

Part B

**A Report of Phase 1 of the
CRTC Study into
Baccalaureate Degree level Entry-to-practice for
Respiratory Therapy in Ontario**

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EXECUTIVE SUMMARY

The CRTO has embarked upon a study to examine the issues associated with moving from a diploma to a degree requirement for entry-to practice. In the fall of 2005 the CRTO conducted a study into the issue of a baccalaureate degree level entry-to-practice for Respiratory Therapy. The purpose of the study was to identify the issues and gain participants' initial perspectives on any move from a diploma to a degree for entry-to-practice in Respiratory Therapy. The firm of Harry Cummings and Associates (HCA) was engaged to conduct focus groups and key informant interviews with Respiratory Therapy stakeholders. In addition, CRTO staff implemented the second stage of Phase 1, which involved consulting with additional stakeholder groups namely, Respiratory Therapy education programs, non-Respiratory Therapy employers (including the OHA), National Respiratory Therapy Regulators and the professional associations. The findings of this second stage are the subject of this report.

While some of the respondents provided examples of how university preparation would benefit patient care, (e.g., enhancing the RT's decision-making skills and capability to deal with complex health issues) there was no clear consensus that a change to degree entry-to-practice would improve patient outcomes or significantly change the provision of health services delivery.

A number of respondents felt that recent changes in Respiratory Therapy suggest the requirement for a degree would be advantageous. Such changes included increased acuity of patients, technological advances, RT expanding roles in such areas as anesthesia, research, health administration, patient education, community care and technical development/research. Likewise, a frequent comment from respondents was that university preparation might better prepare RT graduates to deal with increased complexity of health care in general.

The results show some agreement among respondents with respect to the impact of a degree entry-to-practice credential on the professional itself, for example, increase in respect and credibility of the RT profession, increase in opportunities for advancement and accessibility to continuing education. As with the RT focus groups, respondents raised a concern that degree-entry-to practice credentials might create a conflict between diploma and degree prepared RTs.

Concerning recruitment and retention there were mixed responses. There was debate as to whether a move to a degree would discourage students from pursuing the profession and whether Respiratory Therapists are leaving the field because of lack of advancement opportunities. Cost was an issue identified by many, both with respect to increased tuition costs and increased costs to the health care system associated with higher salary expectations.

A number of major themes were identified by the respondents related to additional impacts of a change in the entry-to-practice credential including impact on patient care; employment; educational issues; financial issues and transitional issues. Regarding transitional issues respondents asked whether diploma-holding RTs would be able to upgrade their credentials and how the potential gap created during the transition might lead to a shortage of RTs.

With respect to education, a number of respondents cautioned against changing the existing strong clinical/technical component. Some respondents thought that a degree entry might cause a change in the applicant pool and the impact this would have on the profession was discussed.

INTRODUCTION

In Ontario, the current minimum requirement for entry to practice in Ontario is graduation from a College-level diploma program offered by a CRTO-approved community college or institute for applied health sciences. Some educational organizations also offer Respiratory Therapy degree programs for secondary school graduates: Dalhousie University/Queen Elizabeth II Health Sciences Centre (Bachelor of Health Sciences - Respiratory Therapy); University of New Brunswick/New Brunswick Community College (Bachelor of Health Sciences); University of Manitoba (Bachelor of Medical Rehabilitation -Respiratory Therapy). Dalhousie University and the Michener Institute for Applied Health Sciences offer an integrated diploma/degree program¹, and degree completion programs in Respiratory Therapy are offered by the Michener Institute for Applied Health Sciences in collaboration with Charles Sturt University, Australia; Athabasca University; Thompson Rivers University (BC); University of New Brunswick; The Marine Institute of Memorial University (Newfoundland); Dalhousie University².

Recognizing the evolution of the Respiratory Therapy and health care in general, the CRTO embarked upon a study to examine the issues associated with moving from a diploma to a degree requirement for entry to practice. The CRTO recognizes that this is a complex issue involving many stakeholders. The creation of opportunities for baccalaureate degree completion and any potential impact on entry-to-practice requirements requires thoughtful and careful consideration and consultation.

In June 2005, the CRTO Council approved Phase 1 of a study into the merits, or otherwise, of degree level entry-to-practice credentials for Respiratory Therapy, and the firm of Harry Cummings and Associates (HCA) was engaged to conduct focus groups and key informant interviews with Respiratory Therapy stakeholders. A report of HCA's methodology and findings forms Part A of consultation Phase³.

In the fall of 2005, CRTO staff, with the assistance of HCA, implemented a second stage of Phase 1 which involved consulting with 4 key stakeholder groups, namely, Respiratory Therapy programs, non-Respiratory Therapy employers (including the OHA), National Respiratory Therapy Regulators and the professional associations. The findings of the consultation are the subject of this report.

In addition, CRTO staff conducted a preliminary literature search, inquired into the current status of degree initiatives and programs for Respiratory Therapy in Ontario and other provinces, and spoke with other health regulatory College representatives in order to gain a broad perspective on the issue of entry to practice requirements across the health professions in Canada.

CRTO staff have also documented the principles identified by government⁴ and questions that will need to be answered should the CRTO pursue this initiative.

It should be stressed that the goal of Phase 1 of the study into a baccalaureate degree level entry-to-practice for Respiratory Therapy was to consult key stakeholders in order to identify the issues

¹ Michener Institute for Applied Health Sciences website, www.michener.ca/ft/respiratorytherapy.php

² CSRT website, www.csrt.com

³ A Report on Respiratory Therapy Stakeholder Perspectives Regarding a Baccalaureate Degree Level Entry-to-practice for Respiratory Therapy in Ontario, Harry Cummings and Associates, December 5, 2005.

⁴ Principles to Manage Proposals for changes to entry-to-practice credentials for Medical and Health Professions.

and gain participants' initial perspectives on any move from a diploma to a degree for entry-to-practice in Respiratory Therapy. If approved by Council, Phase 2 of the study would involve establishing an Advisory Group, undertaking a gap analysis, meeting with government representatives, conducting an in-depth literature search, obtaining key stakeholder input on specific educational options, and addressing transitional issues and stakeholder concerns.

METHODOLOGY

As part of phase 1 of the consultation process, and with the assistance of HCA, the CRTO developed a survey tool to be circulated to 4 key stakeholder groups: Respiratory Therapy programs; non-Respiratory Therapy employers (including the OHA); National Respiratory Therapy regulators; Respiratory Therapy professional associations.

Respiratory Therapy programs

There are currently five College-approved educational programs in Ontario: Algonquin College in Ottawa; Canadore College in North Bay; Fanshawe College in London; La Cité Collégiale in Ottawa; and The Michener Institute for Applied Health Sciences in Toronto. Conestoga College in Kitchener is in the development phase of their RT program and is scheduled for their first intake of RT students in September 2006. Conestoga College has initiated the accreditation process with CoARTE and has met with College staff regarding the process for approval status with the CRTO. The survey was forwarded to all 6 educational programs.

Non-Respiratory Therapy employers

Since Respiratory Therapy managers/employers were canvassed through the Key Informant Interview Process, this survey targeted non-RT managers/employers. In all, surveys were sent to 52 individuals identified from the CRTO data base as being non-RT managers/employers. The survey was also sent to the Ontario Hospital Association and the Ontario Public Service Employees Union. Eight (8) individual managers/employers responded to the survey. In addition, the CRTO obtained the perspectives of a number of additional employer organizations through the OHA, which conducted a survey of its hospital members to obtain input for the submission.

Canadian Respiratory Therapy Regulators and Associations

The College circulated a survey to the members of the National Alliance of Respiratory Therapy Regulatory Bodies which includes the College and Association of Respiratory Therapists of Alberta (CARTA); the Manitoba Association of Registered Respiratory Therapists (MARRT); Ordre professionnel des inhalothérapeutes du Québec (OPIQ) and the Canadian Society of Respiratory Therapists (CSRT) representing the non-regulated provinces. All of the organizations responded to the survey. In addition, the Provincial professional association, the Respiratory Therapy Society of Ontario (RTSO) made a submission which included comments from RTSO members received via the RTSO website.

CRTO members

The firm of Harry Cummings and Associates (HCA) was engaged to conduct focus groups and key informant interviews with respiratory therapy stakeholders. In total 76 RT participants took part in the focus groups and 20 RT employer/managers participated in key informant interviews. The methodology for this portion of the study is included in HCA's report⁵.

⁵ A Report on Respiratory Therapy Stakeholder Perspectives Regarding a Baccalaureate Degree Level Entry-to-practice for Respiratory Therapy in Ontario, Harry Cummings and Associates, December 5, 2005.

RESULTS

1. Impact of a Diploma/Degree on Delivery of Patient Care

Non-Respiratory Therapy employers

Employers voiced a variety of opinions as to the impact a degree program would have on the delivery of health services or patient outcomes. Three of the employer respondents (including the OHA group) were of the view that university preparation facilitates more independent and critical thinking.

Certainly university level preparation equips the RRT with more skills to address the increasing number of issues and the ethical components involved in the more complex clients.

I would be inclined to say that an undergraduate degree enhances critical thinking skills.

In our work environment, the Respiratory Therapist is an essential voice in our team and his/her advice can direct the team in the care of a critical airway or a treatment plan. I think that they need all of the preparation that they can get to prepare them for this role.

Therapists currently entering into practice have the technical skills and knowledge of the Cardio-Respiratory System but they continue to lack some of the critical thinking and team building skills they require to prosper in today's and presumably the future's healthcare environment.

The majority of the (OHA) respondents agree that moving to a degree program would affect the delivery of health services or patient outcomes. Some of the reasons behind that thinking have to do with increased complexity in technology and role expansion in the context of the interdisciplinary health team. University preparation, in general, may facilitate more independent and critical thinking and the utilization of evidence-based practice.

Two respondents were of the view that a diploma program, through the community colleges, is also capable of developing essential critical thinking skills.

I believe that the RTs we have now are well qualified to perform their duties. I believe there is room for both diploma and degree.

One employer added that a university degree is warranted to alleviate the perception that university better prepares its graduates to handle complex care issues:

Critical thinking skills are a valuable asset for employment in the field of Respiratory Therapy. While university level preparation enhances critical thinking skills, the university environment is not the only place where critical thinking skills can be developed. The current community college programs are also capable of developing these essential skills. It is, however, the perception by employers, other regulated health professions and the general public that University better prepares its graduates in this regard. This limitation is not unique to the field of Respiratory Therapy and a degree program is warranted to alleviate this perception.

Three of the respondents expressed the opinion that moving to a degree program would not impact patient care and one respondent stated that experience, rather than training, tends to provide more of a benefit when it comes to dealing with complex critical decisions. Another respondent was of the view that it is the scope of practice and role that are key within the organization:

I am not certain that the degree is the issue as much as the scope of practice and role functions within the organization. Using an illustration, even though MRT is at the degree level now, many hospitals and organizations have failed to maximize the knowledge and keep the technologist in the same roles with the same restrictions...

The OHA went on to make the point that:

A number of hospital respondents cite that many RTs on staff already have a degree – many of them had degrees prior to starting the RT program. The implication being, if a degree program were offered in Respiratory Therapy, the impact may be minimal since many RTs are already university educated.

When asked how a Respiratory Therapist's unique technical skills might be impacted by a move to a degree requirement for entry to practice, the employers' responses were mixed. Some thought that there would be no impact, others were concerned that university preparation might be detrimental to the technical skill element, while others thought critical thinking skills could be enhanced by education that has a good mix of theoretical and technical skills. The following statement would seem to illustrate these views:

With a degree requirement for entry to practice, the assessment and evaluation of patients would become an increasing expectation and move the focus away from the technical skills that the profession is currently providing. It may, however create a great marriage between the technical expertise and the theoretical knowledge behind it. RTs have been criticized as being task-orientated, moving from one technical skill to another without completing a full assessment of the patient status and thus contributing to the patients overall plan of care.

Canadian Respiratory Therapy Regulators and Associations

The majority (3 out of 4) of Alliance members were of the view that university preparation would better prepare graduates for the evolving role of Respiratory Therapy and that a degree program would enhance the RT's decision-making skills and capability to deal with complex health issues.

University level preparation does enhance critical thinking skills. This would enhance our capability to deal with complex health care issues in complex environments.

A degree program does provide students with a greater degree to problem solve, think critically and deal with issues/patients on a more mature emotional level.

I am in favour of establishing degree credentialing for RTs. I believe this will have a positive impact on the profession, in that it will give practicing therapists an edge for advancement in the workplace. I also believe it will have a positive impact on the public, since the degreed person tends to have a more scientific bent, which is crucial in the application of Evidence Based medicine).

Most of the respondents reported that the RT profession needs to be better prepared to handle the higher levels of accountability, autonomy and clinical judgment associated with a changing and expanding scope of practice, and that this preparation would be better served through a degree program.

This new role requires a level of clinical judgment that cannot be provided, particularly through present training programs, since it calls for a much deeper exploration of core scientific material).

As a group, we are often not as agile as we will need to be in the future, when it comes to approaching change, critical review of our own practice and willingness to try new approaches. In addition, legislation such as the Health Professions Act paves the way for expanded scope of practice for any regulated health profession where there is a demonstrated need. The RT profession needs to position itself to take advantage of these opportunities).

Respiratory therapy has evolved over the years creating an environment where the therapist can, and in many places has, taken on the responsibility of decision-making regarding treatment procedures which can affect the care of a patient.

However, one regulator) was of the view that the type of credential itself does not necessarily affect the delivery of health care, but rather, that it is the nature of the education program that determines the quality of the graduate.

When asked how a Respiratory Therapist's unique technical skills might be impacted by a move to a degree requirement for entry to practice, while the respondents agreed that the application of the profession's technical skills should be maintained, only one respondent clearly indicated that having a degree would enhance these skills:

Having a degree could only enhance these skills, possibly a move to make added skills part of the curriculum would then provide a therapist with a wider range of skills upon graduation.

Ontario Respiratory Therapy Education Programs

A common theme that emerged from all 6 Ontario RT programs was that it was challenging to incorporate into the curriculum all that is necessary to prepare students for their career. All respondents believed that increasing the program from a 3-year advanced diploma program to a 4-year program would facilitate a more comprehensive curriculum. Most respondents felt that the complexity of the health care system, the increasing scope of practice of respiratory therapists and the ever-changing technology reinforced the need for graduates of an RT program to have superior critical thinking and problem-solving skills.

A 4-year program would allow re-distribution of content to both incorporate additional content and elevate the current training to a level more appropriate to the complexity of the health care system for today and the future.

This preliminary consultation indicates that the profession is timely in its consideration of a four-year educational process; one that would combine the strengths of the College while incorporating the additional time and educational content and focus that is possible through degree preparation.

We, also, realize that the so-called age of technology and communication has only reinforced the need for strong problem solving and critical thinking skills in the treatment of patients within our own areas of practice, as well as those within allied disciplines.

A Degree would enhance critical thinking for complex situations. It would also facilitate increased knowledge of health care in research as well as allow Respiratory Therapists to have advancement in hospital administration.

When asked how a Respiratory Therapist's unique technical skills might be impacted by a move to a degree requirement for entry to practice, one program respondent indicated that the technical skills training would need strict attention if a move to a degree program was offered in a university setting. Another respondent suggested that curriculum offered through degree preparation might enhance the technical training by incorporating inter-professional education and therefore promoting collaborative practice models of health care.

Given the inherent nature of community colleges, applied degrees delivered in that setting would facilitate the retention of the existing technical emphasis at the diploma level. As well, a 3+1 or 2+2 college/university combination would allow the technical expertise currently delivered by colleges to be retained, while drawing on the strength of universities in better preparing students for research activities.

The opportunity to offer a broader curriculum could complement the unique technical skills with non-technical skills that involve inter-professional education and collaborative patient centred practice.

Although all RT programs agreed that a degree preparation might better prepare graduates, most felt that a four-year applied degree program offered at a College or a collaborative program between Colleges and Universities would better meet the needs of the health care system by maintaining the current infrastructure and integrity of the existing programs.

2. Changes in Scope of Practice/Role of Respiratory Therapists

Non-Respiratory Therapy employers

The employers were generally in agreement that changes in Respiratory Therapy scope of practice and/or role suggest the requirement for a degree would be advantageous. Some of the examples of this change were cited as:

- Home respiratory care has become more intensive; patients are now discharged earlier from hospital with more complex and serious medical conditions.
- More and more effort is being put into research of how we are managing our patients.
- Increased complexity in technology and role expansion.

Concerning whether RT education is an issue when considering members' capability to deal with increasingly complex health care issues, most employers agreed that university level preparation equips the RT with more skills to address issues associated with complex clients, for example:

Although the university preparation may not affect the ability of the Respiratory Therapist to perform skills, it will give them a more global view of the patient and treatment options and

rationale, as well as expand their critical thinking skills and their contribution as a member of the multidisciplinary team. In our work environment, the Respiratory Therapist is an essential voice in our team and his/her advice can direct the team in the care of a critical airway or a treatment plan. I think that they need all of the preparation that they can get to prepare them for this role.

Canadian Respiratory Therapy Regulators and Associations

When asked if there have been any changes in Respiratory Therapy that suggest the requirement for a degree would be advantageous, expanded scope of practice, a greater degree of problem solving, decision-making and accountability in areas such as mechanical ventilation, anaesthesia home care, patient consultation and case management, were cited by the regulators and associations. Factors leading to the changes in scope of practice and concomitant requirements for enhanced clinical judgement were listed as: an increase in the aging population; the emergence of chronic diseases; the vulnerability of the outpatient population; a shortage of healthcare professionals (including physicians); and limited service financing capabilities. There was some concern that the RT profession is not prepared for some of these changes:

As a group, we are often not as agile as we will need to be in the future, when it comes to approaching change, critical review of our own practice and willingness to try new approaches.

When asked if Respiratory Therapy education is an issue when considering members' capability to deal with increasingly complex health care issues, 3 out of 4 RT regulators/associations were of the view that university level preparation would be of benefit.

University level preparation does enhance critical thinking skills. This would enhance our capability to deal with complex health care issues in complex environments.

A degree program does provide students with a greater degree to problem solve, think critically and deal with issues/patients on a more mature emotional level.

Respiratory therapists are taking on a larger role as respiratory care consultants for other healthcare professionals. This new role requires a level of clinical judgment that cannot be provided, particularly through present training programs, since it calls for a much deeper exploration of core scientific material.

In 1999, we undertook a thorough review of the initial training received by respiratory therapists, based on its belief that the current program does not adequately prepare RT students for the type of practice that is – and will continue to be – expected from them within the context of the Quebec and Canadian health networks.

However, one regulator was not convinced that a degree program better prepares an RT to deal with complex care issues and was of the view that it is the nature of the program (diploma or degree) that determines the quality of the graduate.

Ontario Respiratory Therapy Education Programs

When asked if there have been any changes in Respiratory Therapy that suggest the requirement for a degree would be advantageous, RT program respondents identified the following indicators suggesting that scope of practice has changed: complexity of health care, increased acuity of patients, technological advances, RT expanding roles in such areas as anesthesia, research, health

administration, patient education, community care and technical development/research. Once again the respondents reinforced the increasing need for RT graduates to have excellent critical thinking and problem-solving skills. They did however suggest that further research and evidence is needed prior to concluding that a change to degree entry is required to meet these changes in scope of practice and the evolving role of the RT in health care.

Expanded roles in Respiratory Therapy as well as an increase in the sophistication and production of new technology requires the ability to analyze, synthesize and evaluate optimal patient care delivery systems to enhance patient care.

While all respondents agreed that RT scope of practice is broadening and a high level of education is required to prepare the students, it was pointed out that the current system as it exists is preparing students to meet this requirement.

When asked if RT education is an issue when considering RTs capability to deal with increasingly complex health care issues two programs specifically indicated that the length of time (i.e. 3-year program) was a constraint in trying to incorporate the amount of education and clinical training required to meet complex health care. However, one program pointed out that Ontario RT programs have met this challenge over the past several decades which saw tremendous technological and therapeutic advances in respiratory therapy.

As the complexity and acuity of the healthcare requirements rise, there may be need for respiratory therapy professional education to have increased resources related to time, technology, and human resources for both didactic and clinical education.

Educational programs for RT's have consistently maintained a strong technical foundation to meet the challenges of these technological advances and have, also, incorporated superior therapeutic modalities in the application of devices.

University level preparation offers broader curriculum increasing an individual's experience thereby enhancing capacity to deal with increasingly complex health care issues. As well the possibility for specialization within the role could potentially result in higher responsibility for decision making, collaborative and consultative patient care.

3. Changes in the Health Care Sector

Non-Respiratory Therapy employers

The survey asked the respondents if there had been any changes in healthcare in general that suggest the requirement for a degree would be advantageous. Those employers who responded cited increased complexity of the healthcare system and the skills required to provide a holistic approach, as reasons for a degree requirement. In addition, one respondent commented that in today's healthcare world,

Our healthcare system has become a very complex and complicated arena for providing patient care over the past 10 years. Respiratory Therapists are members of a very dynamic and well-educated group of professionals, who for the most part are prepared at the undergraduate degree level. Therapists currently entering into practice have the technical skills and knowledge of the Cardio-Respiratory System but they continue to lack some of the critical thinking and team building skills they require to prosper in today's and presumably

the future's healthcare environment....research and evidence-based practice is critical to improving healthcare, knowledge and patient outcomes.

Canadian Respiratory Therapy Regulators and Associations

One regulator cited recent changes in legislation as an opportunity for expanded scope of practice for any regulated health profession where there is a demonstrated need. Another regulator responded that new clinical, pharmacological and technological developments are making it possible for practitioners to provide patient care of unprecedented effectiveness, but added that in order to realize their full potential, Respiratory Therapists must be able to benefit from increasingly skilled support and professional follow-up.

4. Respect and Credibility of the Profession

Non-Respiratory Therapy employers

Concerning whether university preparation would increase Respiratory Therapists' recognition and credibility, the employers' response was mixed. A number of employers felt that the lack of sheer numbers of RTs, compared to say nurses and physicians, was likely the main reason RTs were perceived as having a lack of voice (3), and that the lack of a degree was a secondary factor.

...strongly suggest that the sheer volume of nurses and physicians compared to Respiratory Therapists drowned out their voice.

RT's represent a smaller stakeholder group in the health care industry, and as individual practitioners have not risen to decision-making positions. This is due in large part to not having a university degree program, and a lack of advancement opportunities without a degree.

However, an equal number of respondents were of the view that degree preparation is a factor in recognition:

However unfair it is the medical system tends to work on having to earn the right to have a say. You are given this recognition more readily if it is backed up with a university education (validation). In real life we know this has no bearing on the ability of health care workers to provide excellence of care.

For any profession, higher levels of education and preparation enhance credibility and recognition.

...facility has a predominance of university-prepared RRCs. Their input into protocols and procedures was invaluable during the SARS outbreak. Critical thinking and an ability to gather resources and information was also evident during that time. By being Baccalaureate-prepared, and more specifically, practicing with an evidence based focus, trust is given by decision-makers judiciously.

The remainder of respondents felt that the issues of recognition and credibility had nothing to do with university-preparedness but rather they are related to hospital culture, decision making and level of experience:

My opinion is this is more of a result of people still working in silos and forgetting the big picture – especially in a crisis situation.

A voice within the team of decision-makers does not have to be a voice with a university degree. It needs to be the voice of experience.

...some of the issues raised, such as their 'voice' during SARS is not related to educational preparation but more to recognition within the health care environment of the existing knowledge and skill of this unique group of professionals; in other words, failure to involve them in key decision making which is within their current scope of practice. Organizations where professional practice is fostered, and where inter-disciplinary teams are valued, treat the existing resources differently. Look at the literature on “magnet hospitals”, it’s not about credentials, it is about respecting professional knowledge and scope.

... most of the decisions being made during the SARS crisis were political and not clinically driven. The provincial government did not move on the issue as quick as they should have and therefore decisions were made from the top down.

When asked to comment on the perception that Respiratory Therapy-specific research is not being supported because the diploma entry-to-practice requirement is not recognized or respected, most of the employers agreed that university preparation would provide more research opportunities for Respiratory Therapy.

A degree prepared RRT has research as a part of their education whereas a college prepared RRT focuses more on clinical skills. Knowledge of the research process would enable the RRT to seek out more opportunities for research and the skill to develop proposals.

*Having degree qualified RT's will help this.
A university degree is a criterion for research funding.*

In order to be respected and be seen as credible in the research arena academic credentials are critical.

While the body of knowledge for RTs is recognized within the Respiratory Community itself, credibility will increase as educational requirements increase.

Similar to the body of knowledge within nursing, credibility is gained as educational requirements are increased with a concurrent drive to research within the academic circle. Continuing scope-specific research broadens and enlightens the minds of not only the specific-discipline, but that of the entire multi-disciplinary team.

Only one employer disagreed that educational preparation was related to research opportunities, although they did acknowledge that recognition of health profession specialties was a factor:

We feel that the driver for respiratory research lies more in the economics of pharmaceutical companies and the specialties of the recognized physicians than it does in our credibility of educational requirements.

Canadian Respiratory Therapy Regulators and Associations

Those regulators and associations that responded to this question agreed that degree preparation does have an influence on the credibility of a profession:

In my opinion, level and credibility of entry to practice (ETP) preparation does limit opportunities for advancement for RTs. We often don't have representation at the decision making level in an organization that would be called upon to deal with a crisis like SARS.

Yes I do believe that that was one factor why RTs were not involved in key decision making during that time period. It has been somewhat evident in not only this instance but in others that due to the fact we as a profession do not have degree status that we have not been included in key decision making committees on a global level.

... a degree prepared profession will also, in my opinion, have a stronger voice when those with post graduate training such as masters' and PhD's achieve positions of authority and responsibility in the health care system.

A lack of a political voice was also cited by 2 organizations as a factor in the profession's respect and credibility.

When asked to comment on the perception that Respiratory Therapy-specific research is not being supported because the diploma entry-to-practice requirement is not recognized or respected, while there was agreement that research opportunities are usually associated with universities, members of the Alliance also listed a number of other factors:

...few physicians consider respiratory therapists as assistants again due to the (small) numbers and the apparent lack of interest.

I agree that lack of university preparation and thus opportunities for post grad research is a major barrier to profession-specific research. I believe that future ability to do RT-specific research at Masters and PhD level is a necessary precursor to effective exploitation of opportunities we have to better serve patients.

Research is taught in University courses and is integral to what a University is all about...this leads me to believe we would be more research oriented if it became part of the teaching/school culture. This would also lead to more credibility in teaching hospitals for department research and/or assisting in research projects by RRTs.

I do not believe this is necessarily a case of non-recognition or lack of respect for the educational credential. Rather, research has typically been primarily the mandate and role of universities. When connected with a university, the opportunities for research, research funding and support are more available. At an undergraduate level, this continues to be a challenge, even at the university, however there is no question that this will evolve as opportunities for post graduate education become available within the profession.

Ontario Respiratory Therapy Education Programs

The participants were asked if they thought that university preparation would increase Respiratory Therapists' recognition and credibility, and provided the perceived lack of voice during the SARS crisis as an example of how this lack of recognition might impact on public health.

Some of the respondents did believe that the lack of university credentials played a role during and following the SARS crisis. There was no consensus on this topic from all RT programs however, some suggesting that while this may be one of the reasons it is difficult to concretely show a cause and effect relationship. Most respondents did agree that lack of a degree preparation may limit opportunities for advancement into administrative and government positions thereby impacting on the awareness and influence of the profession.

We want to be treated as equals but are lagging behind in credentials. Did this contribute to our lack of input into the SARS crisis? It was likely one of the factors.

...it can be assumed that higher credentials are more readily recognized and even required to movement within the health care system hierarchy. Positioning within this system allows for connections and networking with decision makers within the system which in turns may promote higher recognition and credibility.)

RT's are employed in practice areas that range from acute, critical, and emergency care to long-term rehabilitation and home care and, yet, they have minimal input into global/community health strategies. Two examples of this come directly to mind, the MOH consultation process on Primary Health Care in Ontario that took place in the mid-1990's and the post-SARS analysis in 2003. In both of these instances RT's were virtually ignored and it was only after intentional and forceful demanding that their assessment and contribution was recognized. Is this due to lack of degree training? I believe it is.

When asked to comment on the perception that Respiratory Therapy-specific research is not being supported because the diploma entry-to-practice requirement is not recognized or respected, RT program respondents all agreed that research capabilities fell under the university domain. It was pointed out by one respondent that the role of Community Colleges is to focus on discipline specific learning and not necessarily research. All programs did comment that current curriculum does include courses on research methodologies, statistics and critiquing the literature but it is fairly basic and probably does not prepare students to undertake their own research. Many respondents indicated that most research is conducted by Masters or PhD prepared individuals, which limits the opportunities for RTs since no university undergraduate or graduate programs currently exist in respiratory therapy.

Increasing the entry to practice credential to baccalaureate may initiate an increase in eventual graduate programs and in turn research opportunities.

Agree this is an accurate perception. Without university level credentials it is very difficult to obtain grants, recognition, and publication. At the moment most research requires credentialed team support.

RTs in the field have participated and assisted in a cornucopia of research activities in support of advances primarily in the application and collection of data and, yet, rarely is the RT seen as an active participant in the interpretation of the end results. RTs must become the instigators of respiratory care research to ensure that best-practice and cost-efficient treatment is the norm for their patients, the public of Ontario. Baccalaureate degrees that emphasize research/scholarship along with enhanced critical thinking will provide this option for RTs.

5. Human Resources Issues: Opportunities for Advancement

Non-Respiratory Therapy employers

The majority of the employers were in agreement that a degree entry-to-practice requirement would give Respiratory Therapists access to higher level employment positions, but as with the regulator group, some added that to influence policy decisions, a Master's degree is often required:

No question that a degree opens up opportunities for advancement that are not available to college prepared RRTs. This would certainly allow for the ability to influence policy and in career development.

This is where the big advantage comes in obtaining a degree to practice. It is in the advancement to higher education (MHA, MBA, etc.) and therefore greater career advancement that will put them in a position to influence.

Yes. Higher-level employment positions now require a university degree as a minimum entry standard.

Degree/Masters level preparation is standard for a lot of management positions today.

A degree entry-to-practice requirement would not significantly change advancement; however, for example, a MBA or MEd would be more likely to impact advancement.

However, one employer differentiated between a degree requirement and an entry to practice requirement:

A degree yes – required at 'entry to practice' – no.

Some employers commented that RTs already influence policy within their organization:

At our site RTs do play a role in creating policies in regards to their field.

The RT currently sits on two Medical Sub-Committees and the Professional Practice Committee.

More than once an employee warned against raising expectations and then failing to attract "front line" therapists:

I do not believe you can (or should) put the hurdle so high as to discourage front line employment. You raise expectations that can't be met and end up with disgruntled employees who leave the workforce in droves (what advancement opportunities for all of the BScRTs?)... [Other Baccalaureate prepared health care providers] aren't leaving because of pay – one of their reasons is that they can't get that Monday-to-Friday job they thought they'd be able to and they still have to do odd shifts and front line [patient care]! The problem is that most health disciplines have done just that (raised the hurdle too high) - so why shouldn't RTs?

Canadian Respiratory Therapy Regulators and Associations

There was general agreement among the regulators/associations that a degree entry-to-practice requirement would give Respiratory Therapists access to higher level employment positions, i.e., those that influence policy, or in other ways influence career development:

Degree ETP would definitely enhance opportunities for career advancement for RT's.

Absolutely, I feel we would be seen by governments on the same level as nursing or other professions with degrees.

A degree education will definitely open doors to positions of higher responsibility and influence on the delivery of health care.

I am in favour of establishing degree credentialing for RTs. I believe this will have a positive impact on the profession, in that it will give practicing therapists an edge for advancement in the workplace.

... in order to advance our profession we must make advances in education, scope of practice, and lastly, marketing.

As with the employers group, some respondents added that a Master's degree is now the accepted educational preparation for high-level administrative positions:

However Masters-level preparation is now the effective minimum standard for Director level positions - at least in the public sector.

Whereas the nurse or other healthcare professional has already achieved that (BA) status and is now working towards a Masters when the RT is trying to get the degree, it puts our profession at a real disadvantage in real time for those looking at management/administrative positions within hospitals, private sector and government corporations

Ontario Respiratory Therapy Education Programs

Most respondents agreed that a degree entry-to-practice requirement may give RTs access to higher level employment positions, i.e. those that influence policy, or in other ways influence career development

It is possible that graduates who possessed a degree may have expanded opportunities to take a more active role in the provision and administration of healthcare.

Most management positions require a degree. While it is difficult to prove a link between higher recognition and credibility it can be assumed that higher credentials are more readily recognized and even required to movement within the health care system hierarchy.

However, one program pointed out that there may be a negative impact on the number of RTs who opt to remain in patient care if the change were to occur. In addition, they suggest that other options to prepare RTs for senior management/administrative positions include the creation of a one-year management certificate program or to pursue articulation agreements with universities to provide a pathway for RTs to obtain a degree.

6. Importance of Keeping Pace with Other Health Care Professions

Non-Respiratory Therapy employers

Regarding recruitment and retention issues, the employers were divided on whether the profession is losing potential students/employees to other degree-entry professions and/or whether current Respiratory Therapists leaving the field because of lack of advancement opportunities. A number of employers felt there was no relation between recruitment and retention and degree level entry to practice.

I do not agree with this statement. My impression of RTs is that they are people who truly want to have the hands on experience but definitely do not want to be nurses or lab techs or anything else. They are a special breed.

It is unlikely that these are related.

Since most students enter RT with an existing degree, I don't believe that there has been loss of potential students to other degree-entry professions.

An almost equal number of employers agreed with the statement, for example:

I believe that many intelligent individuals who are university-minded will not consider Respiratory Therapy as a potential profession simply because it is diploma entry to practice. When I meet with high school students many will ask after I describe the profession, "which university is the program offered at and can I do a masters when I am finished my undergrad?" When I reply that the program is offered at Community College, I tend to loose much of the interest – not because of the description of the profession but because of the level of education it provides. Leadership opportunities are limited for RTs who do not have a degree as well as their diploma in Respiratory Therapy. All clinical manager, educator and clinical leader positions in our organization require an individual to either have a degree or at the least be in the process of completing one.

Yet others agreed that the diploma requirement may discourage potential students but does not affect the retention of graduate RTs. Other employer respondents were of the view that further investigation is need to support the statement.

I think there needs to be more evidence on whether this change is required. For example, how often are the RTs leaving practice because of dissatisfaction with their current circumstances, and will increasing credentials for entry-to-practice solve their intention to leave?

Canadian Respiratory Therapy Regulators and Associations

With the regulator/association group there was not complete agreement on this issue. One regulator was of the view that the profession likely loses some of the "brightest and best" prospective applicants to other career options and that some of the most promising RTs move on to non-clinical career opportunities related either to RT or to healthcare in general. Another thought that this could be the case but that it needed to be confirmed by a survey.

One regulator cited workforce issues are the biggest reason to move to a degree program for a profession that requires three plus years of post-secondary education.

Ontario Respiratory Therapy Education Programs

There was no consensus among the RT Programs concerning recruitment and retention and whether the profession is losing potential student/employees to other degree-entry professions. Some respondents suggested that moving to a degree entry to practice may reduce the applicant pool and therefore may negatively impact the impending RT shortage. Conversely, it was suggested that recruitment into the profession might be enhanced by a move to a degree entry as this may attract students looking for a career with advancement in health care a potential. In general, all respondents noted that recruitment and retention issues are multi-factoral and cannot be based on one factor alone, that being educational preparation.

In a society that is demanding higher levels of training and education it is in a student's best interest to obtain a degree if it is available to them.

...one must also consider the possibility that elevating the entry to practice credential may reduce the pool of students eligible to apply to programs and further impact the existing RRT shortage. It is also feasible that potential students may opt out for other careers if they perceive that advancement in health care would be hindered by a lack of degree status.

7. Educational Issues: What should be emphasized in a degree program

Non-Respiratory Therapy employers

Regarding educational issues, the participants were asked to respond to two questions concerning the model of delivery and curriculum respectively:

1. What type of degree do you feel would be most appropriate for Respiratory Therapy should there be a move from a diploma to a degree program?
2. What characteristics of the existing non-degree program need to be strengthened /reinforced/retained if we move to a degree program?

The employer responses to question 1 regarding model of delivery were as follows:

Bachelor of Applied Health Sciences in Respiratory Therapy (4)
Bachelor of Respiratory Therapy Services or even a Masters/PhD in Respiratory Therapy.
Bachelor of Science in Respiratory Therapy
General BSc (2)

Regarding what should be emphasized in a degree program, the employer suggestions are outlined below:

<ul style="list-style-type: none">• Maintain/enhance clinical components• global perspective on health care• documentation and written communication skills• business case presentation• administration	<ul style="list-style-type: none">• patient care plans and assessments• infection control• patient education• strengthen expertise of Professors/Educators in didactic and clinical training program
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<ul style="list-style-type: none"> • leadership skills/ team building skills • management skills • conflict management • physiology • evidence based health care • critical thinking; problem solving • microbiology • pharmacology 	<ul style="list-style-type: none"> • research • alternative RT roles • principles of ventilator therapy • ART Lines • ethics • health economics • interprofessional collaborative practice • OR role
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Canadian Respiratory Therapy Regulators and Associations

The regulators' and associations' responses to question 1 regarding model of delivery were as follows:

<p>BScRT with options for post graduate study at the Masters level.</p>
<p>Either the Bachelor of Science in Respiratory Therapy or Bachelor of applied health sciences in respiratory therapy.</p>
<p>I think the title of the degree is less important than the degree itself and the future opportunities it may access for the therapist. In our province we have implemented a Bachelor of Medical Rehabilitation – Respiratory Therapy degree. This is purely because the program is housed within the School of Medical Rehabilitation in the Faculty of Medicine.</p>
<p>Our organization is moving toward establishing a DEC-BAC formula, whereby students will work toward one of two diplomas, each of which is associated with its own specific license to practise. The first component, the Diploma of Collegial Studies, would entitle the recipient to use the designation “respiratory therapist” and to practise under this licence. The second component, the Bachelors Degree, authorizes the use of the “clinical respiratory therapist” title (an interim designation) and grants the right to practise within the parameters of this license.</p>

Regarding what should be emphasized in a degree program, the regulator/association suggestions are outlined below:

<ul style="list-style-type: none"> • anesthesia (as specialty areas of study) • NICU • strong clinical component • critical thinking • population health concepts • expertise related to effecting behavior change in clients/groups • ethics 	<ul style="list-style-type: none"> • statistics, • improved anatomy • basic clinical sciences • interdisciplinary projects • building interdisciplinary patient care teams • health care administration • research • education (including adult education)
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Ontario Respiratory Therapy Education Programs

The RT Program's responses to question 7 regarding the model of delivery were as follows:

Type of Degree	Characteristics of existing program to be strengthened/reinforced/retained
-Bachelor of Science with specialization in RT -Bachelor of Applied Health Science in RT	§ Strengthened –research, product development, critical thinking, health administration, business/managerial skills. § Reinforced – technical trouble shooting, community care/teaching skills, interpersonal skills § Retained – the highly applied and technical components traditionally delivered in the Community College; extensive clinical component in combination with simulated practice
Bachelor of Applied Health Science in RT – offered by College	clinical simulation and e-learning provided within an inter-professional focus
Bachelor of Applied Health Science in RT – offered by College	§ Strengthened: critical thinking and sound decision making. § Increasing students exposure to case study learning along with more time spent in clinical simulation
Bachelor of Health Sciences in RT	§ Strengthened: example, administration, education, philosophy and religion, economics, information systems to name a few. § Reinforced: ethics, human development/behaviour, communications, holistic/traditional/alternative health care, health delivery systems in Ontario/Canada. § Retained: established technological aspects at their current levels including applied sciences, instrumentation and methodology, and clinical experience.
Applied Degree offered by College	Integrate technical skills presently acquired through post-graduate certification (e.g. anesthesia, patient evaluation and non-invasive cardiology Enhance: clinical simulation and patient teaching skills
Bachelor of Health Science (Respiratory Therapy)	§ Retain: technical/professional skills § Enhance the non-specific skills such as critical thinking, leadership and administration

In general, the RT Programs suggested that the following should be emphasized in a degree program:

<ul style="list-style-type: none"> • anesthesia (as specialty areas of study) • NICU • strong clinical component • critical thinking 	<ul style="list-style-type: none"> • statistics • improved anatomy • basic clinical sciences • interdisciplinary projects • building interdisciplinary patient care
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- population health concepts
- expertise related to effecting behavior change in clients/groups
- ethics

- teams
- health care administration
- research
- education (including adult education)

8. Additional Impacts of Moving to a Degree Entry

Non-Respiratory Therapy employers

Employers were asked to identify additional impacts of moving to a degree and they are categorized as follows:

Patient care

Overall the employers were of the view that degree preparation would benefit patient care and the quality of care. The comment was made that degreed graduates would be better prepared to deal with complex patient issues, ethics and participate in the research that will lead to evidence-based practice that is critical to improving healthcare, knowledge and patient outcomes.

Employers also commented that with degree preparation comes the potential for expanded scope of RT practice.

Employment

Employers listed opportunities for advancement, expanded roles, equity with other professions and perceived credibility, as advantages of moving to degree entry. However, at least two employers made the point that smaller hospitals may have problems recruiting as they will not have the range of opportunities to offer.

Educational issues

Employers were in agreement that it is important to retain a strong clinical component in any RT program. Perceived benefits of degree-entry included access to post graduate education and concomitant career advancement opportunities. One employer also cited increased support for clinicians, educators and researchers through the university setting as a benefit. One respondent pointed out that the move to degree-entry would shorten the overall training time compared to those RTs who get a degree first and then complete the RT program (up to 7 years of post secondary education for university prepared RTs). On the negative side there were concerns raised that an increase in the number of programs might put a strain on the number of clinical sites and that a university program may lose the current practical emphasis.

Transition issues

As with the RT focus groups and RT regulators, there was some concern raised concerning a potential conflict between diploma and degree prepared RTs and whether diploma RTs would be able to upgrade their credentials. There was also a concern that the gap created during the transition might lead to a shortage of RTs.

Recruitment and retention

As with the RT regulator group, there were concerns that a move to a degree would discourage students from pursuing the profession, but conversely, some employers were of the view that recruitment into the profession would increase. Again, respondents commented that the "type" or "calibre" of individual entering a degree program may be different from that entering a diploma program. The impact on labour mobility was also identified.

Financial issues

As with the RT regulator respondents, an increase in tuition costs for students and the concomitant anticipated increase in salaries/health care costs associated with degree preparation were cited as financial impacts.

Table of responses re: anticipated impact of a move to degree entry-to-practice

Patient care

Advantages

- Creates a more rounded graduate with better reasoning abilities and depth of understanding.
- Results in better patient care & quality of care, better ability to deal with multiple co-morbidities and holistic view of the patient care needs.
- Potential to increase the scope of practice of RTs.
- Increased collaboration with other health care providers.
- Enhanced critical thinking skills.
- Increased skills to handle ethical issues associated with more complex clients.
- Ability to critique the literature and participate in research.
- Facilitates a greater understanding of the global health perspective.
- Better developed leaders to impact health care.
- Expanded roles.
- Lead to research and evidence-based practice that critical to improving healthcare, knowledge and patient outcomes.
- Increased support for clinicians, educators and researchers through university setting.
- Recognition of clinical contribution of RTs to healthcare.

Employment

Advantages

- Increases opportunities for advancement.
- Access to higher education (MHA, MBA, etc.) and therefore greater career advancement that will put them in a position to influence.
- University preparedness allows RTs to investigate post graduate studies and provides opportunities in management and leadership as well as teaching.
- Establishing a further level of credibility to the profession.
- Enhances professional status, increased professional awareness at organizational and ministry level.
- Increased advocacy for professional issues.
- More flexibility in career choices.
- Improvement in perceived equity with other healthcare providers.
- Maintaining competitiveness across professions.

Disadvantages

- RTs educated to the highest level will be frustrated as they are required to perform “menial” tasks.
- Smaller hospitals will have problems recruiting as they will not have the range of opportunities to offer.

Educational issues

Advantages

- Access to higher education (MHA, MBA, etc.) and therefore greater career advancement that will put them in a position to influence.
- Enhances advancement opportunities.
- Increased support for clinicians, educators and researchers through university setting.
- Shortens training time compared with those RTs who get a degree first, then complete the RT program – up to 7 years of post secondary education for university prepared RTs.
- Possible increased accessibility due to other universities providing the RT program.

Disadvantages

- Potentially more schools providing the course might overwhelm the clinical sites providing the clinical experience/internship.
- Losing basic technical and practical premise for the profession.

Transition issues

- How to grandfather current RTs without a degree.
- How to register RTs from other provinces that do not require a degree to practice.
- Potential view of two-tiered program by existing practitioners - need to investigate opportunities for existing practitioners to obtain RT degree.

Disadvantages

- Gap in graduates during changeover leading to shortage of RTs.

Recruitment and retention

Advantages

- Improves the recruitment of students.
- May attract a higher calibre student who is serious about the profession.
- Opportunity to use existing models of prior learning assessment for foreign trained/re-entry candidates.

Disadvantages

- Fewer students enrolling = future shortages.
- Less technically skilled individuals enrolling.
- More difficult to retain degree prepared individuals at the bedside as they typically look for advancement and management positions.
- Students may well choose to pursue a degree in another area which has brighter job opportunities and does not require working nights, weekends, and holidays.
- A more costly education- may in fact decrease enrollment.
- RT's from other jurisdictions may be unable to practice in Ontario.
- Prospective students may leave Ontario in order to commence employment a year early in other jurisdictions.

Financial issues

Advantages

- Keep on par with nursing when it comes to wage demands etc.
- Better financial compensation.
- Increased expectations related to salary.

Disadvantages

- High cost of university education/time commitment= fewer recruits and potential loss of

talented students who now can't afford schooling (narrowing your market)

- Employer difficulty in meeting monetary compensation package when locked into long-term fixed rate contracts by the government.
- Health Care costs will rise.
- A lot of school for little pay.

Canadian Respiratory Therapy Regulators and Associations

Regulators and Associations were also asked to list the impacts of moving to a degree program for Respiratory Therapy and whether they saw the impact as an advantage or disadvantage. This question raised issues related to patient care, recruitment and retention, employment, cost and the transition issues associated with a move from a diploma to degree. Specific comments are outlined in the table below:

Patient care

The respondents felt that degree preparation would have a positive impact on patient care, citing research and evaluation of RT practice and a more consistent and credible evidence-based / best practice approach to patient care.

Employment

The respondents commented that degree preparation would create more opportunities for advancement and generally give the profession a stronger voice. However, there was a concern raised that degree-prepared graduates might be less willing to undertake "routine tasks" in the work place.

Transition issues

As with the RT focus groups, there was some concern raised about a potential conflict between diploma and degree prepared RTs and whether diploma RTs would be able to upgrade their credentials. One respondent asked whether a change in the entry-to-practice requirement would take RT programs out of the college atmosphere?

Recruitment and retention

There was concern raised that a move to a degree would discourage students from pursuing the profession by increasing the number of years training and therefore the cost. One respondent commented that the "type" of individual entering a degree program may be different from that entering a diploma program, and one respondent commented that a move to a degree for entry-to-practice could create significant mobility issues for practitioners provincially as well as nationally.

Financial issues

The respondents listed cost as an issue on two levels. First, the increase in tuition costs for students and second, the concomitant anticipated increase in salaries associated with degree preparation.

Table of responses re: anticipated impact of a move to degree entry-to-practice

Patient Care

Advantages

- Ability to critically evaluate RT practice and effect change in approach and focus in order to

optimize patient outcomes.

- Ability to demonstrate outcomes.
- Ability to influence (or become) decision-makers.
- Profession-specific research relevant to clinical advances and healthcare system issues.
- More consistent and credible evidence-based / best practice approaches to patient care.
- An opportunity for exposure to the other team members, which can enhance teamwork, and a holistic approach to patient care after graduation.

Employment issues

Advantages

- More opportunities for advancement within the different organizations.
- When a profession has relatively few members, a degree prepared profession will also have a stronger voice when those with post graduate training such as masters' and PhD's achieve positions of authority and responsibility in the health care system.
- A degree education will definitely open doors to positions of higher responsibility and influence on the delivery of health care.
- A higher profile with government

Disadvantages

- Potential for morale issues - of BSc level practitioners re: routine tasks.

Transition issues

- How will the degree program affect the status of previous graduates? Will there be a way for previous graduates to obtain a degree by fast tracking through the program?
- Does this take the programs out of the college atmosphere?

Disadvantages

- Potential for conflict between grand-fathered staff and degree staff.

Recruitment and retention issues

Disadvantages

- Discouraging students from pursuing the profession by increasing the number of years and therefore the cost.
- Recruiting the appropriate types of individuals for a caring/technical/science-based profession. Just an observation but it seems that the type of nurse entering as a degree nurse is different than a college/diploma nurse...good or bad, this will be what happens to RT.
- If Ontario moved to a degree for entry to practice, it could create significant mobility issues for practitioners provincially as well as nationally. This would not be favorable until all jurisdictions have a degree program in place.

Financial issues

Disadvantages

- Cost of the program (tuition is generally higher in universities vs. technical colleges),
- Potential credential creep and concomitant salary creep perceptions.
- Collective Agreements.
- Cost is an issue.

Ontario Respiratory Therapy Education Programs

Respiratory Therapy Education Programs were asked identify the advantages and disadvantages of a change in entry to practice from a diploma to a degree. The following table gives a brief summary of the issues they raised.

Advantages	Disadvantages
<ul style="list-style-type: none"> § Longer program duration therefore more time to cover content § Research § Administration § Increased potential for career advancement into supervisory/administrative roles both within hospitals and externally § Increased credibility/ status within health care system at administrative/policy level. § Improved perception by the public and government on level of expertise, education resource. 	<ul style="list-style-type: none"> § Increased tuition costs for students and increased delivery costs for academic institutions. § Longer program duration § Shortage of Masters and Doctorate prepared RRTs to teach within Baccalaureate programs § Higher salary expectations of degree prepared RRTs § Elevated program entry requirements may reduce the pool of candidates eligible to apply
<ul style="list-style-type: none"> § RTs would be on a more equal playing field with other health disciplines § Increases advancement opportunities § Possible increase in student recruitment, competing with other health programs § Increased opportunities for continuing education § Improved Respiratory Therapy research opportunities § Portable and respected credentials § Better match between education and job requirements 	<ul style="list-style-type: none"> § Increased tuition expenses for students § Possibility of increase wage costs for employers § Possible strain between staff educated to different levels § Possible decreased pool of educators/professors – they now must possess education at a masters level § Will the credential creep continue and where will it stop as other professions fight to keep up or keep ahead
<ul style="list-style-type: none"> § higher caliber of student applying to program § increased applicant pool to choose from § increased border potential and attraction to international students § Program would be more competitive to other degree entry practice health care professions possibly resulting in higher retention and recruitment. 	<ul style="list-style-type: none"> § cost to create program as well as graduate students, § response time in meeting market demands may be decreased due to increase in length of program. § Potential cost to employer due to increased salary expectations. § Change from college division to university division within the MOTCU may have an impact on program delivery etc. § Current program already services a number of students with university degrees.

9. General Level of Support for a Change from Diploma to Degree

Non-Respiratory Therapy employers

Half of the employee respondents (including the OHA) clearly supported the change to a degree entry-to-practice requirement:

Health care has become more and more complex and the knowledge base of professionals who deliver healthcare has also expanded. We expect a great deal of our RTs particularly in non tertiary centers. They need to have the preparation to act as an integral member of the team and other team members need to be able to rely on their knowledge. They need to be involved in research, both as a participant and as a professional able to evaluate the research and make decisions based on the research. Most other health disciplines are moving to degree program. We have to follow or we will be viewed differently and less than the other disciplines. [The]role of the RT requires better educational exposure and experience because of the increased complexity of our job.

However, we should also keep in mind...

We do not only need highly academic people in the profession, we need skilled clinicians who can perform the job and the technical skills of it as well.

One respondent felt that there was room for both diploma and degree preparation and 3 out of 8 of the respondents did not support a change from diploma to degree.

I would say NO to this, again I feel that the diploma program offers more hands on then the degree program does. This has been the issue in other areas that have moved to the degree program.

Canadian Respiratory Therapy Regulators and Associations

Four of the respondents strongly supported a move from a diploma to degree program for entry-to-practice. One regulator suggested that Ontario proceed with the implementation of a degree program and commented that although its province has moved to a degree program it has not altered the “entry to practice” requirements.

Ontario Respiratory Therapy Education Programs

In principle there is general support from 5 of the 6 programs for a change from Diploma to Degree, however, nearly all of the programs point out that further research and investigation is required before making a final decision. One program also pointed out that various options for entry-to-practice (e.g. diploma or degree) may be favourable.

...multiple levels for entry to practice might also be considered with an undergraduate degree addressing those competencies required to move forward in the profession.

The College is supportive of degree credentialing for RTs, however, the profession must proceed with caution and wisdom before mandating such a credential at the entry-to-practice level.

One RT program, stated:

We are certain that this [RT] education can be done entirely in the colleges.

10. General advice do you have for the College on this issue

Non-Respiratory Therapy employers

Regarding the general advice to the College, employers urged the CRTO to consult with other professions who have undergone this transition, allow for both degree and diploma graduates, phase in any change so as not to create a workforce shortage, develop a process and/or criteria for diploma RTs to upgrade, review the educational requirements to see if we are meeting today's demand, consult with CRTO members, and have a realistic plan for implementation.

The OHA member respondents added the following:

- § *Will the baccalaureate credential be a barrier to existing Respiratory Therapists who do not have the credential?*
- § *A degree of equity should be assured so as not to disadvantage current therapists, related to clinical roles/responsibilities. It is appreciated that advancement within the field regarding supervisory positions may favour the baccalaureate prepared therapist.*
- § *Would the baccalaureate designation affect hiring practices for clinical positions; i.e., would this designation be preferred or essential?*
- § *Employers need to understand the impact this decision may have on pay scales.*
- § *The College and association could work with universities to develop post-diploma specialties for areas such as sleep apnoea, anaesthesia assistant, neonatal respiratory management, etc. This would avoid creating an undue shortage while meeting the needs of healthcare providers and their clients, the majority of which being more technical in nature. We also feel it is important to have opportunities for high school graduates to pursue studies at a college level. After a few years of employment, these individuals are often interested and ready to pursue university studies in their field.*
- § *With the recent release of the Health Council of Canada's report from a national summit on June 23, 2005, "Modernizing the Management of Health Human Resources in Canada: Identifying Areas for Accelerated Change", we hope that the recommendation to "Create more interim training and certification steps along pathways to health careers" will bear on the next steps the College of Respiratory Therapists of Ontario takes in this project.*

Canadian Respiratory Therapy Regulators and Associations

In response to whether the respondents had any general advice for the College on the issue of moving from a diploma to degree, the regulators and associations suggested that the CRTO should study the issue further, obtain evidence and support for the change and specifically address the issues related to: upgrading for current RTs; the impact on existing RT programs and other key stakeholders; dealing with entry to practice through existing national processes (credentialing and accreditation). One respondent posed the following questions:

- How will potential 'tiering' of the profession be addressed?
- How will this affect individuals currently practicing without degrees?
- How will RT's who already have degrees in other areas be affected?
- How will it impact recruitment/retention to the profession?

Ontario Respiratory Therapy Education Programs

All RT program respondents indicated that a thorough knowledge/skills gap analysis must be done to establish scope of practice and to ensure that any educational program meets the set entry to practice competencies.

Independent research focusing on a gap analysis of diploma-prepared practitioners' ability to carry out their current roles and responsibilities and what might be the expanded roles and responsibilities of degree-prepared practitioners.

We believe that the first step in this project would be to examine and modify the scope of practice according to the new role of the Respiratory Therapist. A knowledge/skills gap analysis needs to be done afterwards in relation to the new scope of practice. We may find that the degree requirement for entry-to-practice would not be necessary and that the additional education could be acquired through a post-diploma program.)

11. Specific questions for National Alliance of Respiratory Therapy Regulatory Body members

a. Will degree preparation generally widen access to ongoing continuing education?

The one organization that responded to this question agreed that degree preparation will provide access to ongoing continuing education.

b. Is there a need to educate Respiratory Therapy students in a different environment alongside their future colleagues? (e.g., interdisciplinary education models)?

Only one respondent answered this question directly and agreed with the statement there is a need to educate Respiratory Therapy students in a different environment alongside their future colleagues, and commented that exposure to the other team members can enhance teamwork and a holistic approach to patient care after graduation.

c. Do you have any indication to suggest that Respiratory Therapists in your jurisdiction want to upgrade their educational status?

In answer to this question one regulator responded that there are currently 6 active practicing members enrolled in required courses to complete their degree requirements at a University in their province. A professional association answered that it is awaiting the results of a survey and one regulator stated that it is moving toward establishing a formula, whereby students will work toward one of two credentials (diploma/degree), each of which is associated with its own specific license to practice.

d. Will degree level entry affect the portability of credentials? What will be the effect on the MRA?

Concerning whether moving to degree-level entry will affect the portability of credentials and the effect on the MRA (if any) one regulator responded that the issue is not how the student achieves their education, but rather, that they have a recognized exit examination:

The degree exit program is our entry to practice requirement. Currently, the MRA recognizes the CBRC, NBRC and OPIQ exit examination. It doesn't matter how the student achieves their education, rather that they have a recognized exit examination.

A response to an earlier question also has relevance:

In [our province] we have not altered the “entry to practice” requirements despite moving to a degree program. The “entry to practice” requirements are defined through national collaborative processes between jurisdictions. In any case, these should be based on competencies and not credentials. If Ontario moved to a degree for entry to practice, it could create significant mobility issues for practitioners provincially as well as nationally. This would not be favorable until all jurisdictions have a degree program in place.

e. Has your organization/jurisdiction explored/examined the degree issue in any way? If so, please describe and if possible provide any outcomes?

One regulator responded that it has moved to a degree program and its first graduate from the new degree program was in 2002. Another reported that it is moving to diploma/degree formula as follows:

[we are] moving toward establishing a DEC-BAC formula, whereby students will work toward one of two diplomas, each of which is associated with its own specific license to practise. The first component, the Diploma of Collegial Studies, would entitle the recipient to use the designation “respiratory therapist” and to practise under this licence. The second component, the Bachelors Degree, authorizes the use of the “clinical respiratory therapist” title (an interim designation) and grants the right to practise within the parameters of this license.

f. If your organization has explored/examined the degree issue what obstacles or barriers have you encountered?

The only member of the Alliance that has a degree program currently in place cited the major obstacle as lack of resources:

Our major obstacle at present is the lack of resources to achieve the outcomes we would like to see. We are continuing to address this through existing processes. It is important to ensure that resources needs are built into the proposal at the onset and that these are reasonable and achievable. No one will look at a proposal that will cost significant additional dollars. Our primary difficulty is that we have lost resources given the transition arrangements that were put into effect at the time the program was approved. Although these were envisioned, they were not addressed in the transfer agreement.

Only one regulator responded to the question as to what percentage of registrants/members have degrees or some university preparation and indicated that 3.5 % of their current active practicing RTs have a Respiratory Therapy degree, and that most of the active practicing members who currently have a diploma have had some university preparation if not a degree from another faculty i.e. Bachelor of Science, Bachelor of Arts etc.

12. Specific questions for Ontario RT Programs

a. Will degree preparation generally widen access to ongoing continuing education?

Only one program agreed that a degree ETP would increase access to ongoing continuing education.

b. Is it true that creation of knowledge is more in the realm of the university than the college? If so, what are the implications for Respiratory Therapy?

Two of the 3 programs who responded to this question agreed that knowledge creation (i.e. research) is in more in the realm of the university than College and that it traditionally occurs at the post-graduate level (i.e. Masters and PhD level).

c. Is there a need to educate Respiratory Therapy students in a different environment alongside their future colleagues? (e.g., interdisciplinary education models)?

All RT programs agreed that this is very important and point out that this already occurs in the Community College environment. One College cited a report in a publication from the *Colleges of Applied Arts and Technology of Ontario (ACAATO): Beyond the Stethoscope Ontario's Human Resource Requirements in a Reformed Health Care System*. This article includes *Canadian Institute for Health Information (2001)* data describing the fact that Ontario has 50 major health care occupations of which 36 are educated at Community College.

Interdisciplinary study would enhance all students' approach to problem solving, teamwork, and total patient management to realize the best patient outcome. However, this can be achieved in a community college or university environment.

The college is pursuing a formalized integrated professional education incentive dependant upon grant funding.

By keeping the RT education in the colleges, it would allow us to favour interdisciplinary team work, patient management and make better usage of our simulation labs. The colleges offer programs such as Practical Nursing, Nursing, Paramedics, OTA/PTA, Dental Hygienist, Pharmacy Technicians, PSW, etc. All of these professionals are part of the interdisciplinary teams in the health sector.

d. What will be the financial/length of program impact on Respiratory Therapy students who pursue degree level entry?

All respondents indicated that there will be an impact to RT students who pursue degree ETP due to increase length of program and increase in tuition cost. One respondent however, pointed out that many students enter an RT program with some university preparation or a full undergraduate degree therefore taking up to 8 years of education and tuition before graduating as an RT. In these cases, the cost may in fact decrease to the student who is able to achieve a degree at the same time a profession in respiratory therapy in a 4-year degree program.

e. Respiratory Therapy now requires a higher degree of specialization and the ability to synthesize and apply new knowledge. What type of educational program best addresses these needs?

The programs that responded to this question indicated that an education program that met the NCP and included clinical simulation, applied theory/laboratory courses, a strong clinical setting practicum. Options and electives for students would be a positive learning experience.

Educational programming must include content to ensure the achievement of the competencies.

f. What curriculum elements would receive increased emphasis in a degree program?

The programs who responded to this question indicated that core RT curriculum must be maintained and that elective components could include such elements as: ethics, administration, education, research, philosophy and religion, economics, leadership, inter-professional education and patient centred collaborative care, and readiness to practice.

g. Do you have any indication to suggest Respiratory Therapists want to upgrade their educational status?

Two programs indicated that there is reason to suggest that current RTs want to upgrade their educational status, particularly those without an undergraduate degree or those wanting to pursue post-graduate Masters and/or PhD programs. One College stated that discussions with their Advisory Committee indicate that they would support a move to a degree program, however it was their position that the professional would be best served by a joint college/university program thereby combining the best of what a College and University have to offer.

h. Has your organization explored/examined the degree issue in any way? If so, please describe and if possible provide any outcomes.

Three RT programs indicated that they have explored this issue. One program has an articulation agreement in place with Athabasca University and are in discussion with a BC university. Another is investigating a degree completion format to allow students to graduate with a diploma in RT and a Bachelors of Science degree. One program has experience with offering joint diploma/degree collaborative programs in varying combinations in addition to degree completion articulation agreements with many Universities and has also recently confirmed an agreement with Dalhousie University which will be a 3 + 1 year program (3 year diploma program followed by one-year at Dalhousie University either in person or by distance format).

i. If the answer to question 20 is yes, what obstacles or barriers have you encountered?

The 3 programs all noted Ministerial approval/disapproval, financial and administrative impact of opening up discussions with Universities. One respondent indicated that Universities outside of Ontario were generally more receptive to discussions regarding degree completion articulation agreements. A program pointed out that schools:

...Can only partner with a university in Ontario in order to grant degree and there are currently no universities in Ontario with a Bachelor of Respiratory Therapy Program.

j. Please comment on the percentage (%) of students who come into your RT program with degrees or some university preparation.

Two program respondents provided some statistics on this question.

Results of the 2003 First Year Student Survey are indicative that 17% of Respiratory Therapy Program students entered the program with a degree and an additional 13% had completed some university credit courses. These statistics are fairly representative of typical intake groups for this program.

88% partial degree, 68% undergraduate degree (numbers are approximate and reflect applicants across the organization).

CONCLUSION

Regarding overall support for a change in the entry-to-practice credential from diploma to baccalaureate degree, in principle there is general support from a majority of the RT education programs and regulator/association groups, and half of the employee respondents (including the OHA) clearly support the change to a degree entry-to-practice requirement. While support for a change might be mixed, as with the RT respondents, what is clearly supported is the need for further research and investigation prior to making a final decision. In particular, and as indicated in the government's *Principles to Manage Proposals for changes to entry-to-practice credentials for Medical and Health Professions*, the CRTO must ensure that any change in the entry-to-practice credential for Respiratory Therapy must be based on evidence of public need and benefit, improved client outcomes, or a significant change in the provision of health services delivery.

RECOMMENDATIONS

Having reviewed the results and responses of Phase 1 of the study, we recommend that the Registration Committee recommend to Council that the CRTO continue the study into the baccalaureate degree level requirement by implementing Phase 2 of the study as outlined in the November 2005 blueprint as follows:

- Conduct a comprehensive literature search
- Identify knowledge gap analysis
- Meet with MOHLTC and MTCU
- Convene an Advisory Group comprised of educational program representatives and other key stakeholder, to identify options and transitional issues
- Conduct further consultation on specific options with members and other key stakeholders
- Publish the results of the study
- Make a decision as to whether to move forward with a change in the entry-to-practice credential.