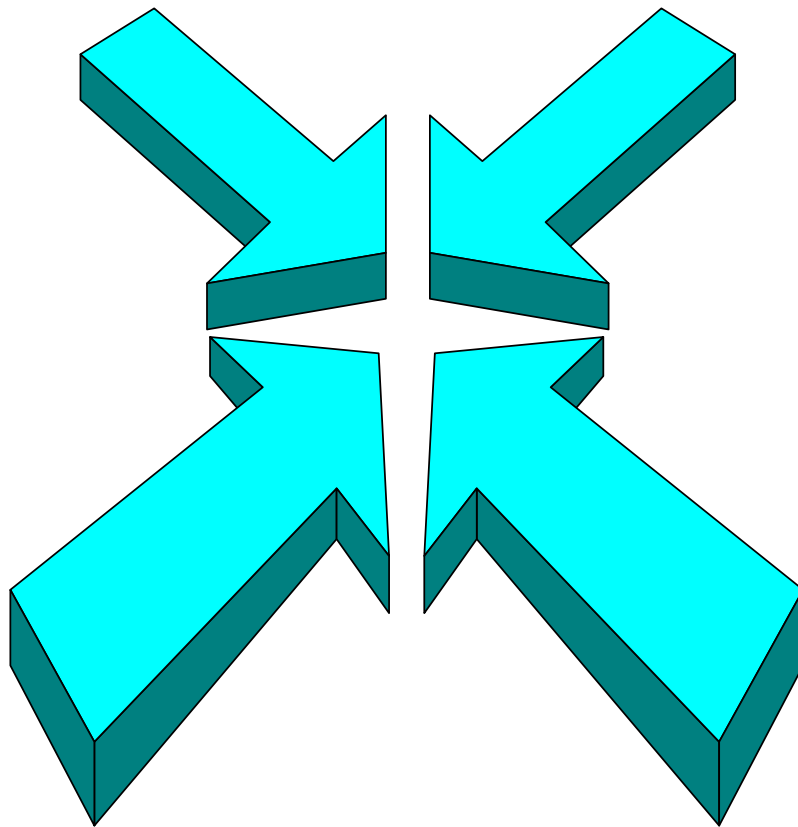


Let's Discuss

Physiotherapy Entry-Level Education in Canada...

Issues, Options and Models



Discussion Paper
National Physiotherapy Advisory Group
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Why This Discussion Paper?

Physiotherapists know that what happens in our education system is important for the future of physiotherapy in Canada. The profession benefits from high quality, relevant entry-level education and both physiotherapists and consumers will be impacted by changes made to the physiotherapy entry-level education system. Our university programs provide leadership in the area of education. Beyond the obvious impact on education, new directions pursued by the programs often impact physiotherapy practice and regulation at local, provincial and national levels. Such was our experience when entry-level qualifications moved from diploma to baccalaureate degree in the early eighties.

Over the past decade, the minimum entry-level qualification to practice physiotherapy in Canada has been a baccalaureate degree. Each of the thirteen physiotherapy educational programs is accredited by the Accreditation Council for Canadian Physiotherapy Academic Programs (ACCPAP) and the (US) Commission on Accreditation in Physical Therapy Education (CAPTE). Several Canadian physiotherapy programs are considering or have moved toward offering a Master's entry-level education program.

The National Physiotherapy Advisory Group (NPAG)¹ has recognized that a national, comprehensive study of the issues, options and educational models for physiotherapy entry-level education in Canada is needed. To facilitate greater understanding and dialogue within the physiotherapy community, this discussion paper explores *Physiotherapy Entry-Level Education in Canada: Issues, Options and Models*.

Findings and observations in this discussion paper were collected using a qualitative approach and are based on a review of the responses from surveys and interviews on entry-level education including selected domestic and international physiotherapist respondents and a limited number of other professions within Canada. The findings are complemented by additional background information collected from the literature, as well as key informants internationally and nationally. A list of selected sources used in the preparation of this document is included at the end.

The reader is asked to consider the series of identified questions while reviewing the discussion paper (see companion Discussion Guide on Entry-Level Education). The issues raised in this paper, the questions posed and the discussions that will follow, will provide information about the current status of physiotherapy entry-level education in Canada as well as future directions. In line with our mutual interest in entry-level education, and mindful of our respective mandates, the objective of the discussion

¹ The NPAG consists of representatives from the Accreditation Council for Canadian Physiotherapy Academic Programs (ACCPAP), Canadian Alliance of Physiotherapy Regulators (The Alliance), Canadian Physiotherapy Association (CPA) and the Canadian University Physiotherapy Academic Programs (CUPAC).

paper is to inform, to stimulate discussion and to facilitate consultation. This paper and other consultations will provide valuable background information for the national invitational consensus meeting to be held in Calgary, Alberta in June 2001.

Understanding the Factors and Implications of Change

In 1998, the physiotherapy community described its expectations of entry-level physiotherapists in the *Competency Profile for the Entry-Level Physiotherapist in Canada (Alliance, CUPAC & CPA, 1998)*. These competencies form the foundation of our physiotherapy practice. Although our Canadian education programs are guided by this profile, the *Analysis of Practice of Canadian Physiotherapists (Alliance, 1996)* and the *Entry-Level Curriculum for Canadian Physical Therapy Programs (CDPAP & CPA, 1995)*, various baccalaureate education models also respond to their local context. In fact, since September 2000 the variation in entry-level physiotherapy education in Canada has advanced to include a mix of baccalaureate and post-baccalaureate programs. It is valuable to take the time to understand the factors and implications of this changing educational landscape.

Change Factors

Proponents of the evolution toward post-baccalaureate entry-level education consistently point to several change factors that have led to their decision to move toward a *Professional Master's Entry-Level Education Degree*².

Need for evidence-based practice and research: Public expectations demand clinicians with increased critical thinking and research-based abilities. There is a growing emphasis on evidence-based practice that demands physiotherapists have enhanced competence in evaluating and introducing research findings into practice. Some evidence exists to suggest that graduates from the professional Master's entry-level programs are better prepared in this area (Warren & Pierson, 1994). Future practitioners will also be expected to contribute to increasing the body of scientific knowledge.

Changing physiotherapy practice: Physiotherapy practice in Canada is evolving within a rapidly changing health care system. Today's educational preparation must meet the demands for tomorrow's practitioners. More and more physiotherapists practice in independent and interdisciplinary situations within hospital, private practice and community settings. Since physiotherapists are expected to be autonomous and lead and supervise other service providers, more mature students are desired. There is an increased accountability for program development and evaluation. The advanced entry-level education model is more responsive to the intensity and breadth of education

² Defined as a post-baccalaureate degree conferred upon completion of an education program that prepares the graduate to enter the practice of physiotherapy. The course of studies focuses on the competencies (i.e. knowledge, skills and behaviours) required to practice physiotherapy and become registered or licensed (NPAG, 2001).

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required, complexity of current practice and public need for accountability for direct access.

Professional image and autonomy: Strong clinical skills must be complemented by increased management and administrative abilities and more autonomous practice styles. Universities must maintain their reputation and competitiveness in light of international and domestic changes and in the hope of being competitive in attracting future students. It will not be enough for graduates to demonstrate effective clinical outcomes; the profession also must have champions and advocates for effective policy, health system and business development, and the education programs must reflect this.

Maintaining national and international recognition: It is time that adequate recognition be given to the intensity of university studies completed in entry-level physiotherapy programs, viewed now as exceeding normal baccalaureate requirements and being more in line with existing master's degree content. Although a growing percentage of physiotherapy program entrants have completed university courses and seek physiotherapy as a second degree, some programs are still admitting students directly from high school.

In the United States, the physiotherapy profession has decided to move to post-baccalaureate entry-level education. There is currently no move in Canada to mandate physiotherapy entry-level education at the post-baccalaureate level, although most programs are currently considering the advantages and disadvantages of this approach. While recognizing the need to resist undue influence of the American trend on the Canadian environment, universities that support the introduction of master's entry-level programs cite the desire to maintain the cross-border practice eligibility with our neighbours to the South.

"Dual accreditation will give [our] students a distinct advantage over students in other programs for clinical opportunities in the United States and employment opportunities in the U.S." (Department of Physical Therapy University of Alberta, 2000)."

Implications of Change

The impact of the emerging post-baccalaureate entry-level physiotherapy education models on the physiotherapy profession and its service mandate to Canadians is perceived as substantial. It must be determined if the action by one or more physiotherapy education programs can be accommodated within a national vision for education and a national identity of the physiotherapy profession. The following summarizes the identified implications of change:

Professional credentials: There is a lack of understanding within the profession of the need for introducing post-baccalaureate entry-level education. Although consensus

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among physiotherapy professional stakeholders on this direction and how it fits within entry-level education and practice in Canada may be desired, it has not yet been achieved. For some, there is a perception that this change will result in increased credentials provided for self-serving rather than altruistic purposes. Such perceptions may lead to a loss of the valued role of physiotherapists in the health service system and public confusion of their role and expertise due to entry-level practitioners having different credentials.

Currently registered physiotherapists: There may be different ways to meet entry-level requirements and become registered to practice physiotherapy. However current practitioners are concerned about worklife and workforce issues including potential career limitations and differential remuneration, role changes and decreased collegial working environment, internal professional conflict and competition and access to upgrading and professional development opportunities.

Regulatory environment: Physiotherapy regulators have a mandate to safeguard public access to safe and effective services. Questions are being raised concerning the impact on currently registered physiotherapists, required competencies and practice standards. Will the lack of a standardized entry-level credential cause public confusion or decrease labour mobility across the country? To date, there has been limited study of the impact on current regulation and the need to change the context of entry-level within existing regulation.

Labour market and supply-demand: The potential success of this educational direction may be affected if labour market issues are not carefully examined and addressed. For example, will this change be supported by progressive development in the physiotherapy career structure? Is the marketplace ready or is there limited market demand for change? Will the expectation of portability of credentials across North America be tempered by the fear of an exacerbating decreased supply or accelerating an emerging shortage of physiotherapists? Will there be a decrease in number of applicants or university seats available to students? Has the potential for the introduction of a higher education level for physiotherapy support workers or increased substitution of such workers for physiotherapists in the delivery of services been considered?

Financial influences: Normally a change in educational preparation has financial implications that demand attention. Is there sufficient funding for the new education programs? Does justification exist for the educational costs and are students willing to pay more for entry-level education? Will the government, public and third party payers support the higher credential with increased remuneration or pay differentials? If the perception of a "more expensive service" emerges, is there a "value-added" rationale to support the change?

Educational/University situation: Many believe that the new curricula will not provide advanced education or new competencies. Furthermore, fear exists that this approach is a shorter and less intensive professional education with the potential for a loss of competencies, in particular the clinical skills. Will there be sufficient clinical focus and expertise developed or too much emphasis on "research" rather than "evidence-based" practice. Will the graduate competencies reinforce the valued clinical role of entry-level physiotherapists or be replaced by a strengthened role envisaged in consultation and administration?

Universities will be expected to provide opportunities to upgrade the current workforce, if desired. Concerns are expressed that there are insufficient resources (i.e. faculty, infrastructure and leadership) to support the co-existence of post-baccalaureate programs as well as other post-graduate tracks, including research-based master's and clinical specialization programs.

Additional Study and Assessment

It is clear that the level of understanding for this change within the physiotherapy community is limited and incomplete. Although questions about the implications are many, the information and rationale about the change is still being developed and communicated.

Many respondents to the survey, conducted to gather information for this discussion paper, indicated that additional study of the current practice, professional, regulatory and fiscal environment was required prior to the shift receiving widespread support. More information is needed on benefits and additional input from professionals, the public and funding/employer sectors. More details of the curriculum design and modified educational process may help physiotherapists better understand the added value of the changes to the public and the health system in general. Educators indicated that future physiotherapists will not lose clinical expertise and the profession will not lose the public recognition of the value of physiotherapy services during the change process.

Learning from Others... A Brief Overview

The phenomenon of moving toward post-baccalaureate education is not limited to physiotherapy in Canada or indeed the physiotherapy profession. It is important to consider and learn from the experiences of others.

International Physiotherapy Experience

Great Britain

The recently published government National Plan for the National Health Service [NHS] indicated the need for a large increase in the number of health care professionals. As a result, a number of NHS regional consortia have commissioned a 2-year accelerated program at a master's entry-level, partly because such approaches are believed to be less expensive and will produce competent practitioners more quickly.

Over the last 6 years, a number of pre-registration master's entry-level programs in physiotherapy have been approved by the Joint Validation Committee, representing the statutory body, the CPSM (regulator) and the professional body, the CSP.

There are currently five 2-year programs at the master's entry-level that are open to graduates of a related discipline (e.g. biology, sports science). It is only possible to undertake a master's entry-level program if the student has a previous degree. The 3-year bachelor degree remains the most popular route. Although there are plans to increase the number of accelerated master's entry-level programs, the government is also keen to increase the number of four-year bachelor degree programs, including offering programs on a part time basis for those wishing to qualify while working.

There are no plans to change the level of entry for all programs and it is likely that the different levels will remain. The Joint Validation Committee has debated the issues for and against higher level entry to the profession and is currently reviewing guidelines to ensure application to entry-level programs with different credentials. *[See Appendix B for more details]*

United States

The professional association and the educational accreditation agency determined that they preferred a system with one standard, the post-graduate entry-level, and with an option for the post-graduate being at the master's or doctorate level. Although post-baccalaureate education for physical therapists had been discussed for decades in the United States, the transition from baccalaureate to post-baccalaureate since the 1979 decision has been slow. This situation was partly the result of the lack of consensus from 1979-1997 of what post-baccalaureate education was. Prior to 1979, the majority of the programs were at the baccalaureate entry-level.

Although only master's and doctorate entry-level programs will be developed after Jan. 1, 2001, the issue of which program to offer is within the purview of the academic institutions. Baccalaureate entry-level programs are still being accredited but this will only continue until Jan. 1, 2002. As of May 2001, there were 161 MPT and 26 DPT programs and only one baccalaureate program. Physical therapists with baccalaureate

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entry-level degrees earned before 2002 will still be able to get licensed and practice as baccalaureate prepared therapists.

It is estimated that by Jan. 1, 2004, 85-90 programs will be accredited at the DPT level representing a dramatic increase from 2001. The educational rationale supporting the DPT was spurred by a drop in the number of applicants three years ago. Many institutions believe that the higher credential will attract more candidates to the profession. However, clinicians appear more anxious and predict it will further reduce the number of applicants.

Recently, the professional association reached consensus on moving toward a doctoral level and agreement with stakeholder groups about what post-baccalaureate education was. [See Appendix B for more details]. This progress was achieved through:

- Development of a consensus based document on post-baccalaureate education, called *The Normative Model of Professional Education*³.
- Conducting information sessions throughout the country over a three-year period to explain the model and build consensus.

The impact of the implementation of the post-baccalaureate requirement on the licensure requirements for U.S. educated or foreign-educated applicants have not yet been established. Most states are currently studying this issue and have yet to indicate their planned actions.

Australia

There is a growing movement toward a post-baccalaureate degree for entry-level in Australia although only one program is currently operating. The Australian Physiotherapy Association (APA) rejected the concept at their AGM in 1991 and reversed its position in 2000. The universities waited for the professional association to agree on this direction in spite of great pressure to proceed. In the interim, the following activities were undertaken:

- A series of discussion papers were developed
- Wide consultation with members and state-based discussion sessions
- Specific dialogue and forums with targeted groups (i.e. private practitioners fearful of a loss in competitive advantage; members concerned with compensation, designation, and competency)
- Work to ensure appropriate standards and registration requirements

Australia prefers a multiple entry-level system with both baccalaureate and master's entry-level programs included. The system supports a range of options and a choice for individuals as long as the graduates are competent. Although there is a market

³ The document has foundational sciences, clinical sciences and all of the educational categories that are now represented in *The Guide to Physical Therapist Practice* and can be purchased from APTA for \$50.00.

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demand for master's entry-level programs, evidence is still needed that the standards of regulated practice can be maintained within the new entry-level programs.

The baccalaureate program is a professional preparation that allows an integrated curriculum. Attention is being given to ensure the master's entry-level programs are developed at an advanced level that meets the entry-level competencies for physiotherapists and does not diminish the accepted master's degree standard. The Australian Council of Physiotherapy Regulating Authorities (ACPRA) accredits master's entry-level programs and, where competencies are comparable with those of the baccalaureate entry-level, such programs are accredited.

Most support was received from universities and public physiotherapists whereas many private practitioners resisted. Wider acceptance was achieved through greater understanding of the:

- Tertiary education environment in Australia. In order to meet growing volume of admission demands, new fee-paying programs (i.e. Master's entry-level) were designed as an alternative to the mandatory low fees in place for undergraduate education.
- Potential for the higher designation to attract clients
- Probability that entrants with a previous degree would have an enhanced skill base

For the present there will be a single entry-level standard (i.e. minimum of baccalaureate) and a mixed model (i.e. either baccalaureate or master's entry-level programs), but the long-term has not been decided. There is not any move or consensus toward a single-entry credential at this time.

Overview of Current Situation for Selected Health Professions in Canada

Occupational Therapy: A trend is occurring toward a master's entry-level with six programs either in place or ready to go. The clinical master's entry-level model varies including a 24-26 month degree after a related baccalaureate program and a special professional stream within the baccalaureate program that takes an additional year.

As part of the Canadian Association of Occupational Therapy accreditation process for education programs, the established competencies must be demonstrated but the credential is left open and includes either a baccalaureate or master's entry-level degree. Much consultation has occurred based on the entry-level competency requirements and has led to a decision to review and revise the competencies as needed. If the revised competency profile indicates a need to move to a master's entry-level as a minimum, further action will be taken. Consultation with regulators, educators, governments and employers are viewed as an essential part of any change in entry-level to the profession.

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Speech Language Pathology and Audiology: The profession moved to a standard of entry-level master's in the early 1980's. At that time, there was a mixed model with diploma, baccalaureate and master's degrees all in existence. The design change was based on the American model and followed the trend toward a single master's entry-level standard. There is a recent move in the United States toward a doctorate entry-level degree for audiology but speech language pathology has not moved in this direction.

Pharmacy: After July 1, 2000 in the United States, the American Council on Pharmaceutical Education (ACPE) changed its accreditation standard for entry-level programs by converging the existing two professional degrees (B.Sc. and Pharm.D.) into a new doctor of pharmacy program (Pharm.D.). A five-year transition period is in place through to June 30, 2005. This change is being closely examined and debated by members of the pharmacy community in Canada to determine if a similar change should be proposed.

A discussion paper (1999) examines issues of supply and demand, geographic and labour mobility, profession and faculty self-interest and baccalaureate and post-baccalaureate program comparisons. It is suggested that a unique Canadian perspective is needed that recognizes differences between the two countries in matters such as historical development of entry-level programs, health system financing and market forces, professional and government roles and university funding and approval processes for new programs. The profession lobbied the Deans and Presidents of universities against the proposal for an entry-level pharmacy doctorate and held a recent debate at an annual conference on the advantages and disadvantages of the model. The discussion is current and consensus has not been reached within the profession.

Nursing: Currently five provinces require a baccalaureate degree (NFLD, NB, NS, PEI and SK) while the others require the minimum of a diploma. Although BC, AB and QB have no plans to move to a single entry baccalaureate degree, Ontario has tentative plans to require a degree by 2005 unless the increasing shortage of nurses changes this direction. In fact, Manitoba just reversed the province's degree-only entry-level policy and reinstated the diploma entry-level programs.

Psychology: Psychology began as a research science similar to physics, chemistry and biology rather than an applied science like most other health disciplines. Applications led psychologists into employing psychology in health, education and industrial sectors. Although professional licensing bodies exist in every province, there is significant inter-provincial variation in current entry-level requirements, related professional

designations/titles and future directions.⁴ Thirteen years ago the Canadian Psychological Association began program accreditation of doctoral programs only. Master's entry-level programs have no accreditation at this point but comply with minimal competency standards for practice at the doctoral level.⁵

The mixed entry-level model, doctoral and master's prepared providers, was originally a practical interim solution to accommodate those provinces where doctoral level education programs were limited or attracting the doctoral level clinician was difficult. Given the wide variations and the lack of consensus, the desired goal of the single doctoral entry-level may take the next 10-20 years to achieve. It is expected that the strong resistance by master's entry-level psychologists will be off-set by the need to address issues of over-supply, labour mobility under the Agreement of Internal Trade⁶ and introduction of clinical doctoral (PsyD) programs.

The Canadian trend is toward the PhD as the entry-level psychologist and the master's credential as the psychological associate (BC, MB, ON, QB). It is suggested⁷ that the solution for psychology might well be the American model of a clinical doctorate (PsyD) with a two-level entry - Psychologist and Psychological Associate. However, the lack of consensus on the entry-level degree is viewed as a major problem. Advice was offered to avoid having different entry-level credentials because it may mislead the public and students, does little for public protection and demonstrates lack of unity in the profession.

"The more anomalies you build into your system, the harder it is for you to argue on behalf of physiotherapy at an integrated level across the country (Dr. John Service, Canadian Psychological Association, May, 2001)."

Current and Emerging Entry-Level Physiotherapy Models in Canada

Realistically speaking, the professional post-baccalaureate degree in physiotherapy as an entry-level degree into practice is already here. Five Canadian programs have already announced the decision to move to the entry-level master's model, one began in

⁴ Atlantic provinces: (current/future) Master's; Quebec: (current) Master's (MPS), (future) Doctoral; Ontario: (current/future) Doctoral (PhD) - psychologist and Master's (MA) - psychological associate; Manitoba: (current) Doctoral (PhD) - psychologist, (future) Master's as psychological associate, Saskatchewan: (current/future) began as Doctoral (PhD) and moved to Master's; Alberta: (current /future) Master's; British Columbia: (current) Doctoral - psychologist and working on Master's probably to be called psychological associate.

⁵ Impacted by international standards that are agreed to as the minimal standards for clinical practice by Canadian Psychology Association (CPA), American Psychology Association (APA) and the Association of State and Provincial Psychology Boards (ASPPB).

⁶ ASPPB recently introduced two systems to facilitate mobility: i) certification of professional qualifications (CPQ) that gives the individual holders a fast track to registration in other states/provinces who are members. To write the CPQ, you must have a Doctorate education level. ii) Reciprocity agreement - With this agreement you do not have to secure a CPQ to get fast track registration but must come from a province/state who is signatory jurisdiction (i.e. ON, MB and seven states at this time, all who are at the Doctoral level).

⁷ Key informant interview with Dr. John Service, Canadian Psychological Association

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2000 while the other programs are targeted to commence between 2001-2004. Two programs will remain at the baccalaureate entry-level for now while three are in the development phase and the remaining three programs are currently exploring the options. It is understood that four of the five Ontario programs have received or are waiting approval to move forward. Although the three Quebec programs are studying the master's entry-level issue and will meet as a group with their provincial physiotherapy regulator in the fall of 2001, it appears that each program is considering a move in this direction. However, final program designs and approval levels for the three Quebec programs have not, as yet, been determined. (*See Tables, Appendix A*).

The following results are based on written responses received from ten of the thirteen Canadian physiotherapy education programs. Proponents of post-baccalaureate entry-level identify similar educational benefits beginning with the value of having mature students/graduates capable of advanced critical thinking and evidenced-based practice. Since many current students already enter physiotherapy programs with some completed university studies, this evolution seems like a logical step. Armed with enhanced skills, it is believed the quality of practice will improve, clinical research-oriented practice in clinical settings will expand and professional credibility and recognition will increase. The change in educational level will also facilitate cross-border mobility with the United States where the advanced credential will be required as of 2002.

The cited educational risks primarily relate to the academic challenges in securing faculty and resources, developing a new integrated curriculum design and assuring students achieve clinical competence. There is a real potential for decreased clinical opportunities if physiotherapists withdraw from clinical education and increased professional conflict in the workplace as colleagues with different credentials emerge and begin to work side by side. Furthermore, the proposed master's entry-level appears to be more expensive than the current baccalaureate design both in tuition costs for students and delivery costs for universities. In some reported instances, government funding may not follow such program changes making it necessary for students to increase self-funding.

The academic community appears to support the change in entry-level education for physiotherapists from the baccalaureate degree to the post-baccalaureate level. While equal numbers of regulators indicate support or indecision, a majority of professional respondents were still undecided. (*See Table 1*)

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Level of Support for change from Baccalaureate to Master's	PT Academic (n=10) Support Worker Programs (n=5)	Regulatory n=8	Professional n=24
Support for entry-level change	70% (PT) 80% (SW)	37.5%	9%
Do not support change	0%	25%	35%
Undecided	30%	37.5%	56%

Table 1: Overview of Level of Support from Domestic Respondents

Survey respondents who are undecided cite similar concerns to those who are not in support of this educational shift, including:

- **Human resources and financial implications:** Concern was expressed for the impact of such a change on current practitioners and the reality of insufficient government funding to support a higher education level and augmented salary expectations. If the career opportunities and benefits do not materialize to balance the increased educational costs, a decreased supply of students and increased attrition of physiotherapists may result. It is expected that physiotherapists may move farther away from “hands on” or direct clinical services and be increasingly substituted by less qualified and more affordable workers.

- **Lack of demand or need:** Some opinions suggest improving access to affordable and effective services is preferred to increased qualifications for service providers. Physiotherapists may move toward a greater consultation role, supported by increased research and administrative abilities developed at a post-baccalaureate level. Opponents suggested that enhanced clinical efficacy and critical thinking could also be addressed through strategies other than introducing advanced entry-level education. Many observed that the work and professional environments are neither prepared nor demanding this change. The change may contribute to a probable supply-demand imbalance, particularly in the transition period.

- **Workforce issues:** Professional input added a strong perspective on the workforce issues and potential impact on quality of work life. If physiotherapists become over-qualified and underpaid for defined system roles, increased dissatisfaction, turnover and attrition may develop. If remuneration exceeds the ability of clients to pay, worker substitution may emerge.

What are the Risks and Benefits of Moving to Post-Baccalaureate Entry-Level Education Programs?

In discussing the impact of moving from baccalaureate to post-baccalaureate entry-level education programs, the risks and benefits must be considered. These factors are triggered by such significant change and may be evidenced within specific programs or at a broad system level.

Of the domestic physiotherapy survey respondents, six potential **benefits** of the post-baccalaureate entry-level programs emerged at the top of the list. All groups identified the enhancement of professional status and research capability as benefits and the fact such programs would more accurately reflect the current length, scope and rigor of the education program. (See Table 2)

Professionals and educators were of the opinion that physiotherapists may receive increased remuneration and are more prepared for the labour market while the academic community further suggested that improved professional autonomy would result. Some regulators and professionals believed that no benefits would result.

Potential Benefits	Professional n=23 surveys %	Regulator n=8 surveys %	Academic (PT) n=10 surveys %	Total of all selected choices on surveys n=126 %
Enhancement of professional status	26	24	16	22
Enhancement of research capability	23	29	18	22
More accurate reflection of length, scope and rigor of program	12	14	18	14
Increased remuneration	12	5	7	10
Improved preparation for labour force	8	5	11	9
Improved autonomy	5	10	16	9

Table 2: Most common benefits of moving toward Post-Baccalaureate Degree

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Numerous risks were identified with groups differing about which risks would be most common. (See Table 3). Professionals and regulators appear concerned about increased substitution of physiotherapists, the financial impact on students and lack of labour market readiness. These risks would be accentuated if one considered the perceived external skepticism of need and internal professional resistance. There is also a potential for an inadequate physiotherapist supply to meet demand, particularly if graduate numbers or student interest decreases.

Although educators appear to agree that the physiotherapy community and the labour market may not be ready, their primary concern is that of the potential perception by others of inflated professional credentials. It was suggested that the negative reaction could possibly emerge from professional, regulation and government circles.

Potential Risks	Professional n=23 surveys %	Regulator n=8 surveys %	PT Academic n=10 surveys %	Total % of all selected choices n =188
Substitution of PTs by less costly workers	18	16	11	17
Lack of labour market readiness	14	11	26	15
Prohibitive educational costs to students	15	11	11	14
Professional resistance	9	16	15	11
Perception by others of inflated credentials	9	9	22	11
Insufficient graduates to meet market demand	14	5	0	10

Table 3: Most common risks of moving toward Post-Baccalaureate Degree

One respondent emphasized the need for careful advanced planning to avoid poor communication of the educational strategy to external groups and to incorporate change strategies in the new model. Strategies can be identified and implemented to minimize the risks and enhance the benefits.

What are the Implications of a Mixed Model System?

There are two questions that emerge when one considers the educational models for physiotherapists. The first question to be considered is if the long-term vision for physiotherapy education in Canada is best served by promoting a single entry-level qualification or multiple qualifications. Universities must decide whether to continue to offer the baccalaureate entry-level degree or, once implemented, only the master's entry-level program. The second question seeks to clarify the impact of the professional post-baccalaureate entry-level programs or the advanced or research post-baccalaureate degrees.

The weight of survey and key informant opinion favors a **single entry-level model** in Canada. Supporters prefer either a baccalaureate or master's degree with some respondents indicating a professional doctoral degree as their choice. The reasons for supporting a single model approach focused on the need to diminish public confusion, enhance consistency and portability of credentials and provide clear career paths for professionals.

The majority of key informants from selected professions other than physiotherapy prefer the single model approach as well. Pharmacy in Canada will remain at the baccalaureate entry-level while Speech Language Pathology endorses the master's entry-level only, both resisting the American trend toward professional doctoral programs. Despite the desire of Nursing to move to a baccalaureate only and Psychology to a doctoral only, these professions face significant internal and external resistance.

Close to one-third of physiotherapy survey respondents indicated a clear preference for a **mixed entry-level educational model**. Over two thirds of this group support a mix of baccalaureate, master's and doctoral entry-level programs with one quarter favouring the combination of the baccalaureate and master's entry-level degrees. Individuals believed that such flexibility would allow programs to meet different needs of physiotherapists and the diverse demands from the health system.

The Canadian Association of Occupational Therapists recently issued a position on entry-level education that supports a mixed model pending further study. Although the Canadian Nurses Association has set the baccalaureate entry-level only as its objective, their reality is a mixed model with entry-level diploma and baccalaureate programs still co-existing. The physiotherapy profession in the United States appears to recognize that the current mixed entry-level model (i.e. Master's and DPT degrees) will most likely remain as the future reality, however the American Physical Therapy Association (APTA) has a vision of DPT entry-level degree only by 2020. The United

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Kingdom and Australia support a single standard (i.e. minimum of baccalaureate degree), but with a mixed model (i.e. baccalaureate and master's entry-level programs).

It appears that unless unity of purpose and strong consensus exists, competing forces within the professional, public policy, regulatory and educational environments destine the system to be a mixed model. Even if agreement on a mixed model is reached, there may be an extended transition period for this to be achieved. The competencies for entry-level practice must be achieved regardless of the model. Psychology urges caution with promoting a mixed model based on their experience with friction among the various levels and different groups, however the multi-model approach in physiotherapy overseas is seen to be responding to a human resource shortage without compromising competency.

Whereas most existing physiotherapy programs in Great Britain and Australia will retain their current baccalaureate degree program in addition to any new master's entry-level program, their Canadian counterparts are not considering this mixed entry-level model. Our reality is that responding Canadian programs have indicated they will proceed with either the baccalaureate or master's entry-level degree and the mixed entry-level model will exist in the foreseeable future.

The professional master's degree is differentiated from the advanced or research-oriented degree by the research requirements. An advanced or research master's degree is conferred upon completion of an education program that provides graduates with advanced knowledge and skills related to enriched research in a specific area of study and involves the preparation and defense of a major paper or thesis (NPAG Physiotherapy Entry-Level Education Project, Bulletin III, June 2001). It is expected that the MPT and MSc programs will co-exist within the universities, one targeted for entry-level candidates and the other for post-entry physiotherapists.

What Next Steps Are Recommended?

Discussion/Consultation/Information Seeking

There is a lack of widespread understanding and dialogue within the profession that may lead to professional resistance and initially place the profession in a reactive mode. To be proactive, increased discussion, dialogue, consultation and collaboration should be fostered among physiotherapists, employers, governments, regulators and educators. Often good ideas lack support if openness to change is lacking and the people and systems are not ready.

Standards, Competencies and Regulation

The physiotherapy profession has developed a consensus document on the entry-level competencies for physiotherapists that acts as a consistent guideline for entry-level education programs. Regulators, governments and employers seek information on public benefit, safety, cost and access to service. There is a desire to facilitate mobility of physiotherapists across the country and perceived barriers to such movement will receive attention.

If regulation change is required to support this educational change, time and political will is needed. Interim and long-term regulation strategies should be developed to accommodate the multiple models that are emerging. Current accreditation standards must be pilot tested with the emerging master's entry-level models and their relevance to established competencies determined.

It was suggested that careful consideration be given to developing standards or guidelines in the workplace relating to service delivery and the interrelationship among service providers, physiotherapists with different educational credentials and support workers.

Education Strategies

It may be valuable to develop a document that presents a consensus view of what entry-level education is and how expectations of competency can be met under a single or mixed model system. A level of agreement or consensus may be necessary for widespread professional support and transition to occur successfully. This approach worked well when the profession moved from a mixed model of diploma and baccalaureate degree to the minimum of baccalaureate degree only. The link between education and physiotherapist practice must be understood and reflect a high level of agreement. This updated consensus-based curricular document, in addition to the *Competency Profile for the Entry-Level Physiotherapist in Canada (April 1998)* will be important guidelines during the accreditation process for physiotherapy academic programs.

Although other professional development and research-based master's degree programs will continue and may well expand in the future, there may be a need or demand for transition programs from physiotherapists with baccalaureate degrees who wish to attain the professional master's credential. The value and potential volume for transition programs should be studied and, where appropriate, accessible and affordable programs developed.

Regardless if universities have the prerogative to determine what credential or degree will be awarded, similar considerations contribute to any entry-level decision including faculty preparation, faculty and senate support, funding availability and depth and scope of competency requirements to name but a few. Universities often implement community consultation, focus groups, collaborative curriculum committees and communication mechanisms to achieve successful change in partnership with their communities of concern.

Closing Thoughts

In May 2000, the Canadian Universities Physiotherapy Academic Council (CUPAC) held a planning session to consider the direction for physiotherapy academic programs, including the introduction of the master's entry-level degree. Based on the outcome of this meeting, the following goal was established:

"For all physiotherapy professional stakeholders to develop a white paper and arrive at a consensus statement regarding a vision for master's entry-level to practice in Canada and establish mechanisms by which each of these groups can support implementation of the vision."⁸

As a follow-up to this planning session, the National Physiotherapy Advisory Group is leading a project that includes the development of this discussion paper on physiotherapy entry-level education in Canada.

There appears to be **limited general awareness** of this educational trend across the country, except in the academic community or areas reached by recent communication initiatives. Furthermore, where awareness is present, few groups or agencies have fully investigated the impact of this shift. Information and impact analysis is in the very early stages notwithstanding the programs that have already decided to proceed.

The good news is that there is evidence that **dialogue has begun** and, in some cases, **structured collaboration** is being established among educators, regulators and the

⁸ A Vision and Action Plan for Physiotherapy Academia in Canada, May 2000

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profession. Most structured activity was reported in Alberta, British Columbia, Ontario and Nova Scotia. However this is the exception rather than the rule. Individual professionals and other stakeholders, for the most part, appear unaware of this discussion to date or have not yet bought into the need for change.

The trend toward changes in entry-level education and the introduction of post-graduate physiotherapy entry-level education within Canada is here! The time for dialogue and communication is now...and maybe a common vision for physiotherapy entry-level education will emerge.

APPENDIX A

OVERVIEW OF CURRENT AND FUTURE PHYSIOTHERAPY ENTRY-LEVEL EDUCATION PROGRAMS IN CANADA

Table 4: Current Physiotherapy Entry-Level Education Program (Selected Features)

Credential Conferred	Length of PT Program /# Students	General Pre-requisite Requirement	Tuition Range (\$\$)
<u>University of British Columbia</u> ▪ BSc (PT)	3 years 36	1 year university or college	2200-3000/yr 6600-9000/3 yrs
<u>University of Alberta</u> ▪ BSc (PT)	4 years 66	High school diploma with defined courses (25% of admissions) University transfer with minimum 1 year (75% of admissions)	4125/yr 16500/4 yrs
<u>University of Saskatchewan</u> ▪ BSc (PT)	3 years 30	2 years of university	4050.00/yr 12150/3 yrs
<u>University of Manitoba</u> ▪ BPT	3 years 30	1 year of university	5500 tuition + \$997 clinical fees/yr 16500 tuition/3 yrs
<u>University of Ottawa</u> ▪ BSc (PT)	4 years 58	OAC with high school sciences	3892-4174/yr 15568-16696/4 yrs
<u>McMaster University</u> ▪ Master's Clinical Health Sciences in PT - MCHS (PT)	2 years 51 domestic 6 international	4 year baccalaureate	Not reported
<u>University of Toronto</u> ▪ BSc (PT) Second Entry	3 years 66	4 year degree	5167.26/yr 15017.78/3 yrs
<u>Queens</u> ▪ BSc (PT)	3 years 45	1 year of university	4000-\$7000 12000-21000/3 yrs
<u>University of Western Ontario</u> ▪ BSc (PT)	3 years 66	3 year baccalaureate	5100/yr 15,300/3 yrs
<u>Université de Montreal</u> ▪ BPT	3.5 years 72	2 year CEGEP diploma with sciences (DEC) or equivalent	Not reported
<u>Université Laval</u> ▪ BSc de la santé (physiothérapie)	3.5 years 70	2 year CEGEP diploma with sciences (DEC) or equivalent	6004.80/3.5 years (55.60 per credit)
<u>McGill University</u> ▪ BSc (Phys.Ther.)	3 years 60	2 year CEGEP diploma with sciences (DEC) or equivalent	2,545.93/yr Quebec 4585.93/yr non-Quebec
<u>Dalhousie University</u> ▪ BSc (PT)	3 years 48	1 year General Arts & Science with required subjects	Not reported

Table 5: Future Plans For Physiotherapy Entry-Level Education Program at Canadian Universities (Selected Features)

Reported Plans To Move toward Post-Baccalaureate Degree Entry-Level Education	# of students
Have already changed to Master's Degree Entry-Level <ul style="list-style-type: none"> McMaster - start date: 2000 	51 domestic, 6 international
Have determined Yes (start dates) <ul style="list-style-type: none"> University of Toronto - 2001 University of Western Ontario - 2002 University of Ottawa - 2003 or 2004; pending approval University of Alberta - tentatively 2003; pending approval 	Not known 44-48 Not known 66-72
Have determined No <ul style="list-style-type: none"> Queens (implementing a one year Master's after BPT) University of Manitoba 	Not applicable
In the development phase or exploring the possibility <ul style="list-style-type: none"> Université de Montreal (supports direction; design phase for 2003) McGill University (supports direction; design phase for 2004) Dalhousie University (supports direction, no design or date determined) Université Laval (under review) University of Saskatchewan (under review) University of British Columbia (under review) 	72 planned <i>Some programs would rather maintain current numbers while others may need to consider a reduction in number</i>

Table 6: Physiotherapy Post-Baccalaureate Entry-Level Education Programs at Canadian Universities (Selected Features)

Credential Conferred	Length of Program	Pre-requisite Degree Requirement	Tuition Range (\$)
McMaster University <ul style="list-style-type: none"> MCHS (PT) - Master's in Clinical Health Sciences (PT) 	24 months (6 terms)	4 year baccalaureate degree or defined equivalent (minimum of 1 biological or life science and 1 social science or humanities course)	Not reported
University of Toronto <ul style="list-style-type: none"> MSc (PT) 	24 months	4 year degree including 2 life and/or physical sciences (one human/vertebrate physiology course), 1 social sciences, humanities or languages, and one half course in Statistics	Not reported
University of Alberta <ul style="list-style-type: none"> MPT 	28-31 months	any undergraduate degree with 5 pre-requisites areas (anatomy, human physiology, English, statistics, psychology)	16,000 /31 months
University of Ottawa <ul style="list-style-type: none"> MHSC (PT) - Master's in Health Sciences (PT) 	2 full years (6 terms)	honours baccalaureate	2000/term 12,000/2yr
University of Western Ontario <ul style="list-style-type: none"> MPT 	2 full years	4 year baccalaureate	6420/yr 12840/2 yr

APPENDIX B

ADDITIONAL INFORMATION ON THE RECENT EXPERIENCE OF SELECTED INTERNATIONAL PHYSIOTHERAPY CASES WITH ENTRY-LEVEL EDUCATION

United Kingdom

It is important to understand that in England, Wales and Northern Ireland, the Department of Health [NHS] funds qualifying physiotherapy education and in Scotland, it is funded by the higher education funding council. There are therefore a number of different stakeholders in the system in addition to the service, the students and the education providers.

Action taken

The number of stakeholders in physiotherapy education in the U.K. impacts on the remit of the professional body and limits its authority to make decisions. These include government initiatives, funding council arrangements, National Health Service needs and statutory body requirements. As mentioned above, the urgent need for a substantial increase in number of physiotherapists within the National Health Service has led the commissioning of several such master's entry level programs.

The validation guidelines which are for use by all education providers and the Joint Validation Committee are currently being revised and will include guidance on developing assessment criteria for level programs. There is an ongoing debate around the level of clinical education in these programs. It is generally accepted that although the academic content of a program may be set at the master's level, (i.e. postgraduate), it is a difficult task to set the clinical content of the program (33%) at a Master's level when the students may not have had previous clinical experience.

United States

After much discussion, a resolution to increase education requirements to a post-baccalaureate degree was adopted in 1979. However, it was modified to a post-baccalaureate level to accommodate the range of undergraduate models that existed. At that time, strong resistance to the APTA decision was encountered from the Deans of Schools who believed that the shift would be forced upon them through the program accreditation mechanism.

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By and large, individual universities decided the degree to be offered and as long as the programs met the accreditation standards, the differences in the programs were valued. In 1979, there were only 7 masters and 78 baccalaureate program. During the 23 years of transition, there was also great growth in the number of programs from 85 to 198 with many of them initiated at the MPT level. In 1998, there were 146 accredited programs at the post-baccalaureate level and only 31 at the baccalaureate level.

There is still great variation in program models, from the 2-year to the 3-year post-baccalaureate MPT or DPT programs. It is expected that the 2-year post-baccalaureate program will phase out due to the common understanding that more time is needed to convey necessary knowledge and skills for entry-level practice. There will be some programs that will not or can not change their degree from MPT to DPT because of implications beyond their control (e.g. number of doctoral prepared faculty; lack of institution authority to grant doctoral degrees).

The state licensing bodies did not look at competencies or degrees all through this transition but had the requirement that an individual must be a graduate of an accredited program and pass a common licensure exam.

Action taken

Since 1993, much discussion has occurred to reach consensus on moving from the baccalaureate toward a doctoral level and reaching a level of agreement in the profession and with stakeholder groups about what post-baccalaureate education was, including:

- Development of a consensus based document, called *The Normative Model of Professional Education*. The document has foundational sciences and clinical sciences covering the education categories that are represented in *The Guide to Physical Therapist Practice*.
- Information sessions held throughout the country over a three-year period to explain the model and build consensus. As a result, in 1997, the revised education criteria went up for hearing, were agreed to with little resistance and lead to the accreditation body limiting accreditation activity to just post-baccalaureate programs.

APPENDIX C

SELECTED SOURCES

Surveys and Key Informant Interviews

- Results from four surveys⁹: i) physiotherapy (domestic), ii) other professions (domestic); iii) rehabilitation support worker programs (domestic); and iv) physiotherapy (international).
- Results from key informant interviews conducted with: i) Canadian Association of Occupational Therapy (Claudia Von Zweck); ii) Canadian Psychological Association (Dr. John Service); iii) American Physical Therapy Association (Dr. Joseph Black); iv) WCPT Europe (Antonio Lopez); v) Australian Physiotherapy Association (Fiona McKinnon); vi) University of Toronto (Dr. Molly Verrier); vii) University of Saskatchewan (Dr. Elizabeth Harrison); and viii) Université de Montreal (Dr. Bertrand Bélanger).

Articles, Reports and Publications

Canadian Alliance of Physiotherapy Regulators, Canadian Physiotherapy Association and the Canadian University Physiotherapy Academic Council (April 1998). *Competency Profile for the Entry-Level Physiotherapist in Canada (April 1998)*. Canadian Physiotherapy Association. Toronto, ON: Author.

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⁹ From 65 domestic surveys, 42 responses (65%) were received as of April 30, 2001. Respondents included academic programs (n=10, 77%), regulatory bodies (n=8, 73%) and professional leaders including CPA Board, Divisions, Branches and several accreditation agency members (n=24, 59%). Input was also received from rehabilitation support worker education programs (n=5, 29%).

Input through surveys and interviews were gathered from other professions in Canada included pharmacy, speech language pathology and audiology, occupational therapy, nursing and psychology.

International physiotherapy participants included survey respondents from Great Britain (2) Australia (1), USA (1), Portugal (1) and the International Society of Educators in Physiotherapy (1) and the European Region of the World Confederation of Physical Therapy (1).

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Glossary

ACCPAP	Accreditation Council for Canadian Physiotherapy Academic Programs
ACPRA	Australian Council of Physiotherapy Regulating Authorities
APA	Australian Physiotherapy Association
APA	American Psychology Association
APTA	American Physical Therapy Association
ASPPB	Association of State and Provincial Psychology Boards
CAPTE	Commission on Accreditation in Physical Therapy Education
CDPAP	Council of Directors of Physiotherapy Academic Programs
CLEAR	Council on Licensure, Enforcement and Regulation
CPA	Canadian Physiotherapy Association
CPA	Canadian Psychology Association
CPSM	Council of Professions Supplementary to Medicine
CSP	Chartered Society of Physiotherapy
CUPAC	Canadian Universities Physical Therapy Academic Council
DPT	Doctor of Physical Therapy (Professional)
FARFB	Federation of Associations of Regulatory Boards
FCCPT	Foreign Credentialing Commission on Physical Therapy (US)
FSBPT	Federation of State Boards of Physical Therapy (US)
IQAS	International Qualification Assessment Services
MPT	Master's of Physical Therapy (Professional)
NPAG	National Physiotherapy Advisory Group
NHS	National Health Service
PCE	Physiotherapy Competency Examination (includes PQE + PNE)
The Alliance	Canadian Alliance of <i>Physiotherapy</i> Regulators