CORE CURRICULA FOR ENTRY-TO-PRACTICE HEALTH AND SOCIAL CARE WORKER EDUCATION IN ONTARIO

NEEDS ASSESSMENT CONDUCTED FOR THE COUNCIL OF ONTARIO UNIVERSITIES

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DISCLAIMER

The views expressed in this needs assessment are the views of the authors and do not necessarily reflect those of the Council of Ontario Universities or the Government of Ontario.

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EXECUTIVE SUMMARY--CORE CURRICULA FOR ENTRY-TO-PRACTICE HEALTH AND SOCIAL CARE WORKER EDUCATION IN ONTARIO

This needs assessment focuses on core curricula in the context of health and social care workforce entry-to-practice programs as they relate to seniors care. It is one of five needs assessments commissioned by the Council of Ontario Universities in November, 2013, with funding from the Government of Ontario, in order to help identify priority areas for implementing the educational recommendations in Dr. Sinha's Report *Living Longer, Living Well*. Interim results of the needs assessments also supported stakeholder discussions at the "Better Aging: Ontario Education Summit" held on February 13, 2014.[1]

In particular, this needs assessment seeks to identify optimal approaches to implementation of educational recommendations 102, 130, 131 and 132 of Dr. Samir Sinha's, *Living Longer, Living Well,* which state:

102. The Ministry of Health and Long-Term Care should encourage pharmacist training in geriatrics including certification programs where available and/or programs incorporated in pharmacy curriculums.

130. The Ministry of Health and Long-Term Care, in collaboration with the Ministry of Training, Colleges and Universities, should support the preparedness of all future health and social care providers to meet the evolving care needs of older Ontarians by requiring that core training programs in Ontario for physicians, nurses, occupational therapists, physiotherapists, social workers, pharmacists, physician assistants, paramedics, personal support workers, and other relevant health and social care providers, include relevant content and clinical training opportunities in geriatrics.

131. The Ministry of Health and Long-Term Care, in collaboration with the Ministry of Training, Colleges and Universities, should lead Canada in establishing an educational accreditation standard for training in geriatrics and/or gerontology for all Ontario schools training health and social care professionals that will likely work with older adults.

[1] Dr. Sinha is the Provincial Expert Lead for the Ontario Seniors Strategy. Dr. Sinha identifies enhanced education and training of health and social care professionals who work with older adults as a key enabler of a seniors-friendly Ontario.

132. The Ministry of Health and Long-Term Care, in collaboration with the Ministry of Training, Colleges and Universities and the Ministry of Community and Social Services, should encourage the development of a list of core competencies in the care of older adults for all Ontario postgraduate training programs for health and social care professionals.

The needs assessment explores the views of educators, accreditors and regulators on what is needed in entry to practice education for seniors care, looks at the availability of published gerontological and geriatric competency documents that could help guide entry to practice education, examines best practices in several jurisdictions, and identifies priority areas for moving forward.

EDUCATORS' VIEWS REGARDING ADEQUACY AND GAPS RELATED TO SENIORS CONTENT IN ENTRY TO PRACTICE EDUCATION

- Program faculty and administrators from the following disciplines were surveyed regarding their views on adequacy of preparation in entry to practice programs--chiropractors, dentists, nurses (registered nurses and registered practical nurses), occupational therapists (and occupational therapy assistants), paramedics, personal support workers, pharmacists, physicians, physician assistants, physiotherapists (and physiotherapy assistants), recreation therapists, social workers, social service workers, undergraduate medicine, family medicine residency, and internal medicine residency.
- Over 50% of teaching faculty agreed that their graduates have the necessary competencies for seniors' care and about 20% disagreed. 70% of education administrators agreed that their graduates have the necessary competencies for seniors' care whilst 18% disagreed.
- Despite these perceptions, three quarters of teaching faculty and 64% of education administrators indicated that gerontology content should be improved in their own program.

CURRENT COURSES RELATED TO SENIORS CARE

Of the 76 programs represented in the survey:

- 40 (52 %) reported that the program had a required seniors' care, gerontology, or geriatrics course
- 40 (52 %) reported having a required clinical or practicum experience with a focus on seniors' care, gerontology, or geriatrics
- 57 (75 %) reported that all students in their program receive some clinical or practicum experience with seniors

EDUCATORS' PREFERRED APPROACHES TO ACHIEVING ENHANCED COMPETENCIES

Educators ranked their preferred approaches to enhancing competencies from highest to lowest as follows:

1. Improved content about seniors' care in entry-to-practice education
2. Improved clinical/practicum experience in entry-to-practice education
3. Continuing professional education and certification
4. Interprofessional education at the entry-to-practice level
5. Provincial accreditation standards for gerontology or geriatrics content of entry-to-practice programs
6. Employer provided education
7. Post graduate education

EDUCATORS' VIEWS REGARDING WHAT IS NEEDED FOR THEM TO ENHANCE CURRICULA RELATED TO SENIORS CARE

Clinical education

- Access to more clinical placements
- Clinical sites be mandated to accept students
- Clinical placements should allow students to demonstrate new behaviours or behaviours that staff at the clinical placements do not exhibit

Curriculum

- A need for standardized curriculum with more common resource development
- Education about seniors' care/geriatrics throughout all levels of education/years of program, also referred to as threading (as opposed to block immersion that is currently used in medicine or seniors' care courses)
- Reconfiguring theory and clinical courses so that students have foundational knowledge about well seniors, positive aspects of aging, health, and assessment before early clinical placements with seniors
- Curriculum and competency review by an advisory council to the faculty/department
- Student access to gerontology minors at the undergraduate level
- Adding courses as healthcare system changes towards home care and less institutionalized acute care.
- Communication amongst programs about what is already being done

Resources

- Time within the curriculum
- Time for faculty to accomplish the curriculum revisions
- Financial resources, space resources, and teaching resources (evidence-based resources, resources about chronicity, accessible online resources, hands on learning resources, technological resources)
- Funding to develop and support appropriate clinical placements

Faculty

- Faculty interest in interprofessional courses
- More faculty with expertise in seniors' care, including clinical faculty
- Clinical education for teaching faculty regarding gerontology and geriatrics

Broader recognition of the importance of seniors care in curriculum

- University administration recognition of need for seniors' care/geriatric education
- Curriculum committee recognition of the importance of competencies for seniors' care and geriatrics
- Support from accrediting bodies, provincial ministries, and regulatory bodies
- Mechanisms to overcome negative attitudes among students towards elder care

Post-graduate education

- Continued education through the workplace (where the individual can realize their gaps in knowledge and education can be provided through the employer and hands-on during the job)
- Post-grad geriatric courses and possibly specialization

VIEWS OF EDUCATION ACCREDITATION BODIES REGARDING ENHANCING REQUIREMENTS FOR SENIORS COMPETENCIES

- For many education accreditation bodies, specific competencies are not mandated and there does not appear to be any intent to require seniors' care competencies.
- Education accreditation bodies expect that entry-to-practice education programs prepare graduates for generalist practice in a variety of settings and with diverse populations. Some see seniors' care as specialty practice, possibly beyond the scope of the programs they accredit.
- Some accreditation documents do specify or mandate seniors' competencies (i.e., standards for personal support worker training, standards for pharmacy education

programs, standards for family medicine residency training, and the standard for social service worker gerontology programs).

- For accrediting bodies that specify or mandate competencies more generally (i.e., registered practical nurse standard), there could be a potential to modify competency requirements to include a greater focus on seniors' care competencies.

VIEWS OF REGULATORS REGARDING ENHANCING REQUIREMENTS FOR SENIORS COMPETENCIES

- Most regulatory bodies' competency frameworks do not specify particular seniors' care competencies, just as they do not specify competencies for other populations. Rather, these frameworks describe generalist practice and competencies that apply across populations and some of these statements include aging, elderly, or old age as an example. This means that specifying competencies for seniors' care would be inconsistent with most regulatory bodies' approach to defining competencies.
- Two exceptions, in terms of regulatory bodies that produce or endorse documents which specify seniors' care competencies, were physiotherapy and family medicine.
- Regulators who responded to the survey view current standards and competency requirements as adequate, given their focus on preparing generalist practitioners and their belief that seniors' care is a specialty. They do not plan to incorporate seniors' care competencies into their competency frameworks.
- Overall, it seems unlikely that most regulators would include seniors' care competencies in their competency frameworks.

AVAILABILITY OF COMPETENCY FRAMEWORKS FOR ENHANCING CURRICULA

- 19 interdisciplinary and profession specific seniors' care competency frameworks are available that could inform curriculum enhancement, education accreditation, or professional regulation.
- The National Initiative for Care of the Elderly interprofessional core competencies [62] are specified for entry-to-practice and could, therefore, be used to inform curriculum enhancement.

POTENTIAL PRIORITY AREAS AND BEST PRACTICES TOWARDS ENHANCING ENTRY TO PRACTICE EDUCATION FOR SENIORS CARE

Changes are more likely to be successful if they are systematic in nature, both at the policy and at the program level. A multipronged approach is needed – reaching education administrators, educators, practice partners, and organizations that influence curriculum standards.

POLICY LEVEL

1. Train-the-trainer programs to create change agents and leaders of curriculum change within faculty ranks.
2. Reinforce the demographic imperative with faculty and administrators.
3. Engage professional associations, regulators, and educational accreditation organizations in the process of endorsing seniors' care competency expectations at entry-to-practice.
4. Include representatives of practice settings in the process.
5. Introduce programs to increase faculty capacity for seniors' care research and scholarship.
6. Revive and expand previous Ontario based training for family medicine preceptors (that was focused on Alzheimer's Disease and Related Dementias) and training for nursing and social work educators (train-the-trainer curricular enhancement program), including professional development, education, and training for faculty and preceptors to include other disciplines.
7. Facilitate more dialogue and discussion amongst accreditation bodies and regulators regarding whether seniors care is a specialty or within generalist practice in light of changing demographics.

PROGRAM LEVEL

8. Build leadership among Deans, Directors, and Program chairs, including support for curricular enhancement initiatives and finding time in curriculum for the changes, e.g., retreat program to bring together leaders.
9. Compare curriculum to endorsed seniors' care competencies.
10. Identify gaps.
11. Address clinical and classroom faculty training needs.
12. Enhance clinical partnerships.
13. Train clinical preceptors.
14. Use numerous existing resources to assess curricula and enhance teaching. Resources created in Ontario can be shared on the POGOe website.
15. Support educators in a process of matching and, if necessary, adapting numerous available teaching resources to gaps they identify in their curriculum.
16. Evaluate seniors care clinical experiences specifically in terms of how they contribute to seniors care competencies.

BACKGROUND

The 2012 report by Dr. Samir Sinha, *Living Longer, Living Well* [2], identifies the importance of adequately trained and supported care professionals as a key enabler for improved seniors wellbeing. The *Living Longer, Living Well* [2] report includes specific recommendations that the Ministry of Health and Long-Term Care and the Ministry of Training, Colleges, and Universities should:

- "encourage pharmacist training in geriatrics including certification programs where available and/or programs incorporated into pharmacy curriculums" (Recommendation 102, p. 167);
- Require that core training programs for health and social care workers include "relevant content and clinical training opportunities in geriatrics" (Recommendation 130, p. 203)
- "establish an educational accreditation standard for training in geriatrics and/or gerontology" for programs educating health and social care workers (Recommendation 131, p. 203); and
- Develop "a list of core competencies in the care of older adults for all Ontario postgraduate training programs for health and social care professionals" (Recommendation 132, p. 203).

To inform action on these recommendations, this needs assessment explored the following questions:

1. What are the views of educational representatives for various health and social care disciplines in terms of what is needed in curriculum development in gerontology? And, related to this, do educational representatives from a sample of the various disciplines believe that gerontological competency development and implementation is the right approach, or should additional gerontological education be done through continuing professional development (CPD)?
2. What are the views of educational accreditation bodies about standards for gerontological education?
3. What are the views of regulatory bodies about standards for gerontological education?
4. What is the status of discipline-specific gerontological competency documents?
    a. How many disciplines have discipline-specific gerontological competency documents?
    b. How many disciplines and professions have endorsed a set of gerontological competencies?
    c. What would be entailed in getting endorsement for such competencies?

5. How much have educators taken up the specialized gerontological competencies in developing and updating their curricula? What are the barriers and incentives to such uptake?

6. What is happening in other jurisdictions (other provinces and internationally) in terms of core curricula for various disciplines that could help to inform competency, accreditation, and curricula development in gerontology in Ontario?

The approach, methods, findings, and analysis of findings for each of these questions are described separately, followed by an integrated analysis of results.

1. VIEWS OF EDUCATORS

SUMMARY: APPROACH AND METHODS

To answer the questions about educational representatives' views, we surveyed administrators and teaching faculty in health and social service entry-to-practice education programs in universities, community colleges, and career colleges. We also conducted key informant interviews of administrators and teaching faculty. We incorporated existing data from a recent Council of Ontario University Programs in Nursing (COUPN) survey of members about gerontological content in curriculum [3] and a 2004 Ontario Interdisciplinary Council for Aging and Health (OICAH) survey of therapy, nursing, social work, and medical programs [4].

SURVEY METHODS

We surveyed administrators (Deans, Directors, and Chairs) and teaching faculty of Ontario college, university, and career college entry-to-practice programs for professions identified in the *Living Longer, Living Well* [2] report and prioritized by COU [chiropractors, dentists, nurses (registered nurses and registered practical nurses), occupational therapists (and occupational therapy assistants), paramedics, personal support workers, pharmacists, physicians, physician assistants, physiotherapists (and physiotherapy assistants), recreation therapists, social workers, and social service workers][2]. For medicine, the focus was on undergraduate education, family medicine residency, and, to some extent, internal medicine residency.

Survey questions are attached (Appendices 1 and 2). The survey included questions about:

[2] Abbreviations of professional designation included in this report include: RN (Registered Nurse), RPN (Registered Practical Nurse), OT (Occupational Therapist), OT Assistant (Occupational Therapy Assistant), PSW (Personal Support Worker), PT (Physiotherapist), PT Assistant (Physiotherapy Assistant), SW (Social Worker), SSW (Social Service Worker).

- the respondent and their program
- the extent to which students are exposed to gerontological content
- opinions about adequacy of gerontology content
- awareness of gerontology competency documents
- available gerontological expertise for teaching
- experience developing or modifying curriculum or courses to better meet gerontological competencies
- what informants would need to modify their curriculum
- whether informants favor enhanced curriculum or continuing professional development (CPD) to achieve competency

Fluid Survey was used for the online survey. All survey invitations were sent by email. On our behalf, the Council of Ontario Universities sent invitations to participate in the survey to Deans and Directors of university programs in nursing, medicine, and rehabilitation. The Deans were invited to (1) complete the survey or have it completed by a designate; and (2) pass on the invitation to their teaching faculty. For university social work programs, the chair of the Deans and Directors of Social Work group distributed the survey invitation and link to members of the group on our behalf. We compiled a contact list for university dentistry, pharmacy, and recreation therapy programs. Deans and Directors of these programs were asked to complete the survey and to circulate the invitations to their faculty on our behalf. A similar system was used for college programs (RPN, OT and PT assistant, PSW, recreation therapy, and paramedic), where the heads of health sciences and nursing programs circulated the invitation to Deans and Directors using their distribution lists. For career colleges, the executive director of Career Colleges Ontario distributed the email invitation to career colleges with PSW or OT/PT assistant programs on our behalf. A reminder email was sent about a week after the initial invitation, with a request to pass it along again. Survey responses were received from January 15, 2014 until March 6, 2014, with 156 usable responses received.

KEY INFORMANT INTERVIEWS

Key informant telephone interviews were conducted with 12 leaders of programs for nursing, personal support workers, social work, social service workers, rehabilitation (occupational therapy and physiotherapy), and medicine. Potential interviewees were identified from the survey (respondents who indicated a willingness to be contacted) and from our contacts.

The interviews elaborated on information obtained in the surveys, with a focus on what informants would need to modify their curriculum and whether they favor enhanced curriculum or continuing professional development to achieve competency. The interview guide is attached (Appendix 3). We conducted a group interview with Deans and Associate

Deans of medical education programs. We used key informant interviews to identify people who could be interviewed for a question about experience modifying curriculum.

SUMMARY: RESULTS

SAMPLE

Table 1 provides a detailed description of the survey sample. The online survey of educational administrators and teaching faculty yielded 156 usable responses. There were 56 responses from administrators (Deans, Directors, or Program Chairs) and 100 responses from teaching faculty. Thirty-two respondents were from Community Colleges, 103 from Universities, and 11 from Career Colleges. Thirty-eight unique educational institutions were represented in the sample. There was at least one administrator from educational programs for 14 health and social care worker categories and at least one teaching faculty response for 14 health and social care worker categories. Several respondents reported responsibility for, or teaching in, more than one program. Respondents were from programs that graduated between 2 and 2000 students per year (mean = 137, median = 100). Of the 53 administrators who responded to the survey question about their expertise, 25 (47.2 %) reported that they had expertise in seniors' care, gerontology, or geriatrics. Of the 88 teaching faculty who responded to this question, 53 (60.2 %) reported that they had expertise in seniors' care, gerontology, or geriatrics.

TABLE 1: EDUCATION ADMINISTRATORS AND TEACHING FACULTY SURVEY SAMPLE

Variable	Educational Administrator Sample (n = 56) N (%)	Teaching Faculty Sample (n = 100) N (%)
1. Type of Educational Institution:		
University	41 (73.2)	62 (62.0)
Community College	11 (19.6)	31 (31.0)
Career College	4 (7.1)	7 (7.0)
2. Program graduate profession/worker type:		
Audiologist	0 (0.0)	2 (2.0)
Chiropractor	0 (0.0)	6 (6.1)
Nurse Practitioner	0 (0.0)	2 (2.0)
Occupational Therapist	2 (3.6)	0 (0.0)
Occupational Therapy Assistant	0 (0.0)	0 (0.0)
Paramedic	1 (1.8)	1 (1.0)
Personal Support Worker	3 (5.5)	6 (6.1)
Pharmacist	3 (5.5)	4 (4.1)
Physician: Undergraduate medicine	4 (7.3)	2 (2.0)
Physician: Family medicine residency	1 (1.8)	0 (0.0)
Physician: Internal medicine residency	2 (3.6)	1 (1.0)
Physician: Other postgraduate medicine residency	7 (12.7)	0 (0.0)
Physician: More than one physician category	2 (3.6)	6 (6.1)
Physiotherapist	4 (7.3)	0 (0.0)
Physiotherapy Assistant	0 (0.0)	0 (0.0)
Recreation Therapy	3 (5.5)	4 (4.1)
Registered Nurse	8 (14.5)	33 (33.7)
Registered Practical Nurse	0 (0.0)	9 (9.2)
Social Worker	5 (9.1)	11 (11.2)
Social Service Worker	0 (0.0)	3 (3.1)
Speech Language Pathology	1 (1.8)	1 (1.0)
Combination of RN, RPN, and PSW	2 (3.6)	1 (1.0)
Other combinations of more than one program	7 (12.7)	5 (5.0)
3. Self-reported expertise in seniors' care, gerontology or geriatrics	25 (47.2)	53 (60.2)

Note: due to missing data, some column totals do not equal the sample size

EDUCATIONAL ADMINISTRATORS' AND TEACHING FACULTY OPINIONS ABOUT ADEQUACY OF EDUCATIONAL PREPARATION

Details of survey responses to four questions about opinions of how adequately Ontario entry-to-practice educational programs prepare graduates for seniors' care are provided in Figures 1 to 4.

FIGURE 1: RESPONSES TO SURVEY ITEM "ONTARIO ENTRY-TO-PRACTICE EDUCATION PROGRAMS FOR HEALTH AND SOCIAL CARE WORKERS ADEQUATELY PREPARE GRADUATES FOR SENIORS' CARE" (EDUCATION ADMINISTRATORS AND TEACHING FACULTY)

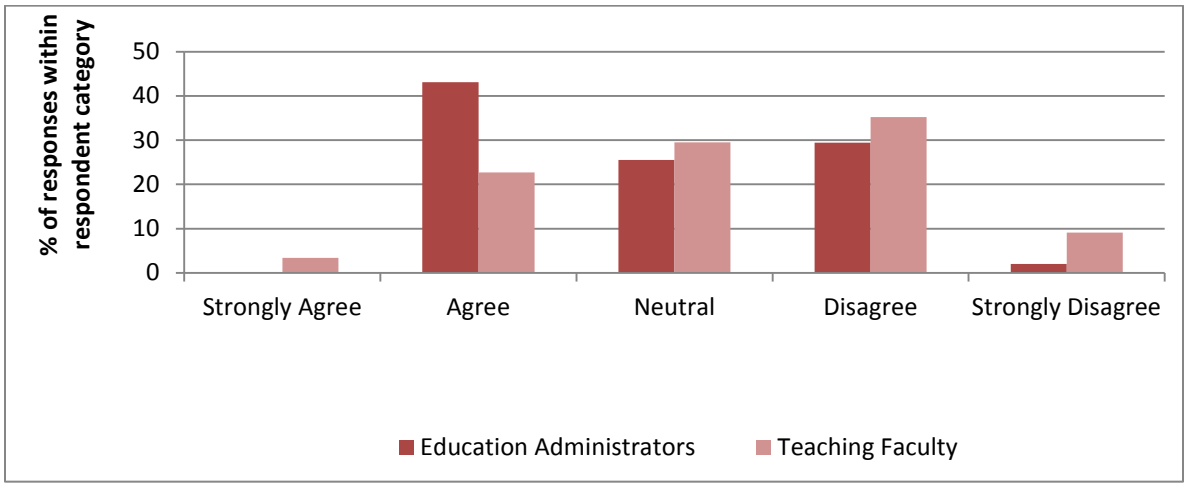


FIGURE 2: RESPONSES TO SURVEY ITEM "GRADUATES OF THE PROGRAM I TEACH (DIRECT) HAVE THE NECESSARY COMPETENCIES TO PROVIDE SENIORS' CARE" (EDUCATION ADMINISTRATORS AND TEACHING FACULTY)

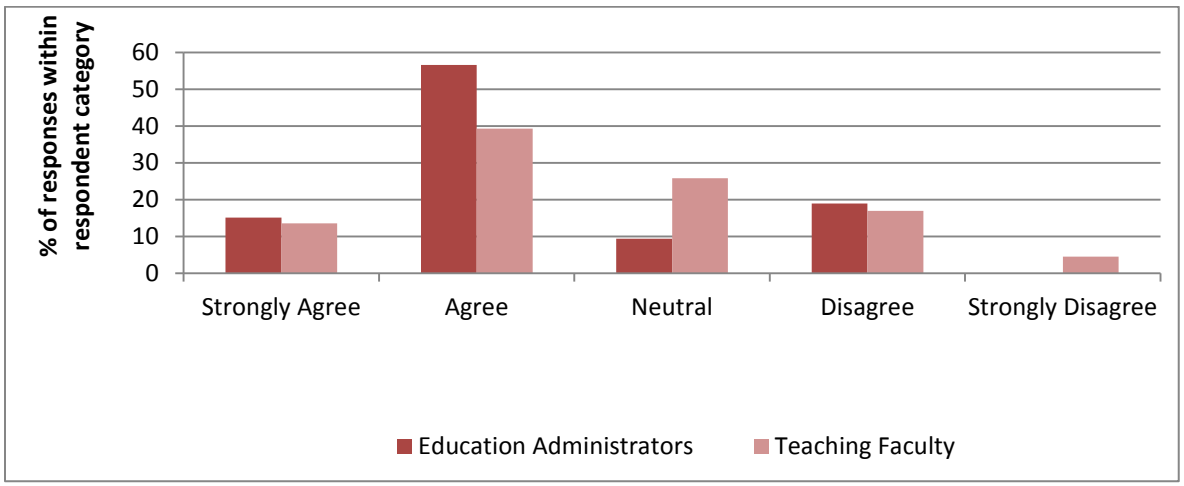


FIGURE 3: RESPONSES TO SURVEY ITEM "GERONTOLOGY CONTENT SHOULD BE IMPROVED IN ONTARIO ENTRY-TO-PRACTICE EDUCATION PROGRAMS FOR HEALTH AND SOCIAL CARE WORKERS" (EDUCATION ADMINISTRATORS BY TEACHING FACULTY)

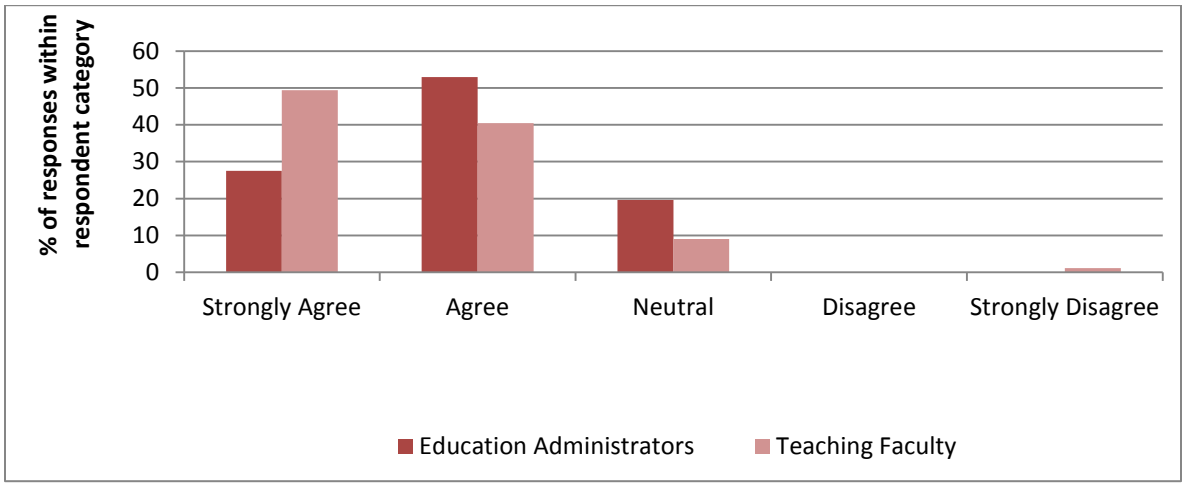
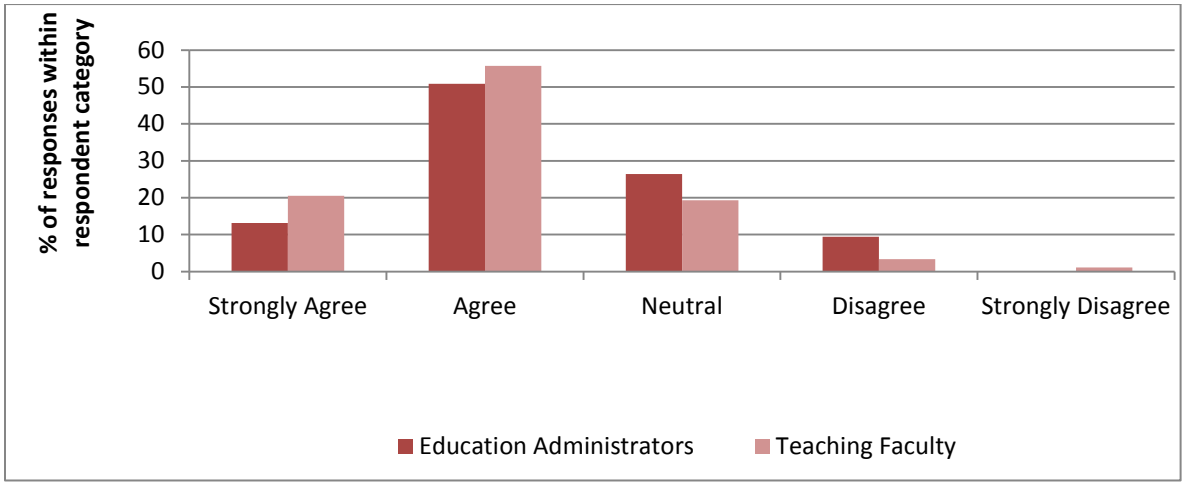


FIGURE 4: RESPONSES TO SURVEY ITEM"GERONTOLOGY CONTENT SHOULD BE IMPROVED IN MY PROGRAM" (EDUCATION ADMINISTRATORS AND TEACHING FACULTY)



Some interesting observations can be made from the data presented in Figures 1 to 4. About a quarter of the teaching faculty agreed with the statement that Ontario's entry-to-practice health and social care education programs adequately prepare graduates for seniors' care; 45% disagreed. The teaching faculty were more positive about the programs they taught in; over 50% agreed that their graduates have the necessary competencies for seniors' care; about 20% disagreed. Education administrators were more positive about the adequacy of Ontario's entry-to-practice education programs and more positive about the programs they administered; 70% agreed that their graduates have the necessary competencies to provide seniors' care. Despite these perceptions, most teaching faculty (90%) and education administrators (80%) indicated

that Ontario's entry-to-practice education programs should be improved. Three quarters of teaching faculty indicated that gerontology content should be improved in their program. Education administrators were less likely to think that their programs should be improved (64%). Self-reported expertise was not associated with opinions about need to enhance education.

REGISTERED NURSE, REGISTERED PRACTICAL NURSE, PHYSICIAN, AND SOCIAL WORK EDUCATORS' OPINIONS ABOUT ADEQUACY OF EDUCATIONAL PREPARATION

There were enough respondents to provide details of responses from educators in four professional designations: (1) registered nurse educators (n = 37); (2) registered practical nurse educators (n = 9); (3) physician educators (n = 20); and (4) social worker educators (n = 12). For this analysis, administrators and teaching faculty were combined in each profession category. Note, nurse educators who indicated that they taught in or directed both registered nurse and registered practical nurse programs are not included in this analysis. Details of responses by these profession categories are provided in Figures 5 to 8.

FIGURE 5: MD, RN, RPN, AND SW EDUCATORS' RESPONSES TO SURVEY ITEM "ONTARIO ENTRY-TO-PRACTICE EDUCATION PROGRAMS FOR HEALTH AND SOCIAL CARE WORKERS ADEQUATELY PREPARE GRADUATES FOR SENIORS' CARE"

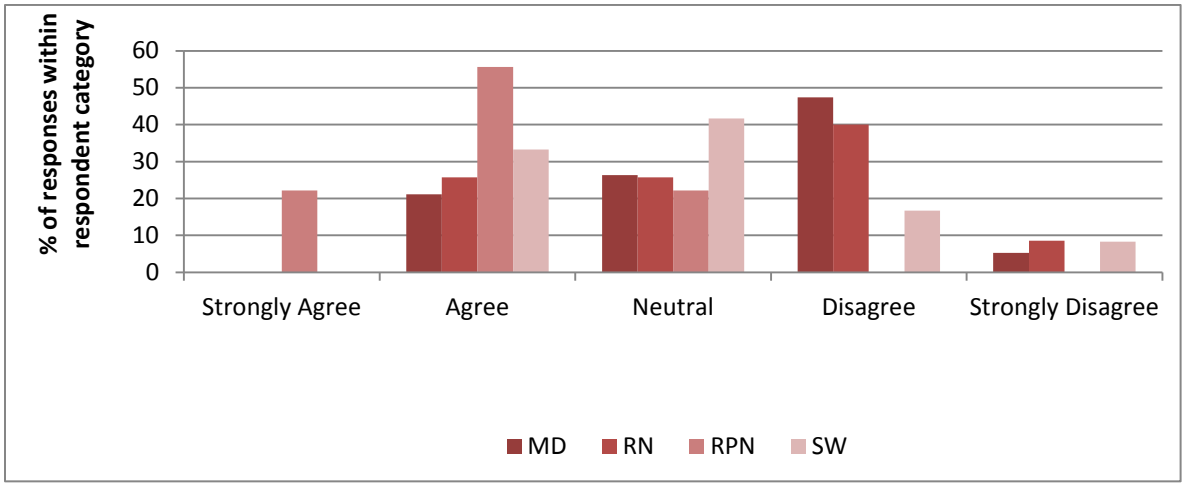


FIGURE 6: MD, RN, RPN, AND SW EDUCATORS' RESPONSES TO SURVEY ITEM"GRADUATES OF THE PROGRAM I TEACH (DIRECT) HAVE THE NECESSARY COMPETENCIES TO PROVIDE SENIORS' CARE"

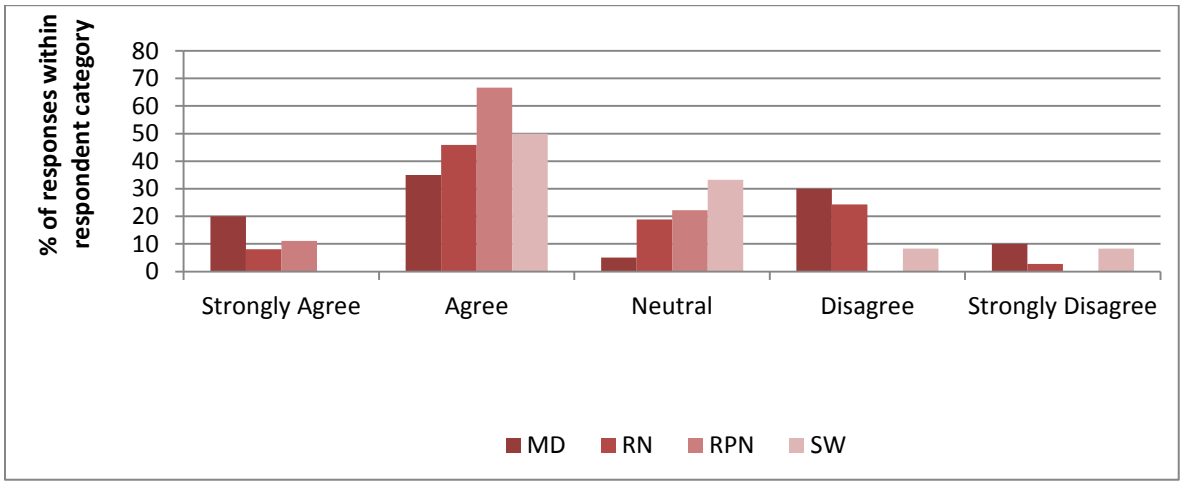


FIGURE 7: MD, RN, RPN, AND SW EDUCATORS' RESPONSES TO SURVEY ITEM "GERONTOLOGY CONTENT SHOULD BE IMPROVED IN ONTARIO ENTRY-TO-PRACTICE EDUCATION PROGRAMS FOR HEALTH AND SOCIAL CARE WORKERS"

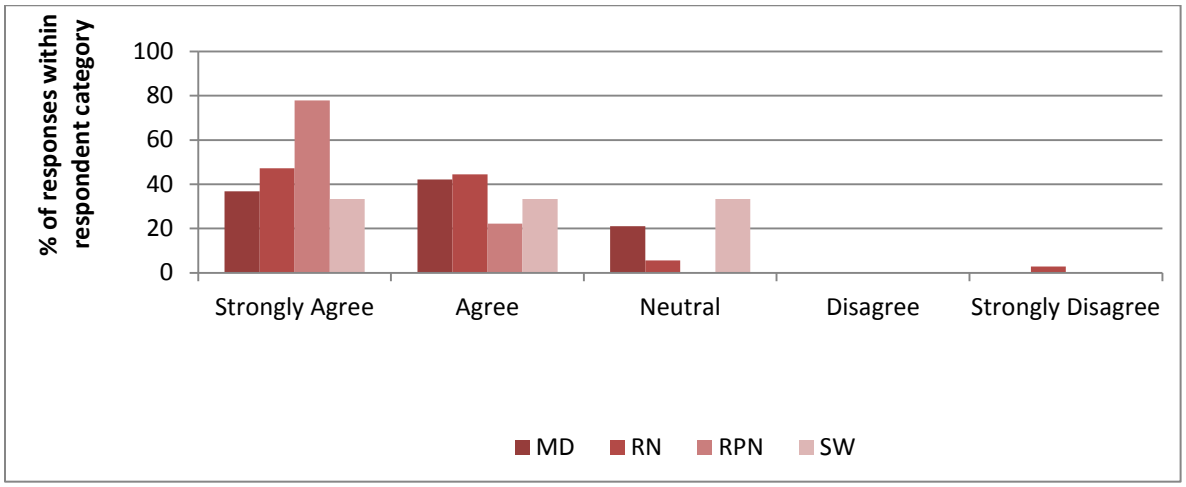
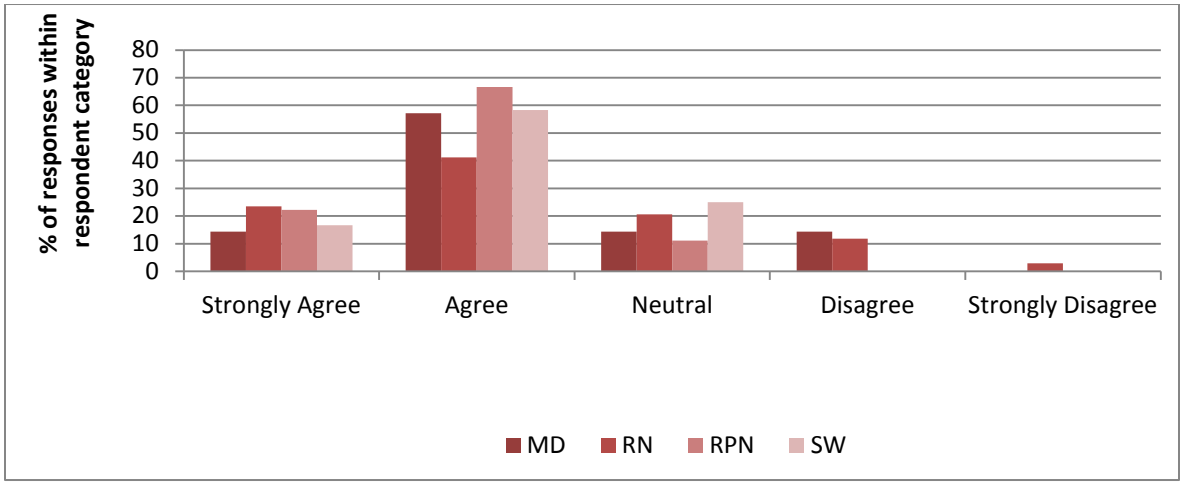


FIGURE 8: MD, RN, RPN, AND SW EDUCATORS'RESPONSES TO "GERONTOLOGY CONTENT SHOULD BE IMPROVED IN MY PROGRAM"



The data from educators from these four professional designations (registered nurse, registered practical nurse, physician, and social worker) indicate that among survey respondents, registered nurse and physician educators were less positive than registered practical nurse and social work educators about the preparation for seniors' care. Most registered nurse, registered practical nurse, physician, and social work educators agreed or strongly agreed that gerontology content should be improved in Ontario entry-to-practice programs and in their own programs. Self-reported expertise was not associated with opinions about need to enhance education.

CURRENT REQUIRED COURSES RELATED TO SENIORS' CARE

Of the 76 programs represented in the survey:

- 40 (52 %) reported that the program had a required seniors' care, gerontology, or geriatrics course
- 40 (52 %) reported having a required clinical or practicum experience with a focus on seniors' care, gerontology, or geriatrics
- 57 (75 %) reported that all students in their program receive some clinical or practicum experience with seniors

Responses to these questions, broken down by program type (professional/worker category) are detailed in Table 2. The reported prevalence may be slightly elevated. For each of the 76 programs represented in the survey, we combined responses within programs (i.e., when there was more than one respondent from a program in an education institution) to determine how many of the programs had required seniors' care content. In some cases, respondents from the

same institution and program gave contradictory responses. If at least one respondent from a program responded affirmatively to a question about required seniors' care content, their program was classified as having the corresponding required course or practicum experience.

Entry-to-practice education programs for recreation therapists and social workers stood out, with a low proportion of these programs guaranteeing student practice experience with older adults.

TABLE 2: REQUIRED COURSES BY PROGRAM TYPE (PROFESSIONAL/WORKER CATEGORY)

Health or Social Care Worker Program	Required seniors' care, gerontology, or geriatrics course		Required clinical or practicum experience where the focus is seniors' care, gerontology, or geriatrics		All students receive some clinical or practicum experience with seniors (where seniors' care is part of the experience but not the focus)	
	N	Percent within program category (%)	N	Percent within program category (%)	N	Percent within program category (%)
Audiologist	0	(0.0)	0	(0.0)	0	(0.0)
Chiropractor	4	(66.7)	1	(16.7)	5	(83.3)
Nurse Practitioner	1	(50.0)	1	(50.0)	2	(100)
Occupational Therapist	2	(100)	1	(50.0)	2	(100)
OT Assistant	0	(0.0)	1	(100)	1	(100)
Paramedic	1	(50.0)	1	(50.0)	2	(100)
Personal Support Worker	5	(71.4)	6	(85.7)	7	(100)
Pharmacist	0	(0.0)	0	(0.0)	6	(85.7)
Physician: Undergraduate	3	(75.0)	1	(20.0)	4	(80.0)
Physician: Family medicine	1	(100)	1	(100)	1	(100)
Physician: Internal medicine	3	(100)	3	(100)	2	(66.7)
Physician: Other postgraduate	3	(75.0)	4	(100)	5	(100)
Physiotherapist	0	(0.0)	1	(20.0)	5	(100)
PT Assistant	0	(0.0)	1	(100)	1	(100)
Recreation Therapy	2	(28.6)	1	(14.3)	2	(28.6)
Registered Nurse	17	(45.9)	18	(50.0)	34	(94.4)
Registered Practical Nurse	7	(87.5)	8	(88.9)	9	(100)
Social Worker	0	(0.0)	0	(0.0)	2	(15.4)
Social Service Worker	0	(0.0)	0	(0.0)	0	(0.0)
Speech Language Pathology	2	(100)	0	(0.0)	2	(100)

Note: Differential response rates to the three survey items mean percentages for each category may vary

WHAT WOULD BE NEEDED TO ENHANCE CURRICULUM?

The survey included an open ended question "What would your program and faculty need (e.g., resources, supports, etc.) in order to modify your curriculum to enhance gerontology content?"

Seventy respondents included suggestions in their responses to this item. The responses are available in Appendix 1. As well, in our key informant interviews of Deans, Directors, and Program Chairs/Leads, we asked what would be needed to achieve enhanced curriculum.

The most frequently mentioned need, identified by both administrators and teaching faculty, was need for faculty with expertise in seniors' care or more faculty with expertise in seniors' care, including clinical faculty with expertise. Related to this, several respondents reported that teaching faculty would need continuing education or learning about gerontology and geriatrics. One respondent suggested that in order to change curriculum, a faculty member designated and given authority to oversee curriculum change would be needed.

Time was a need identified by administrators and teaching faculty:

- time within the curriculum for fit in the new content
- protected time for trainees to engage in this learning
- time for interprofessional learning within the curriculum
- time for faculty to accomplish the curriculum revisions.

Several administrators and teaching faculty respondents identified specific needs related to clinical practicum learning sites. This included:

- need for access to more clinical placements
- a recommendation that clinical sites be mandated to accept students
- suggestions that clinical placements should allow students to demonstrate new behaviours or behaviours that staff at the clinical placements do not exhibit
- funding to develop and support appropriate clinical placements

The key informants we interviewed also reported that support from practice agencies and stakeholders outside of the education institution was needed to ensure success. Related to this, the key informant interviewees revealed that curriculum and competency review by an advisory council to the faculty/department was needed to increase success with curricular revisions.

Resources were mentioned by several respondents as needed in order to achieve curriculum change. Specifically, financial resources, space resources, and teaching resources (evidence-based resources, resources about chronicity, accessible online resources, hands on learning

resources, technological resources), and time, as mentioned above, would be beneficial to achieve enhanced curriculum.

Three respondents commented on needs related to attitudes and interest of faculty and administration, including needs for:

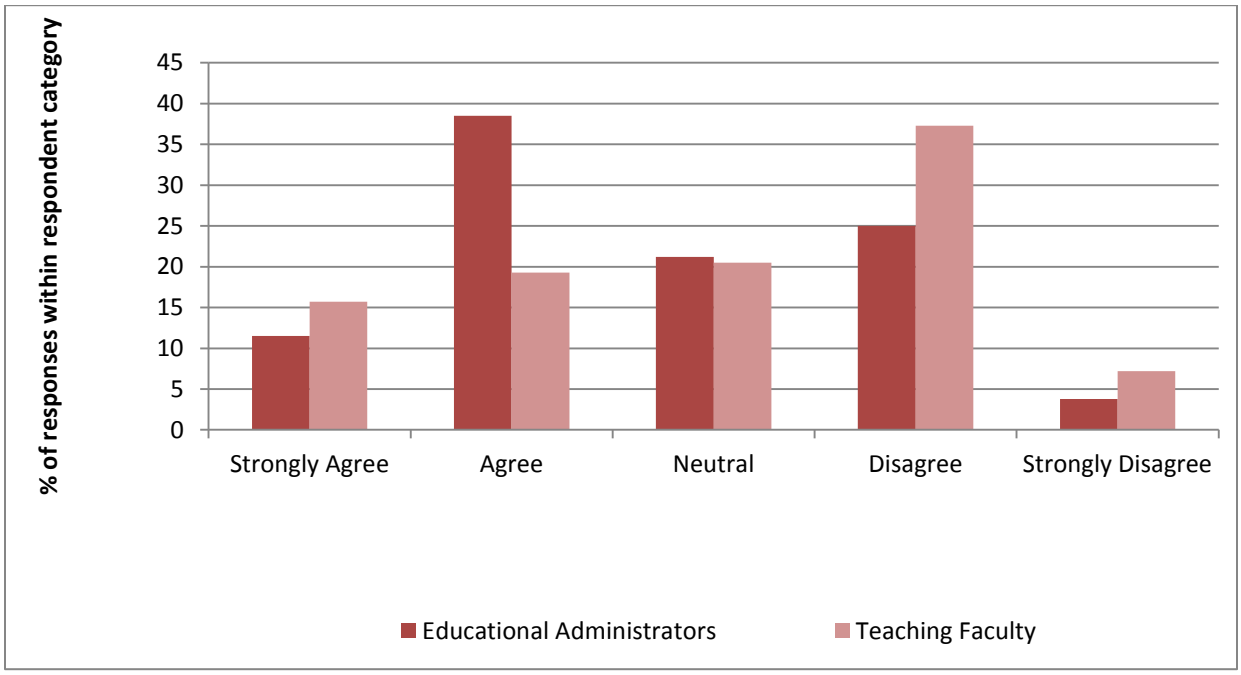
- faculty interest in interprofessional courses
- university administration recognition of need for seniors' care/geriatric education
- curriculum committee recognition of the importance of competencies for seniors' care and geriatrics

The need for recognition of the importance the seniors' care content was illustrated in comments about needs made by two survey respondents (an administrator and a teaching faculty). They indicated that they view gerontological nursing as a specialty, whereas the purpose of their education is to prepare generalist nurses.

Five survey respondents indicated a need to have accrediting or regulatory bodies mandate seniors' care content. The key informant interviews were consistent with this recommendation. Key informants indicated a need for support from accrediting bodies, provincial ministries, and regulatory bodies; that they should focus on seniors' care and include more seniors' care or geriatric content in licensing exams. Two key informants recommended that hospital accreditation pay more attention to geriatric competencies and outcomes. This, they thought, would ultimately influence curriculum.

A related survey item asked about opinions of whether there were sufficient faculty and instructors with expertise in seniors' care, gerontology, or geriatrics. The responses are summarized in Figure 9. Teaching faculty were more likely than education administrators to report that their program lacked sufficient expertise.

FIGURE 9: RESPONSES TO SURVEY ITEM "IN MY PROGRAMS, WE HAVE ENOUGH FACULTY AND INSTRUCTORS WITH EXPERTISE IN SENIORS' CARE, GERONTOLOGY, OR GERIATRICS" BY RESPONDENT CATEGORY (EDUCATIONAL ADMINISTRATORS AND TEACHING FACULTY)



PREFERRED APPROACHES TO ACHIEVING ENHANCING EDUCATION OF HEALTH AND SOCIAL CARE PROVIDERS FOR SENIORS' CARE

Survey respondents were asked to rank eight possible approaches to achieving seniors' care competencies among Ontario health and social care providers. These approaches included those recommended in the *Living Longer, Living Well* [2] report, approaches identified in literature about gerontological curricular enhancement, and approaches recommended by other experts. Following is a list of possible approaches to achieving enhanced competencies, listed in order from those ranked highest to those ranked lowest by survey respondents:

1. Improved content about seniors' care in entry-to-practice education
2. Improved clinical/practicum experience in entry-to-practice education
3. Continuing professional education and certification
4. Interprofessional education at the entry-to-practice level
5. Provincial accreditation standards for gerontology or geriatrics content of entry-to-practice programs
6. Employer provided education
7. Post graduate education

In the survey, there was also an option of indicating another preferred strategy for achieving seniors' care competencies among Ontario health and social care workers. Eleven respondents suggested other strategies. Five of them suggested incorporating seniors' care competencies in accreditation or standards: (1) national educational accreditation standards (n = 3); (2) provincial Ministry of Training Colleges and Universities vocational outcomes (n = 1); (3) licensing exams (n = 1). Another suggested mandating particular content in nursing curriculum (Gentle Persuasive Approaches to Dementia Care). Other suggestions were:

- Integration of seniors related content throughout courses and threaded through program
- Seminars by leaders and educators and improved point of care education
- Improving the status of working with older adults to overcome negative attitudes among students towards elder care
- Communication among programs about what is already being done
- Balancing education that addresses the needs of older adults with education that addresses the needs of other populations that learners will work with in diverse settings

In the key informant interviews, we asked the Deans, Directors, and Program Chairs/Leads what they favored as an approach to achieving gerontological competencies. No single approach stood out as a theme from the interviews. The informants' suggestions included:

- Increased exposure in entry-to-practice education, with education about seniors' care/geriatrics throughout all levels of education/years of program, also referred to as threading, through the curriculum (as opposed to block immersion that is currently used in medicine or seniors' care courses).
- Reconfiguring theory and clinical courses so that students have foundational knowledge about well seniors, positive aspects of aging, health, and assessment before early clinical placements with seniors.
- Continued education through the workplace (where the individual can realize their gaps in knowledge and education can be provided through the employer and hands-on during the job).
- Enhancing entry-to-practice education by adding courses as healthcare system changes towards home care and less institutionalized acute care.
- One individual mentioned the possibility of allowing nursing students to have a professional certificate course in geriatrics on top of the generalized nursing program, to enhance a culture of graduates choosing gerontology.
- A need for standardized curriculum with more common resource development.
- A need more post-grad geriatric courses.
- Student access to gerontology minors at the undergraduate level.

ANALYSIS

Opinions varied about the extent to which current entry-to-practice education programs for health and social care workers adequately prepare graduates for seniors' care. About one third of teaching faculty and almost half of the education administrators surveyed thought that Ontario entry-to-practice education programs for health and social care workers adequately prepare graduates for seniors' care. Respondents were more positive about the programs they taught in or administered. This indicated varied readiness or motivation for changing curriculum.

A large proportion of survey respondents thought that gerontology content should be enhanced in Ontario programs and over half of them thought that improvements were needed in their own program, indicating a willingness and motivation to enhance curriculum. These findings are similar to a previous survey of Ontario therapy, nursing, social work, and medical residency programs that found that two-thirds of respondents from therapy, nursing, and social work programs and almost all medical programs thought that it was important to include seniors' care training in their programs [4]. A further indication of readiness is the finding that the most favored approaches to achieving seniors' care competencies were enhancing courses and clinical experiences in entry-to-practice education, indicating that the respondents saw this as their responsibility.

Education administrators tended to be more positive than were teaching faculty about the extent to which seniors' care competencies were being achieved. As discussed in a subsequent section of this report, support from administrators for curriculum enhancement was identified as a facilitator to change (and a barrier when it wasn't present) in key informant interviews and was identified as very important in successful initiatives in other jurisdictions.

Half of programs represented in the survey have required courses that focus on gerontology, geriatrics, or seniors care. This is higher than found in a 2004 survey of Ontario therapy, nursing, and social work programs, where in 60% of programs, gerontology content was only available through elective courses [4]. Having a required course does not necessarily ensure that students achieve expected seniors' care competencies. It was beyond the scope of this needs assessment to assess the extent to which seniors' care competencies were covered in curriculum (e.g., through curriculum mapping).

Three-quarters of the programs reported that all of their students have some clinical or practice experience with older adults as part of their education. Students having practice experience with older adults was valued by practitioners interviewed for another needs assessment about their expectations of new graduates [5]. Students in one quarter of the programs in the survey did not have this experience. One should be careful about assuming that just because students

are exposed to older adults in clinical practice they are achieving seniors' care competencies. When asked about what would be needed to achieve enhanced curriculum, respondents noted a need for clinical sites where the practices students are being taught can be modeled by staff and practiced by students, indicating that exposure to older adults is not enough.

The respondents' indications of what would be needed to achieve enhanced curriculum point to a number of potential barriers to change. All of the needs that were identified in the survey are consistent with findings from our key informant interviews and experience in other jurisdictions. Strategies to address these needs are discussed in a subsequent section of this report.

2. VIEWS OF EDUCATION ACCREDITATION BODIES

SUMMARY: APPROACH AND METHODS

Organizations that accredit entry-to-practice health and social care worker education programs in Ontario were contacted and their websites were examined to determine:

1. Whether they have included or are considering adding seniors' care or gerontology standards;
2. Whether they believe standards related to seniors' care or gerontology competencies are necessary;
3. Whether they believe that education programs meet needs for gerontological competencies among health and social care professionals; and
4. The process for modifying accreditation standards.

National accreditation organizations for entry-to-practice education programs of nursing (registered nurse), occupational therapy, physiotherapy, occupational therapy and physiotherapy assistants, pharmacy, medicine, physician assistants, social work, paramedics, and kinesiology were included. Ontario Ministry of Health and Long-Term Care and Ministry of Training, Colleges, and Universities documents related to standards for education of social service workers, personal support workers, and registered practical nurses were examined. At the time of this report, a new set of vocational standards for personal support worker education were about to be released. Recreation therapy education is not accredited, so was not included.

Accreditation standard documents were examined from:

1. Accreditation of Interprofessional Health Education (Interprofessional)
2. Association of Faculties of Medicine of Canada (Undergraduate Medicine)
3. Canadian Association for Social Work Education (Social Work)

4. Canadian Association of Occupational Therapists (Occupational Therapy, Occupational and Physiotherapy Assistants)
5. Canadian Association of Schools of Nursing (Registered Nurse)
6. Canadian Council for the Accreditation of Pharmacy Programs (Pharmacist)
7. Canadian Council of University Physical Education & Kinesiology Administrators (Kinesiology)
8. Canadian Medical Association (Physician Assistants, Paramedics)
9. College of Family Physicians of Canada (Family Medicine)
10. Ontario Ministry of Health & Long-Term Care (Personal Support Worker)
11. Ontario Ministry of Training, Colleges, and Universities (Social Service Worker and Registered Practical Nurse)
12. Physiotherapy Education Accreditation Canada (Physiotherapy)
13. Royal College of Physicians and Surgeons Canada (Specialty Medicine)

We examined the documents and noted the extent to which seniors' care or gerontological competencies were embedded in the accreditation documents.

All of the accreditation organizations were contacted by email and/or telephone. We made repeated attempts to contact the Executive Directors, or their designates, up to 6 times. Responses were provided from five of them:

1. Accreditation of Interprofessional Health Education (Interprofessional)
2. Canadian Association for Social Work Education (Social Work)
3. Canadian Association of Schools of Nursing (Registered Nurse)
4. Canadian Council for the Accreditation of Pharmacy Programs (Pharmacist)
5. Royal College of Physicians and Surgeons Canada (Specialty Medicine)

SENIORS' CARE AND GERONTOLOGICAL COMPETENCIES IN EDUCATION PROGRAM ACCREDITATION DOCUMENTS

Four of the accreditation documents we examined include specific references to care for clients across the lifespan[3] and five include explicit references to gerontology and/or seniors' care[4]. The remaining documents either specify institutional standards or contain no reference to client demographics, aging, or seniors' care. See Table 3 for a summary of gerontological content in these documents.

It does not appear that any of the six accrediting bodies we interviewed intend to add gerontological competencies to their accreditation documents or processes. It should be noted that the Canadian Association of Schools of Nursing (CASN) is currently proposing a project whereby they would identify competencies for entry-to-practice RN education related to community-based care, specifically targeting seniors' and caregivers. This might lead to publication of documents similar to their competencies for palliative and end-of-life care [15] and for nursing informatics [16]. However, these competencies are resources for faculty not linked to accreditation standards.

Also, while we were unable to speak with the Canadian Association of Occupational Therapists, this organization (which accredits occupational therapy education programs and partners with

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[3] [6] Canadian Association of Schools of Nursing. *Accreditation program information*. 2014.
[7] Canadian Association of Occupational Therapists. *Profile of Practice of Occupational Therapists in Canada*. 2012.
[8] Physiotherapy Education Accreditation Canada and Canadian Association of Occupational Therapists. *Accreditation Standards for Occupational Therapist Assistant & Physiotherapist Assistant Programs in Canada 2012-2014* 2012-2014.
[9] Ministry of Training Colleges and Universities. *Practical Nursing Program Standard: The approved program standards for Practical Nursing program of instruction leading to an Ontario College Diploma delivered by Ontario Colleges of Applied Arts and Technology (MTCU funding code 51407)*. 2012.

[4] [10] Ministry of Training Colleges and Universities. *Social Service Worker-Gerontology Program Standard: the approved program standard for all Social Service Worker-Gerontology programs of instruction leading to an Ontario College Diploma delivered by Ontario Colleges of Applied Arts and Technology (MTCU funding code 50728)*. 2007.
[11] Ministry of Health and Long Term Care. *Ministry of Health and Long Term Care Personal Support Worker Training Standards (1997)*. 2009.
[12] The Canadian Council for Accreditation of Pharmacy Programs. *Accreditation Standards for the First Professional Degree in Pharmacy Programs.* 2013.
[13] The College of Family Physicians of Canada. *Specific Standards for Family Medicine Residency Programs Accredited by the College of Family Physicians of Canada*. 2013.
[14] The College of Family Physicians of Canada. *Triple C Competency-Based Curriculum: Report of the Working Group on Postgraduate Curriculum Review – Part 1.* 2011.

the Physiotherapy Education Accreditation Canada to accredit occupational therapy and physiotherapy assistant education programs) published a position statement on Occupational Therapy and older adults in 2011[5]. In this position statement, "CAOT recognizes that there is a need to support opportunities for occupational engagement for older adults, regardless of health or disability status" [17](¶ 1). The position statement makes six recommendations for occupational therapists and lists five CAOT initiatives. Unfortunately, these recommendations do not include education recommendations and do not appear to directly link to accreditation.

[5] "Promote interprofessional research, include and partner with older adults in research. Provide occupational therapists with access to evidence-based and professional development activities on the consequences of elder abuse, age discrimination, spirituality, sexual health in older adults, socio-cultural sensitivity, aging with a disability, and interactions between resilience, occupation, autonomy, and meaning"[17].

TABLE 3: GERONTOLOGY AND SENIORS' CARE COMPETENCY STATEMENTS WITHIN COMPETENCY DOCUMENTS OF EDUCATION ACCREDITATION DOCUMENTS

Profession & Accrediting Body	Profile	Key statements
Interprofessional Accreditation of Interprofessional Health Education	Interprofessional Health Education Accreditation Standards Guide [18]	• Optional accreditation. • No mention of aging, geriatric, gerontology, or seniors' care competencies.
	Principles and practices for integrating interprofessional education into the accreditation standards for six health professional in Canada [19]	• Optional accreditation. • No mention of aging, geriatric, gerontology, or seniors' care competencies.
	Canadian Interprofessional Health Collaborative (agency overseeing AIPHE). National Interprofessional Competency Framework [20]	• General across settings and disciplines. • No mention of aging, geriatric, gerontology, or seniors' care competencies.
Kinesiologist Canadian Council of University Physical Education & Kinesiology Administrators	Accreditation Standards [21]	• No mention of aging, geriatric, gerontology, or seniors' care competencies.
Occupational Therapist Canadian Association of Occupational Therapists	Practice Profile for Support Personnel In Occupational Therapy [22]	• No mention of aging, geriatric, gerontology, or seniors' care competencies.
	CAOT Academic Accreditation Standards and Self-Study Guide [23]	• No mention of aging, geriatric, gerontology, or seniors' care competencies.

Profession & Accrediting Body	Profile	Key statements
	Profile of Practice of Occupational Therapists in Canada [7]	• Client population: Occupational therapists work with clients of all ages as individuals, families, groups, communities or populations (p. 4) • 7.3 Display awareness of diversity and the power issues involved in a professional relationship. 7.3.2 Respect diversity, including but not limited to, the impact of age, gender, religion, sexual orientation, ethnicity, cultural beliefs, and ability on participation and shared decision-making (p. 10)
Paramedic Canadian Medical Association	Guiding principles for national entry-level competency profiles used in the Canadian Medical Association conjoint accreditation process [24]	• No mention of geriatric, gerontology, or seniors' care competencies.
	Guidelines for paramedic programs on the use of the Paramedic Association of Canada's (PAC) 2011 National Occupational Competency Profile (NOCP) in the Canadian Medical Association (CMA) conjoint accreditation process [25]	• No mention of geriatric, gerontology, or seniors' care competencies.
	Revised Advisory to paramedic programs Re: revision to competency profile [26]	• No mention of geriatric, gerontology, or seniors' care competencies.
Personal Support Worker Ministry of Health & Long-Term Care	Ministry of Health and Long Term Care Personal Support Worker Training Standards [11]	• Explicit statements regarding senior's care, including learning objectives for 25 standards.

Profession & Accrediting Body	Profile	Key statements
Pharmacist Canadian Council for the Accreditation of Pharmacy Programs	Accreditation Standards for the First Professional Degree in Pharmacy Programs [12]	• "Criterion 27.4: The curriculum must include a clinical sciences component that provides for the understanding and acquisition of the knowledge and development of the skills necessary for the delivery of competent care to, or on behalf of, patients throughout the health care system. This should include, but is not limited to content in clinical pharmacokinetics, complementary and alternative medicines, drug abuse and dependency, drugs in pregnancy, emergency first care, geriatrics, health promotion and disease prevention, immunization, information technology and practice support tools, medication administration, nutrition, pediatrics, pharmacy law and regulatory issues, pharmacotherapeutics, the pharmacist's role in public health, the pharmacist's role in primary care, medication and patient safety practices, and self care/non-prescription drug use" (p. 20) • "Criterion 28.1: The curriculum must include practice experiences where students can develop the appropriate clinical skills to assist a variety of patients, including the management of patients with acute illnesses and/or chronic conditions in primary care, long-term care, critical or emergency care, and those in the transitions between levels of care" (p. 21)

Profession & Accrediting Body	Profile	Key statements
Physician – Undergraduate Medicine Liaison Committee on Medical Education, which the Association of Faculties of Medicine in Canada Committee on Accreditation of Canadian Medical Schools works with for accreditation	Functions and Structure of a Medical School: Standards for the Accreditation of Medical Education programs Leading to the M.D. Degree [27]	• Specifies that "curriculum will be guided by the contemporary content from and the clinical experiences associated with, among others, the disciplines and related subspecialties that have traditionally been titled family medicine, internal medicine, obstetrics and gynecology, paediatrics, preventive medicine, psychiatry, and surgery" (ED-15, p. 10) • Refers to "widely recognized definitions of the knowledge, skills, behaviors, and attitudinal attributes appropriate for a physician" (p. 7) that would inform objectives of medical education and "allow assessment of student progress in developing the competencies that the profession and the public expect of a physician" (p. 7). These definitions are stated to be available from: o AAMC Medical School Objectives Project whose Learning Objectives for Medical Student Education Guidelines for Medicals Schools [28] includes specifying that issues related to age are an essential aspect of the medical history. This project also includes publications about contemporary issues in medicine but aging, seniors' care, and geriatrics is not one of the issues. o Accreditation Council for Graduate Medical Education (ACGME) that accredits residency programs o American Board of Medical Specialties (ABMS) that certifies licensed physicians o CanMEDS 2005 report of the Royal college of Physicians and Surgeons of Canada [29] which describes generic competencies of physicians

Profession & Accrediting Body	Profile	Key statements
	Data Collection Instrument [30]	• Requires clerkship experiences in family medicine, internal medicine, obstetrics/gynecology, paediatrics, psychiatry, surgery. Does not specify geriatrics or aging population. (ED – Section II Full • Requires clinical resources that provide breadth of learning including types of patients, with age as an example (ED – Section V, ER-6)
Physician-Specialty Medicine and Family Medicine Royal College of Physicians and Surgeons of Canada and The College of Family Physicians of Canada	General Standards Applicable to the University and Affiliated Sites: A Standards [31]	• Standards for organization of university structure, sites for education, and liaison between university and sites • Does not pertain to curriculum
	General Standards Applicable to All Residency Programs: B Standards [32]	• Refers to all residency programs • No mention of aging, geriatric, gerontology, or seniors' care competencies. • Generic statements about curriculum content, specifying that curriculum would be relevant to specific specialty
	General Standards of Accreditation [33]	• No mention of aging, geriatric, gerontology, or seniors' care competencies.

Profession & Accrediting Body	Profile	Key statements
Physician - Family Medicine The College of Family Physicians of Canada	Specific Standards for Family Medicine Residency Programs Accredited by the College of Family Physicians of Canada (aka: The Red Book) [13]	Explicit statements about gerontological or seniors' care competencies: • "Residents must provide clinical care across different settings: hospital, long-term care facilities, and home care settings, as well as in the office. Residents must provide care to patients at every stage of life, from birth to death. This includes care of children and adults, men and women, the elderly, and palliation and end-of-life care" (p. 18) • "Care of the elderly: Residents must be able to provide comprehensive care for the elderly. They must also be familiar with the atypical presentation of illness in this unique population and with the management of common geriatric and psychogeriatric problems—both physical and psychological—in hospital, institution, and community settings such as the patient's home" (p. 20).
	Triple C Competency-based Curriculum: Report of the Working Group on Postgraduate Curriculum Review – Part 1 [14]	• Proposal for implementation of competency based curriculum in all Canadian family medicine programs • Rationale includes need to respond to ageing population and references a report that recommended core curriculum include care of the elderly
	Triple C Competency-based Curriculum Report – Part 2: Advancing Implementation [34]	• Reports on and discussed practical aspects of process of implementing Triple C Competency-based Curriculum • Links with evaluation objectives in family medicine (*Defining competence for the purposes of certification by the College of Family Physicians of Canada: The Evaluation Objectives in Family Medicine* [35] which includes numerous evaluation objectives relevant to care of the elderly (see Table 4 for details)

Profession & Accrediting Body	Profile	Key statements
Physician Assistant Canadian Medical Association	Guiding principles for national entry-level competency profiles used in the Canadian Medical Association conjoint accreditation process [24]	• No mention of geriatric, gerontology, or seniors' care competencies.
	Advisory to physician assistant programs Re: new competency profile [36]	• No mention of aging, geriatric, gerontology, or seniors' care competencies.
Physiotherapist Physiotherapy Education Accreditation Canada	Accreditation Standards for Occupational Therapist Assistant & Physiotherapist Assistant Programs in Canada 2012-2014 [8](Published jointly with Canadian Association of Occupational Therapists) and Accreditation Handbook for Education Programs using 2012 Accreditation Standards [37]	• OTA 6.1.1 explanatory notes: Communicate effectively to facilitate the client's understanding (e.g., considering education, culture, age, and gender). 6.1.3 Supports diversity in communication by using strategies to reduce communication barriers with different populations in different practice contexts and incorporates sensitive practice. Explanatory notes: Adapt communication strategies to facilitate the client's understanding (e.g., considering education, culture, age, and gender). • PTA 6.1.1 explanatory notes: Communicate effectively to facilitate the client's understanding (e.g., considering education, culture, age, and gender). 6.1.3 Supports diversity in communication by using strategies to reduce communication barriers with different populations in different practice contexts and incorporates sensitive practice. explanatory notes: Adapt communication strategies to facilitate the client's understanding (e.g., considering education, culture, age, and gender).

Profession & Accrediting Body	Profile	Key statements
	2012 Accreditation Standards for Physiotherapy Education Programs in Canada [38]	• Seniors' care, gerontology, and geriatric content not specified • "The standards document is intentionally not directive or prescriptive, allowing for program diversity, autonomy, and innovation. The criteria are intended to provide a broad interpretation of a standard. The examples of evidence are not intended to be exhaustive" (p. 6) • Note that ensuring competency of entry-to-practice is shared responsibility of supporting organizations (Council of Canadian Physiotherapy University Programs, The Canadian Alliance of Physiotherapy Regulators, and the Canadian Physiotherapy Association). Thus, guiding documents include *Entry to Practice Physiotherapy Curriculum: Content Guidelines for Canadian Physical Therapy Programs* [39], *Essential Competency Profile for Physiotherapists in Canada* [40], *Analysis of Practice* [41]and *Physiotherapy Competency Examination Blueprint* [42] • Curriculum is expected to be "based on information about the contemporary practice of physiotherapy, standards of practice and current literature, documents, publications and other resources related to the profession, physiotherapy professional education, and educational theory and practice, and the needs of society." (Criterion 2.2, p. 11)
	Accreditation Handbook 2013: Education Programs [43]	• Describes process of accreditation

Profession & Accrediting Body	Profile	Key statements
Registered Nurse Canadian Association of Schools of Nursing	Accreditation Program Information: Cornerstones of the Accreditation Program available from: http://www.casn.ca/en/AccreditationProgramInformation_62/	• "2. Program Framework: 3. The curriculum includes concepts related to health promotion, prevention, and curative, supportive, and rehabilitative care, including palliation, across the life span."
	Position Statement: The Education of Registered Nurses in Canada [44]	• Baccalaureate education "for the initial education of nurses to practise as generalists"
Registered Practical Nurse Ministry of Training, Colleges, and Universities	Practical Nursing Program Standard [9]	• Refers to clients across the lifespan (p. 6, p. 17) • No specific mention of geriatric, gerontology, or seniors' care competencies.
Social Worker Canadian Association for Social Work Education	Standards for Accreditation [45]	• Curriculum standards do not mention aging, geriatric, gerontology, or seniors' care competencies • Refer to diversity "Standards encourage and support diversity and social justice in all aspects/domains of social work programs. Diversity throughout this document refers to a range of characteristics including, but not limited to: age, gender, ..." (p. 3) • Statement that "policies and standards are not aimed at uniformity of social work education; instead, they are intended to promote the uniqueness and diversity of social work programs across Canada and enable them to better respond to their respective contexts and partners" (p. 2)
	Procedures for Accreditation [46]	• No mention of geriatric, gerontology, or seniors' care competencies.

Profession & Accrediting Body	Profile	Key statements
Social Service Worker Ministry of Training, Colleges, and Universities	Social Service Worker Program Standard [47]	• No mention of geriatric, gerontology, or seniors' care competencies.
	Social Service Worker-Gerontology Program Standard [10]	• Entire document is devoted to seniors' care.

EDUCATION ACCREDITATION ORGANIZATIONS' BELIEFS ABOUT THE NEED TO INCLUDE COMPETENCIES FOR SENIORS' CARE IN EDUCATIONAL ACCREDITATION

Four of the five education accreditation bodies who responded to our request for information expressed the belief that the addition of seniors' care or geriatric competencies to accreditation profiles would mean the inclusion of other "specialty practice" competencies, which would result in very lengthy guidelines. Therefore, these bodies doubted the need to include competencies for seniors' care in educational accreditation. There was more support for general statements about diversity in the context of generalist education.

EDUCATION ACCREDITATION ORGANIZATIONS' BELIEFS ABOUT EXTENT TO WHICH CURRENT EDUCATION MEETS NEEDS FOR PROFESSIONALS' COMPETENCIES FOR SENIORS' CARE

Of the five accreditation bodies who responded to our request for information, three were willing to answer our question "Do you believe educational programs meet needs for gerontological competencies of graduates?" One accreditation body thought that this varied between education programs. Two responded that gerontological content was being covered. However, both qualified their responses; one indicated that concerns had recently been expressed at the practice level that gerontology and pediatrics are weaknesses in entry-to-practice education, the other thought that the extent to which this gerontological content is covered varies across education programs, depending on the institution and the expertise of the faculty.

PROCESS OF MODIFYING ACCREDITATION STANDARDS

Based on information available from the education accrediting body websites and information we obtained from key informants, it is evident that accreditation standards are not easily changed; the process of modifying accreditation standards is lengthy. It requires input and agreement from multiple stakeholders. The accrediting bodies have committees responsible for recommending revisions and revisions might take months or years.

ANALYSIS

For the most part, education accreditation does not mandate specific competencies to be achieved by program graduates. Where aging or seniors' care is referred to in accreditation documents, it is more likely to be as an example of a diverse population than in context of specifying competencies. Given this approach, it is not surprising that for many accreditation bodies, seniors' care competencies are not mandated and there does not appear to be any intent to require seniors' care competencies.

Education accreditation bodies expect that entry-to-practice education programs prepare graduates for generalist practice in a variety of settings and with diverse populations. Some see seniors' care as specialty practice, possibly beyond the scope of the programs they accredit. Accreditation may evaluate the extent to which programs demonstrate currency or contemporary content. For the most part, accreditation bodies have not published statements indicating that they expect currency in education to include consideration of the aging population. A notable exception is the Canadian Association of Occupational Therapy.

Some accreditation documents specify or mandate seniors' competencies. Where this was found, it was in the context of an accreditation approach that included some evaluation of specified competencies (i.e., standards for personal support worker training, standards for pharmacy education programs, standards for family medicine residency training, and the standard for social service worker gerontology programs). Not all accrediting bodies that specify or mandate competencies include seniors' care competencies (i.e., registered practical nurse standard), indicating a potential to modify competency requirements to include a greater focus on seniors' care competencies.

Because of the low response rate to our attempts to interview representatives of education accreditation organizations and reluctance to respond to our questions about adequacy of current education for seniors' care competencies, we could not accurately determine the extent to which education accreditation bodies may see enhancing education as a priority. Based on review of documents on their websites and our questions about endorsing seniors' care competency documents (described in a subsequent section), there is variability in the extent to which this is seen as a priority but, for the most part, it does not appear to be a priority.

3. VIEWS OF PROFESSION REGULATORY BODIES

SUMMARY: APPROACH AND METHODS

Provincial regulators of health professions and social work were contacted and competency documents on their websites were reviewed to determine the extent to which:

1. Seniors' care or gerontology competencies are part of the competency frameworks for regulated health professions and social work[6];

[6] dentists, chiropractors, nurses (RNs and RPNs), occupational therapists, pharmacists, physicians, physician assistants, physiotherapists, recreation therapists, social workers, social service workers, and paramedics

2. Adding such competencies has been considered by the regulators; and
3. Regulators believe that current education meets needs for gerontological competencies among health and social care professionals.

Regulation of health professionals and social workers is provincial. However, for several professions, national organizations or nationally set exams determine eligibility for licensure or registration at the provincial level. As appropriate, national organizations were contacted and nationally set competency frameworks were examined. We also included national organizations where regulatory bodies were members of the organization (e.g., the Council of Canadian Physiotherapy University Programs, of which the Canadian Alliance of Physiotherapy Regulators is a member) and the provincial Federation of Health Regulatory Colleges of Ontario. The Canadian Association of Occupational Therapists, the National Physiotherapy Advisory Group, and the National Association of Pharmacy Regulatory Authorities have expected competency documents for unregulated OT Assistants, PT Assistants, and Pharmacy Technicians, respectively. These are summarized in Table 5.

The websites of the following regulatory bodies and related organizations were reviewed:

1. Association of Canadian Occupational Therapy Regulatory Organizations (National OT)
2. Canadian Alliance of Physiotherapy Regulators (National PT)
3. Canadian Council of Social Work Regulators (National Social Worker)
4. Canadian Network of National Associations of Regulators (National)
5. College of Family Physicians of Canada (National Family Medicine)
6. College of Kinesiologists of Ontario (Provincial Kinesiologist)
7. College of Nurses of Ontario (RNs and RPNs)
8. College of Occupational Therapists of Ontario (Provincial OT)
9. College of Physicians and Surgeons of Ontario (Provincial Specialty Physician)
10. College of Physiotherapists of Ontario (Provincial PT)
11. Council of Canadian Physiotherapy University Programs (National PT)
12. Federation of Health Regulatory Colleges of Ontario (Provincial)
13. Federation of Medical Authorities of Canada (National Physician)
14. Health Professions Regulatory Advisory Council (National)
15. Medical Council of Canada (National Physician)
16. National Association of Pharmacy Regulatory Authorities (National Pharmacist)
17. Ontario College of Family Physicians (Provincial Family Medicine)
18. Ontario College of Pharmacists (Provincial Pharmacist)
19. Ontario College of Social Workers and Social Service Workers (Provincial Social Worker and Social Service Workers)
20. Royal College of Physicians and Surgeons of Canada (National Specialty Physician)

We noted the extent to which seniors' care or gerontological competencies were embedded in the documents. This includes specific statements about older adults or aging as well as expectations for competency across the lifespan or in diverse populations.

All of the regulatory bodies were repeatedly contacted by email and/or telephone. Responses were provided from the following six of the twenty listed above:

1. Canadian Council of Social Work Regulators
2. College of Kinesiologists of Ontario
3. College of Nurses of Ontario
4. National Association of Pharmacy Regulatory Authorities
5. Ontario College of Pharmacists
6. Royal College of Physicians and Surgeons of Canada

SUMMARY: RESULTS

SENIORS' CARE AND GERONTOLOGICAL COMPETENCIES IN REGULATOR COMPETENCY DOCUMENTS

Of the 20 competency documents reviewed:

- Four documents (from two professions, medicine and physiotherapy) included explicit statements about gerontological or seniors' care competencies. Three of these documents were from the College of Family Physicians of Canada and one from the Council of Canadian Physiotherapy University Programs, which includes the Canadian Alliance of Physiotherapy Regulators[7].
- A further 11 documents included statements about expectations for competency across the lifespan but no specific seniors' care competencies[8].
- Three documents had neither[9].

[7] Council of Canadian Physiotherapy University Programs (members are: the Canadian Physiotherapy Association, the Canadian Alliance of Physiotherapy Regulators, and the Accreditation Council of Canadian Physiotherapy Academic Programs); The College of Family Physicians of Canada (3 documents)

[8] College of Nurses of Ontario (3 documents); National Physiotherapy Advisory Group; College of Occupational Therapists of Ontario; Association of Canadian Occupational Therapy Regulatory Organizations; The Canadian Council of Social Work Regulators; College of Family Physicians of Canada's Undergraduate Education Committee; College of Kinesiologists Ontario; Canadian Association of Occupational Therapists; and a document released by the Association of Faculties of Medicine of Canada, The College of Family Physicians of Canada, Collège des Médecins du Québec, Royal College of Physicians and Surgeons of Canada

See Tables 4 and 5, which summarize the gerontological content in these documents. Detailed description of statements about gerontological content in the physiotherapy and medicine documents is provided below.

In addition to statements about required knowledge or application across the lifespan, the Council of Canadian Physiotherapy University Programs *Entry-to-Practice Physiotherapy Curriculum Content Guidelines for Canadian University Programs* [48] includes the following knowledge requirements specific to gerontology:

- "Common theories of biological development (e.g. movement) and aging" (p. 15)
- "Theories of psychological development and aging" (p. 15)

These guidelines also include requirements for knowledge about disease processes or assessments associated with some common geriatric syndromes (e.g., falls, functional decline) and knowledge of diseases or disorders that are more common in older age (e.g., Parkinson disease, stroke, dementia, and cognitive impairment).

The College of Family Physicians of Canada's document *Defining competence for the purposes of certification by the College of Family Physicians of Canada: The evaluation objectives in family medicine* [35] is a guide for the College's Board of Examiners criteria for the certification exam in family medicine. This document describes competencies, expected observable skills and behaviours. "Elderly" is a priority topic, with five key feature skills: (1) avoid polypharmacy; (2) inquire about non-prescription medication use; (3) screen for modifiable risk factors to promote safety and independence; (4) assess functional status; and (5) thoroughly assess for diseases prone to atypical presentation (p. 96). Other highly relevant priority topics in this document (the priority topics either common in older adults or including specification of need for special considerations for older adults) are anemia, dehydration, dementia, diabetes, infections, mental competency, multiple medical problems, Parkinsonism, palliative care, UTI, and thyroid. The document also includes an expectation to "adapt communication to the individual patient for reasons such as culture, age, and disability" (p. 39), with an example of including patients with cognitive impairment.

[9] College of Physiotherapists of Ontario; Ontario College of Social Workers and Social Service Workers; National Association of Pharmacy Regulatory Authorities

TABLE 4: GERONTOLOGY AND SENIORS' CARE COMPETENCY STATEMENTS WITHIN COMPETENCY DOCUMENTS OF REGULATORY BODIES: REGULATED HEALTH PROFESSIONS

Profession & Regulatory Body	Profile	Key statements
Kinesiologist College of Kinesiologists of Ontario	Kinesiologists Core Competency Profile [49]	• Expectations for competency across the lifespan • No specific seniors' care competencies
Occupational Therapist College of Occupational Therapists of Ontario & Association of Canadian Occupational Therapy Regulatory Organizations	Essential Competencies of Practice for Occupational Therapists in Canada, (3rd Ed.) [50]	• Expectations for competency across the lifespan • No specific seniors' care competencies • "Diversity includes, but not limited to age, gender, religion, sexual orientation, ethnicity, cultural beliefs, ability" (p. 17 & 24) • "3.1.1 Applies relevant current knowledge of foundational biomedical and social sciences into practice. Cues: anatomy/neuroanatomy, neurology/neurophysiology, development across the lifespan (i.e., children, adolescents, adults, older adults), social sciences (i.e. psychology, sociology, education), disease/conditions" (p. 19)
Pharmacist National Association of Pharmacy Regulatory Authorities	Professional Competencies for Canadian Pharmacists at Entry to Practice: Second Revision [51]	• Seniors' care competencies not specified • Across the lifespan not explicitly stated
Physician – Undergraduate College of Family Physicians of Canada's Undergraduate Education Committee	CanMEDS – FMU Undergraduate Competencies from a Family Medicine Perspective [52]	• Expectations for competency across the lifespan • No specific seniors' care competencies

Profession & Regulatory Body	Profile	Key statements
Physician - Postgraduate Association of Faculties of Medicine of Canada, The College of Family Physicians of Canada, Collège des Médecins du Québec, Royal College of Physicians and Surgeons of Canada	A Collective Vision for Postgraduate Medical Education in Canada [53]	• Expectations for competency across the lifespan • No specific seniors' care competencies • Rationale for recommendation 1 "Ensuring the right mix, distribution, and number of physicians to meet societal needs" includes meeting the needs of the elderly (p. 14)
Physician – Family Physician The College of Family Physicians of Canada	Specific Standards for Family Medicine Residency Programs Accredited by the College of Family Physicians of Canada. [13] (aka: The Red Book)	Explicit statements about gerontological or seniors' care competencies: • "Residents must provide clinical care across different settings: hospital, long-term care facilities, and home care settings, as well as in the office. Residents must provide care to patients at every stage of life, from birth to death. This includes care of children and adults, men and women, the elderly, and palliation and end-of-life care" (p. 18) • "Care of the elderly: Residents must be able to provide comprehensive care for the elderly. They must also be familiar with the atypical presentation of illness in this unique population and with the management of common geriatric and psychogeriatric problems—both physical and psychological—in hospital, institution, and community settings such as the patient's home" (p. 20).

Profession & Regulatory Body	Profile	Key statements
	Defining Competence for the Purposes of Certification by the College of Family Physicians of Canada: The evaluation objectives in family medicine. Report of the Working Group on the Certification Process [35]	Explicit statements about gerontological or seniors' care competencies: • Elderly are included as a priority topic with five key feature skills [(1) avoid polypharmacy; (2) inquire about non-prescription medication use; (3) screen for modifiable risk factors to promote safety and independence; (4) assess functional status; and (5) thoroughly assess for diseases prone to atypical presentation] (p. 96) • "Culture and Age Appropriateness-Adapts communication to the individual patient for reasons such as culture, age, and disability (e.g., the young child or teenager, or someone with speech deficits, hearing deficits, or language difficulties." Example of undesired observable behavior "Ignores the patient while exclusively engaging the caregiver, especially with children, the elderly, those with cognitive impairment (e.g., no questions to the patient, patient not involved in management plan)" (p. 39) • "Behavioral Problems-In elderly patients known to have dementia, do not attribute behavioural problems to dementia without assessing for other possible factors (e.g., medication side effects or interactions, treatable medical conditions such as sepsis or depression)" (p. 71). • Several other mentions within the priority topics and key features of specialized considerations for the elderly (such as diabetes, anemia, dehydration, dementia, depression, infections, mental competency, multiple medical problems, parkinsonism, palliative care, UTI, and thyroid).

Profession & Regulatory Body	Profile	Key statements
Physician - Family Physician Care of the Elderly designation The College of Family Physicians of Canada	Specific Standards for Family Medicine Residency Programs Accredited by the College of Family Physicians of Canada. [13] (aka: The Red Book)	• Delineates goals, curriculum, training program organization, teaching resources, and training practice settings for physicians undertaking additional Care of the Elderly training in order to "refine and extend their skills and increased their involvement in the care of the elderly in their practice." (p. 36)
Physiotherapist Council of Canadian Physiotherapy University Programs (Canadian Physiotherapy Association, the Canadian Alliance of Physiotherapy Regulators, and the Accreditation Council of Canadian Physiotherapy Academic Programs)	Entry-to-Practice Physiotherapy Curriculum: Content Guidelines for Canadian University Programs [48]	• Statements about applying knowledge "across the lifespan" and some examples of "aging" as a special population • "Common theories of biological development (e.g. movement) and aging" (p. 15) • "Theories of psychological development and aging" (p. 15) • Include requirements for knowledge about disease processes or assessments associated with some common geriatric syndromes (e.g., falls, functional decline) and knowledge of diseases or disorders that are more common in older age (e.g., Parkinson disease, stroke, dementia, and cognitive impairment).
Physiotherapist College of Physiotherapists of Ontario	Essential Competency Profile for Physiotherapists in Canada [40]	• No specific seniors' care competencies (but includes statement that contexts of practice include practice settings with older adults: senior centres, adult day centres, nursing homes, residences/assisted living for older adults) • Expectations across the lifespan not explicitly stated

Profession & Regulatory Body	Profile	Key statements
Registered Nurse College of Nurses of Ontario	Competencies for entry-level Registered Nurse Practice [54]	• Expectations for competency across the lifespan and for meeting needs for palliative or end-of-life care • No specific seniors' care competencies • "25. Demonstrates a body of knowledge from nursing and other disciplines concerning current and emerging health care issues (e.g., health care needs of older adults, vulnerable and/or marginalized populations, health promotion, obesity, pain prevention and pain management, end-of-life care, addiction, mental health)" (p. 6) • "65. Supports clients through developmental and role transitions across the lifespan (e.g., pregnancy, infant nutrition, well-baby care, child development stages, family planning and relations, geriatric care)" (p. 8)

Profession & Regulatory Body	Profile	Key statements
	National Competencies in the context of entry-level Registered Nurse practice. Adopted for Ontario Registered Nurses Entry-to-Practice Competencies (From the Jurisdictional Competency Process: Entry-Level Registered Nurses [55]	• Expectations for competency across the lifespan • No specific seniors' care competencies • Assumes that entry-to-practice nurses are generalists whose "competencies are transferable across diverse practice settings" (p. 3). • "Approved nursing education programs are required to provide learning opportunities for students to apply the entry-level competencies in direct practice experiences with clients of all ages and genders in a variety of settings" (p. 17) • "Similarly, learning experiences with older persons may be obtained in a variety of settings including public and community living as well as institutional and residential settings. Such experiences cannot replace experiences with clients in acute care and other traditional health care settings" (p. 18). • "Competencies: Specialized body of knowledge 22. Has a knowledge base from nursing and other disciplines concerning current health care issues (e.g., the health care needs of older people, vulnerable and/or marginalized populations, health promotion, pain prevention and management, end-of-life care, problematic substance use, blood borne pathogens and traumatic stress syndrome). 23. Has a knowledge base about human growth, development and role transitions for people of all ages and genders, especially how these impact various states of health and wellness" (p. 9)
Registered Practical Nurse College of Nurses of Ontario	Entry-to-Practice Competencies for Ontario Registered Practical Nurses [56]	• Expectations for competency across the lifespan • No specific seniors' care competencies • "Assessment: 3. Collaborates with clients across the lifespan to perform a holistic nursing assessment" (p. 6)

Profession & Regulatory Body	Profile	Key statements
Social Worker The Canadian Council of Social Work Regulators	Entry-Level Competency Profile for the Social Work Profession in Canada [57]	• Expectations for competency across the lifespan • No specific seniors' care competencies • Competencies regarding assessment and "4. Delivering Services 103. Apply relevant services as required in accordance with legislation and regulation, including the protection of children, youth, and vulnerable adults, etc." (p. 47)
Social Worker Ontario College of Social Workers and Social Service Workers	Codes of Ethics and Standards of Practice [58]	• No seniors' care competencies or specification of expected competencies "across the lifespan" • Addresses ethics in regards to incapacitation

TABLE 5: GERONTOLOGY AND SENIORS' CARE COMPETENCY STATEMENTS WITHIN COMPETENCY DOCUMENTS OF REGULATORY BODIES: UNREGULATED HEALTH PROFESSIONS

Profession & Regulatory Body	Profile	Key statements
Occupational Therapy Assistant Canadian Association of Occupational Therapists	Practice Profile for Support Personnel in Occupational Therapy [22]	• No specific seniors' care competencies • Expectations for competency across the lifespan not explicitly stated
Physiotherapy Assistant National Physiotherapy Advisory Group (made up of Canadian Alliance of Physiotherapy Regulators, Accreditation Council for Canadian Physiotherapy Academic Programs, Canadian Physiotherapy Association, and Canadian Council of Physiotherapy University Programs)	Essential Competency Profile for Physiotherapist Assistants in Canada [59]	• Expectations for competency across the lifespan • No specific seniors' care competencies • Seniors care listed as a clinical area of practice
Pharmacy Technician National Association of Pharmacy Regulatory Authorities	Professional Competencies for Canadian Pharmacy Technicians at Entry to Practice [60]	• No specific seniors' care competencies • Expectations for competency across the lifespan not explicitly stated

PLANS FOR INCORPORATION OF SENIORS' CARE AND GERONTOLOGICAL COMPETENCIES IN REGULATOR COMPETENCY FRAMEWORKS

None of the six regulators who responded reported that they were in the process of, or considering, incorporating (more) seniors' care competencies in their competency frameworks. All six reported that they regulate generalist practice and that seniors' care or geriatrics would fall under a specialty practice. None reported endorsing any gerontological competency frameworks. One body, The College of Kinesiologists of Ontario, stated that they plan to revise their competency profile within the next five years. They reported that geriatric or seniors' care competencies would be included if a gap assessment of the current profile indicated a need for such competencies. The Canadian Council of Social Work Regulators expressed openness to reviewing existing geriatric profiles for endorsement.

REGULATORS' BELIEFS ABOUT EXTENT TO WHICH CURRENT EDUCATION MEETS NEEDS FOR PROFESSIONALS WITH COMPETENCIES FOR SENIORS' CARE

Of six regulators who responded to our request for information and an interview, four were willing to answer our question "Do you believe current education meets needs for gerontological competencies of graduates?" Three of the regulators were confident that the current curriculum meets the graduates' needs to learn about seniors' care. One regulator indicated that the degree to which gerontological competencies are achieved probably depends on the education program and that "we can do more" to improve seniors' care content in education.

ANALYSIS

Most regulatory bodies' competency frameworks do not specify particular seniors' care competencies, just as they do not specify competencies for other populations. Rather, these frameworks describe generalist practice and competencies that apply across populations. Most competency frameworks include statements that competency is expected across the lifespan or with diverse groups and some of these statements include aging, elderly, or old age as an example. This means that specifying competencies for seniors' care would be inconsistent with most regulatory bodies' approach to defining competencies.

Two exceptions, in terms of specifying seniors' care competencies in documents produced or endorsed by regulatory bodies, were documents from physiotherapy and family medicine. One is the entry-to-practice curriculum guide for physiotherapy programs, published by the Council of Canadian Physiotherapy University Programs, of which the Canadian Alliance of Physiotherapy Regulators is a member. While this curriculum guide is endorsed by physiotherapy regulators in Canada, another document sets out competencies for regulation.

This document, the *Essential Competency Profile for Physiotherapists in Canada* [40] is used by the College of Physiotherapists of Ontario. It does not specify seniors' care competencies.

The second exception, in terms of regulatory body documents specifying seniors' care competencies, is competency documents from the College of Family Physicians of Canada (*Specific Standards for Family Medicine Residency Programs Accredited by the College of Family Physicians of Canada* [13] and *Defining Competence for the Purposes of Certification by the College of Family Physicians of Canada: The evaluation objectives in family medicine* [35]). The *Evaluation Objectives in Family Medicine* [35], which influences both educational accreditation and certification exams for entry-to-practice of family physicians, includes many requirements for seniors' care competencies. This competency framework sets out specific clinical skills and behaviours for a large number of populations and illness conditions. Among these, "elderly" is a priority topic and many of the other priority topics reference special consideration for older adults or are highly relevant to older adults.

The entry-to-practice competency document used for regulation of family physicians is unlike entry-to-practice competency documents of other professions in that it specifies clinical skills and behaviours specific to a large number of populations, illnesses, and health conditions. Thus, incorporating geriatric competencies into this document is consistent with the organization of this competency framework and approach. In practitioner interviews, conducted for separate needs assessment [5], we were told that there are plans to further strengthen the geriatric competencies in family medicine entry-to-practice requirements.

Regulators who responded to our survey view current standards and competency requirements as adequate, given their focus on preparing generalist practitioners and their belief that seniors' care is a specialty. Regulator respondents reported that they regulate generalist practice and view seniors' care or geriatrics as part of specialty practice. They do not plan to incorporate seniors' care competencies into their competency frameworks. Few of the regulators shared an opinion on the extent to which current education meets needs for gerontological competencies. Those who gave an opinion tended to be confident that the current education is meeting all needs for gerontology competencies.

Regulators' views that current competency frameworks and educational preparation are adequate are consistent with their current mandate to regulate generalist practice. With the exception of family medicine, regulators tend to view seniors' care or geriatrics competencies as part of specialty practice rather than generalist practice.

Thus, it seems unlikely that most regulators would include seniors' care competencies in their competency frameworks.

4. INTERPROFESSIONAL AND DISCIPLINE SPECIFIC GERONTOLOGICAL COMPETENCY DOCUMENTS

SUMMARY: APPROACH AND METHODS

A list of discipline specific and interdisciplinary seniors' care competencies was compiled and reviewed. These competency documents were identified through contacts with experts in the field, key informant interviews, the online survey, and internet searches. Information about the extent to which the competency frameworks had been endorsed by other organizations was obtained by: asking the organizations that produced the competency documents; examining their websites; and asking professional, regulatory, and accreditation organizations if they endorsed any gerontological or seniors' care competency frameworks. We contacted health and social care worker professional associations to find out what would be involved in obtaining their endorsement of gerontological competencies. Competencies for training in geriatric medicine are not included.

SUMMARY: RESULTS

CANADIAN INTERDISCIPLINARY GERONTOLOGICAL COMPETENCIES

Three Canadian interdisciplinary competency frameworks were identified [61-63]. The National Initiative for Care of the Elderly [62] core competencies are specified to apply at the entry-to-practice level. The other two competency guidelines do not differentiate between competencies expected at the entry-to-practice and competencies expected after gaining work experience. The three frameworks are:

1. *Recommended Core Competency Guidelines for Health Human* R*esources: Working with Behaviourally Complex Population* [61]. Behavioural Supports Ontario (BSO).
2. *Interprofessional Core Competencies* [62]. National Initiative for Care of the Elderly (NICE).
   Endorsed by:
   - Geriatric Education Recruitment Initiative (GERI)
   - Gerontological Nurses Association of Ontario
   - Canadian Physiotherapy Association
3. *Recommended Core Competencies in Dementia Care 2007* (appendix to the Alzheimer Strategy Transition Project *Report 3: Health Human Resources Strategy*) [63]. Ontario Alzheimer Strategy Transition Project.
   Endorsed by:
   - Gerontological Nurses Association of Ontario

CANADIAN DISCIPLINE SPECIFIC GERONTOLOGICAL COMPETENCIES: ENTRY-TO-PRACTICE LEVEL

Three discipline specific gerontological competency frameworks were identified. A fourth competency framework, the Canadian Association of Schools of Nursing competencies for palliative and end-of-life care, is relevant to seniors' care. These four competency frameworks are listed below:

1. *Core Competencies (Learning Outcomes) for Medical Students in Canada* [64]. Canadian Geriatric Society (CGS).
   Endorsed by:
   - Ontario Community Support Association
   - National Initiative for Care of the Elderly
2. *Objectives of Training in Psychiatry: Geriatric Component 2009* [65]. Canadian Academy of Geriatric Psychiatry (CAGP).
3. *Social Service Worker – Gerontology Program Standards (March 2007)* [10]. Ministry of Training, Colleges and Universities (MTCU)
4. *Palliative and End-of-Life Care: Entry-to-Practice Competencies and Indicators for Registered Nurses* [15]. Canadian Association of Schools of Nursing (CASN).

CANADIAN DISCIPLINE SPECIFIC GERONTOLOGICAL COMPETENCIES: EXPERIENCED PRACTITIONERS

Two Canadian gerontological nursing competency frameworks were identified, both are expected competencies for experienced nurses:

1. *Gerontological Nursing Competencies and Standards of Practice 2010* [66]. Canadian Gerontological Nursing Association (CGNA).
   a. Endorsed by Gerontological Nurses Association of Ontario.
2. *Gerontological Nursing Certification Exam Blueprint and Specialty Competencies* [67]. Canadian Nurses Association.

A third competency profile is relevant. The Paramedic Association of Canada *National Competency Profile for Paramedics* [68] is not specific to seniors' care. However, it specifies a number of seniors' care competencies.

INTERNATIONAL INTERDISCIPLINARY AND DISCIPLINE SPECIFIC GERONTOLOGICAL COMPETENCIES

Several international frameworks were identified that specifically address interdisciplinary and discipline specific gerontology competencies. They are listed below.

1. *Multidisciplinary competencies in the Care of Older Adults at the Completion of the Entry-level health professional degree.* Partnership for Health in Aging (21 U.S. Organizations) [69]. This document was created and endorsed by 21 organizations.
2. *Competencies for Post-Acute and Long-Term Care Medicine.* American Medical Directors Association [70].
3. *Recommended Baccalaureate Competencies and Curricular Guidelines for the Nursing Care of Older Adults.* American Association of Colleges of Nursing [71].
    - Endorsed by American Geriatrics Society
4. *Geriatric Social Work Competency Scale II with Life-long Leadership Skills: Social Work Practice Behaviors in the Field of Aging.* Council on Social Work Education [72].
    - Endorsed by American Geriatrics Society
5. *Standards of Clinical Practice (April 2013)*. International Association for Physical Therapists Working with Older People [73].
    - Endorsed by Canadian Physiotherapy Association
6. *Learning Outcomes/Competencies for Undergraduate Medical Education in Europe*. The Tuning Project (Medicine) [74].
7. *Geriatric Pharmacy Curriculum Guide (2nd edition, 2007).* American Society of Consultant Pharmacists [75].
8. *Minimum Geriatric Competencies for Emergency Medicine Residents* [76].
    - Endorsed by American Geriatrics Society
9. *Minimum Geriatric Competencies for Internal Medicine or Family Medicine Residents.* [77].
    - Endorsed by American Geriatrics Society
10. *Minimum Geriatric Competencies for Medical Students.* [78]
    - Endorsed by American Geriatrics Society
11. *AALTCN Standard and Core Competencies for Nursing in Nursing Homes.* American Association for Long Term Care Nursing. [79].
    - Endorsed by American Geriatrics Society
12. *Proposed Competencies in Geriatric Patient Care for Use in Assessment for Initial and Continued Board Certification of Surgical Specialists.* [80].
    - Endorsed by American Geriatrics Society
13. *Geriatric Core Competencies for General Psychiatry Residents.* American Association for Geriatric Psychiatry [81].

- Endorsed by American Geriatrics Society

ENDORSEMENT OF COMPETENCIES

We contacted professional organization and asked about their processes for endorsement of competency frameworks. Seven organizations[10] described similar processes, whereby either a committee and/or board of directors would review the competencies in question and decide whether or not to endorse them. One organization, the Registered Practical Nurses Association of Ontario (RPNAO) indicated that they would not explicitly endorse any competencies outside of those required for registration. One organization, Therapeutic Recreation Ontario, would not endorse competencies either, but would provide the information for their members. One organization, the Ontario Association of Social Workers, indicated that they would use existing profiles as a guide to inform their own profile. Finally, the Paramedic Association of Canada was open to the idea of endorsing geriatric competency profiles, but was not aware of available profiles. This last association is beginning the two-year process of reviewing their competency profile and plan to use existing competency profiles to inform their revisions.

Regulatory bodies and accrediting agencies were also asked whether they endorse any geriatric competencies. Among the six of twenty regulatory bodies that responded to our request for information and an interview, none endorsed any geriatric competencies. Three of seven accrediting bodies responded to our request for information and an interview; none endorsed any geriatric competencies.

Five of the six regulatory bodies answered the question about the process for endorsing competencies (the Royal College of Physicians and Surgeons of Canada did not respond to this question). The College of Nurses of Ontario and the Ontario College of Pharmacists would not endorse the competencies of other organizations; neither would the National Association of Pharmacy Regulatory Authorities (but the National Association of Pharmacy Regulators indicated that they would use existing profiles as a guide to inform their own profiles). The College of Kinesiologists of Ontario would also use existing profiles to guide modification to their profile as well. One organization, the Canadian Council of Social Work Regulators, indicated that they are open to reviewing geriatric competencies.

[10] Canadian Gerontological Nursing Association, Gerontological Nurses Association of Ontario, Registered Nurses Association of Ontario, Ontario Society of Occupational Therapists, Ontario Community Support Association, Canadian Physiotherapy Association and Ontario Kinesiology Association.

Two of the three accrediting bodies, the Canadian Council for the Accreditation of Pharmacy Programs and the Canadian Association for Social Work Education, offered a response to the question about the process for endorsing competencies. Both described a review process outlined by the professional organizations, whereby a committee and possibly member organizations would review and recommend endorsement, which would ultimately need to be approved by the board.

ANALYSIS

We identified 19 interdisciplinary and profession specific seniors' care competency frameworks that could inform curriculum enhancement, education accreditation, or professional regulation. One potential problem with using some of the frameworks is that some do not distinguish between entry-to-practice competencies and competencies expected of more experienced workers. The National Initiative for Care of the Elderly interprofessional core competencies [62] are specified for entry-to-practice and should, therefore, be used to inform curriculum enhancement. There are alternatives if educators prefer to use profession-specific competencies (e.g., Canadian nursing competencies are for more experienced nurses but American baccalaureate education competencies could be used).

Given how time consuming it is to go through the process of developing competency frameworks, it makes sense to consider using existing Canadian or international competency frameworks rather than developing new ones. Using the American baccalaureate nursing competencies in the process of curriculum mapping was found to be useful for Canadian nursing faculty [82].

There is opportunity to engage professional organizations, regulators, and education accrediting bodies by seeking endorsement of existing competency documents. Most of the regulators would not consider endorsing competency frameworks but some indicated that they would review them in the process of revising their competency profiles.

5. EXPERIENCE OF ONTARIO EDUCATIONAL PROGRAMS WITH DEVELOPING AND UPDATING CURRICULA RELATED TO SENIORS CARE

SUMMARY: APPROACH AND METHODS

The online survey of all Ontario education administrators and teaching faculty included questions for education administrators and teaching faculty about whether their programs had developed or modified curriculum to achieve gerontological competencies. Survey respondents who indicated a willingness to be contacted for further information about these changes were contacted and interviewed. The interviews focused on barriers, facilitators, and incentives for

curriculum change encountered by the informants. Additional details were obtained about the process of successful enhanced seniors' care curriculum revisions at Conestoga College, Kitchener, Ontario. Relevant findings from a Council of Ontario Universities Programs in Nursing (COUPN) survey [3] are summarized as well.

SUMMARY: RESULTS

SURVEY RESPONDENTS' AWARENESS OF PUBLISHED INTERPROFESSIONAL AND DISCIPLINE SPECIFIC GERONTOLOGICAL COMPETENCIES

Among the 56 education administrator survey respondents, 12 (21%) indicated that they were aware of published interprofessional gerontological/geriatric competencies for health care workers; 18 (32%) indicated that they were aware of published gerontological/geriatric competencies specific to students in their program. However, this last number is an overestimate as several of the respondents then listed competency documents that were not gerontological competencies but generic discipline specific competencies (e.g., entry-to-practice standards, practical nursing entry-to-practice competencies, RN entry-to-practice competencies, OT assistant and PT assistant entry-to-practice competencies, or practice guidelines). For the most part, education administrator survey respondents did not name the competency documents they reported knowing about.

The National Initiative for Care of the Elderly (NICE)/Geriatric Education Recruitment Initiative (GERI) *Core Competencies for Gerontology* [62] were listed by 4 of the 56 education administrators and the Behavioural Supports Ontario *Recommended Core Competencies for Health Human Resources Working With Behaviourally Complex Population* [61] were listed by 2 of the 56 education administrators. Relevant discipline specific gerontological/geriatric competencies that were listed by the administrators were:

- Canadian Gerontological Nursing Association *Gerontological Nursing Competencies and Standards* [66] (n = 5)
- Canadian Geriatric Society *Core Competencies in the Care of Older Persons for Medical Students in Canada* [64] (n = 3)
- College of Family Physicians of Canada accreditation standards for Programs in Care of the Elderly *The Red Book: Specific Standards for Family Medicine Residency Programs* [13] (n = 1)

Among the 100 teaching faculty survey respondents, 20 (20%) indicated that they were aware of published interprofessional gerontological/geriatric competencies for health care workers; 32 (32%) indicated that they were aware of published gerontological/geriatric competencies specific to students in their program. However, like the administrators, several of these

respondents listed examples that were not specific to gerontology, geriatrics, or seniors' care. For the most part, teaching faculty survey respondents did not name the competency documents they reported knowing about.

Awareness of three interprofessional gerontological/geriatrics competency frameworks listed by at least one teaching faculty respondent is described below:

- Behavioural Supports Ontario *Recommended Core Competencies for Health Human Resources Working With Behaviourally Complex Population* [61] (n = 4)
- Partnership for Health in Aging *Multidisciplinary Competencies in the Care of Older Adults at the Completion of Entry-Level Health Professional Degree* [69] (n = 2)
- National Initiative for Care of the Elderly (NICE)/Geriatric Education Recruitment Initiative (GERI) *Core Competencies for Gerontology* [62] (n = 4)

There was also low awareness of profession specific gerontological/geriatrics competencies. Awareness of four such competency documents listed by at least one respondent is described below:

- Canadian Gerontological Nursing Association *Gerontological Nursing Competencies and Standards of Practice* [66] (n = 5)
- Hartford Foundation nursing standards (assume referring to American Academy of Colleges of Nursing *Recommended Baccalaureate Competencies and Curricular Guidelines for the Nursing Care of Older Adults* [71] (n = 2)
- Canadian Geriatric Society *Core Competencies in the Care of Older Persons for Medical Students* in *Canada* [64] (n = 2)
- College of Family Physicians of Canada accreditation standards for Programs in Care of the Elderly *The Red Book: Specific Standards for Family Medicine Residency Programs* [13] (n = 1)

Survey respondents who indicated that they had some expertise in seniors' care were slightly more likely than those who indicated that they did not have this expertise to report knowing about a gerontological or geriatric competency document.

SURVEY RESPONDENTS' EXPERIENCES DEVELOPING AND UPDATING CURRICULA

Almost two thirds of programs represented by survey respondents and just over one quarter of teaching faculty survey respondents had modified or enhanced curriculum or courses in their programs.

- Forty eight (63%) programs represented in the survey reported that they had developed or modified curriculum to enhance gerontology content to better achieve seniors' care competencies.
- Seventy-nine teaching faculty responded to the question about whether they had modified a course; 42 (53%) had not developed or modified a course to better achieve seniors' care competencies.
- Five administrators reported that curriculum revision was underway or that they had plans to enhance a new curriculum with seniors' care content.

Survey respondents listed the following changes that they had made to existing curricula to enhance seniors' care content and competencies:

- Adding a 7 week unit focused on older adults
- Introducing an elective course
- Including seniors' care learning objectives in self-directed learning courses
- Adding lectures or other seniors' care content to existing courses

FACILITATORS, INCENTIVES AND BARRIERS FOR CURRICULUM REVISION

Nineteen key informants were interviewed about curricular changes. These key informants were recruited from among survey respondents who indicated a willingness to be interviewed about their curricular changes, programs known to have made curricular changes, or suggested by contacts through the Council of Ontario Universities.

INTERVIEWS WITH EDUCATION ADMINISTRATOR KEY INFORMANTS

Eleven education administrators (Deans, Directors, Program Chairs/Leads) were interviewed about curricular changes their programs had made and their views of barriers and incentives to making curricular enhancements for seniors' care competencies. Changes they discussed included:

- Modified therapeutic recreation curriculum after the Long-Term Care Homes Act specified requirement for education of designated lead for recreational and social activities program.
- Half-day weekly lecture series at a medical school that increases exposure to topics such as geriatrics, as well as block exposure, enhanced skills program, and a longitudinal elective on geriatrics.
- A community college enhanced curriculum after a provincial review of professional standards and a review of employment trends.

- A BScN program added a third year elective course on gerontology, and strengthened threading of gerontology throughout the entire curriculum.
- Conestoga College revised both their PSW and practical nursing programs, which will be launched in September 2014 and 2015 respectively. The programs will have seniors competencies threaded throughout them, making it a focus of the curriculum. This includes changing when the practical nursing students go into long-term care facilities for clinical, which will change from first to second semester to allow the students to build foundational knowledge on the population. (This project is described in more detail in below).

In interviews of administrator/leader key informants, a major theme regarding facilitation of curricular change was having faculty who are passionate and interested in the field of gerontology and geriatrics. These individuals helped to bring their own research, as well as evidenced based literature and recent publications such as the Ontario Senior's Strategy [1], into their education program and curriculum. The informants indicated that having a commitment to having current curriculum that includes contemporary competencies was a facilitator. This commitment came from faculty themselves or through an ancillary advisory council that facilitates the process.

With respect to incentives for curricular change, many education administrator informants mentioned external agencies such as community groups, professional advisory committees, or active research as incentives towards changing curriculum. It was also mentioned that the accreditation process helped to identify where programs needed to improve their curriculum, which was an incentive to bring more geriatric content into curriculum. The need for enhanced education due to an aging population was brought up as well, as they believed that the majority of graduates would end up working with the senior population. On the contrary, a few individuals interviewed said they had no external incentives to modify or enhance curriculum, and had to work from internal motivation.

A major barrier for curricular change that was reiterated by many education administrator informants was a lack of funding or budgetary constraints that prevented course or curriculum development, in addition to lack of time to dedicate towards curriculum development. Finding dedicated time for teaching to achieve gerontological competencies within an already full curriculum, when the focus is on preparing generalists, was also a barrier. Competencies set forth by accrediting and regulatory bodies were also perceived as a barrier, as the curriculum must reflect these competencies for students at an entry-to-practice level, not necessarily seniors' care competencies. This prevented the focus from being on 'perceived' specialty areas such as geriatrics, and towards more generalist entry-to-practice competencies. One interviewee gave the example that the College of Nurses of Ontario's entry-to-practice

competencies are focused on acute care, which does not allow for a focus on geriatric care that is mostly chronic and within tertiary sites. Misunderstanding of standards and poor communication between regulatory and educational organizations was also a barrier mentioned by multiple informants. Informants discussed a misunderstanding on the part of the Ministry of Health and Long-Term Care (not being fully aware of how undergraduates are being prepared) and misunderstanding on the part of students (not knowing where and with what populations they will work with upon graduation). This lack of knowledge from the students' perspective was then seen as contributing to difficulty attracting students and graduates to work in seniors' care.

Another barrier discussed by education administrator informants was a negative perception of seniors' care and geriatrics; that geriatrics needed a more positive association, to encourage more graduates into the area. Informants stated that attracting students is difficult when there are few teaching faculty interested and knowledgeable in, researching, and teaching geriatrics and seniors' care; that if this were addressed it would help create a positive atmosphere for learning about seniors' care.

Resistance to change from the faculty was mentioned as barrier. Related to this, physician educator informants commented that a barrier to enhancement in Internal Medicine residency is a perception among faculty and trainees that because most patients are older it means that trainees are learning geriatrics.

Other barriers to enhance gerontology in the existing curriculum that were mentioned included difficulty in obtaining long-term care placements for students due to strict criteria, as well as challenges to find clinical placements sites to meet the demands of training students in geriatric care. Challenges within clinical organizations to welcome students include staffing shortages and lack of staff training.

Finally, sustainability was a theme revealed in the interview data. Having dedicated faculty and building faculty capacity was seen as likely contributing to sustained change in curricular enhancements for seniors' care competencies. One informant recalled a dementia educational project aimed at family physicians [83]. This project, funded by the Ontario Dementia Strategy had a positive influence on family medicine practice and on family medicine education. However, it was not possible to sustain when the program funding ended.

INTERVIEWS WITH TEACHING FACULTY KEY INFORMANTS

Eight teaching faculty were interviewed about their work modifying their own courses to enhance gerontological content. Examples included using tools that were obtained through the Knowledge Exchange Institute for Geriatric Nursing Education [84], using RNAO best practice

guidelines, using resources from the ConsultGeriRN.org website, using research on policy and long term care in social policy course (reported to be common in social work social policy courses in the province), developing case studies, involving undergraduate students in research, and providing education sessions for medical residents in Internal Medicine subspecialties. Another strategy for enhancing learning was supporting student clubs and interest groups.

These teaching faculty informants also described factors that facilitated enhancing courses and contributed to their success. The most commonly cited facilitating factor was support from Deans and program coordinators. When this was present, there was less likelihood of the informant reporting a barrier to the process of strengthening curriculum. Other factors that contributed to success were:

- Passionate and experienced faculty
- Student interest in geriatrics
- Support from hospitals and local agencies to facilitate relevant clinical placements

A faculty member from a pharmacy program described using the American Society of Geriatric Pharmacists clinical practice guidelines in the development of a new course. Factors that contributed to success with this initiative included having several faculty with relevant expertise, passion for, and desire to develop and teach the course and excellent support from the school administration to develop the course. Not having a previous course to model this course on made the process more challenging than modifying an existing course would have been.

When asked about incentives for enhancing gerontology content in existing courses or developing new courses, most teaching faculty informants stated that the incentives to improve the program or create courses were intrinsic and based in their or a colleague's interest and expert knowledge. Some mentioned specific documents (e.g., *Living Longer, Living Well* [2], Ontario Interdisciplinary Council on Aging and Health reports, American Guide for Geriatric Pharmacotherapy [85], and resources from Knowledge Exchange Institute for Geriatric Nursing Education [84]) as incentives. Some informants reported that the growing concern for care of aging and knowing the current needs made it necessary to develop a course or improve their programs. One participant mentioned that a grant was available to enhance a course and this provided an incentive.

The most commonly cited barriers to enhancing courses and curriculum encountered by teaching faculty informants were time and resources to create or modify courses. They noted that it takes a lot of time and planning to enhance or develop a course. Furthermore, there is limited time in the academic year or within a course to fit in the new content. Finally, it takes a long time to develop partnerships with health care agencies to develop suitable

clinical/practicum placements. While economic resources were cited as a barrier, the more common resource barrier was not having enough faculty with relevant expertise. Just as student interest was cited as a facilitator, student lack of interest or lack of motivation was cited as a barrier to enhancing curriculum. Similarly, while support from clinical sites could act as a facilitator, clinical sites with too many students or challenges with locating quality clinical sites were also cited as a barrier. A social work educator noted that competencies regarding social policy are lacking in social work and that there has been little focus on this aspect of competency development (as compared to clinical practice competencies).

CONESTOGA COLLEGE

Conestoga College developed a new gerontology curriculum for their PSW program and practical nursing education, supported by a CIHR & Schlegel Industrial Research Chair for Colleges in Seniors Care held by Dr. Veronique Boscart, a clinician, educator, manager, and researcher. The Institute for Care of Seniors, which operates as part of the Chair:

- supports the college to improve graduate readiness to care for and meet the needs of an aging and more complex population; and
- disseminates knowledge in order to enhance education, training, and research to enhance care and well-being of seniors.

The Research Chair for Colleges in Seniors Care position is funded by the National Sciences and Engineering Research Council of Canada (NSERC) and administered through the Canadian Institutes for Health Research (CIHR). Funding is leveraged by contributions from Schlegel Villages and Conestoga College, creating a collaboration between the education and practice settings. The chair supports professional development of faculty, to build capacity within the college to enhance the ability to develop and teach gerontology curriculum. The chair has dedicated time for curriculum review and design to integrate gerontology into existing curriculum of all health care and other programs (nursing, personal support worker, occupational therapy assistant, physiotherapy assistant, recreation therapy, paramedic, fire and police officer) and in the professional development and continuing education programs. The chair develops new courses and works together with faculty to develop Highly Qualified Personnel to build sustainable curriculum change. Partnerships with local health care organizations help to develop highly quality clinical placements and residency programs. Faculty development is achieved through annual knowledge institutes, website development, lunch and learns, and other knowledge translations actions at local, provincial, and national level. The chair is also evaluating innovative approaches of co-locating education of personal support workers and nurses in long-term care and retirement homes.

The processes of major program review that supported enhanced gerontological content and competencies in Personal Support Worker program at Conestoga College are appended (Appendix 5). Involving the Program Advisory Committees (PAC) in the process helps to ensure that the curriculum is relevant for the new graduates and the future employers. The PAC for each program includes members of the community such as employers (acute, long-term care, primary care settings), volunteers, employees, former and current students, and college faculty (Dean, program chair, teaching and clinical faculty). These PACs also involve members from for-profit and non-for profit organizations. The PACs meet 3 to 4 times a year to discuss the new and evolving trends in the workplace setting and in the education, legislative or regulatory changes to the practice, program reviews and outcomes, key performance indicators, and system challenges and issues. PACs have been instrumental in integrated and sustained gerontological change in the College's programs.

COUNCIL OF ONTARIO UNIVERSITY PROGRAMS IN NURSING (COUPN) MEMBERS' SURVEY

In 2013, gerontology content was a topic of discussion at the Council of Ontario University Programs in Nursing (COUPN, a committee of heads of university nursing programs in Ontario). Currently, there is the assumption that the competencies and knowledge in aging are threaded through the curriculum of the nursing programs. Some programs have required courses or elective courses available to students from gerontology programs at their universities. COUPN surveyed members about current gerontology content and future plans with respect to gerontology content [3]. Eight of the 14 programs that are members of COUPN responded to the survey. These eight programs had either a required theory course devoted to aging or a required course where seniors' care was a major component (n = 5 with required course devoted to aging; n = 7 with required courses where seniors' care or gerontology was a major component). The eight programs had required clinical placements where most or all patients were older adults (as would be expected for current hospital clinical placements). Four programs offered gerontology elective courses. Most respondents reported a commitment to continuing to enhance curriculum related to seniors' care. One respondent identified resources that would support this, including resources to identify how best to systematically integrate more gerontology content, establishing a dedicated leadership position for enhancing gerontology in curriculum within each program, and resources to conduct a curriculum review to determine the extent and leveling of gerontological content in programs.

ANALYSIS

Clearly, there is an opportunity to increase educators' awareness of published seniors' care competency documents. Among education administrators and teaching faculty in Ontario health and social care worker education programs in this survey, there was very limited

awareness of published seniors' care competency documents. Among survey respondents who indicated that they were familiar with such documents, most either did not name a document or named a document that was a generic entry-to-practice competency document.

Educators must know what the expected seniors' care competencies are in order to assess the adequacy of their curricula and courses. Approaches to increase educators' awareness of expected competencies should include endorsement of relevant competency documents (and publicity about the endorsement) by organizations that are influential with educators, such as education accreditors, professional associations, and regulators.

About two thirds of the education programs represented in the survey reported that they had modified courses or curriculum to enhance seniors' care content. About one quarter of teaching faculty survey respondents had enhanced a course they taught. This finding indicates that educators recognize the need to enhance curriculum to achieve seniors' care competencies. Aside from respondents at Conestoga College, none of the survey respondents described a systematic approach to curricular revision for enhanced seniors' care content and competency achievement. As revealed in the next section of this report, successful seniors' care curricular enhancement programs described in the literature feature systematic approaches to curricular change to ensure sustainability. This suggests that the laudable changes our survey respondents made may be at risk of not being sustained.

Among key informants who were interviewed about their experiences with enhancing curriculum, education administrators and teaching faculty identified similar facilitators for this process: (1) having a faculty member, or members, with knowledge, passion for, and expertise about seniors' care; and (2) student interest. These expert faculty would have the intrinsic motivation described by informants as an incentive to engage in the work of curricular revisions and enhancements. The finding that faculty expertise facilitated success is consistent with the respondents' reports of what they would need to achieve curricular change (described in the first section of this report). The most frequently cited need was for faculty expertise and most survey respondents reported that their programs did not have enough faculty with expertise in seniors' care (50% of education administrators and 65% of teaching faculty thought their programs did not have enough faculty with expertise). Faculty development will be necessary to achieve seniors' care enhancements in curriculum.

Student interest in seniors' care, identified as a facilitator of curricular change contrasted with a barrier encountered by education administrator informants. These informants found that when students did not understand the demographic imperative and did understand that they would need knowledge about seniors' care, it created a barrier to curricular change. It is necessary to continue to demonstrate the relevance of learning about seniors' care to trainees.

Similarly, resistance from faculty or faculty perceptions that working with older adults equates to knowing what is needed for seniors' care (referred to by one informant as an assumption of learning by osmosis) was a barrier. This is consistent with findings that most faculty were unaware of established seniors' care competency documents.

Teaching faculty also identified the importance of support from administration for curricular changes. This is consistent with the reports from both education administrators and teaching faculty that not having time to devote to curricular change, course development, or course modification was a barrier to enhancing seniors' care in curriculum. Support from administration is necessary to find the resources to overcome this barrier.

The importance of clinical agencies for achieving enhanced seniors' care curricular changes came through in reports of barriers and facilitators experienced by the informants. This is consistent with survey respondents' reports of what they would need to achieve curricular enhancement (described in the first section of this report). Clinical agencies control access to clinical placements, representatives from clinical and social service agencies provided an incentive for curricular enhancement and, as experienced at Conestoga College, through their involvement in advisory committees, contributed to curriculum revision decisions.

Findings related to the importance of clinical practicum agencies, compliment findings from practitioner interviews conducted for another needs assessment [5]. Whereas some educators and administrators in this survey indicated that they are challenged to teach practices in keeping with current evidence, practitioners in the other needs assessment [5] said that graduates were not knowledgeable about current practices (e.g., use of screening and assessment tools). This highlights the importance of meaningful partnership between practitioners and educators to inform curricular enhancements. Such partnerships, along with faculty expertise, and support from education program administrators are all necessary to address concerns about sustainability raised by informants.

Not having enough time to devote to curriculum review and curricular enhancement was identified as a barrier by both education administrators and teaching faculty informants. As noted by the informants, it takes considerable time to develop new courses or modify courses. Furthermore, in order to take a systematic approach, including mapping curriculum to seniors' care competencies to identify gaps, takes both time and expertise, as evident in the description of the process used at Conestoga College.

Finally, informants who had engaged in enhancing seniors' care in their curricula noted the demographic imperative for their actions. These informants recognized that seniors' care competencies are not "nice to know" but "need to know." This message needs to be reinforced.

6. EXPERIENCE DEVELOPING AND UPDATING CURRICULA RELATED TO SENIORS CARE: OTHER JURISDICTIONS

SUMMARY: APPROACH AND METHODS

We scanned published and grey literature about systematic approaches to enhancing gerontological content in nursing, social work, and medicine entry-to-practice education. We excluded literature about making changes at the course level. A librarian provided search strategy advice.

The literature review was supplemented with key informant interviews of representatives of aging centres in Canadian universities and colleges. We gathered information from the following centres about their experiences with enhancing curriculum in entry-to-practice education programs for health and social care workers:

- Sheridan College Elder Research Centre
- Brenda Stafford Centre for Excellence in Gerontological Nursing, University of Calgary
- Laurentian/Huntington University
- Schlegel – University of Waterloo Research Institute for Aging
- Conestoga College Centre for the Care of Seniors
- University of Manitoba Centre on Aging

SUMMARY: RESULTS

LITERATURE REVIEW

The literature review identified five initiatives for systematic curricular enhancement in the U.S.A. and two Canadian initiatives.

Four initiatives were funded by the John A. Hartford Foundation [86], one for each of nursing, social work, and medicine as well as an interdisciplinary training program. These initiatives undertook to enhance curriculum, training, and research capacity for seniors' care. Programs for curricular enhancement in nursing, social work, and medicine are described here. Interdisciplinary training is the focus of another Council of Ontario Universities needs assessment, thus the fourth John A. Hartford Foundation initiative, Geriatric Interdisciplinary Team Training is not described in detail here.

The fifth identified American program is the Donald W. Reynolds Foundation Aging & Quality of Life Program, focused on preparation of physicians for care of frail older people [87].

The two identified Canadian initiatives were: (1) Ontario Dementia Strategy Physician Training initiative [83, 88], funded by the Province of Ontario; and (2) Knowledge Exchange Institutes for nursing, social work, and physician educators, funded by the National Initiative for Care of the Elderly (NICE) and the Canadian Institutes of Health Research (CIHR) [84, 89].

JOHN A. HARTFORD FOUNDATION FUNDED PROGRAMS FOR ENHANCING NURSING CURRICULUM

The John A. Hartford Foundation has provided substantial funding for programs to enhance curriculum and develop capacity in gerontological nursing, including over $73 million since 1996 [90]. Many of the programs are described in a special issue of *Nursing Outlook* [91].

HARTFORD INSTITUTE FOR GERIATRIC NURSING

In 1996, the John A. Hartford Foundation funded the Institute for Geriatric Nursing at New York University. A goal of the Institute is "to increase geriatric competence in all nurses, not just those specializing in geriatrics" ([92], p. 17). Among its many accomplishments, the Hartford Institute for Geriatric Nursing has implemented a strategy to increase individual nurse competence for seniors' care by increasing geriatric content in nursing curriculum. The Hartford Institute for Geriatric Nursing partnered with the American Association of Colleges of Nursing to provide the Geriatric Nursing Education Consortium program (described in detail below). Resources from this initiative are housed on their ConsultGeriRN.org website. Their *Try This*™ series launched in 1998 is a series of brief evidence based tools, each accompanied by streaming videos and a journal article. It is valuable for continuing professional development and entry-to-practice education.

GERIATRIC NURSING EDUCATION CONSORTIUM PROGRAM

In collaboration with the American Academy of Colleges of Nursing (which accredits BScN programs in the U.S.A.) and the Hartford Institute for Geriatric Nursing, the John A. Hartford Foundation funded the Geriatric Nursing Education Consortium (GNEC) program. This program was designed to enhance gerontological content in senior level undergraduate nursing courses across the U.S.A. They prepared teaching materials based on state-of-the science literature reviews of key topics in gerontological nursing[11] and have since updated the materials. The

[11] Atypical presentation of older adults with complex illness; Assessment and management of cancer related to older adults with complex care needs; critical thinking related to complex care of older adults; Assessment and management of Type II diabetes in older adults with complex care needs; Assessment and management of heart disease related to complex care of older adults; Mental health issues in aging; Assessment and management of

teaching modules are based on the American Academy of Colleges of Nursing baccalaureate competencies for seniors' care [71]. Then they used a train-the-trainer approach to educate faculty representatives from a majority of the BScN programs in the U.S.A. to evaluate their curriculum and use teaching resources to enhance curriculum. Nursing programs were invited to send faculty to one of six two-day Faculty Development Institutes offered across the U.S.A. Participation was contingent on support from the faculty members' deans for the time that they would need to work on curricular revisions and train their colleagues.

An evaluation found that this program was very effective; "that thousands of nursing students, in nearly half the nursing schools in the country will be exposed to best practices in geriatric care across a wide range of course offerings … this success serves as a quality boost for the entire health care system" [93] (p. 1). Eight hundred and eight faculty from 418 institutions, representing 69% of nursing programs in the U.S.A. participated in a Faculty Development Institute. Successful implementation was significantly associated with participant ratings of feasibility of including GNEC materials. Of the 9 modules provided, the rating ranged from *Excellent* to *Very Good*. Overall the Faculty Development Institute experience was rated as *Extremely Helpful* or *Very Helpful* and this was positively associated with the number of courses that were enhanced or revised. Facilitators for achieving curricular change were identified, including two external facilitators and on internal facilitator. The two external facilitators were: "inclusion of gerontology content in AACN's Essentials of Baccalaureate Education for Professional Nursing Practice" and "inclusion of gerontology content in the NCLEX-RN or Registered Nurse licensure exam" [93] (p. 4). The evaluation also identified barriers to curricular changes. All 'serious' noted barriers were internal factors and included: "increasing in teaching demands on all faculty; increases in teaching demands on faculty attending the FDI; and insufficient time to focus on curricular change," these barriers were associated with less success with implementation" [93] (p. 4). Other commonly cited barriers, that were not significantly associated with the number of courses enhanced or revised, were: "participant's perception that other faculty members; resistance to being influenced over their course content; and lack of institutional recognition of older adults as a 'core business' of nursing" [93] (p.4).

The faculty and student response to the curricular materials was overall positive. The noted success was associated with support from both the AACN and the John A. Hartford Institute and their roles.

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older adults with complex illness in the critical care unit; Models of care and inter-professional care related to complex care of older adults; Assessment and management of older adults with urinary incontinence; Critical thinking related to complex care of older adults; Cultural competence and chronic disease management of older adults; Spirituality and aging; Sexuality in older adults.

The authors of the GNEC evaluation concluded:

> The work of changing curricula is not easy. While smart strategies, solid resources (the modules), and an environment that creates forward motion in spite of barriers are useful, it is clear that inspired faculty and committed leaders are instrumental in achieving and institutionalizing these changes. [93] (p. 6).

GNEC curriculum resources are available from websites of the AACN, the Hartford Institute for Geriatric Nursing, and ConsultGeriRN.org. These resources include: (1) state of the science evidence summaries[12]; (2) case studies, PowerPoint files, and lecture notes[13] (3) podcasts for nine of the modules[14]; (4) archived webinars about the resources and how to teach using the resources[15]; (5) six nursing home as clinical placement site modules and archived webinars that help faculty select and use long term care homes for clinical placements[16] (funded by the Commonwealth Fund and the Picker Institute); and (6) clinical teaching modules[17] and an archived webinar on their use (developed by the Hartford Institute for Geriatric Nursing and the AACN, with funding from the Jewish Foundation for Education of Women). GNEC resources have been disseminated to some Canadian faculty through the National Initiative for Care of the Elderly [84] [89].

BUILDING ACADEMIC GERIATRIC NURSING CAPACITY (BAGNC) PROGRAM

The Building Academic Geriatric Nursing Capacity (BAGNC) program, originally administered by the American Academy of Colleges of Nursing, received funding of 53.2 million dollars to address the shortage of leaders in geriatric nursing research and education [94]. The program funds pre-doctoral and post-doctoral scholarships and fellowships. Between 2000 and 2010, 129 pre-doctoral scholarships ($50,000/year for two years) and 87 post-doctoral fellowships ($60,000/year for two years) were awarded [95]. Awardees are mentored and participate in leadership conferences. This program has an indirect influence on curriculum by preparing scholars for faculty positions.

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[12] http://www.hartfordign.org/education/gnec_%E2%80%93_geriatric_nursing_education _consortium/
[13] http://www.aacn.nche.edu/geriatric-nursing/gnec
[14] http://consultgerirn.org/resources/gnec_podcasts/
[15] http://www.aacn.nche.edu/geriatric-nursing/gnec-webinar-series
[16] http://consultgerirn.org/resources/NH_Modules/
[17] http://consultgerirn.org/resources/clinical_teaching/

HARTFORD FOUNDATION CENTERS OF GERIATRIC NURSING EXCELLENCE (HCGNE)

In 2001, the Hartford Foundation Centers of Geriatric Nursing Excellence (HCGNE) were established, with five centers [96]. These centres are funded through the Building Academic Geriatric Nursing Capacity (BAGNC) Initiative. The program has expanded to include 17 centres now [90]. The centres were created to "build a critical mass of geriatric nursing activity and expertise in the areas of education, training, research, clinical practice, policy, and regional and national collaboration" [97] (p. 243). Three of the core activities of the centres are enhancement of capacity to train students; development and implementation of nursing curriculum; and development of an infrastructure to sustain changes. Each of the centers was able to use their own 'flavor,' because there was no specific single model for a center; this allowed for the centers to build on their unique strengths and develop new strengths [97].

Four primary activities from the Building Academic Geriatric Nursing Capacity (BAGNC) Initiative to ensure its success were: (1) faculty development; (2) leadership development; (3) collaboration among the Centers of Geriatric Nursing Excellence; and (4) dissemination of John A. Hartford nursing resources and products [98].

Faculty development included expanding the number of geriatric nursing faculty. This was achieved through: (1) recruitment of doctoral students committed to careers in geriatric nursing; (2) creating programs that increased the amount of geriatric content included; and (3) providing gero-focused development opportunities for existing faculty to participate in [98].

Leadership development included an expectation that individuals would take leadership roles within various environments; within their institution, within nursing, and in the health care environment. Also, the BAGNC program offers a leadership skill building conference [99].

Collaboration was a mechanism to sustain the BAGNC initiatives; including collaboration between centres, with other foundations, and with federal agencies [99].

Dissemination of resources was expected, with all centers sharing resources and disseminating them beyond the network of centres. Alumni of the funded programs also have a role to "continue to develop a network of resources, support and collaboration to raise awareness about geriatric nursing" [98] (p. 17).

An independent evaluator systematically examined the activities of the Hartford Foundation Centers of Geriatric Nursing Excellence [97]. This evaluation only included the first three and a half years from these centers (period including 2001 – 2004). It was found that linkages from the centers increased the number of practicum sites for students. Each center worked together with one another instead of competing with one another. This independent evaluation found that the Hartford Foundation Centers of Geriatric Nursing Excellence was successful.

JOHN A. HARTFORD FOUNDATION FUNDED SOCIAL WORK INITIATIVES

The Geriatric Social Work Initiative (GSWI) was initially funded in 1999 [100]. In the first ten years of the program the John A. Hartford Foundation provided $64.5 million in grants [100]. The goal of this program is to prepare social workers with competencies for seniors' care. The program recognizes that this requires enhanced curriculum so that all social workers graduate with education about aging, enhanced practicum experiences, faculty with specialized knowledge, and academic leadership. The two main strategies are to cultivate leaders and to transform social work education. Similar to the John A. Hartford Foundation programs for nursing, social work initiatives have addressed building faculty capacity for aging related research and teaching (e.g., faculty scholars program and funding for graduate students) and curriculum revisions [100]. This literature review focuses on programs for education transformation.

The John A. Hartford Foundation funded three curriculum programs, first the Council on Social Work Education Strengthening Aging in Social Work Education (SAGESW), then the Geriatric Enrichment in Social Work Education (GeroRich) Project, and, finally, the John A. Hartford Foundation funded the Council on Social Work Education (CSWE) National Centre for Gerontological Social Work Education (Gero-Ed Centre) from 2004-2012 [98]. Recently funded Hartford Geriatric Social Work Centers at Boston College and the University of Michigan will provide leadership for social work education [101].

CURRICULAR ENHANCEMENT THROUGH COUNCIL FOR SOCIAL WORK EDUCATION (CSWE) GERIATRIC ENRICHMENT IN SOCIAL WORK EDUCATION (SAGE-SW) PROJECT AND (GERORICH) PROJECT

The GeroRich project was funded from 2001 to 2006. In early years of the project, 67 social work programs in the U.S.A. were funded to plan, implement, evaluate, and sustain curricular and organizational changes. Final years of the project were devoted to evaluation and sustainability. The program promoted the use of a planned change model for curricular and organizational enhancement [102].

The project and its outcomes are described in detail in a Council on Social Work Education monograph [102] and in a special issue of *Journal of Gerontological Social Work* (Volume 48, Issue 1-2, 2006) [103]. The intention was that the 67 social work programs would achieve curricular infusion – meaning that gerontological competencies would be "infused in most aspects of a foundation course" [102] (p. 10). The intention was not for integration of content or for creation of specialized streams but rather that all social workers would graduate with expected competencies. The project also attended to structural factors, with the aim hat issues of age and older adults would be woven into organizational culture and structural

arrangements [102] (p. 10). Structural factors that were considered were structural arrangements "governance and decision-making policies and procedures, program autonomy, and other external demands" [102] (p. 16) and key stakeholders. It was found that structural arrangements such as the following were necessary to "gerontologize" a program:

- Leadership from a dean/director including administration/operations support for faculty initiatives
- Support from curriculum committee and other governance bodies
- Access to current teaching materials
- Evidence of commitment to gerontological social work in program mission, goals, objectives, and other documents
- Training for field/practicum instructors
- Fundraising for additional resources

Implementing curricular change required:

- Deliberate, planned, repeated, sustained, creative efforts to ensure faculty buy-in for the need to change or enhance curriculum
- Planned strategies to engage community practitioners and agencies (who "were more receptive than any other key stakeholder group to gero infusion" [102] (p. 63). An advisory committee was helpful in this process.
- Engaging students by infusing gerontology into foundation courses, providing them with opportunities to interact with older adults in theory and practice course, demonstrating positive role models among gerontological social workers, and engaging them in research.

An evaluation found that "building a critical mass of gerontology faculty" [102] (p. 70) was an enabler of sustainability.

GERO-ED CENTER

The Gero-Ed Center was funded following the GeroRich project. The Gero-Ed Center work focuses on: (1) faculty and programmatic development; (2) student recruitment into specialized geriatric social work; (3) dissemination of teaching resources; and (3) educational policy [100].

Faculty development initiatives include a Curriculum Development Institute Program that funded 120 social work education programs to infuse gerontology in required BSW and MS courses (as described in the GeroRich project) and to create specializations in aging (e.g., minors or certificates). This project included faculty training, mentorship, peer collaboration, and annual workshops. Online courses about how to teach gerontology content are available

on the Gero-Ed website[18] for faculty who could not attend the training. Consultation is also available. Information about effective change strategies is also available from the website[19]. A searchable database[20] of assignments, bibliographies, case studies, class exercises, experiential exercises, films and media, lectures, syllabi, teaching modules, and websites is a great resource for teaching.

HARTFORD PARTNERSHIP PROGRAM FOR AGING EDUCATION

The Hartford Partnership Program for Aging Education (formerly the Practicum Partnership Program) supports university-community partnerships. An aim of the program is to ensure that student practicum placements and experiences mirror transformations taking place in aging care. In turn, this should lead to recruiting and retaining students in the field of aging. The program "offers a new field approach that exposes students to older adults beyond the nursing-home setting and blurs the line between classroom learning and internships so graduates are prepared for the realities of the workplace" [104] (¶ 5). The program is grounded in a competency model. It encourages student rotation through a number of agencies during a year-long practicum placement. In this model, the role of the field/practicum educator is expanded; they participate in classroom learning bringing practice into the classroom [105].

JOHN A. HARTFORD FOUNDATION FUNDED INITIATIVES IN MEDICINE

The John A. Hartford Foundation curriculum development work began with medicine. The foundation funded similar initiatives as previously described for social work and nursing, reporting in 2005 to have funded over $36 million for faculty development and recruitment to geriatrics [106]. Programs included:

1. Faculty Development Awards (1983-1987), subsequently transformed to the Academic Geriatrics Recruitment Initiative – to recruit and train geriatrics fellows
2. Programs to increase geriatrics in training of surgeons, subspecialties of internal medicine, and family medicine
3. The Medical Student Training in Aging Research Program (to provide "an intellectually stimulating, supportive and positive education experience in geriatric medicine" [107])
4. Research awards programs
5. Training for Chief Residents
6. Curriculum Grants

[18] http://www.cswe.org/CentersInitiatives/GeroEdCenter/TeachingTools/42071.aspx
[19] http://www.cswe.org/CentersInitiatives/GeroEdCenter/TeachingTools/ProgramInfusion.aspx
[20] http://www.cswe.org/CentersInitiatives/GeroEdCenter/TeachingTools/TeachingInfusion.aspx

7. Leadership training programs

JOHN A. HARTFORD FOUNDATION CENTERS OF EXCELLENCE IN GERIATRIC MEDICINE

The John A. Hartford Foundation initially supported advanced fellowship training from the Academic Geriatrics Recruitment Initiatives; this was initiated as ten centers in 1988 [106]. Currently there are 28 active Centers of Excellence in geriatric medicine functioning [108]. One of the main goals of this program was to train future geriatric medicine faculty. The John A. Hartford Foundation Centers of Excellence has grown in number to 28 centers; each of these centers has common attributes[21]. These centers provide young scholars with resources to develop programs of research, prepare for leadership roles, and they can apply for grants (for salary support, pilot research, development of service venues for research, and hiring research personnel). This program demonstrated quantifiable results; as of 2005, there were 163 advanced geriatric fellows, as well as, 222 faculty members being supported [106].

Reuben and colleagues evaluated the program and found that the initiatives were successful as indicated by "the number of geriatricians who have entered or remained in academic geriatrics, and by their advancement up the promotion ladder" [109] (p. 1388).

INCREASING GERIATRICS EXPERTISE IN SURGICAL AND MEDICAL SPECIALITIES

Five specialties participated in the initial phase of this ongoing project: (1) emergency medicine; (2) general surgery; (3) gynecology; (4) orthopedic surgery; and (5) urology [110], with expansion to 10 disciplines [111]. The goals for each specialty are:

1. To improve the amount and quality of geriatric education received by residents in these specialties;
2. To identify and support specialty faculty in promoting geriatric training and research within their own professional disciplines; and
3. To assist professional certifying bodies and professional societies in improving their members' ability to care for older patients [110] (p. 32).

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[21] Common Attributes of John A. Hartford Foundation Centers of Excellence:
-leadership and depth of faculty (basic science, clinical, and multidisciplinary)
-successful recruitment of geriatric fellows who pursue research and academic careers
-existence of a geriatrics department, division, or section
-access to excellent geriatric clinical facilities across the continuum of care
-demonstrated success in obtaining competitive research funding
-history of success in producing academic faculty and successful researchers in geriatric medicine
-highly visible institutional commitment to geriatrics ([106], p. 10)

INTEGRATING GERIATRICS IN INTERNAL MEDICINE SUBSPECIALITIES: GERIATRIC EDUCATION RETREAT (GER)

Over 10 years, Geriatric Education Retreats, organized by subspecialty, brought together 40 or 50 leaders (from geriatrics and internal medicine subspecialties) at a time, in 5-day meetings. Objectives of this program included: raising awareness, obtaining commitment from leaders, building relationships, gerontologizing training in subspecialties, increasing geriatric content in certification exams for subspecialties, and increasing geriatric research in subspecialties. Geriatric Education Retreat participants left the retreats feeling energized to fulfill leadership roles within their institutions and professional societies including: (1) redesigned curricula; (2) published articles and book chapters; and (3) development of new research agendas [110].

GERIATRICS EDUCATION FOR SPECIALTY RESIDENTS (GESR) PROGRAM

The Geriatrics Education for Specialty Residents (GESR) program supported 29 residency programs to pilot various methods for integration of geriatrics within specialty internal medicine residency programs. The GESR were implemented through development of both curriculum content and faculty leaders to support these initiatives on a long-term basis and at the national level. The GESR training programs were implemented in each specialty including anesthesiology, emergency medicine, general surgery, gynecology, ophthalmology, surgery, otolaryngology, physical medicine and rehabilitation, thoracic surgery, and urology.

Five themes for a successful GESR programs were identified:

1. A designated faculty leader in the specialty program

   Having support from the residency program director was vital for the faculty leader. The motivations for becoming faculty leads included seeing geriatrics as a new area for funding and research, the ability to become leaders in a developing specialty, to improve teaching skills, and using evidence based medicine. Faculty leads also described providing better quality care for older adults, which would also reduce the length of stay, improve outcomes, and providing better care to the terminally ill.

2. Collaboration with the geriatrics program in the institution

   Geriatricians from the geriatrics faculty were needed, some schools saw this as a temporary need while others thought this collaboration would be permanent.

3. Creating a ‘buy in’ by the residents

   All programs struggled with how to create ‘buy in’ from the residents. Specialties found the geriatrics training contrast to the specialty training regarding technical aspects. Local and

national data were used to demonstrate need to the residents. Incorporation of residents in a team setting was used to show geriatrics as rewarding and fun. Understanding community resources was emphasized to assist with transition from hospital care. Residents learned about hospice care.

4. Setting a structured curriculum

Early in the process, assistance was requested to develop critical content, this lead to the publication of "The Geriatrics Syllabus for Specialists." A pocket book was also created "Geriatrics at Your Fingertips" to have a quick reference guide, available online with no charge.

5. Use of technology

Two roles were noted for use of technology; one was resources being available for trainees that were flexible in terms of time frame, the second was these same resources are available to use and viewing from other programs. More information on the programs and services can be found at the Portal for Online Geriatric Education [112].

Evaluation of the GESR projects has resulted in reports, presentations, and publications that describe the educational programs and the educational content. Advice for programs beginning similar efforts is that they may want to include the following set of principles or lessons learned:

1. Identify a lead faculty person to direct the effort
2. Perform a needs assessment among trainees at the faculty
3. Obtain support from the program director and department chair for initiatives and for time in the department curriculum
4. Establish a relationship with faculty in the geriatrics program
5. Identify learning objectives
6. Develop a lecture series (grand rounds, journal club, etc.) to supplement other initiatives
7. Identify the initiative clinical venues for teaching
8. Evaluate effectiveness of the training [112] (p. 514).

JOHN A. HARTFORD FOUNDATION SUMMIT MEETING

The Hartford Summit Meeting in 2009 had representatives from the American Geriatrics Society, the American Academy of Hospice and Palliative Medicine, and the John A. Hartford Foundation .This goal of this two-day retreat was to identify over lapping interests that could be worked on collaboratively. Major identified areas included workforce, education, research, policy, and communication to memberships. Many opportunities for collaboration between

geriatrics and adult hospice and palliative medicine were identified. It was thought that increased communication between the organizations and their memberships would foster solutions for care regarding seriously ill seniors [113].

JOHN A. HARTFORD FOUNDATION CURRICULUM GRANTS IN MEDICINE

The John A. Hartford Foundation provided curriculum grant funding in medicine [110]. From 2001-2005, $5.2 million in grants were awarded to 40 medical schools, through the Association of American Colleges of Medicine (AACM)[114] to develop new curricular models and other training resources, which were then disseminated broadly by AAMC. A survey of all graduating medical students conducted by the AACM, indicated increased perceived competence for seniors' care and satisfaction with geriatrics education among graduates of medical schools that received curriculum funding [114]. Products developed through this program were incorporated into the Portal of Geriatrics Online Education (POGOe) described in a later section.

PRIMARY CARE RESIDENCY TRAINING

The Primary Care Residency Training program, coordinated by the Stanford University School of Medicine, funded curriculum innovation in seven primary care residency training programs. Products of this program included learning modules, easy access reference materials, training exercises, exams, and instructional materials [115]. They are available at the Stanford University Geriatric Education Resource Center [116].

CHIEF RESIDENT IMMERSION TRAINING IN CARE OF OLDER ADULTS

This program built on a Chief Resident Immersion Training program developed by the Boston Medical Center with funding from the Donald W. Reynolds Foundation. The purpose of CRIT was to improve chief residents understanding of geriatric principles, teaching, and leadership skills. Effectiveness was demonstrated [117]. In 2007, John A. Hartford Foundation replicated CRIT at 13 additional medical schools and in 2011, 19 additional CRIT sites [118].

THE DONALD W. REYNOLDS FOUNDATION FUNDED MEDICAL EDUCATION INITIATIVES

The goal of the Donald W. Reynolds Foundation Aging and Quality of Life program is to improve the quality of life for America's elderly by preparing physicians to provide better care for frail older people [87]. Funding has been provided for faculty positions. There were also four cohorts of grants to provide strengthening of geriatrics training at individual academic centers [87].Of relevance to this needs assessment is the curriculum resources dissemination initiative, the Portal of Geriatrics Online Education (POGOe).

PORTAL OF GERIATRICS ONLINE EDUCATION (POGOE)

POGOe [119] is an online clearing house that provides practicing physicians, clinical educators, and physicians in training high quality geriatric educational materials at no charge. It includes interdisciplinary education and training materials developed within and relevant to other health and social care worker professions. Resources include: evidenced based literature, teaching tools, resources and support, and educational materials. In 2010 resources were classified according to the medical student competencies [120]. Currently there are 795 resources organized by six topics: (1) Caring for the Older Adult (444 resources); (2) Geriatric Syndromes (378 resources); (3) Diseases (228 resources); (4) Patient Safety (64 resources); (5) Care Settings and Models (154 resources); and (6) Geriatric Palliative Care (74 resources). The Web - Geriatrics Educations Modules (GEMs) are a series of interactive case modules that can be accessed online on various topics, for example 'atypical presentation of urinary tract infection'[121]. They are based on the Association of American Colleges of Medicine geriatric competencies.

GERIATRIC EDUCATION PROGRAM

Donald W. Reynolds Geriatric Education Program supported strengthening geriatric content in medical education. The first initiative was to develop and implement a clinical geriatric experience for third year medical students. Overall, knowledge and attitudes significantly improved from third year medical students after the geriatric experience [122] (Atkinson, et al., 2013). Reuben and colleagues [123] conducted an evaluation of the first cohort of the Reynolds Geriatric Education Programs. The evaluation noted that the funding strategy used by the Donald W. Reynolds Foundation was successful for achieving their goals and that they influenced primary care and specialty care.

ONTARIO ALZHEIMER'S DISEASE AND RELATED DEMENTIAS: PHYSICIAN TRAINING STRATEGY

This initiative was part of the provincial dementia strategy. The Ontario Ministry of Health and Long Term Care and the Ontario Senior Secretariat provided $2 million to the Ontario College of Family Physicians to develop a comprehensive dementia education program for students, family medicine residents, and practicing family physicians [83]. The enhancements for entry-to-practice education were:

- Establish a dementia curriculum for undergraduate, postgraduate and continuing medical education programs.
- Enhancing Family Medicine resident training by enhancing Alzheimer's Disease and related dementias competencies of family medicine preceptors [83, 88].

DEMENTIA CURRIUCULUM FOR MEDICAL EDUCATION

Committees with representation from each Ontario medical school first developed a set of dementia educational objectives for undergraduate and family medicine residency training. Existing dementia curriculum was reviewed at each medical school. Curriculum materials available in Canadian medical schools and via the internet were reviewed and revised. Additional education materials were developed. The education objectives, curriculum, and learning materials were made available to Ontario medical schools and used in continuing medical education activities that were part of the overall physician education strategy. The material was available on a website created for this project. The extent to which this material was taken up in undergraduate curriculum was not reported in the 2006 evaluation of this program [88].

FAMILY MEDICINE PRECEPTOR PROGRAM

This faculty development program started in 2004. It was designed to enhance competencies related to Alzheimer's Disease and related dementias among family medicine preceptors. Preceptors are practicing family medicine physicians who are responsible for education of family medicine residents in practice settings.

The three components of this program were:

1. One day and a half day workshop to:
    a. improve knowledge about Alzheimer's Disease and related dementias; and
    b. learn strategies to teach this material to family medicine residents
2. Three to four half-day practicums for preceptors to learn more about services available for persons with Alzheimer's Disease or a related dementia and their family carers
3. Monthly teleconferences with geriatric specialists.

A 2006 evaluation reported on the first component (workshops) [88]. At the time of the report, the other two components were partially implemented. As of 2006, 52 preceptors had participated in four workshops. Pre-workshop evaluation forms were completed by 40 of them. The most frequently reported barriers to undertaking the role of preceptor for family medicine residents related to dementia care were: (1) inadequate time (endorsed by 68% of preceptors) ; (2) inadequate personal knowledge (endorsed by 52% of preceptors); (3) inadequate access to suitable teaching materials (endorsed by 32% of preceptors); and (4) inadequate remuneration (endorsed by 32% of preceptors). The small number of post-workshop evaluation forms completed at the time of the evaluation report means that is not possible to draw conclusions about specific gains made by the preceptors.

CANADIAN KNOWLEDGE EXCHANGE INSTITUTES FOR NURSING, SOCIAL WORK, AND MEDICAL EDUCATION

The National Initiative for Care of the Elderly (NICE) curriculum development work included two Knowledge Exchange Institutes for faculty and seniors trainees. The Knowledge Exchange Institutes were adapted from the U.S. Geriatric Nursing Education Consortium program. In 2009, 30 nursing faculty members and senior trainees from across Canada participated [84]. In 2011, 39 Canadian faculty and trainees from nursing, social work, and medicine participated [82]. The Institutes were organized using a model of planned change, and, similar to the American GeroRich social work project [102, 103], the process of planned change for implementing curricular enhancement was emphasized with participants. Faculty mapped curriculum and the content of one course to published seniors' care competencies prior to attending an institute. At the 2 ½ day Institutes, faculty were given evidence based resources for incorporating gerontological content in their courses and their colleagues' courses, including resources from relevant John A. Hartford Foundation funded initiatives. They discussed and began to assess barriers and facilitators to curriculum enhancement, strategies to engage key stakeholders, set short-term and long-term goals, and made plans for changing their courses and influencing their colleagues.

A one year evaluation of the 2009 Nursing Institute [89] was positive, with 86% of the 21 people who participated in the follow-up evaluation reporting that the Institute had been very helpful or extremely helpful to them for integrating gerontology content into their courses. Most of them had used several tools from the Institute in their courses (86%). In that first year, gerontology content teaching tools that the participants received reached a large number of students. For example, Geriatric Nursing Education Consortium resources were used in courses with enrolment of 1384 students. Most Institute attendees reported being somewhat confident or confident about their ability to convince their colleagues to incorporate seniors' care content into their courses. They reported sharing their learning with their teaching colleagues and with their Dean or Department Chair.

The most commonly reported barriers to integration into curriculum were: (1) colleagues' perception that the seniors' care teaching resources were not appropriate to their courses; (2) impending or recent curricular revision; (3) impending accreditation; (4) their colleagues' lack of confidence in using the resources in their teaching. Key factors that, when present, facilitated their success were: (1) approval and support of the Dean or Department Chair (in turn influencing curriculum committees and faculty members); (2) buy-in from colleagues; (3) student demand for content.

KEY INFORMANT INTERVIEWS: CENTERS OF AGING

Several centers for Aging were invited for key-informant interviews, yet few responded to the call.

BRENDA STAFFORD CENTRE FOR EXCELLENCE IN GERONTOLOGICAL NURSING: DR. SANDRA HIRST

The Brenda Stafford Centre for Excellence in Gerontological Nursing at the Faculty of Nursing, University of Calgary was funded by the Brenda Stafford Foundation from 2008 to 2013. With funding of $1.1 million, activities were directed to three goals: (1) enhancing undergraduate education to better prepare nurses for seniors' care, especially in long term care settings; (2) education and knowledge translation about best practices to nurses working in long term care settings; and (3) collaboration between the university and LTC homes and assisted living facilities association with the Brenda Stafford Foundation. The funds were restricted to these activities. It provided funding for one course release per semester for the director, administrative assistance, and a variety of initiatives. The funder is now funding a university-wide centre, with the nursing initiatives folded in to the larger centre.

Initiatives, activities, and outcomes included:

- Collaboration to enhance curriculum. There is now a required gerontology element in a family psychosocial course and there is a new senior elective focused on care of older adults in acute care. A textbook about transitions in older adults is now used in four courses – thus, achieving enhanced threading and embedding of gerontological content in required courses.
- Monthly gerontological nursing rounds, inviting students from other universities within the city. Refreshments and snacks were provided at the late afternoon rounds that drew between 20 and 60 students. The rounds were highly practice focused. There was exceptional feedback from participants. They were highly valued.
- Collaboration with Alberta Health Services advanced practice nurse to provided education for clinical faculty. Education was based in the Nurses Improving Care for Health System Elders (NICHE) [124] model and participants received NICHE binders. Education was open to clinical faculty at University of Calgary and other nursing programs in the city. Turnout was good even though many participants were not paid to attend. University of Calgary staff could attend as part of their paid work days. Lunch and parking was provided.
- Clinical scholar program. Students interested in gerontology were linked with faculty members. They prepared abstracts and posters. They were funded to present at

conferences such as the Canadian Gerontological Nursing Association or the Canadian Association on Gerontology. Papers are in press from clinical scholars.

- An online teaching tool kit is being developed.
- A prominent bulletin board with regularly updated displays and information about gerontological nursing.
- Study groups for practicing nurses preparing to write the Canadian Nurses' Association Gerontology certification exam.
- Access to clinical placement sites in long term care that fit with clinical course learning objectives.
- Lecture series.
- Enhanced graduate student access to Brenda Stafford Foundation affiliated clinical sites for research.

The funding restriction to knowledge transfer, enhancing curriculum, and enhancing university-industry collaboration is unusual among university centres; research centres and research chairs bring more prestige and recognition to their faculties than practice-based chairs or centres. An important factor in the success of this initiative was the relationships that were built between the funder, the service providers associated with the funder, and the centre director. The director reported that consistent presence, persistent championing, and "pushing" the gerontology agenda was a key factor in their success; while five years was not long enough to achieve sustained wide scale culture change, significant changes and enhancements were made.

SHERIDAN ELDER RESEARCH CENTRE, SHERIDAN COLLEGE: DR. LIA TSOTSOS

The Sheridan Elder Research Centre is primarily focused on research and continuing professional development. It influences education by involving students in practice research, providing education for health care providers, creating new teaching and learning products for faculty and students in the gerontology program, and providing practicum placement for students. Funding for the center is available from the Canadian Government through an NSERC grant. This funding allows the center to work with small and medium-sized businesses to help them implement and utilize new technologies.

The Sheridan Elder Research Centre provides applied research into areas of practical concerns and immediate relevance to older adults and their families. The centre also develops innovative approaches and creative interdisciplinary partnerships that focus on enhancing the lives of older Canadians. The centre also holds workshops for various staff on the use of technologies to assist in caring for older populations. Students are engaged in research activities and designing products. This helps them develop competencies to use similar tools and technologies in

practice. Another initiative is development of the board game *From Lab to Life*. This is a board game for students in gerontology studies. Students have to work in teams to work together to answer a research-based type question. Challenges are presented and students have to collaborate to solve the challenges that arise.

CENTRE ON AGING AT THE UNIVERSITY OF MANITOBA

While we were unable to interview a representative of this centre, the following information was obtained from their website. The mandate of the Centre on Aging at the University of Manitoba is conducting research on aging. Specifically related to the student support, the centre promotes and supports both undergraduate and graduate education in area of aging, and creates research training opportunities for students. The centre developed a 'STAR' program, a group of Students Targeting Aging Research at the University of Manitoba. They meet regularly to discuss and explore research in aging, learn from researchers, and discuss new directions in research. Related to faculty development, the centre provides fellowships to new researchers to encourage studies in aging and gerontology.

HUNTINGTON UNIVERSITY, CENTRE FOR RESEARCH IN GERONTOLOGY: DR. BIRGIT PIANOSI

The Centre for Research in Gerontology promotes gerontology programs (certificate, minors, major, four-year specialization) for all current students and graduates, and researchers in gerontology at the Huntington University. Realizing that individual faculty may be interested in aging, but most coursework does not have an aging component; the centre focused on creating a variety of different programs, such as minors in gerontology, course in disabilities for seniors, etc. for all heath care programs. This focus has resulted in a very strong increase in courses currently being offered and enrollment numbers of students.

As well, the center offers several opportunities to educate healthcare professionals, including specific programs such as Gentle Persuasive Approaches, PIECES, and U-First (dementia care education programs) and certification courses. A large emphasis is put on train-the-trainer courses for professionals in the care setting, so the programs are sustainable. The centre is very involved in the community and well connected to care institutions, workgroups, and professionals.

RESEARCH INSTITUTE FOR AGING (SCHLEGEL UWATERLOO CONESTOGA): DR. VERONIQUE BOSCART

The Research Institute for Aging (RIA) includes training programs aimed to enhance excellence in resident-centred care, leadership in long-term care and retirement living, and management in recreation for seniors [125]. Continuing education programs for personal support workers

(Excellence in Resident Centred Care Program), managers (Leadership Program for Long-Term Care and Retirement Living) and recreation therapists (Recreation Management Program for Older Adults offered through Conestoga College) has an indirect effect on entry-to-practice education by enhancing competencies of potential preceptors.

As well, research, education, and practice are affiliated within the RIA. The Institute works to ensure that research is integrated into training and education. The nine main research program areas are: Age-friendly physical environments; Argi-food for Healthy Aging (A-HA); Geriatric Medicine; Murray Alzheimer Research and Education Program (MAREP); Optimizing Medications for Seniors; Physical Activity and Plasticity of Aging; Primary Healthcare Education; Spirituality and Aging; Vascular Aging and Brain Health; and Workforce Development and Interprofessional Practice.

ANALYSIS

The John A. Hartford Foundation made a significant impact on education of entry-to-practice education of physicians, nurses, and social workers in the U.S.A. – and a significant impact on seniors' care. These programs have gerontologized curricula, created sustained change, and supported education programs to have "highly visible institutional commitment to geriatrics" ([126] ¶ 5.

Evaluation of the various programs for curricular enhancement indicate that the barriers to curricular change and needs expressed in our Ontario survey and key informant interviews can and should be successfully addressed.

A large number of freely available resources for incorporating seniors' care content into curriculum to achieve seniors' care competencies among graduates continue to be updated. Ontario educators should use these resources to assess their curricula and enhance their teaching. Resources created in Ontario can be shared on the POGOe website.

Some of the common features of these programs for curricular enhancement include:

1. Systematic approach to influencing a large number of educators across education programs
2. Systematic approach within programs, including:
    a. comparing curriculum to endorsed seniors' care competencies
    b. identifying gaps
    c. addressing clinical and classroom faculty training needs
    d. enhancing clinical partnerships
    e. training clinical preceptors

3. Train-the-trainer programs to create change agents and leaders of curriculum change within faculty ranks
4. Training faculty to use systematic planned change approach to curriculum revision
5. Committed inspired faculty are important – but sustained change cannot depend on these few faculty, so curricular change programs should happen in tandem with programs to increase faculty capacity for seniors' care research and scholarship
6. Building leadership from Deans, Directors, and Program chairs, including support for curricular enhancement initiatives and finding time in curriculum for the changes

The physician, nursing, and social work John A. Hartford Foundation initiatives all included partnership with organizations of education programs (e.g., the Association of American Medical Colleges; the American Association of Colleges of Nursing, which accredits American BScN programs; and the Council on Social Work Education, that accredits American social work programs). The initiatives involved these influential organizations in development and uptake of entry-to-practice competencies for seniors' care.

The Brenda Stafford Centre for Excellence in Gerontological Nursing had many of the features for success noted in evaluation of John A. Hartford Foundation initiatives. However, the challenge of creating a critical mass of faculty with expertise and commitment to gerontological nursing was difficult to achieve in the relatively short funding period and limited time available for the director to devote to the centre work.

Like the Brenda Stafford Centre for Excellence in Gerontological Nursing, the Conestoga Centre for Advancing Seniors Care, described in the preceding section of this report, also has many of the features for success of the John A. Hartford Foundation funded initiatives. Both the Brenda Stafford Centre and the Center for Advancing Seniors Care benefit from external funding dedicated to curricular enhancement. As noted in the John A. Hartford Foundation initiatives, it takes time to plan for and implement curricular change. Not depending on faculty to do this work on an ad hoc basis should significantly increase the likelihood of success.

ANALYSIS: CORE CURRICULA FOR ENTRY-TO-PRACTICE HEALTH AND SOCIAL CARE WORKER EDUCATION IN ONTARIO

Over half of the survey respondents endorsed a need to enhance curricula for seniors' care competencies in their health and social care worker education programs. This indicates a readiness for change in many programs. Thus, there is a need to capitalize on this readiness by supporting systematic approaches to curricular enhancement.

The finding that a substantial number of educators do not think their programs need to be improved indicates that either (a) these programs are adequately preparing their graduates, or

(b) there is a need to engage educators in activities that would enhance readiness for change. Enhancing readiness for change would increase likelihood of successful sustained curricular enhancements [127].Findings from our key informant interviews and review of successful initiatives in the U.S.A. suggest several approaches to enhance readiness for change:

- Reinforce the demographic imperative that motivated our key informants to enhance their courses or programs
- Engage professional associations, regulators, and educational accreditation organizations in the process of endorsing seniors' care competency expectations at entry-to-practice
- Include representatives of practice settings in the process
- Engage education administrators in leadership development for curricular enhancement
- Engage educators in a process of curriculum review using relevant published seniors' care competency frameworks

Entry-to-practice curricula in programs for health and social care workers need to be assessed against established seniors' care competency frameworks. Among survey respondents, there were variable opinions about the extent to which current entry-to-practice curricula adequately prepare health and social care workers with needed seniors' care competencies. For the most part, however, these opinions were not based in knowledge of published seniors' care competencies; at least 70% of respondents were unaware of such competency documents.

A large number of inter-professional and profession/discipline-specific seniors' care competency frameworks for entry-to-practice health and social care workers are available from Canadian and American sources. Ontario educators should use them to evaluate curriculum and make decisions about curriculum enhancement. The John A. Hartford Foundation initiatives for social work and nursing included training in the process of curriculum review using some of these competency frameworks. The importance of this step in a systematic approach to curricular enhancement indicated that there is a need for similar support for Ontario educators.

All successful curriculum enhancement approaches identified in other jurisdictions involved systematic approaches – both systematic approaches to reaching as many education programs as possible and training and support for these programs to use a systematic, planned change approach to achieve sustained curricular enhancements. This indicates a need for similar approaches to meet the needs and address the barriers to curricular enhancement identified by survey respondents and key informants. Such an approach should include a mechanism to address the significant time it takes to engage in this process. It should also include mechanisms to support partnership with practitioners to inform and support curricular enhancements.

The most important need, as identified by our survey respondents and key informants, was a need for faculty capacity to teach to achieve seniors' care competencies. This need is consistent with findings from the literature about successful curricular enhancement. Experience of the John A. Hartford Foundation initiatives suggests addressing this need through:

- Professional development, education, and training on seniors' care for teaching faculty (both classroom and practice based faculty)
- Professional development, education, and training on seniors' care for clinical preceptors
- Professional development, education, and training for teaching faculty about methods to integrate the seniors' care content in their teaching
- Building capacity for research and scholarship related to seniors' care

In Ontario, the physician training strategy for Alzheimer's Disease and Related Dementias [88] included professional development, education, and training for faculty and preceptors, indicating that this approach could be successful again, on a larger scale.

The literature indicates a need for commitment from education administrators and senior leaders. This is consistent with descriptions provided by key informants who enhanced their courses or curriculum. In our survey, over half of the education administrators thought that gerontological content needed improvement in their program. Administrators were less likely than teaching faculty to endorse a need for curricular enhancement in their program and they were less likely to endorse a need for more faculty expertise in seniors' care. This supports a need to engage not only teaching faculty but also administrators and leaders. A John A. Hartford Foundation funded Geriatric Education Retreat program, aimed at integrating geriatrics content in internal medicine subspecialties, is a promising approach [110]. This program brought together leaders to raise awareness, gain their commitment, build relationships, and, ultimately, to achieve enhanced seniors' care curriculum.

The survey respondents indicated that they need more teaching resources related to seniors' care. However, some key informants and participants in Canadian Knowledge Exchange Institutes for educators [82, 84, 89] recognized that there are a large number of teaching resources available; that the volume of what is available can be overwhelming. Indeed, the literature review revealed that excellent resources for educators are available online at no cost. This indicates a need to inform educators about the available resources. There is also a need to support educators in a process of matching and, if necessary, adapting available teaching resources to gaps they identify in their curriculum.

The survey found that most Ontario entry-to-practice health and social service graduates have some exposure to older adults in their clinical practice courses. This is consistent with the fact

that so many patients and clients in the clinical settings are seniors. Notable exceptions were education programs for recreation therapy and social work, where 72% (recreation therapy) and 85% (social work) of the programs represented in the survey did not ensure that all students had some practice experience with older adults. This indicates a need for an approach similar to the John A. Hartford Foundation Partnership Program for Aging Education; it achieved enhanced seniors' care practice/field experiences for participating programs [104].

Mere exposure to older adults in practice settings is not necessarily sufficient to achieve seniors' care competencies. Indeed, practitioner informants in another needs assessment [5] about practitioner perceptions of competency gaps warned of complacency that they observed, where colleagues assume that because they work with older adults they know all they need to know. This indicates that educators should assess the degree to which seniors' care competencies are actually achieved in these practice learning experiences.

A consistent theme in the survey, key informant interviews, and literature about success in other jurisdictions was the important influence of competencies as defined by education accreditation organizations and professional regulators. This complex issue was also a theme at the *Better Aging: Ontario Education Summit* [128]. We found that most competency documents of education accreditation organizations and regulatory bodies do not include seniors' care competencies. However, this is consistent with a common approach to competencies in these organizations; one that does not highly specify required competencies. In Ontario, most education accreditation does not include detailed specification of competencies graduates are expected to achieve. Entry-to-practice programs are expected to demonstrate that they prepare graduates for contemporary practice and for provincial registration/licensing.

An exception to findings of missing seniors' care competencies in regulatory bodies and education accreditation organizations is physician education, particularly family medicine residency training. Here, developments in competency based residency training approaches mean that a large number of specific competencies are laid out. These competencies are used for both licensing (regulation) and education accreditation. A large number of seniors' care competencies are incorporated within family medicine required competencies. Interestingly, interviews conducted for the needs assessment of practitioner views of competency gaps revealed that family medicine training is seen to have made significant improvements over the past 10 years – with graduates likely to be viewed as achieving most required competencies [5]. This indicates that similar achievements are possible in other medical specialties, building on successful strategies used in Canadian family medicine training and John A. Hartford Foundation initiatives in medical education [110, 111].

Successful John A. Hartford Foundation initiatives included partnership with organizations of education programs and education accrediting bodies to establish seniors' care competencies

to guide curricular development and accreditation of entry-to-practice education programs. As well, these initiatives included partnership with professional associations related to competency development or endorsement. Aligning accreditation expectations with the new reality of seniors' care as a generic competency at entry-to-practice is a successful approach. However, given that most competency frameworks for entry-to-practice health and social care workers are not highly specified, the American approach of integrating seniors' care competencies is less likely to be successful in Ontario. The importance of partnerships in successful initiatives indicates a need to engage in similar partnerships with Canadian accreditation and regulatory bodies. Our findings indicate that short term success is more likely with professional associations.

Finally, the tension between perceptions of seniors' care as a specialty versus senior's care competencies being required for all practitioners is evident in this needs assessment. Some survey respondents indicated that they view themselves as educating generalists, whereas seniors' care competencies are seen by them as specialist practice competencies. Similar views are likely present among educators who did not respond to the survey and were commented on in the practitioner views needs assessment [5]. Similarly, many of the regulatory bodies and education accreditation organizations reported a mandate to ensure educational preparation of generalists, not specialists in seniors' care. Clearly, we need to reinforce the demographic imperative to prepare graduates of Ontario health and social care education programs for seniors' care. Some educators and organizations that influence curriculum question the fact that seniors' care competencies are required for generalist practice. Educators and those who influence curriculum need to hear and believe that:

- "Geriatrics is not a subspecialty. It's a supraspecialty. It's broader than any other specialty. It incorporates all medical and surgical specialties, as well as nursing, social work, and rehabilitation." (William R. Hazzard, MD, Professor, Gerontology and Geriatric Medicine, Wake Forest School of Medicine, [94], p. 41); and
- "Because older adult patients are the core business of health care, all nurses must have core competencies in geriatrics." (Elizabeth Capezuti, PhD, RN, Associate Professor, NYU College of Nursing, [94], p. 49)

Systematic approaches to address this gap in perception and to achieve curricular enhancement are needed. This needs assessment and the literature about success in other jurisdictions indicates that this should be a multipronged approach – reaching education administrators, educators, practice partners, and organizations that influence curriculum standards.

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APPENDIX 1: SURVEY QUESTIONS, DEANS, DIRECTORS, PROGRAM CHAIRS

Information about your program

1. Which of the following entry-to-practice health or social care programs do you direct?

___ Chiropractor
___ Dentist
___ Occupational Therapist
___ Occupational Therapist Assistant
___ Medicine – Undergraduate
___ Medicine – Postgraduate Family Medicine
___ Medicine – Postgraduate Internal Medicine
___ Medicine – Postgraduate Other (please specify)
___ Paramedic
___ Personal Support Worker
___ Pharmacist
___ Physician Assistant
___ Physiotherapist
___ Physiotherapist Assistant
___ Recreation Therapy
___ Registered Nurse
___ Registered Practical Nurse
___ Social Work
___ Social Service Worker
___ Speech Language Pathology
___ Other (please specify)

2. Is your program located in a college or university?

___ Career College
___ Community College
___ University

3. How many students graduate from your program each year? _____

Questions about gerontology curriculum and preparation for seniors' care in health and social care worker education programs

4. Please rate agreement with the following statements
   a) Ontario entry-to-practice education programs for health and social care workers adequately prepare graduates for seniors' care.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

   b) Graduates of the program I direct have the necessary competencies to provide seniors' care.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

   c) Gerontology content should be improved in Ontario entry-to-practice education programs for health and social care workers.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

   d) Gerontology content should be improved in my program.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

   e) In my program, we have enough faculty and instructors with expertise in seniors' care, gerontology, or geriatrics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

5. How many faculty members and instructors in your educational unit (department, program, or faculty) are experts on seniors' care, gerontology, or geriatrics? _____

6. Are you an expert on seniors' care, gerontology, or geriatrics?

   ____Yes
   ____ No

7. Does your program have a required seniors' care, gerontology, or geriatrics course?

   ____ Yes
   ____ No

8. Does your program have a required clinical or practicum experience with a focus on seniors' care, gerontology, or geriatrics?

   ___ Yes
   ___ No

9. Do all students in your program receive some clinical or practicum experience with seniors?

   ___ Yes
   ___ No

10. It has been suggested that future health and social care providers should be better prepared to meet the needs of older adults. In your opinion, how this could best be achieved? Please rank the following strategies:

    ___ improved content about seniors care in entry-to-practice programs
    ___ improved clinical/practicum experience in entry-to-practice programs
    ___ provincial accreditation standards for gerontology and geriatrics content of entry-to-practice programs
    ___ post graduate education
    ___ continuing professional education and certificate programs
    ___ employer provided education
    ___ interprofessional education at the entry-to-practice level
    ___ other (please specify)

11. Are you aware of published health care worker gerontological/geriatric competencies (i.e., generic gerontological/geriatric competencies for health care workers or health professionals)?

    ___ No
    ___ Yes → Please list _____

12. Are you aware of published specialized gerontological/geriatric competencies that are specific to students in your program (e.g., gerontological or geriatric competencies for nursing, social work, medicine, etc.)

    ___ No
    ___ Yes → Please list _____

13. Has your educational unit developed or modified curriculum to meet generic or specialized gerontological/geriatric competencies?

    ___ No
    ___ Yes → If yes, we would appreciate learning more about your experience. Could we contact you for more information? (Please provide your name, email, and phone number) _____

14. What would your program and faculty need (e.g., resources, supports, etc.) in order to modify your curriculum to enhance gerontology content or better meet gerontological/ geriatric competencies?

    _____
    _____
    _____

APPENDIX 2: SURVEY QUESTIONS, TEACHING FACULTY

Information about your program

1. In which of the following entry-to-practice health or social care programs do you do most of your teaching? (Please answer the remaining questions about that program)

   ___ Chiropractor
   ___ Dentist
   ___ Occupational Therapist
   ___ Occupational Therapist Assistant
   ___ Medicine – Undergraduate
   ___ Medicine – Postgraduate Family Medicine
   ___ Medicine – Postgraduate Internal Medicine
   ___ Medicine – Postgraduate Other (please specify)
   ___ Paramedic
   ___ Personal Support Worker
   ___ Pharmacist
   ___ Physician Assistant
   ___ Physiotherapist
   ___ Physiotherapist Assistant
   ___ Recreation Therapy
   ___ Registered Nurse
   ___ Registered Practical Nurse
   ___ Social Work
   ___ Social Service Worker
   ___ Speech Language Pathology
   ___ Other (please specify)

2. Is your program located in a college or university?

   ___ Community College
   ___ University

3. How many students graduate from your program each year? _____

Information about you

4. Are you employed full-time or part-time?

   ___ Full-time
   ___ Part-time

5. Are you a permanent or temporary employee?

   ___ Permanent (e.g., tenured, in tenure stream, unlimited term contract)
   ___ Temporary (e.g., sessional instructor)

6. Do you teach clinical/practicum courses?

   ___ Yes
   ___ No

7. Do you teach theory/classroom courses?

   ___ Yes
   ___ No

Questions about gerontology curriculum and preparation for seniors' care in health and social care worker education programs

8. Please rate agreement with the following statements
   a) Ontario entry-to-practice education programs for health and social care workers adequately prepare graduates for seniors' care.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

   b) Graduates of the program I teach in have the necessary competencies to provide seniors' care.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

c) Gerontology content should be improved in Ontario entry-to-practice education programs for health and social care workers.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

d) Gerontology content should be improved in my program.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

e) In my program, we have enough faculty and instructors with expertise in seniors' care, gerontology, or geriatrics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

9. How many faculty members and instructors in your educational unit (department, program, or faculty) are experts on seniors' care, gerontology, or geriatrics? _____

10. Are you an expert on seniors' care, gerontology, or geriatrics?

____Yes
____ No

11. Does your program have a required seniors' care, gerontology, or geriatrics course?

____ Yes
____ No

12. Does your program have a required clinical or practicum experience with a focus on seniors' care, gerontology, or geriatrics?

___ Yes
___ No

13. Do all students in your program receive some clinical or practicum experience with seniors?

___ Yes
___ No

14. It has been suggested that future health and social care providers should be better prepared to meet the needs of older adults. In your opinion, how this could best be achieved? Please rank the following strategies:

___ improved content about seniors care in entry-to-practice programs
___ improved clinical/practicum experience in entry-to-practice programs
___ provincial accreditation standards for gerontology and geriatrics content of entry-to-practice programs
___ post graduate education
___ continuing professional education and certificate programs
___ employer provided education
___ interprofessional education at the entry-to-practice level
___ other (please specify)

15. Are you aware of published health care worker gerontological/geriatric competencies (i.e., generic gerontological/geriatric competencies for health care workers or health professionals)?

___ No
___ Yes → Please list _____

16. Are you aware of published specialized gerontological/geriatric competencies that are specific to students in your program (e.g., gerontological or geriatric competencies for nursing, social work, medicine, etc.)

___ No
___ Yes → Please list _____

17. Has your educational unit developed or modified curriculum to enhance gerontology content or to meet generic or specialized gerontological/geriatric competencies?

___ No
___ Yes → If yes, we would appreciate learning more about your experience. Could we contact you for more information? (Please provide your name, email, and phone number _____)

18. Have you developed or modified a course to enhance gerontology content or to better meet generic or specialized gerontological/geriatric competencies?

    ___ No
    ___ Yes → If yes, we would appreciate learning more about your experience. Could we contact you for more information? (Please provide your name, email, and phone number _____)

19. What would you and your colleagues need (e.g., resources, supports, etc.) in order to modify your curriculum or courses to enhance gerontology content or better meet gerontological/ geriatric competencies?

    _____
    _____
    _____

APPENDIX 3: INTERVIEW GUIDE FOR DEANS, DIRECTORS, AND CHAIRS

Note: This is a semi-structured interview. The interview guide is flexible, to allow for a comfortable conversation, gathering priority information, and following up for details depending on the participant's experience.

Thank you for agreeing to participate in this interview. Before we begin, I'd like to get a little bit of information about your educational unit – your program, department, or faculty.

1. What is your position in the program? (*clarify whether they are Dean, Director, Department Head, etc.*)

2. What entry-to-practice health or social service worker education programs are part of the educational unit you are responsible for? (*e.g., clarify whether they are talking about one profession/discipline or many – Deans may be responsible for several programs – in subsequent questions there may be different responses for programs within the educational unit – be sure to clarify this as you ask the questions and listen to the answers).*

3. Are you at a university or a community college?

4. How many faculty and instructors are part of your educational unit?

5. How many students graduate from programs in your educational unit each year?

6. Do you have any gerontology or geriatrics courses in your program(s)? *If yes,* Are they required or elective? *If elective,* how many students register in the elective course some time during their education?

Thank you, now I'd like to ask you a few questions about your opinions on gerontology content in curriculum.

1. What is your opinion about whether or not entry-to-practice education for health and social care workers adequately prepares graduates for seniors' care? *(prompt to elaborate and explain – probe for basis of their opinion – what evidence they might have to support it)*

2. How do you think your program compares to other programs for (insert type of worker) in Ontario – in terms of preparing graduates for seniors' care? What about in comparison to other programs in Canada? Internationally? *(prompt to elaborate and explain – probe for basis of their opinion and evidence they might have to support it)*

3. Has your educational unit evaluated your curriculum with respect to competencies for seniors care? *(if yes, ask for details)*

4. How familiar are you with established gerontological competencies for health and social care workers? What about gerontological competencies specific to your program – that is (insert type of worker)?*(ask for details about which ones they are familiar with and whether they have used them)*

5. It has been suggested that Ontario educational programs for health and social care workers should increase and enhance gerontological content and ensure that graduates meet certain competencies for care of older adults. Do you agree? Is this the case for (insert type of worker their program educates) programs? *(probe to elaborate – depending on responses to previous questions)*

6. Two approaches have been suggested that in order to meet required competencies for seniors care. One approach is to enhance curriculum to ensure that graduates meet the competencies. The other approach is to use continuing professional development or continuing education to ensure that health and social service workers attain the required competencies. What is your opinion about the best way to go? *(probe to elaborate)*

7. What do you think would be needed for Ontario entry-to-practice educational programs for (insert type of worker their program educates) to improve gerontological content and better meet gerontological competencies for graduates? *(probe for information about what they would need within their program – e.g., what kind of supports, education for educators, resources, etc. would be needed – what do they think would be barriers and facilitators, what would act as an incentive)*.

8. Has your program had any experience with modifying curriculum to better meet gerontological competencies? *If yes,* We are interested in learning more about this. Is there someone in your program who we could contact to learn about the experience? *Take the contact information separately from the interview guide.*

Thank you for your time. We appreciate it. Is there anything else that you'd like to add?

If not, Thanks again.

APPENDIX 4: SURVEY RESPONSES: WHAT WOULD BE NEEDED TO MODIFY CURRICULUM?

Following are responses to the open ended question "What would your program need (e.g., resources, supports, etc.) in order to modify your curriculum or enhance gerontology content?"

Education Administrator Responses:

1. SME's willing to contribute to developing content for program delivery. Faculty who have experience in research in this field.
2. Faculty with the requisite knowledge/expertise.
3. Online content that could be accessed by different health professions as appropriate would be quite worthwhile.
4. Additional faculty with expertise in this area.
5. Many of our clinical placements currently include gerontology/geriatric foci; in order to make these mandatory, we would need clinical sites to be required to take students for clinical education.
6. Time and resources (financial).
7. Clinical instructors with expertise and experience in facilities that provide care for older adults.
8. Our program offers strong IPE training and basic geriatrics/ seniors health and most students have internships that have substantial focus on older adults. However, there are few opportunities for specialized geriatric internships. We need to consider how best to expand the offerings and allow more students this experience.
9. We would need access to clinical settings that at this time focus on personal support worker and practical nursing students. Our program does place students in geriatric settings including community/home care in the senior practicum but not every student has this experience. The Year One Clinical with a seniors focus is taken by all students. We have a specialized option in Geriatric nursing that is a nursing option. We would need support to make it core curriculum.
10. More resources - space, teachers.
11. Expertise. Beyond just lectures. Resources in the clinical areas for hands on.
12. Additional resources (human). Additional clinical placements.

13. We believe that we are meeting the standards for gerontology/ geriatrics entry level training.
14. Intake knowledge exam and progress exam on knowledge around care of the elderly.
15. Mandated Geriatric Medicine rotation by the Royal College of Physicians and Surgeons of Canada Internal Medicine Subspecialty committee.
16. Expertise and Protected time for trainees.
17. Another rotation and/or lectures for senior residents in geriatrics.
18. We would need to hire someone with expertise, but the university will not hire now.
19. Because it is already a very program, it would be very difficult to add content to our existing program. We would likely need to eliminate existing content in order to add gerontological content.
20. Continuing education or competency upgrade specific to gerontology.
21. Probably more resources in the form of faculty members with this focus. Please note: we do not deal in competencies or agree with this concept!
22. Continuing education pd activities. Ability to attend gero conferences. Excellent resources.
23. More researched evidence to support implementation. External agency support to permit/demonstrate new behaviours.
24. Interest from other professions to develop an IPE course. Resource support to bring in more individuals with expertise in geriatrics.
25. We are graduating "generalists" who can meet entry-to-practice competencies as beginning practitioners. Students may or may not work with elderly clients in various years of the programs.

Teaching Faculty

1. Resources, tenured teaching faculty, support, etc.
2. More full time faculty trained with gerontology background.
3. TIME.

4. I don' think so - we likely have the knowledge base and could consult within-house and community partners in order to get the materials to do justice to the content for such a course.
5. We work on a generic model, preparing students for a wide range of employment.
6. Educational resources. Money to develop and support placements/practicum with a gerontological focus.
7. More faculty time for specialty elective courses with high demand.
8. More faculty with interest and specialty; curricular support.
9. We have some expertise on site.
10. Stronger community partnerships with agencies focused on older adults in community and residential care. Greater awareness re: need to embed issues related to older adults into classes.
11. Gerontological specialists. More IPE opportunities with gerontology.
12. Resources in order to adapt course content. Financial support to purchase supports in order to enhance competencies.
13. National standard, core competencies for entry to practice.
14. More faculty with gerontological expertise.
15. Resources - time, workshops.
16. Time for development; additional education for clinical faculty.
17. University budget support.
18. Awareness of gerontological services, changes.
19. More faculty.
20. Time for faculty to accomplish curriculum revisions, funding to have more GPA coaches certified.
21. Education for faculty. Access to variety of education modalities (online; workshops, conferences, etc). Most faculty do not appreciate area as specialty; need to change attitudes. Other courses which are outdated could be redesigned.

22. More instructors with gerontological experience.
23. While I appreciate the need for gerontology, I think gerontological approaches might well include a strong focus on chronicity...with more resources in this area.
24. Improved knowledge of what is being taught for other health professionals and more opportunities for interprofessional collaboration during learning.
25. Need more geriatricians.
26. Need the university to recognize that there is too little geriatric education.
27. Influence the curriculum committee who see geriatrics as special interest.
28. Need Royal College Internal medicine training programs to make geriatric medicine a mandatory rotation.
29. One faculty member would need to be responsible for ger content. This person would have to be provided the time and authority to oversee this. Faculty tend to teach what they know + like - it tends not to be older people's care. Many of the courses I have inherited used articles that were neither practice based or gerontological focused. The use of these types of articles does not help prepare nurses to take care of people in general or older people.
30. More time!
31. Resources with teaching, especially practicum teaching (i.e. suitable sites that work with older adults, or technology that could simulate similar effects), administrative support (i.e. in converting some content into mandatory components).
32. Subject matter expertise; accreditation requirements.
33. Release from some teaching obligations to have time to work on curriculum.
34. That a course be dedicated to this topic.
35. A mandated geriatrics course for entire class. In terms of resources, not sure.
36. Better connection with interprofessional colleagues and infrastructure to support that.
37. Resources - faculty in particular. I think you need to differentiate between gerontological care and care for individuals with Alzheimer's Disease (sometimes they are put together as one). The care of someone with Alzheimer's Disease is completely different from gerontological care and none of those competencies will prepare you for that role. There

definitely needs to be a special program that will help all healthcare professionals care for individuals through all stages of the disease process.

38. The hospital where my students practice is a NICHE hospital - but students can't get access to that content at this time. I would love to be able to use that content for students.
39. Resources (literature). Sample curriculum from programs that incorporate gerontology.
40. Be aware about this competencies and all information in regards to the latest resources and support.
41. Nothing because we are preparing general nurses able to work with anybody. We are not a specialty program for specific partners.
42. Nothing, as the standard is directed by NACC (National Association of Career Colleges).
43. We would need more time within the program to focus specifically on Gerontology. We are currently a Generalist program. From the program's perspective, a post-graduate certificate offering would be the most logical.
44. Curriculum standards, identified resources.
45. Money to pay for standardized patients simulating an issue with an aging client.
46. Resources and faculty training, to provide key workshop opportunities for our learners to learn about specific support and care that they can provide.
47. Support from agencies where clinical practice takes place. Standards for the preceptors (especially PSW). We teach best practices, the PSW students learn all the "bad habits" in the agencies. All their learning is "out the window" after several months of employment. This is why I strongly believe that agencies need to have educational sessions for PSWs every 6 months to re-enforce best practices and infection control.
48. Develop a clinical experience for nursing students in the first year of the 4 year program. suggestion 8-10 6 hour shifts. Utilize part time faculty who have worked in LTC to supervise these clinical hours. Provide some theory to go along with this experience.
49. Both monetary and technological support.
50. Support from higher levels. We see this in family medicine but not internal medicine.
51. Horizontal curriculum in wide variety of residency programs would be helpful.

52. Incentives: A. provincial (COUPN)/federal (CASN) educational standards that had named ratio of gerontological nursing experts for tenure stream faculty AND sessional instructor per student count. B. CASN accreditors with expertise in gerontological nursing practice and gerontological nursing research.

53. Increased faculty and support, a course dedicated to this topic.

APPENDIX 5: EXAMPLE OF PROCESS OF PROGRAM REVIEW FOR ENHANCING GERONTOLOGICAL COMPETENCIES

Conestoga College PSW Major Program Review Process Steps:

1. **Assess needs, demands, strengths and challenges**
   a) Assessing Needs and Demands:
      - Gather information on the performance of existing program
      - Perform environmental scan
      - Conduct literature review of current needs and demands of PSW workforce, Key Performance Indicators (KPI)
      - Satisfaction of students and faculty
      - Feedback
      - Review of competency documents
      - Review of PSW program requirement documents

   b) Assessing Strengths and Challenges
      - Discussions with key stakeholders and faculty

2. **Select desired competencies and outcome indicators**
      - Utilizing information collected above to understand main themes, outcome indicators and competency
      - Discussions with Program Advisory Committee (PAC) members to rank importance of PSW core-competencies

3. **Map existing curriculum**
      - Utilize of existing curriculum surveys and content mapping to map existing curriculum
        - Look at competencies:
          - Not covered in program
          - Partially covered in only one semester
          - Partially covered in several semesters, but not fully covered
          - Partially and fully covered within the same semester
      - Once mapping completed, engage team in discussion to identify gaps, overlaps, relevancy of program
      - Review course objectives and outlines

4. **Utilize intentional planning to address strengths and challenges in order to meet requirements**
      - Utilize systematic development of the program and courses
      - Create conceptual framework to guide development and subsequent evaluation

5. **Design and test integrated curriculum**
    - Review and revise course outlines
    - Create a new curriculum survey and content map after implementation
    - Evaluate before and after curriculum review
        - Student and faculty's knowledge and competencies

6. **Measure outcome indicators, revise and refine curriculum**
    - Revise and refine curriculum based on measurements of previously established outcome indicators