly cynicism, when new pharmacists discover that they will not be able to use their skills in practice. This is by no means meant to imply that any of the participants were suggesting that pharmacy curricula be “dumbed down” to produce pharmacists with only the skills needed to practice at the de facto standards level found in many community pharmacies. Rather, the CPPs were of the opinion that graduating new pharmacists with the skills, knowledge, and confidence needed to deliver clinical services will not on its own result in changes in the way community pharmacy is presently practiced. Until the basic structure of community pharmacy practice is changed to where it is possible for pharmacists to deliver clinical services, the pharmacist’s level of knowledge and skills in that area will remain a moot point. There is no need for advanced clinical skills in environments where “...so many pharmacists who are blessed with an outstanding professional education regress to technicians when they enter practice” (Zellmer, 2005, p. 261). As Harding and Taylor (2000) have pointed out, such skills are not needed in the “MacPharmacy”.
The mismatch between pharmacists' clinical skills and knowledge and the requirements of most community pharmacy practises is not a new one. Knowlton (1991) discussed the issue some fifteen years ago when he stated that community pharmacists used little of what they learned in school. Despite the gap, educators and regulators over the last three or four decades have introduced new practice models and standards into pharmacy curricula. The philosophy in place would seem to be that as students with new skills entered practice, they would use the skills and knowledge and thereby make the new practice model the new standard. After pharmacy education adopted the pharmaceutical care model (Hepler & Strand, 1989) and it was not fully adopted as a practice standard, especially in community settings, it was decided that existing educational programs did not provide graduates with a level of training that would give them the confidence to deliver pharmaceutical care (Commission to Implement Change in Pharmaceutical Education, 1993b). The solution adopted in the US (Commission to Implement Change in Pharmaceutical Education, 1993b; 1993c; 1996), and presently being considered in Canada, (Mansour et al., 2004) was to add another year to the entry-level pharmacy program and re-credential it as professional doctorate.

The CPPs in the focus groups did not share this philosophy. They worried that raising the level of clinical education without first addressing the structural barriers to providing clinical services in community settings would only increase the sense of frustration among new graduates and drive many into other areas of practice. The implication was that unless serious attention is paid to reducing structural barriers in the business-oriented, and increasingly corporate, environment of community pharmacy,
changes to entry-level programs will never on their own result in the introduction of new practice models.

The focus group members did have some concerns regarding the entry-level education of community pharmacists. Some felt that the program was designed primarily with hospital pharmacy in mind and did not pay sufficient heed to the needs of community practice. A point mentioned was that while community pharmacy operates as a business, and many pharmacists are either managers and/owners at some time in their careers, pharmacy curricula tend to offer little in the way of basic business or management courses. It was suggested that if pharmacists were better versed in business they might be able to put together a better business case for the introduction of more clinical cases. They also felt that some training in marketing would be valuable inpromoting new clinical services being offered.

Finally, a point which raised a good deal of discussion in the focus group sessions centred not so much on the program content as the criteria for acceptance into the program. They felt that some graduates lacked the communication skills and the attitude needed for the delivery of patient-focused services and a screening process, like an admissions interview, should be instituted to help weed out candidates who lack empathy. The question of how to select the “right” candidate for entry into pharmacy is one that most faculties regularly consider. When the US moved to an entry-level Pharm.D., many schools re-examined their entrance criteria in the hope of admitting candidates with an aptitude for delivering pharmaceutical care services (Chesnut & Phillips, 2000). Some, like the University of Toronto, have decided that interviews are not an effective tool
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(Duncan-Hewitt, 1996). Others have decided that they can be if combined with other tools, like a multiple choice test which measures verbal and quantitative abilities, and a written task which rates students on their academic skills (Jones, Krass, Holder, & Robinson, 2000).

The common feature of all these tests is that they are resource intensive to administer. Most also share the characteristic of being predictors of how well students do in their academic program rather than how they may do in practice. Latif (2000, 2004, 2005) has looked at the moral and ethical reasoning of pharmacy students, as well as some retail pharmacists, and suggests that interviews and/or questionnaires design to measure ethical and moral factors may have some predictive ability regarding clinical performance. Whether they could be cost effectively be developed and implemented for a faculty the size of that at the University of Manitoba is a question beyond the scope of this study.

**Implications for Future Research**

While the findings of this study are limited by its size and scope, they do point to a number of potentially interesting larger scale studies that might be considered. The first of these would necessarily be a study to determine if the main findings of this research are replicated in a larger, more broadly representative group of community pharmacists. Participation, in this case, would not be limited to preceptor pharmacists or any other practice subgroup, but would include practitioners from all types of community practice. The focus of such a study could be narrower than was the case of the one reported on here. I would suggest that it look at what the broader group considers to be the main
obstacles to the introduction of patient-focused clinical services, commonly referred to as pharmaceutical care, in retail community pharmacies. The goal would be to determine if this larger group felt that clinical services were not being introduced because they, their colleagues, and/or entry-level practitioners lacked the knowledge, skills, attitudes, and/or confidence needed to deliver these services, or if, as the small group in this study felt, the problem is with the basic infrastructure of retail pharmacy.

If the findings of a study of a broadly representative group of community pharmacists were in agreement with those of this small study, it would indicate a need for research into how patient-focused clinical services might be successfully integrated into community retail pharmacy’s infrastructure. The business structure and increasing corporate ownership are realities of community pharmacy in most of Canada and plans for introducing clinical services in that environment must consider those realities. Hence research in this area must consider the business and corporate factors and the need for any introduced services to ultimately contribute to the profitability of the organization.

Summary

This thesis has described a qualitative study which examined the perceptions of a select group of community pharmacists on the changes and challenges they observe in contemporary practice and on the knowledge, skills, and attitude needed by entry-level pharmacists to deal with those challenges now, and in the foreseeable future. Study participants were community pharmacists licensed to provide patient care in the province of Manitoba and who had been a preceptor for an undergraduate student and/or pharmacy
intern within the two years preceding the start of the study. A total of sixteen community preceptor pharmacists took part.

The study was grounded in focus group interviews, four of which were conducted between September and November 2005. Session transcripts and observer notes were analysed using inductive data analysis techniques for interpretation and to extract key themes related to participants’ views, opinions, and perceptions on changes and challenges in community practice and on what knowledge, skills, and attitude are needed by someone entering practice. The themes, along with supportive quotes, were presented in Chapter Four, and a discussion of their implications may be found earlier in this chapter.

Qualitative research cannot provide evidence on prevalence, prediction, cause and effect, or outcomes. Its strength lies in providing in-depth, contextualized accounts and offering explanations. Although this study was limited in size and scope, I feel that in this study qualitative procedures were effective in determining the nature of the challenges and needs for entry-level pharmacy practice that this group of community pharmacists perceived as being important.

The participants in this study felt that community pharmacy practice was inevitably evolving away from dispensing products towards providing patient-focused clinical services to optimize therapeutic outcomes. In their opinion, this change is being driven by technology which is reducing the pharmacists’ role in dispensing and by the public demanding more information on their medications and assistance in managing their drug therapies and disease conditions. The business nature of community pharmacy,
rather than shortcomings in education, was cited as the main challenge to the profession’s evolution towards a new practice model. The participants felt that as long as those making business decisions in community pharmacy think that there are greater profits to be found in dispensing drugs than in providing specialized clinical services, the evolution will be a slow one. Many also felt that the increasing corporate presence in community pharmacy will only exacerbate the problem.

Education was cited as a challenge to pharmacists providing clinical services but the focus group participants felt that the problems were found post-graduation. They felt that the current baccalaureate pharmacy is more than adequate in preparing entry-level practitioners for the challenges they will face in the first few years of practice. Many reported that new graduates were often frustrated by the fact that in community practice they were able to use only a portion of the knowledge and skills they gained in university.

Rather than radically changing or extending entry-level education programs, the participants of this study felt that emphasis should be placed on developing and making available appropriate continuing professional development programs for practising pharmacists. Their rationale was that while university programs based on the current educational outcome standards (AFPC Advisory Committee on Curricular Change, 1998) do a very good job of preparing students for entry-level practice, the rate at which new drug therapies and classes are introduced makes a good portion of their knowledge outdated and incomplete within a few years. An extended program, they suggest, would not address this problem.
The participants also felt that for community clinical pharmacy services to evolve there should be continuing professional development opportunities where pharmacists can upgrade their credentials in specific areas or sub-disciplines, such as diabetes or asthma management. While some of this study may be appropriate for entry-level, the participants felt it was more appropriate for post-university study after a pharmacist in practice has had an opportunity to determine their area of interest.

Although the focus group members did consider the current entry-level program to be an adequate preparation for entry-level community practice, they felt that the curriculum did not pay adequate attention to some areas of specific interest to retail pharmacy. In particular, they suggested that the curriculum should reflect the business reality of community pharmacy and offer course options in management and marketing of professional services.

Finally, the focus group members suggested that a better screening system is needed in the pharmacy admission process in order to select students who have the type of attitude needed for the compassionate delivery of clinical patient services. They felt some students were attracted to pharmacy by the promise of financial rewards and that they did not have the degree of empathy needed for dealing with patients. They suggested an admission interview as a means of dealing with the problem.

As was indicated earlier in this chapter, most of the points which arose from the focus group data have been previously discussed in the literature. The need for pharmacists to get out of the dispensary has been discussed for decades, as has been the inherent conflict between business and the practice of a profession in the retail
community setting. Likewise, admission committees of all professional faculties are always looking for better ways of selecting the right candidates. Where the views of the focus group participants differed from what is found in the literature is in the reasons for why community pharmacy has been slow to adopt the patient-focused clinical services practice model, commonly known as pharmaceutical care. The opinion commonly found in the literature is that pharmacists are not providing clinical services because they feel they do not have the skills and knowledge to do so with confidence (Commission to Implement Change in Pharmaceutical Education, 1993b; Hill, 1999). The opinion of the participants of this study was that community pharmacists, and especially those who graduated after the pharmaceutical care model was introduced into Canadian curricula, are not providing clinical services because the business structure of retail community pharmacy is an impediment to their doing so.

This was a qualitative study of a small, select group of community pharmacists and is therefore limited in its scope. While the observations presented here are not generalizable to the broader practice community, the implication of these findings is that further study of the obstacles to implementing patient-focused clinical services in retail community settings is warranted. If the primary barrier to the introduction of advanced services is not the knowledge, skills, and confidence of pharmacists, but is rather related to the basic infrastructure of community pharmacy in Canada, it would seem that raising the entry-level knowledge and skills of new pharmacists will not on its own solve the problem. It would seem prudent, therefore, to investigate this question on a broader scale before instituting major curricular changes in Canadian Faculties of Pharmacy.
REFERENCES


Brown, T. (2004, 12 November). What is Entry-Level PharmD? In T. Brown (Chair), *Managing the Change to Entry Level PharmD in Canada*. Meeting held at University of Toronto.


References


Commission to Implement Change in Pharmaceutical Education. (1993c). Papers from the Commission To Implement Change in Pharmaceutical Education: Entry-Level


Winnipeg: Manitoba Pharmaceutical Association.


Mailhot, C., Binette, M., Couture, S., Lamontagne, D., Laurier, C., Mallet, L., et al. (2004, 12 November). Relevance of Modifying the Baccalaureate in Pharmacy to an Entry-Level PharmD. In T. Brown (Chair), *Managing the Change to Entry Level PharmD in Canada*. Meeting held at University of Toronto, Canada.


APPENDICES
Appendices 152

*Appendix 1 Categories of Pharmacy Practice in Manitoba*

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-Category</th>
<th>Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educators</td>
<td>Faculty of Pharmacy</td>
<td>Professors and instructors involved in training pharmacists</td>
<td>Some academics have patient-care license. Generally, these are clinicians and individuals in the practice division of the faculty. Individuals with licenses represent only a minority of faculty members.</td>
</tr>
<tr>
<td></td>
<td>Public and private technical schools and colleges</td>
<td>Instructors involved in training pharmacy technicians</td>
<td>These are mainly people with patient-care licenses.</td>
</tr>
<tr>
<td>Community (Retail)</td>
<td>Community practice settings have different types of administrative structures. The level of autonomy a manager has on marketing and professional services is impacted by these structures. The definitions presented here for the different structures is one used by the industry (adapted from Jennings, 2005, p. 11-12).</td>
<td>In these settings all the pharmacists are required to hold a patient-care license as they are providing direct care to members of the public.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independent</td>
<td>An independent pharmacy is not affiliated with any corporately run banner, franchise or chain program. The name of the store is unique to that store, and the owner has complete control over ordering, marketing strategies, store image, etc. The owner may own more than one store; however, it is generally accepted that five or more stores under single ownership constitute a chain pharmacy (whether or not it is a member of the Canadian Association of</td>
<td>Complete autonomy on marketing and professional services</td>
</tr>
<tr>
<td>Category</td>
<td>Sub-Category</td>
<td>Description</td>
<td>Comments</td>
</tr>
<tr>
<td>----------</td>
<td>--------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>Banner</td>
<td>Independent pharmacies that are affiliated with a central office and pay fees for the right to use a recognized name (e.g. Price Watchers, Pharmasave) and to participate in centralized buying, marketing, professional programs, etc., are known as banner pharmacies. While banner stores usually assume a required “look and feel,” the stores themselves are independently owned and the owners retain a high level of autonomy as far as local marketing, professional services, etc. However, if the owner of a banner pharmacy owns five or more stores, these stores are considered to comprise a chain.</td>
<td>High level of autonomy on local and professional services.</td>
</tr>
<tr>
<td>Franchise</td>
<td>Franchise</td>
<td>Franchise arrangements vary widely for retail pharmacies in Canada. The two largest franchises are Shoppers Drug Mart and Jean Coutu. While the franchisees do not necessarily own the physical store or the fixtures, and master leases are usually held by the franchisor, they enjoy some autonomy in local marketing, buying and in-store services, as well as access to programs</td>
<td>Some autonomy on the local marketing and professional services</td>
</tr>
<tr>
<td>Category</td>
<td>Sub-Category</td>
<td>Description</td>
<td>Comments</td>
</tr>
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<td>----------</td>
<td>--------------</td>
<td>-------------</td>
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</tr>
<tr>
<td></td>
<td>Chain</td>
<td>Chain pharmacies, such as Pharma Plus and Lawtons, employ pharmacy managers who are salaried employees of head office. Head office directs all marketing, merchandising, buying, professional programs, etc. An individual or corporation must own five or more stores to be considered a chain. A chain is not necessarily a member of the Canadian Association of Chain Drug Stores.</td>
<td>Central office directs all marketing and professional services.</td>
</tr>
<tr>
<td></td>
<td>Supermarket</td>
<td>Supermarket pharmacies are departments within a supermarket such as Canada Safeway and Loblaws. They employ salaried pharmacy managers (except in Quebec, where regulations require pharmacists to own the dispensary; this is usually achieved with a franchise agreement), who follow the direction of head office for all marketing, merchandising, buying, professional activities, etc.</td>
<td>Same as chain</td>
</tr>
<tr>
<td>Category</td>
<td>Sub-Category</td>
<td>Description</td>
<td>Comments</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mass Merchandiser/ Department Store</td>
<td>Mass/Dept. pharmacies are departments within a large retail outlet such as Wal-Mart. Like supermarket pharmacies, they employ salaried pharmacy managers (except in Quebec, see Supermarkets), who follow the direction of head office for all marketing, merchandising, buying, professional activities, etc.</td>
<td>Same as the chain and supermarket</td>
<td></td>
</tr>
<tr>
<td>Government/ Regulatory</td>
<td>Manitoba Government</td>
<td>Manitoba Health, Pharmacare, etc</td>
<td>Administrative, such as formulary no direct patient care services.</td>
</tr>
<tr>
<td></td>
<td>Manitoba Pharmaceutical Association</td>
<td>Regulatory body</td>
<td>Administrative functions</td>
</tr>
<tr>
<td>Institutional</td>
<td>Long-term Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hospital Dispensing</td>
<td>Individuals in these settings are directly involved with patient care and hence are required to hold a patient-care license. These practitioners have opportunities to work directly with other healthcare providers, such as physicians, nurses, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hospital Consulting</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Educating Manitoba Pharmacists

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1878</td>
<td>Manitoba Pharmaceutical Act Required prospective pharmacists to attend courses</td>
</tr>
<tr>
<td>1888</td>
<td>MPhA hires lecturer 1st Winnipeg-educated pharmacist</td>
</tr>
<tr>
<td>1889-1894</td>
<td>Pharmacy lectures given by Manitoba Medical College</td>
</tr>
<tr>
<td>1894</td>
<td>MPhA assumed responsibility for instruction in pharmacy</td>
</tr>
<tr>
<td>1899</td>
<td>Manitoba College of Pharmacy erected</td>
</tr>
<tr>
<td>1902</td>
<td>MPhA approaches U of Manitoba re affiliation leading to Bachelors of Pharmacy U MB recommends affiliation and establishment of course leading to B Pharm</td>
</tr>
<tr>
<td>1905</td>
<td>U MB established program of studies for B Pharm</td>
</tr>
<tr>
<td>1908</td>
<td>1st B Pharm granted</td>
</tr>
<tr>
<td>1914</td>
<td>U MB assumes responsibility for pharmacy education in Manitoba</td>
</tr>
<tr>
<td>1915</td>
<td>Dept of Pharmacy established</td>
</tr>
<tr>
<td>1916</td>
<td>1st University Diploma Course graduates</td>
</tr>
<tr>
<td>1919</td>
<td>U MB assumes ownership of College of Pharmacy</td>
</tr>
<tr>
<td>1924</td>
<td>1st University B Pharm granted</td>
</tr>
<tr>
<td>1939</td>
<td>2 year Diploma program withdrawn</td>
</tr>
<tr>
<td>1940</td>
<td>BSc Pharm introduced 2 year apprentice + 3 year academic</td>
</tr>
</tbody>
</table>

*Adapted from (Steele, 1999)*
### Appendix 3 Comparison of Canadian Pharmacy Degrees

<table>
<thead>
<tr>
<th>Degree</th>
<th>Educational Requirements</th>
<th>Outcomes</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.Sc. Pharm.</td>
<td>- 1+4 years</td>
<td>- Requires an additional period of externship/internship before a practice license is granted. The number of weeks varies from province to province. For example, Manitoba has a requirement of a 9 week internship while Quebec requires 24 weeks.</td>
<td>all 9 Canadian faculties of pharmacy</td>
</tr>
<tr>
<td></td>
<td>- 16 weeks experiential</td>
<td>- Graduates are expected to be able to practice pharmaceutical care.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entry-level</td>
<td>- 2+4 years in Quebec (1+5 if introduced elsewhere)</td>
<td>- Professional doctorate</td>
<td>offered at Université de Montréal as of the 2006-2007 academic year</td>
</tr>
<tr>
<td>Pharm.D.</td>
<td>- 40 weeks experiential</td>
<td>- Graduates able to obtain a practice license without any additional externship/internship.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- classroom delivered content knowledge increased by about 12-14 weeks over BSc</td>
<td>- Proponents claim that graduates will have more confidence to practice pharmaceutical care.</td>
<td></td>
</tr>
<tr>
<td>Degree</td>
<td>Educational Requirements</td>
<td>Outcomes</td>
<td>Availability</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Post-baccalaureate Pharm.D.</td>
<td>• 2 year full-time post BSc&lt;br&gt;• 1 year classroom + 1 year experiential</td>
<td>• Professional doctorate&lt;br&gt;• Advanced degree for the development of pharmacotherapy specialists.&lt;br&gt;• These individuals develop therapeutic knowledge and skills in a highly specialized area, predominantly with an acute care emphasis (critical care, oncology, infectious diseases, etc.)</td>
<td>• offered at the Universities of Toronto and British Columbia since early 1990s&lt;br&gt;• Toronto also introduced a part-time program starting in fall of 2005</td>
</tr>
<tr>
<td>Non-traditional Pharm.D.</td>
<td>• provides practising pharmacists with a baccalaureate degree an opportunity to upgrade to an entry-level Pharm.D.&lt;br&gt;• time frame varies</td>
<td>• Professional doctorate&lt;br&gt;• Entry-level Pharm.D. credentials</td>
<td>• Université de Montréal plans to offer a program starting in 2010</td>
</tr>
</tbody>
</table>

At the end of each of the professional doctorate programs, candidates will be awarded the same credential (Pharm.D.) and most people will not be able to distinguish one from the other without first seeing the individuals’ *curriculum vitae*. This is an unusual credentialing system in that it will not be possible to easily distinguish an entry-level from a post-graduate program.
Appendix 4 Education and Nursing Research Ethics Board Submission

HES Fax No. 261-0325 Protocol # ________________ (Assigned by HES Admin.)

Human Subject Research
Ethics Protocol Submission Form (Ft. Garry Campus)
Psychology/Sociology REB □ Education/Nursing REB □ Joint-Faculty REB □

Check the appropriate REB for the Faculty or Department of the Principal Researcher. This form, attached research protocol, and all supporting documents, must be submitted in quadruplicate (original plus 3 copies), to the Office of Research Services, Human Ethics Secretariat, 244 Engineering Building, 474-7122.

If the research involves biomedical intervention, check the box below to facilitate referral to the BREB:

Requires Referral to Biomedical REB □

Project Information:
Principal Researcher(s): Rehana Durocher

Status of Principal Researcher(s): please check
Faculty □ Post-Doc □ Student: Graduate ☑ Undergraduate □ Other □ Specify: __________

Campus address: 407F Pharmacy Phone: 4746989 Fax: 4747617

Email address: Rehana_Durocher@umanitoba.ca Quickest Means of contact: Email

Project Title: Perspectives of Manitoba Pharmacists on the Competencies of Entry-Level Practice

Start date ________________ Planned period of research (if less than one year): ________________

Type of research (Please check):
Facility Research:
Self-funded □ Sponsored □ (Agency) __________

Administrative Research:
Central □ Thesis ☑ Class Project □

Student Research:
Unit-based □ Course Number: __________

Signature of Principal Researcher: ____________________________

This project is approved by department/thesis committee. The advisor has reviewed and approved the protocol.

Name of Thesis Advisor: Zana Lutfiyya, Ph.D. Signature ____________________________
(Required if thesis research)

Name of Course Instructor: ____________________________ Signature ____________________________
(Required if class project)

Persons signing assure responsibility that all procedures performed under the protocol will be conducted by individuals responsibly entitled to do so, and that any deviation from the protocol will be submitted to the REB for its approval prior to implementation. Signature of the thesis advisor/course instructor indicates that student researchers have been instructed on the principles of ethics policy, on the importance of adherence to the ethical conduct of the research according to the submitted protocol (and of the necessity to report any deviations from the protocol to their advisor/instructor).
### Ethics Protocol Submission Form (Basic Questions about the Project)

The questions on this form are of a general nature, designed to collect pertinent information about potential problems of an ethical nature that could arise with the proposed research project. In addition to answering the questions below, the researcher is expected to append pages (and any other necessary documents) to a submission detailing the required information about the research protocol (see page 4).

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Will the subjects in your study be <strong>UNAWARE</strong> that they are subjects?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Will information about the subjects be obtained from sources other than the subjects themselves?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3. Are you and/or members of your research team in a position of power vis-a-vis the subjects? If yes, clarify the position of power and how it will be addressed.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4. Is any inducement or coercion used to obtain the subject's participation?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>5. Do subjects identify themselves by name directly, or by other means that allows you or anyone else to identify data with specific subjects? If yes, indicate how confidentiality will be maintained. What precautions are to be undertaken in storing data and in its eventual destruction/disposition.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>6. If subjects are identifiable by name, do you intend to recruit them for future studies? If yes, indicate why this is necessary and how you plan to recruit these subjects for future studies.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>7. Could dissemination of findings compromise confidentiality?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>8. Does the study involve physical or emotional stress, or the subject's expectation thereof, such as might result from conditions in the study design?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>9. Is there any threat to the personal safety of subjects?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
10. Does the study involve subjects who are not legally or practically able to give their valid consent to participate (e.g., children, or persons with mental health problems and/or cognitive impairment)?
   If yes, indicate how informed consent will be obtained from subjects and those authorized to speak for subjects
   ___ Yes ___ X No

11. Is deception involved (i.e., will subjects be intentionally misled about the purpose of the study, their own performance, or other features of the study)?
   ___ Yes ___ X No

12. Is there a possibility that abuse of children or persons in care might be discovered in the course of the study?
   If yes, current laws require that certain offenses against children and persons in care be reported to legal authorities.
   Indicate the provisions that have been made for complying with the law.
   ___ Yes ___ X No

13. Does the study include the use of personal health information?
    The Manitoba Personal Health Information Act (PHIA) outlines responsibilities of researchers to ensure safeguards that will protect personal health information. If yes, indicate provisions that will be made to comply with this Act (see document for guidance - http://www.gov.mb.ca/health/phia/index.html).
    ___ Yes ___ X No

Provide additional details pertaining to any of the questions above for which you responded "yes."
Attach additional pages, if necessary.

In my judgment this project involves: ☑ minimal risk
     □ more than minimal risk

(Policy #1406 defines “minimal risk” as follows: “... that the risks of harm anticipated in the proposed research are not greater nor more likely, considering probability and magnitude, than those ordinarily encountered in life, including those encountered during the performance of routine physical or psychological examinations or tests.”)

   ___ / ___ /___
   dd mm yr
   _____________________________
   Signature of Principal Researcher
Required Information about the Research Protocol

1. Summary of Project

Professional education legitimates itself primarily through practice. It may be argued that faculties of pharmacy, education, medicine, nursing, dentistry, and law exist primarily to graduate new pharmacists, teachers, physicians, nurses, dentists and lawyers. While professional schools are increasingly involved in traditional scholarly activities and research, some may argue that their raison d'être remains the “production” of new professionals to fulfill the mandate the profession avowed with the public in order to gain exclusivity to a specialized body of knowledge. That being the case, the question arises as to who is ultimately responsible for deciding what future professionals are taught and what influence other stakeholders have in making that decision. The success of change in a profession, like any organizational change, occurs only through the dedicated efforts of individual members of the profession. Hence, what role(s) should individual practitioners play in determining curricular change and how do they affect adoption of new models and standards?

In light of ongoing discussions taking place between pharmacy educators and various external community stakeholders looking at the future of pharmacy education and practice, I intend to explore the perspectives of some of the individuals who might be affected by changes in pharmacy education standards. These changes centre around the provision of medication management in addition to drug distribution or dispensing. Changes in pharmacy education and healthcare policies would have a direct impact on the practices of community pharmacists. These individuals make up the largest group of pharmacy practitioners in Manitoba (67%), and in Canada. To this point they have had limited input to the discussions.

This research is being conducted as part of my Masters of Education (Post Secondary Studies) thesis. My goal is to explore the views, opinions, ideas, and perceptions on changes and challenges, which Manitoba community (retail) pharmacists (staff and managers) face now, and in the foreseeable future in the delivery of pharmaceutical care. I will also seek their opinions on the necessary knowledge, skills and attitudes needed for entry-level practice to respond to the identified changes and challenges.

In this study, I will use in-depth, qualitative interviews and data will be collected between August 2005 and December 2005. Four focus groups interviews of approximately two hours each will be conducted with groups of eight to ten participants in each group, using an interview guide (see attached) developed for practising pharmacists. The participants will all be preceptor pharmacists currently practising in community (retail) settings in Winnipeg or within an hour drive of the city. Preceptors are pharmacists who have mentored and supervised students and/or recent graduates on experiential clerkships and internships. Individuals from existing, publicly-available lists of preceptor pharmacists will be sent a letter of invitation to request their participation in the study. The invitation will include information about the study and contact information of the researcher. I will contact all interested participants after the contact date deadline to explain the study and the related logistics. Recruitment of the study participants will only commence upon approval of the Education/Nursing Research Ethics Board of the University of Manitoba.

The interviews will be audio recorded and transcribed. Transcriptions will be enriched with written notes related to non-verbal features of the interview atmosphere, including setting.

body language, and tone. Data will be analysed for interpretations and themes related to participants’ views, opinions and ideas on changes and challenges, and entry-level educational outcomes. The transcripts, without any participant-identifying information, will be shared with my thesis supervisor. Steps will be taken to protect the identity of the participants in the field notes and other materials by the use of pseudonyms. A summary of the general themes of the collated interview data will be provided to participants in either hard copy or electronic form (as per participants’ preference). All the data collected in the course of the project will be securely held at my home. At the end of the project, all the audio recordings will be destroyed. I anticipate completing this project by the end of the summer of 2006. Focus group transcripts and notes will be kept indefinitely in a locked, secure location.

5. Deception:
No deception will be used in this study.

6. Feedback/Debriefing:
A summary of the general themes of the collated interview data will be provided to the participants in either hard copy or electronic form (as per participants’ preference).

7. Risk and benefits:
Given the nature of the study, I anticipate minimal risk to potential participants. I recognized that the pharmacy community is Manitoba relatively small, and some pharmacists may feel that participation in a study such as this may influence their colleagues’ opinions of them. Hence steps will be taken to maintain the confidentiality of the participants outside of the focus groups (please refer to point 8 below). Participants also have the right to withdraw any of their comments, or withdraw completely from the study, at anytime.

8. Anonymity and confidentiality:
Disclosures or data participants provide will be held in complete confidence. To preserve confidentiality, pseudonyms will be used in all notes, transcripts, and reports associated with this study. In any final report, all quotations, citations, or paraphrases will be made generic with respect to unique personal identifiers, including but not limited to gender, age, ethnicity, and pharmacy practice. All data collected in the course of the study will be stored securely at my home. At the completion of the project, all audio recordings will be destroyed. I anticipate completing this project by the end of summer 2006.

9. Compensation:
There will be no financial compensation for participation, although I will likely provide light snack and refreshments during the focus group.
The Manitoba Pharmaceutical Association (MPhA) has accredit these focus group sessions for two continuing education points (MPhA File no: 25108M). It is standard practice for licensed pharmacists to earn continuing educational points for participation in professional development activities and granting points for these sessions is not considered exceptional practice. Accreditation of the sessions was approved by MPhA after I submitted a standard form containing a brief description of my study.
ENREB Approval Letter

APPROVAL CERTIFICATE

02 August 2005

TO: Rehana Durocher  
Principal Investigator

FROM: Stan Straw, Chair  
Education/Nursing Research Ethics Board (ENREB)

Re: Protocol #E2005:064  
"Perspectives of Manitoba Pharmacists on the Competencies of Entry-Level Practice"

Please be advised that your above-referenced protocol has received human ethics approval by the Education/Nursing Research Ethics Board, which is organized and operates according to the Tri-Council Policy Statement. This approval is valid for one year only.

Any significant changes of the protocol and/or informed consent form should be reported to the Human Ethics Secretariat in advance of implementation of such changes.

Please note that, if you have received multi-year funding for this research, responsibility lies with you to apply for and obtain Renewal Approval at the expiry of the initial one-year approval; otherwise the account will be locked.
Appendix 5 Recruiting Letter

3 August 2005

«MFName» «MSName»
«Pharmacy_Name»
«Street_Address»
«City» «Province» «Postal_Code»

Dear «MFName»,

I would like to invite you to participate in a study I am conducting. As part of the requirements for my Masters of Education (Post Secondary Studies) thesis project, I am investigating the perspectives of Manitoba community pharmacists on competencies to entry-level practice.

Please allow me to introduce myself. I graduated from the Faculty of Pharmacy at the University of Manitoba in 1994 and have practised both in hospital and retail settings in Manitoba. Since 1998 I have been employed by the Faculty of Pharmacy where I served as the experiential programs coordinator from 1998-2004, and where I am currently a clinical instructor in the area of non-prescription therapy. I am also staff pharmacist at the Riverview Health Centre Pharmacy. I have a long-standing interest in education, which has intensified in pharmacy. This led me to begin a part-time graduate studies program in postsecondary education.

You are being invited to take part in this study because you, and/or pharmacists in the pharmacy you manage, have served as a preceptor for students at the Faculty of Pharmacy and/or recent graduates doing their pre-licensure internship. Your experience as a preceptor/practitioner and a manager of preceptors and practitioners will contribute to the study by providing information on the educational needs for entry-level pharmacists and some of the challenges and changes you perceive in the delivery of pharmaceutical care in your practice. To the best of my knowledge no information of this type is currently available regarding Manitoba community pharmacists. I would like you to help me fill that knowledge gap.

I am enclosing a “Project Information Sheet” describing my study. Please take a few minutes to review the document and please feel free to contact me if you have questions. Since I hope to gather my study data by the end of 2005, I would like to start setting up a schedule for the study sessions soon. If enough of you are able to participate, I would like to hold the first session in late August or early September. Other sessions will likely run in October and November. You can help me achieve this goal by getting back to me with your response at your earliest convenience.

Please call me at 474.6989 (weekdays) or Rehana_Durocher@UManitoba.ca (evenings). Or send me a note at Rehana_Durocher@UManitoba.ca.

I would like to thank you in advance for considering this invitation.

Sincerely,

Rehana Durocher
WHAT DOES IT TAKE TO BE A COMMUNITY PHARMACIST?

Community pharmacists who have served as preceptor for pharmacy undergraduate students and/or interns are needed for a study to identify knowledge, skills and attitudes needed for entry-level pharmacy practice. Your views, opinions, ideas, and perceptions on the changes and challenges which Manitoba community pharmacists (staff and managers) face now, and in the foreseeable future, in the delivery of pharmaceutical care are being sought. You and a small group of your peers will take part in focus group sessions where these important issues will be discussed. If you would like to add your voice to the discussion, contact Rehana Durocher at 474-6989 or or via email at Rehana_Durocher@umanitoba.ca.

This study is being conducted as part of a thesis project in the Masters of Education program at the University of Manitoba. It is not sponsored by the University of Manitoba or any other agency. Participants are assured of confidentiality in all stages of the project, including any publication of the results. The researcher is a licensed practising pharmacist and these sessions are accredited by the Manitoba Pharmaceutical Association.
Appendix 6 Project Information Sheet

Project Title: Perspectives Of Manitoba Pharmacists On The Competencies To Entry-Level Practice.

Researcher(s): Rehana Durocher, B.Sc. (Hons Biochemistry), B.Sc. (Pharmacy), M.Ed. student

Sponsor: None. This research is being conducted as part of my Masters thesis project in Education (Postsecondary studies)

What is this study about?
The goal of this study is to explore the views, opinions, ideas and perceptions of Manitoba community pharmacists on:

- changes and challenges they face now and in the foreseeable future in the delivery of Pharmaceutical Care.
- the necessary knowledge, skills, and attitudes entry-level pharmacists should have to respond to the changes and challenges
- how entry-level pharmacists should be educated to respond to the changes and challenges identified above

Participant’s Role
Should you agree to participate, you will take part in a focus group discussion of approximately two-hour duration. Focus group is a form of qualitative research, which is described as group interview carefully planned to encourage participants to share their ideas, perspectives about a particular issue (entry-level education in pharmacy) in a non-threatening environment. The discussion is usually dynamic, relaxed and often enjoyable to the participants. A focus group is conducted with a maximum of ten people at once. The purpose is not to reach a common view, make recommendation or decisions, but to learn about all the possible views.

My role in the interview will be to provide an atmosphere in which the participant feels comfortable disclosing their feelings, perceptions and opinions relative to entry-level education in pharmacy. I will be recording the audio portion of the interview in order to produce a transcript of the conversations. I will have two assistants present as note takers, assistant moderator and to help with other technical aspects of the session.

The interview will be scheduled to take place between August 2005 to December 2005 at a time and location suitable to the group.

Will the information be kept confidential?
Collated information gathered in this research study may be published or presented in public forums; your name, however, will not be used or revealed.

Are there any risks to taking part in this study?
Given the nature of the study, I anticipate minimal potential of risk to the participants. Participants have the right to withdraw any of their comments or withdraw completely from the study at anytime.

Are there any benefits in taking part in this study?
By participating in this study you will be providing information to the researcher about the changes and challenges community pharmacists perceive in the delivery of pharmaceutical care. You will also provide information on the educational needs of entry-level pharmacists.

**Will participation cost anything?**

No, other than the time you will invest in participating in the focus group (2 hrs), there will be no out-of-pocket cost to you.

**Is there any compensation for participating?**

There will be no financial compensation for participation, although I will likely provide a light snack during the focus group sessions. The Manitoba Pharmaceutical Association has accredited this session for 2 CEUs.

**Has this project receive ethics approval?**

The Education/Nursing Research Ethics Board (ENREB) has approved this project, and any complaints regarding procedures may be reported to the Human Ethics Secretariat at 474-7122.

**Who is supervising this study?**

*My thesis supervisor is:*

Zana Lutfiyya, Ph.D.  
Tel 474-9009  
Email: lutfiyy@ms.umanitoba.ca

*Other committee members are:*

David Collins, Ph.D.  
Tel 474-8794  
Email: dcoll@ms.umanitoba.ca

Dieter Schönwetter, Ph.D.  
Tel 480-1302  
Email: schonwet@ms.umanitoba.ca

**What should you do if you are interested?**

If you are interested in participating in this research by attending a focus group session, please contact me at Rehana_Durocher@umanitoba.ca, or at 474-6989 (work), at your earliest convenience. I am looking for forty participants for the study. I will contact all interested participants to arrange a suitable time and location for the focus group sessions. I will also provide you with a written consent form, and information sheet, which you should bring to the focus group session.

Sincerely,

Rehana Durocher
Appendix 7 Focus Group Session Agenda

What does it take to be a community pharmacist?
Rehana’s Focus Group Session #1

Where: Room 300 A & B (2nd Floor), Faculty of Pharmacy, U of Manitoba Fort Garry Campus

When: 6:30-9:00 PM, Thursday, September 1, 2005

Agenda:

<table>
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<tr>
<th>Time</th>
<th>Activity</th>
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<tr>
<td>6:30-7:00</td>
<td>Pizza, dessert, coffee/tea</td>
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<tr>
<td>7:00-9:00</td>
<td>Round-table discussion on the knowledge, skills and attitudes needed for entry-level pharmacy practice.</td>
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CEUs: 2

How to get there: If you are coming south on Pembina Highway, turn left on to University Crescent, drive until the road forks, take a left on to Dysart Road and proceed to parking lot A, P or K. If you are coming from the south and travelling north on Pembina Highway, turn right on Chancellor Matheson, turn left on to University Crescent, drive one block, take a right on to Dysart Road and proceed to a parking lot.

Parking: Parking lots A, P and K are the closest to the Pharmacy Building (#24 on map). Parking in those lots is free after 4:30 PM, except for those spots marked 24 hour reserved or those for handicap access.

Delayed or Lost: Should you be delayed or you are not familiar with the campus and can't find your way to Room 300 Pharmacy (or if you find the doors are locked), please call my cell at
Appendix 8 Informed Consent Form

Request for Informed Consent

Project Title: Perspectives of Manitoba Pharmacists on the competencies to entry-level practice
Researcher(s): Rehana Durocher, B.Sc. (Hons Biochemistry), B.Sc. (Pharmacy), M.Ed.student
Sponsor: None. This research is being conducted as part of my Masters thesis project in Education(Postsecondary studies)

Thank you for considering participation in this research study. This letter is provided to you to outline the purpose and nature of the study, to formally request your participation in the study, and to obtain your written informed consent as a participant.

This consent form, a copy of which will be left with you for your records and reference. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

Background Information
This research is being conducted as part of Masters of Education (Post Secondary Studies) thesis project. I graduated from the Faculty of Pharmacy at the University of Manitoba in 1994 and have practised both in hospital and retail settings in Manitoba. Since 1998 I have been employed by the Faculty of Pharmacy where I served as the experiential programs coordinator from 1998-2004, and where I am currently a clinical instructor in the area of non-prescription therapy. I am also staff pharmacist at the Riverview Health Centre Pharmacy. I have a long-standing interest in education, which has intensified in pharmacy. This led me to begin a part-time graduate studies program in postsecondary education. This thesis project is the final phase of my M.Ed work. My goal is to continue to find application of my graduate work in the undergraduate and post-graduate education of pharmacists.

Purpose of the Study
The goal of this study is to explore the views, opinions, ideas and perceptions of Manitoba community pharmacists on:

➢ changes and challenges they face now and in the foreseeable future in the delivery of Pharmaceutical Care.
➢ the necessary knowledge, skills, and attitudes entry-level pharmacists should have to respond to the changes and challenges
➢ how entry-level pharmacists should be educated to respond to the changes and challenges identified above

Participant’s Role
Should you agree to participate, you and I will engage in a focus group interview of approximately two hours. The interview will be scheduled to take place between August, 2005 to December, 2005 at a time and location suitable to the group. The interview strategy will follow qualitative interviewing norms, as opposed to a structured question and answer session. The format will be conversational and relaxed and I will make reference to a prepared interview guide with open-ended questions to guide our conversation. My role in the interview will be to provide an atmosphere in which you feel comfortable disclosing your feelings, perceptions and opinions relative to the learning portfolio as a continuing development tool.

Confidentiality
The researcher, focus group assistants, nor the members of the focus group will reveal the identity of other focus group members. I will audio record the interview, and the recording will be used exclusively by a confidential secretary and myself to make a transcript. The transcript, without any information, which might identify you or any of the study participants, will be shared with my advisor and other members of my thesis committee. The transcript will also include notes about non-verbal features of the situation (such
as the location, atmosphere, tone, body language) taken from written notes of the interview session. A summary of the general themes of the collated interview data will be provided to participants in either hard copy or electronic form (as per your preference).

Any disclosures or data you provide will be held in complete confidence. To preserve confidentiality names of participants will be known only to me, pseudonyms will be used in all notes, transcripts, and reports associated with this study. In any final report, all quotations, citations, or paraphrases will be made generic with respect to unique personal features or identifiers, including but not limited to your gender, age, ethnicity, and address of pharmacy. All data collected in the course of the study will be securely held at my home. At the end of the project, all audio recordings will be destroyed. I anticipate completing this project at the end of summer 2006.

I should also let you know that no compensation is being offered for participation.

Potential Risks to Participants
Given the nature of the study, I anticipate minimal potential of risk to the participants. Participants have the right to withdraw any of their comments or withdraw completely from the study at anytime.

Compensation
There will be no financial compensation for participation, although I will likely provide a light snack during the focus group sessions. This session has been accredited by The Manitoba Pharmaceutical Association for 2 CEUs (MPH File no: 25108M).

Informed Consent
Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. Before providing written consent, however, you should be aware that you have the right to withdraw any of your comments or withdraw completely from this project at any time and/or refrain from answering any questions you prefer to omit, without prejudice or consequence. In no way does this waive your legal rights nor release the researchers or involved institutions from their legal and professional responsibilities. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

Contact Information
I can be contacted as follows:

Rehana Durocher
474-6989 (office)
Email: Rehana_Durocher@umanitoba.ca

My thesis advisor can be contacted as follows:
Zana Lutfiyya, Ph.D.
227B Education Building
University of Manitoba
Winnipeg MB R3T 2N2
Tel 474-9009
Email: lutfiyy@ms.umanitoba.ca
Other members of the thesis committee are:

David Collins, Ph.D.
202 Pharmacy Building
University of Manitoba
Winnipeg MB R3T 2N2
Tel 474-8794
Email: dcoll@ms.umanitoba.ca

Dieter Schönwetter, Ph.D.
D009 Dental Bldg
University of Manitoba
Winnipeg MB R3E 0W3
Tel 480-1302
Email: schonwet@umanitoba.ca

Ethics Approval

This research has been approved by the Education/Nursing Research Ethics Board of the University of Manitoba (file #E2005-064). If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Secretariat at 474-7122 or e-mail Margaret.Bowman@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and reference.

Sincerely,

Rehana Durocher

Please sign below to indicate your informed written consent to participate in this study, and to indicate that you agree to respect the confidentiality of other members of the discussion group by not disclosing their identities or their contributions to the discussions during the session.

Participant’s Signature ___________________________ Date ____________

Researcher’s Signature ___________________________ Date ____________
**Follow-up**

Please indicate how you would like to receive a summary of the research carried out in this project.

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<td>I would like to discuss the results of the study with the researcher upon completion.</td>
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<td>I am not interested in receiving follow-up information</td>
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**Contact information (required only if you would like to receive a summary of the research)**

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Appendices

Appendix 9 Focus Group Interview Schedule

Introduction
Thank you all for taking the time to participate in this group discussion. I will be facilitating the discussion session and assisting me today is Marian Kremers. Marian will be making notes and also be asking some questions.

I’ve asked you here because I am interested in exploring your views, opinions, ideas and perception on the changes and challenges you face in practising pharmacy.

➢ I would like to know what challenges and changes you are facing now and how you think it might influence you in the foreseeable future.
➢ I would also like your thoughts on what knowledge, skills, and attitudes you think are necessary to respond to the changes and challenge you will have identified, and how new pharmacists entering practice should be prepare for them (for example, through the educational program, socialization with the professional activities and/or mentorship).

You have been invited to take part in this study because you have served as a preceptor within the last two years for students at the Faculty of Pharmacy or new graduates’ internships. I feel that your experience as a preceptor and practitioner will contribute to this study by providing information on some of the challenges and changes you perceive in the delivery of pharmaceutical care in your practice and on the educational needs for entry-level pharmacists.

I am interested in your opinions and perceptions, so there are no right or wrong answers, just differing points of view. Please feel free to share your point of view even if it differs from what others have said. You maybe assured of complete confidentiality.

Before we begin, there are some basic ground rules for the sessions:
➢ Only one person should speak at a time
➢ I am audio-recording the session because we don’t want to miss any of your comments, so please speak up.
➢ We will be on first name basis… however, in our analysis of this session there will not be any names attached to comments.

Please keep in mind that we are just as interested in negative comments as positive ones (and at times the negative comments are the most helpful). Does anyone have any questions about the procedures?

Let’s begin. We have placed name cards on the table in front of you to help us remember each other’s names. Let’s start by finding out more about each other by going around the table, one at a time, and tell us:
1. Your first name
2. Where do you practice
3. How long have you been in community practice
4. When was the last time that you precepted an undergraduate or intern.
1. Describe for us what you think are some of the changes/challenges the pharmacy profession is facing today. Perhaps speculate on what changes and challenges you think the profession will be facing in the foreseeable future?

A definition of Pharmaceutical care given to the participants.

2. How do you see the delivery of pharmaceutical care “playing out” in your practice site?
   - Is the demand for PC changing? Has it decreased or increased?
   - How about the future? Do you expect that there will be an increase or decrease in the demand for PC?

Given the changes and challenges that you have identified:

3. What are some of the changes you think the pharmacy profession should make to address the current challenges?
   - What knowledge, skills and attitudes do practicing pharmacists have to address the challenges you have identified?
   - What knowledge, skills and attitudes do new pharmacists entering practice need?
   - Which of these would you suggest are the most important for an entry to practice pharmacist to master?

4. In your opinion, do new graduates have the knowledge, attitude, and skills needed to address the challenges of contemporary community pharmacy practice?

If the answer is NO: Well most of you think that new graduates don’t have the knowledge, attitude and skills to address the challenges. How then do you think the current University program should be modified to equip students with what they need?

Probing Questions
   - What changes would you suggest?
   - Should anything be added, or removed?
   - Is there a need to change the structured practical training program?
     - Should be made shorter, or longer - such as longer internship?
     - Should experiential learning start early in the program?
     - Would it be better to leave all experiential learning to the end of the program?
   - If things are added to the program that would make it longer than the current 5 (1+4) years, should students still be granted a BSc Pharm, or should it be a new degree like a Masters or entry-level PharmD?
If the answer is Yes: Well most of you think new graduates are reasonably well prepared. Do you have any recommendation on how the University’s pharmacy program might be improved?

Wrapping Up
In the time we have remaining, are there any specific points concerning the topics we have been discussing that you might like to add? Or are there any general comments you would like to make concerning pharmacy education as it exists in Manitoba at present, or as you would like to see it exist in the future?

Thank you for taking the time to discuss issues concerning the challenges that pharmacy faces including the role that education plays. I greatly appreciate you sharing your perspectives with me.

Just a reminder, none of what you have said will be identified by your name or by other information that could identify you. Thank you again for your willingness to participate.

Pharmaceutical care involves the process through which a pharmacist cooperates with a patient and other professionals in designing, implementing, and monitoring therapeutic outcomes for the patient. This in turn involves three major functions:

- Identifying potential and actual drug-related problems
- Resolving actual drug-related problems, and,
- Preventing potential drug-related problems

This is more than dispensing and patient counselling – this definition involves medication management.