**PATIENT SAFETY IN HEALTH PROFESSIONAL EDUCATION: DEVELOPMENT OF A QUESTIONNAIRE TO ASSESS STUDENT LEARNING**

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## Acknowledgement

## Project Summary

The Canadian Patient Safety Institute (CPSI) has recently developed the "Patient Safety Competencies Framework".  As they prepare to roll this out across Canada over the coming year, they are interested in obtaining health professional students' perspectives on how patient safety is addressed in their curricula, including the role of courses and clinical placements.

The objectives of this project were, first, to develop and pilot test a questionnaire to assess (a) health professional students' exposure to the six core domains of the Safety Competencies Framework and (b) students perspectives on patient safety in their curricula, including the role of courses, practica, peers, and mentors/preceptors.  Second, this project aimed to deliver an easy-to-implement plan for data collection from a variety of health professional student audiences from across Canada.  Given the target audience, their high degree of use and access to on-line technology, and CPSI's need to have an easily deployable questionnaire, the proposed questionnaire is web-based and ready for use in a widespread, systematic data collection effort with students in a variety of health professional programs.

A web-based survey, the *Health Professional Education in Patient Safety Survey (H-PEPSS),* was developed based on the literature, two focus groups and a small pilot test with a sample of nursing students in a 2nd degree nursing program at York University.  A hard copy of the questionnaire is found in appendix B of this report.  The web-based survey can be viewed at: http://www.surveymonkey.com/s.aspx?sm=5bW_2ffZElP4pOTBkvSqif9_2buCv1XnEaW3zkilptSWfrM_3d .  Several key findings emerged from this project: (1) our literature review revealed few studies that look specifically at how patient safety has been incorporated in HP education; (2) there is not necessarily a high degree of consistency between the nursing role students are taught in the classroom and what they experience in clinical placements; (3) an individual rather than a systems approach to errors remains the dominant model in the nursing program we studied (as well as among physicians we interviewed in another study); (4) nursing students and most nursing educators focus on clinical safety issues rather than system safety.

While findings from our focus groups suggest HP students have somewhat limited knowledge of the "system" aspects of patient safety, pilot survey results from the same health professional group suggest greater learning regarding the system aspects of patient safety.  Accordingly, it may be best to assess health professional students' perspectives on how patient safety is addressed in their curricula using both the quantitative survey proposed here as well as more in-depth qualitative approaches such as focus groups or in-depth interviews.  The latter can provide data with greater depth and richness.

## Background

Our initial work as part of the studentship, including a preliminary survey of current nursing programs, strongly suggests that patient safety has not yet been well integrated into undergraduate nursing education.  It is our understanding that CPSI has come to a similar conclusion following some of the background work that was done for the Patient Safety Competencies project.  Additionally, there is little evidence regarding health professional students' perspectives on patient safety in their curricula.  In addition, a small focus group study done by a group of Professor Ginsburg's senior undergraduate students in 2007 suggests that patient safety is not dealt with in a system-focused way in either the classroom or practicum settings.  As CPSI prepares to roll out the Safety Competencies Framework, it will be important to engage students in various health professional programs and perhaps new graduates in the practice setting to assess this critical stakeholder perspective.

## Objectives

(1) To develop and pilot test a questionnaire to assess (a) health professional students' exposure to the six core domains of the Safety Competencies Framework and (b) students perspectives on patient safety in their curricula, including the role of courses, practica, peers, and mentors/preceptors.

(2) To deliver an easy-to-implement plan for data collection from a variety of health professional student audiences from across Canada.  Given the target audience, their high degree of use and access to on-line technology, and CPSI's need to have an easily deployable questionnaire, the proposed questionnaire is web-based and ready for use in a widespread, systematic data collection effort with students in a variety of health professional programs.

## Methods

This project included several steps that are commonly used in the survey development process including a literature review, use of focus groups to guide survey development, expert feedback and survey pilot testing.

*Literature review.*  A literature review was conducted to determine existing knowledge and tools, if any.  A Pubmed search was conducted using the following search terms:
1. (education) AND (patient safety[Title/Abstract]) AND (survey[Title/Abstract])
2. (education) AND (patient safety) AND (survey[Title/Abstract])

Studies of students' experiences were particularly highlighted, but assessments of educators' perceptions were also noted.

*Focus groups*.  Two focus groups were conducted with a convenience sample of $2^{nd}$ degree nursing students (n=12) from York University who were in the final months of their training (these students have previous undergraduate degrees from a wide range of disciplines).  The purpose of the focus groups was to help ensure the final questionnaire had strong face validity (i.e. will be meaningful and appropriate for HP students) by (a) gauging how patient safety is currently covered in a HP program, and (b) identifying key issues/challenges related to PS in HP education so these could be incorporated into the questionnaire.  A copy of the focus group moderator guide is included in Appendix A.  Focus group participants received a $50 honorarium.

***Development of draft questionnaire*.**  Based on the six CPSI competencies and the focus group data, a draft questionnaire was created to assess (a) students' exposure to each of the six competency areas; (b) students perceptions regarding how broader PS issues are addressed in HP education; (c) basic demographics so that survey data can be analyzed by HP group, age and gender of respondents, year of study, previous education, and previous clinical experience.  The bulk of the questionnaire (Section 1) focuses on the extent to which students feel confident in their knowledge of the six competency areas.

***Expert feedback.***  Feedback on the draft questionnaire was solicited from three patient safety experts who are involved with the training of health professionals in medicine (Dr. Peter Norton) and nursing (Dr. David Gregory and Dr. Deborah Tregunno).  This expert feedback aided with item clarification as well as general questionnaire design issues.

***Pilot-test Health Professional Education in Patient Safety Survey (H-PEPSS).***  The questionnaire was pilot tested with sample of 10 nursing students in the School of Nursing at York University to assess length, relevance, and identify problematic questions/wording.  Subjects were sent a copy of the questionnaire with instructions to run through the survey twice: once by entering their responses in the normal fashion, and then immediately afterwards by highlighting any problematic or unclear questions.  One day after completion, the group was divided into two teleconferences to obtain general and question-specific feedback.  Hard copies of the completed surveys were returned to the researchers.  Participants received a $50 honorarium.  Half of the focus group participants also participated in the questionnaire pilot.

***Survey formatted for web-delivery.***  Personnel from the Experiential Education office at York University's Atkinson faculty were engaged to convert the final questionnaire for use as a web-based survey instrument.

## Results

Five important themes emerged from various aspects of this project:

1. Our literature review revealed few studies that look specifically at how patient safety has been incorporated in HP education (see Neudorf, Dyck, Scott, Davidson (2008) for an exception) and none that provide the student perspective on this important issue.  One US study assessed quality and safety education in pre-licensure nursing curricula; however they did so from the perspective of nursing program leaders (Smith, Cronenwett, Sherwood, 2007). While this is an important stakeholder perspective, this group perspective will tend to be quite different from the student perspective.

2. Our focus groups indicated that there is often a lack of consistency between the nursing role that they are taught in the classroom and the role that they observe in clinical settings.  The survey pilot confirmed that it is important to ask separately about aspects of patient safety that students learn about in the classroom versus in the clinical setting.  In addition, there is tremendous variation in how different preceptors and clinical settings address and handle patient safety issues.  Other patient safety nursing educators (Gregory, Guse, Dick, Russell, 2007) and students (Norman, Buerhaus, Donelan, McCloskey, Dittus, 2005) have identified the need to address these discontinuities between education and practice settings.

3. An individual rather than a systems approach to errors is likely still the dominant model.  A recent study of primary care preceptors' views about teaching and medical errors showed that "accepting responsibility for errors" was seen as prerequisite to learning (Mazor, Fischer, Haley, Hatem, Quirk, 2005).  This approach is of course not consistent with the system view of errors

which emphasizes the need to look carefully at systemic reasons for errors that occur (and espoused by CPSI safety competency #2—Culture of safety).

4.  Our results reveal that nursing students and nursing educators (who do not have a specific research interest in patient safety) focus almost exclusively on clinical safety issues such as hand hygiene, safe medication practice, infection control, etc. when asked about patient safety in nursing education. This finding is consistent with others (Gregory et al., 2007). One recent Canadian paper describes an educational effort to shift the culture toward a systems approach to patient safety. Graduates of this program are anticipated to emerge with skills in determining the root causes of system error in healthcare (Neudorf et al., 2008). Our results show that the issue of reporting is one of the few non-clinical issues that students are exposed to in their education. However, it tends to be discussed simply as a policy or required practice and students remain unaware of where the information goes or how it is used—many assume or wonder if it is used punitively. Even if errors are not handled in a punitive way, students tend to receive the simple and vague message to "be more vigilant". The kind of system analysis, learning, and change pieces that should ideally flow from reporting (Ginsburg, Chuang, Norton, Berta, Tregunno, Ng, Richardson, under review) tend not to be discussed.

***Health Professional Education in Patient Safety Survey (H-PEPSS)***. The process outlined in the methods led to the development of a 44-item survey that takes approximately 12 minutes to complete. The questionnaire can be found in Appendix B. ***Section 1*** has seven sub-sections, of which six relate to each of the CPSI patient safety competencies. In each sub-section three to six items were created based on CPSI's *Safety Competencies Draft Document.* We attempted to preserve the language used in the competency document as much as possible; however, expert and pilot feedback pointed out the need to simplify some of the language for this audience given their lack of familiarity with much of the patient safety terminology. A sub-section, entitled "clinical safety", was added to the start of section 1 in recognition of point 4 above and to start respondents off with a straightforward set of items. This section is intended to encourage respondents to contrast the more system aspects of safety covered by the six competencies with more straightforward clinical safety issues. Our expectation of greater agreement on statements regarding the extent to which clinical safety is covered than for the other six sections was supported by our pilot data. For each of the seven areas in section 1, respondents are asked to indicate the extent to which they feel confident about what they learned (a) in the classroom setting, and (b) in the clinical setting. Pilot results confirmed it is appropriate to ask separately about these two settings.

Sections 2 and 3 of the questionnaire ask about other salient issues regarding PS in HP education identified in the literature and the focus groups and outlined in the five themes above. Section 4 solicits demographic information and information on student's program and program stage. These data will be helpful for understanding whether program, program stage and other variables are related to PS competency learning.

***Questionnaire Pilot Results.*** General feedback indicated the questionnaire was relevant, interesting, well rounded and reasonable in length. Increasing the survey length is likely to have a negative effect on response rates. Respondents further indicated that the format was clear and the instrument was straightforward to complete. Question specific feedback led us to revise the wording of several questions students had difficulty understanding. Problematic items tended to be those that asked about "systems" or "system risks" without defining what is meant by "systems". Post pilot changes saw the inclusion of a definition of "systems" in three places on the questionnaire. The definition was drawn from CPSI's and AHRQ's work on patient safety. Individual responses indicate that respondents are using the full response scale and that there is reasonable variability in the data.

The pilot also suggested that a web-based format was preferred over paper, and was seen as familiar, convenient and secure. HP students would be most likely to participate in a web-based deployment of the proposed instrument under the following conditions:

(1) students receive personalized pre-notification about the survey **from their program director** that briefly informs them of the purpose and process and encourages them to respond
(2) a mechanism for ensuring confidentiality or anonymity of responses is clearly outlined in the pre-notification email, and again with the actual invitation to complete the questionnaire
(3) the actual survey invitation and implementation comes from a 3$^{rd}$ party such as CPSI or the experiential education office at York (this will help ensure number 2, above)

***Web-based survey.*** The *Health Professional Education in Patient Safety Survey (H-PEPSS)* has been converted to a web-based survey using Survey Monkey Professional. The questionnaire can be viewed at: http://www.surveymonkey.com/s.aspx?sm=5bW_2ffZElP4pOTBkvSqif9_2buCv1XnEaW3zkilptSWfrM_3d and has been set up in the following way:

- It is a **truly anonymous survey**—no one will know who has chosen to complete the questionnaire and no identifying information will be collected (respondent's IP address will **not** be stored in the survey results).
- Anonymity has been made clear on the survey instruction page but must also be made clear to respondents in the invitation email (see sample survey invitation email in appendix E).
- Because some students may complete the questionnaire from public computers at campus kiosks or computer labs, the survey is set up to allow multiple submissions per computer.
- Because multiple submissions are permitted from a single terminal, the survey invitation email (Appendix E) explicitly asks students to complete the survey only once.
- When completing the survey, respondents can go back to previous pages in the survey and update their responses until the survey is finished or until they have exited the survey. After the survey is finished, the respondent will not be able to re-enter his/her survey.
- After the respondent leaves the survey website they will be redirected to the CPSI competencies webpage.
- Features such as the use of logos (CPSI and York University) and a progress bar have been incorporated to enhance legitimacy and respondent retention, respectively—both of which can enhance response rates.
- An opportunity for comments is included on the last page

A plan for implementation of the survey with students in different HP programs is outlined in the Recommendations section of this report.

## Limitations

Although this survey was developed using a strong approach that included relevant literature, expert and end-user perspectives and the instrument underwent pilot testing, one of the study limitations has to do with the restricted nature of the student sample we used in the focus groups and pilot test. Because of the timing of the summer studentship, access to HP students during this time of year was limited. Consequently, the students were limited to a single HP group (nursing) and were drawn from one educational setting (York University). Although our expert group reviewed the survey with multiple HP groups in mind, it may be advisable to have a few educators from other HP disciplines such as OT, PT, pharmacy, etc. review the survey for clarity and any discipline-specific language issues.

Additionally, our sample consisted of second-entry nursing students, who by virtue of their previous undergraduate degrees may have developed particular learning characteristics that are not seen in collaborative nursing programs. Moreover, the participants were recruited from a summer class that included only students placed at urban teaching hospitals (the other half of the student cohort, placed in community hospitals, was not accessible to us due to administrative obstacles despite our efforts).

A final limitation stems from the limited number of focus groups we were able to conduct in the study timeframe (recall that this was a revised studentship project which was approved and implemented over a very short period (June-August 2008) where student access tends to be more limited. That said we feel confident regarding the themes we report from this process.

## Recommendations

1. *Note that in addition to the recommendations that follow for implementing the H-PEPSS, we recommend that CPSI conduct a few supplemental focus groups with HP students in nursing and non-nursing programs as a source of additional data for CPSI.  Addition of qualitative data will greatly enhance CPSI's depth of understanding of the extent and ways patient safety is incorporated in HP education and will help assess the accuracy of any H-PEPSS survey data that are collected.  If CPSI is able to arrange the focus group logistics and student recruitment via the HP program directors you work with to implement the H-PEPSS (below), the current study team would likely be able to conduct the focus groups and analyze the data. Contact Deborah Tregunno (tregunno@yorku.ca), Evan Castel (ecastel@yorku.ca) and CC Liane Ginsburg (lgins@yorku.ca) on maternity leave.*

The following are a set of recommendations for implementation of the *H-PEPSS.*

2. *Contact program directors identified in Appendix C to request participation of their students in the survey*

3. *Ask 2-3 members of this group of program directors from non-nursing programs to review the questionnaire for any language that is not relevant for their HP group*

4. *For program directors agreeing to participate, provide them with a short pre-notification email they can send to their students to inform them about the survey (see sample pre-notification email in appendix D).  The easier and more consistent CPSI can make the program director's job the more likely they will be to agree to ask their students to participate).*

5. *Obtain from program directors students' full names and email addresses (a list of email addresses in an Excel file would also suffice) and provide to Natasha Hargovan (Tel 416.736.2100 ext. 20954; hargovan@yorku.ca) from the Experiential Education office at York University.  Natasha will conduct the web-based survey and provide summary data to CPSI.*

6. *Note that some colleagues in the school of Nursing at York have expressed an interest in continuing work on this project.  Contact Deborah Tregunno (tregunno@yorku.ca), Evan Castel (ecastel@yorku.ca) and CC Liane Ginsburg (lgins@yorku.ca) –on  maternity leave until 06/09.*

## Student Learning

This pilot project allowed the graduate student, Evan Castel, to develop important focus group facilitation techniques as well as survey design and implementation skills that will be important as he pursues his

doctorate in a field that relies a great deal on the use of these methodologies. In addition to these opportunities for "methods" learning, the student also gained additional knowledge of key areas of patient safety culture, teamwork, communication, managing risks, system and environment, and learning that are reflected in the CPSI Safety Competencies.

## References

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## Appendices

Appendix A – Focus group moderator's guide

Appendix B – Health Professional Education in Patient Safety Survey (*H-PEPSS*)

Appendix C – Convenience sample of HP program directors whose students could be targeted for the survey

Appendix D – Sample pre-notification email, to be sent by program directors to their students

Appendix E – Sample survey invitation email to be sent to respondents

**Appendix A - Focus group moderator's guide**

**Study Name:**   Assessment of Exposure to Patient Safety Concepts in Nursing Education
**Researchers:**   Liane Ginsburg, PhD; Evan Castel, MSc candidate

**-----Part 1) Demographics**

1.  Let's go around the room and please tell me a bit about yourself and your educational background.
       *Prompt*: place and year of HP program, previous education.

**-----Part 2) Patient Safety in the Curriculum**

2.  Please describe any aspects of your nursing curriculum that you would say were focused on patient safety
       *Prompts*
         - What topics / material were covered?
         - When and where did this teaching take place? (classroom, placement/practicum?)
         - Length, intensity, followup?
         - Did it ever include other health practitioners?  If so, what types?

3.  To what extent was PS integrated into the overall program, versus being handled as a stand-alone topic?

4.  Tell me about how patient safety (PS) came up during your practicum.
       *Prompts:*
         - What were the circumstances?
         - How was it handled by your peers…mentor/preceptor?

       ----------- *Distribute and have participants complete questionnaire regarding exposure to 6 CPSI competency areas --------*

5.  To what extent do you feel prepared to handle patient safety issues that may arise in the workplace?
       *Prompts:*
         - What is your sense of how adequately PS is covered in the curriculum
         - Are there issues you would like to see added or removed?

**-----Part 3) Closing**

6.  Is there anything else that you'd like to mention that we haven't discussed?

# *Health Professional Education in Patient Safety Survey (H-PEPSS)*

**Questionnaire Instructions**:

1.  This survey takes approximately 12 minutes to complete

2.  This survey seeks the **perspectives of students** in the health professions on the ways in which patient safety is addressed in health professional education.

3.  The survey asks about **clinical safety issues** (e.g. hand hygiene, transferring patients, medication safety) but also **system issues that effect safety** (e.g. aspects of the organization, management, or the work environment including policies, resources, communication and other processes)

4.  The survey is seeking your <u>perceptions</u> and <u>opinions</u> only.  There are no right or wrong answers.  Indicate the extent to which you agree or disagree with each question statements. If you are unsure whether you agree or disagree, mark "neutral".

5.  This survey is completely **anonymous**.  No one will know whether you have chosen to participate or what your individual answers are.  Completion of the survey is entirely voluntary, though we do hope you will take this opportunity to help provide the student perspective on this important issue.

YORK U
UNIVERSITÉ
UNIVERSITY

cpsi·icsp
Canadian        Institut
Patient         canadien
Safety          pour la sécurité
Institute       des patients

> **Patient Safety:** The pursuit of reduction and mitigation of unsafe acts within the health care system, as well as the use of best practices shown to lead to optimal patient care outcomes.

## SECTION 1: Learning about specific patient safety content areas

Here we ask about 7 areas that have to do with keeping patients safe. We would like to know about the extent to which you feel confident about what you learned in each of these areas. We ask you to think about both your classroom and clinical practice setting experiences—and evaluate them separately.

For each item, the response scale (*strongly disagree, disagree, neutral / unsure, agree, strongly agree*) is provided twice: **…in the classroom** and **…in clinical settings**.

### Clinical safety: *"I feel confident in what I learned about…"*

1. safe clinical practice in general
2. hand hygiene
3. infection control
4. safe medication practices

### Culture of safety: *"I feel confident in what I learned about…"*

5. the ways in which health care is complex and has many vulnerabilities (e.g. workplace design, staffing, technology, human limitations)
6. the importance of having a questioning attitude and speaking up when you see things that may be unsafe
7. the importance of a supportive environment that encourages patients and providers to speak up when they have safety concerns
8. the nature of systems (e.g. aspects of the organization, management, or the work environment including policies, resources, communication and other processes) and system failures and their role in adverse events

### Working In Teams with Other Health Professionals: *"I feel confident in what I learned about…"*

9. team dynamics and authority/power differences
10. managing inter-professional conflict
11. debriefing and supporting team members after an adverse event or close call
12. engaging patients as a central participant in the health care team
13. sharing authority, leadership, and decision-making
14. encouraging team members to speak up, question, challenge, advocate and be accountable as appropriate to address safety issues

### Communicating Effectively: *"I feel confident in what I learned about…"*

15. enhancing patient safety through clear and consistent communication with patients
16. enhancing patient safety through effective communication with other health care providers
17. effective verbal and nonverbal communication abilities to prevent adverse events

### Managing Safety Risks: *"I feel confident in what I learned about…"*

18. recognizing routine situations and settings in which safety problems may arise
19. identifying and implementing safety solutions
20. anticipating and managing high risk situations

### Understanding Human and Environmental Factors: *"I feel confident in what I learned about…"*

21. the role of human factors such as fatigue, competence that effect patient safety
22. safe application of health technology

| | ...in the classroom | | | | | ...in clinical settings | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 23. the role of environmental factors such as work flow, ergonomics, resources, that effect patient safety | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| **Recognize, Respond to and Disclose Adverse Events and Close Calls:** *"I feel confident in what I learned about…* | | | | | | | | | | |
| 24. recognizing an adverse event or close call | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 25. reducing harm by addressing immediate risks for patients and others involved | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 26. disclosing the adverse event to the patient | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 27. participating in timely event analysis, reflective practice and planning in order to prevent recurrence | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

## SECTION 2: How broader patient safety issues are addressed in health professional education

| | strongly disagree | disagree | neutral / unsure | agree | strongly agree |
|---|---|---|---|---|---|
| 28. As a student, the scope of what was "safe" for me to do in the practice setting **was very clear** to me | ○ | ○ | ○ | ○ | ○ |
| 29. There is consistency in how patient safety issues were dealt with by different preceptors in the clinical setting | ○ | ○ | ○ | ○ | ○ |
| 30. I had sufficient opportunity to learn and interact with members of interdisciplinary teams | ○ | ○ | ○ | ○ | ○ |
| 31. I gained a solid understanding that **reporting** adverse events and close calls can lead to change and can reduce reoccurrence of events | ○ | ○ | ○ | ○ | ○ |
| 32. Patient safety was well integrated into the overall program | ○ | ○ | ○ | ○ | ○ |
| 33. Clinical aspects of patient safety (e.g. hand hygiene, transferring patients, medication safety] were well covered in our program | ○ | ○ | ○ | ○ | ○ |
| 34. "System" aspects of patient safety were well covered in our program (e.g. aspects of the organization, management, or the work environment including policies, resources, communication and other processes) | ○ | ○ | ○ | ○ | ○ |

## SECTION 3: Comfort speaking up about patient safety

| | strongly disagree | disagree | neutral / unsure | agree | strongly agree |
|---|---|---|---|---|---|
| 35. In clinical settings,discussion around adverse events focuses mainly on system-related issues, rather than focusing on the individual(s) most responsible for the event | ○ | ○ | ○ | ○ | ○ |
| 36. In clinical settings, reporting a patient safety problem will result in negative repercussions for the person reporting it | ○ | ○ | ○ | ○ | ○ |
| 37. If I see someone engaging in unsafe care practice in the clinical setting,, I feel safe to approach them | ○ | ○ | ○ | ○ | ○ |

## SECTION 4: Demographic information

| 39. Health professional program | 40. Program stage | 41. Previous degrees / diplomas (check all that apply) | 42. Age group: | 43. Gender: | 44. Did you have training in a clinical setting prior to this program? |
|---|---|---|---|---|---|
| ○ RN Nursing<br>○ LPN/RPN Nursing<br>○ Pharmacy<br>○ OT<br>○ PT<br>○ Medicine<br>○ Other:_____ | ○ I am currently in year ___ of a ___ year program<br><br>○ I have recently completed a ___ year program | ○ High school diploma<br>○ Community college diploma<br>○ Bachelors degree<br>○ Masters degree<br>○ PhD | ○ <21<br>○ 21-25<br>○ 26-30<br>○ 31-40<br>○ 41-50<br>○ >50 | ○ Female<br>○ Male | ○ Yes<br>○ No |

**Appendix C – Convenience sample of HP program directors whose students could be targeted for the survey**

| HP Program Type | University | Contact | Source Website |
|---|---|---|---|
| Medicine | DALHOUSIE UNIVERSITY Faculty of Medicine Sir Charles Tupper Medical Building 5849 University Avenue Halifax, Nova Scotia  B3H 4H7 (902) 494-6592 | Laura Harris Buffett Director, Undergraduate Medical Education laura.harris@dal.ca Room C-125 Tel 902-494-1546 Fax 902-494-8884 | http://undergraduate.medicine.dal.ca/ |
| Medicine | UNIVERSITY OF CALGARY Undergraduate Medical Education Room G 701 - Health Sciences Centre 3330 Hospital Drive N.W. Calgary AB  T2N 4N1 Tel 403.210.3841 - Fax 403.270.2681 | Wilma Dodge Director, Undergraduate Medical Education wdodge@ucalgary.ca 403-220-3945 | http://medicine.ucalgary.ca/undergrad |
| Occupational Therapy | UNIVERSITY OF MANITOBA School of Medical Rehabilitation R106 - 771 McDermot Avenue, University of Manitoba, Winnipeg, MB  R3E 0T6 | Emily Etcheverry, BOT, M.Ed., Ph.D Professor and Director, School of Medical Rehabilitation Ph: (204) 789-3418 eetchev@cc.umanitoba.ca | http://www.umanitoba.ca/faculties/medicine/units/medrehab/etcheverry.html |
| Occupational Therapy | UNIVERSITY OF WESTERN ONTARIO School of Occupational Therapy Faculty of Health Sciences 1201 Western Road Room 2555, Elborn College London ON  N6G 1H1 | Angela Mandich Director Tel: (519) 661-2175 amandich@uwo.ca | www.uwo.ca/fhs/ot http://www.uwo.ca/fhs/bio/profile/mandich_a.html |
| Pharmacy | MEMORIAL UNIVERSITY OF NEWFOUNDLAND School of Pharmacy Health Sciences Centre 300 Prince Philip Drive St. John's, NL  A1B 3V6 Telephone 709-777-8300 Fax 709-777-7044 | Dr. Deborah Kelly Acting Director and Assistant Professor, Cross Appointment to Faculty of Medicine dvkelly@mun.ca 709-777-7903   Rm H3442 | http://www.mun.ca/pharmacy/people/ |
| Pharmacy | UNIVERSITY OF TORONTO Pharm.D. Program, Faculty of Pharmacy | Gustavo Luna Coordinator  Pharm.D. Program | http://www.phm.utoronto.ca/pharmd/phmd_idx.html |

| | 144 College Street, 8th Floor<br>Toronto, Ontario  M5S 3M2<br>Tel: (416) 978-0603<br>Fax: (416) 978-6528 | g.luna@utoronto.ca<br>416-946-3768 | |
|---|---|---|---|
| Physical Therapy | MCGILL UNIVERSITY<br>School of Physical and Occupational Therapy<br>Davis House,<br>3654 Promenade Sir William Osler<br>Montreal, Quebec H3G 1Y5<br>Tel.: 514-398-4500<br>Fax: 514-398-6360 | Mindy Levin,<br>Physical Therapy Director<br>mindy.levin@mcgill.ca<br>514-398-3994 | http://www.mcgill.ca/spot/pt/ |
| Physical Therapy | UNIVERSITY OF BRITISH COLUMBIA<br>Department of Physical Therapy<br>212 - 2177 Wesbrook Mall<br>Vancouver, BC V6T 1Z3<br>Phone: 604-822-8225<br>Fax: 604-822-1870 | Dr Alison Greig, BSc (PT), PhD<br>MPT Program Coordinator<br>alison.greig@ubc.ca<br>604-822-7571 | http://www.physicaltherapy.med.ubc.ca/Home.htm |
| Physical Therapy | UNIVERSITY OF WESTERN ONTARIO<br>Arthur and Sonia Labatt Health Sciences Building, Room 200 ,<br>London, Ontario N6A 5B8 Tel: (519) 661-2111 | Dr. Jayne Garland<br>Director<br>jgarland@uwo.ca<br>Elborn College Room 1588 | http://www.uwo.ca/fhs/pt/ |
| Practical Nursing | Saskatchewan Institute of Applied Science and Technology - SIAST<br>Wascana Campus<br>4500 Wascana Parkway<br>Regina SK  S4S 7J6<br><br>*NB: SIAST's PN program is offered at 2 other campuses; see web link at right* | Cindy Smith. RN, BScN, MN<br>Program Head,  Practical Nursing Program, Wascana Campus<br>cindy.smith@siast.sk.ca<br>(306) 775-7567 | http://www.siast.sk.ca/nursingdivision/practicalnursing/ |
| Practical Nursing | VANCOUVER COMMUNITY COLLEGE<br>Practical Nursing Department<br>250 West Pender Street<br>Vancouver, BC  V6B 1S9 | Marilyn Heaps<br>Department Head<br>mheaps@vcc.ca<br>604.443.8555 | http://healthsciences.vcc.ca/practicalnursing/ |
| Respiratory Therapy | Southern Alberta Institute of Technology - SAIT<br>1301 16th Ave NW<br>Calgary AB T2M 0L4 | Ron Wyrostok<br>Academic Chair (403) 284-8500<br>ron.wyrostok@sait.ab.ca | http://www.sait.ab.ca/pages/cometosait/academic/admissioncriteria/art.shtml |
| Respiratory Therapy | UNIVERSITY OF MANITOBA<br>School of Medical Rehabilitation<br>NA-617 - 700 McDermot Ave. | T. Yachemetz<br>Head, Department of Respiratory Therapy | http://www.umanitoba.ca/faculties/medicine/units/medrehab/rt_index.html |

| | Winnipeg MB R3E 0T2 | tyachemetz@hsc.mb.ca | |
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| Nursing | UNIVERSITY OF NEW BRUNSWICK<br>Faculty of Nursing<br>Postal Box 4400<br>MacLaggan Hall, Room 106<br>Fredericton, New Brunswick E3B 5A3<br>Tel.: 506-453-4642<br>Fax: 506-447-3057 | Lee Heenan<br>Assistant Dean<br>Faculty of Nursing<br>Tel.: (506) 458-7670<br>Fax: (506) 447-3374<br>E-Mail:lheenan@unb.ca | http://www.unbf.ca/nursing/moncton/contact.html |
| Nursing | MCGILL UNIVERSITY<br>Faculty of Medicine<br>School of Nursing<br>3506 University St.<br>Montreal (Québec) H3A 2A7<br>Tel.: 514-398-4145<br>Fax: 514-398-8455 | Dr Helene Ezer<br>Director, School of Nursing<br>514-398-4162<br>Room 421, Wilson Hall<br>helene.ezer@mcgill.ca | http://www.mcgill.ca/nursing/about/faculty/ |
| Nursing | MCMASTER UNIVERSITY<br>School of Nursing<br>1200 Main Street West<br>Hamilton, Ontario L8N 3Z5<br>Tel.: 905-525-9140<br>Fax: 905-524-5228 | Kathie Clark,<br>Administrative Director,<br>National Collaborating<br>Centre for Public Health<br>Methodologies & Tools<br>kclark@mcmaster.ca | http://www.fhs.mcmaster.ca/nursing/faculty_admin.shtml |
| Nursing | QUEEN'S UNIVERSITY<br>School of Nursing<br>90 Barrie Street, Cataraqui Bldg.<br>Kingston, Ontario K7L 3N6<br>Tel.: 613-545-2669<br>Fax: 613-545-6770 | Cynthia Baker,<br>Director, School of Nursing<br>&<br>Associate Dean (Health Sciences)<br>bakerc@queensu.ca | http://meds.queensu.ca/nursing/fac_index.php?fld_UserID=12 |
| Nursing | UNIVERSIÉ D'OTTAWA/UNIVERSITY OF OTTAWA<br>Ecole des sciences infirmeries<br>451 Chemin Smyth, Suite 3027<br>Ottawa, Ontario K1H 8M5<br>tél 613-562-5426<br>Fax: 613-562-5438 | Kirsten Woodend,<br>Director and Associate Dean<br>Office: RGN3052<br>(613) 562-5426<br>kwoodend@uottawa.ca | http://www.health.uottawa.ca/sn/contact.htm |
| Nursing | UNIVERSITY OF MANITOBA<br>Faculty of Nursing<br>218 Bison Bldg.<br>Winnipeg, Manitoba R3T 2N2<br>Tel.: 204-474-9201<br>Fax: 204-474-7500 | Dauna Crooks, RN, DNSc<br>Dean<br>(204) 474-9201<br>Dauna_crooks@umanitoba.ca | http://www.umanitoba.ca/faculties/nursing/aboutus/staff.html |

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| Nursing | UNIVERSITY OF SASKATCHEWAN<br>College of Nursing<br>Health Sciences Bldg.<br>107 Wiggins Road<br>Saskatoon, Saskatchewan S7N 5E5<br>Tel: (306) 966-6221<br>Fax: 306-966-6621 | Lorna Butler,<br>Dean<br>(306) 966-6223<br>lorna.butler@usask.ca | http://www.usask.ca/nursing/facultyProfiles.htm |
| Nursing | UNIVERSITY OF ALBERTA<br>Faculty of Nursing<br>3-129 Clinical Sciences Bldg.<br>Edmonton, Alberta T6G 2G3<br>Tel.: 403-492-6236<br>Fax: 403-492-6029 | Dr. Anita Molzahn<br>Dean<br>(780) 492-3029<br>anita.molzahn@ualberta.ca | http://www.uofaweb.ualberta.ca/nursing/deancontact.cfm |
| Nursing | UNIVERSITY OF LETHBRIDGE<br>4401 University Drive<br>Lethbridge, Alberta T1K 3M4<br>Phone: (403) 329-2111 | Ruth Grant Kalischuk,<br>Associate Dean Nursing<br>kalischuk@uleth.ca<br>Anderson Hall AH169<br>Phone: (403) 329-2724<br>Fax: (403) 329-2668 | http://www.uleth.ca/hlsc/nursing/nursing.html |
| Nursing | UNIVERSITY OF BRITISH COLUMBIA<br>School of Nursing<br>2211 Wesbrook Mall, Room T206<br>Vancouver, B.C. V6T 2B5<br>Tel.: 604-822-7417<br>Fax: 604-822-7423 | Sally Thorne<br>Director<br>sally.thorne@nursing.ubc.ca | http://www.nursing.ubc.ca/Faculty/biopage.aspx?c=51.2249938994628 |

**Appendix D – Sample pre-notification email CPSI can ask program directors to send
   to their students**


*Subject: Upcoming Survey of Patient Safety in Health Professional Curricula*

*The Canadian Patient Safety Institute (CPSI) has recently developed the "Patient Safety
Competencies Framework".  As they prepare to roll this out across Canada over the coming
year, they would very much like to obtain health professional students' perspectives on how
patient safety is addressed in their curricula, including the role of courses and clinical
placements.*

*In the next week or two you (and students in other health professional programs across the
county) will be receiving an invitation to complete a short web-based questionnaire asking about
patient safety in the curriculum.  The questionnaire is being administered by York University
(the questionnaire invitation will come from York) and the results will be provided only to CPSI.
No survey results will be given back to your program and the survey is being conducted in a
completely anonymous fashion so that no one will know whether you have chosen to participate
or what your individual answers are.  Completion of the survey is entirely voluntary though we
do encourage you to take this opportunity to help provide the student perspective on this
important issue.*

**Appendix E – Sample survey invitation email (to be sent by CPSI or York University to students)**

*As a follow up to the email you received from your program director a few weeks ago, we are writing to invite you to complete the Health Professional Education Patient Safety Survey (H-PEPSS).*

*The Canadian Patient Safety Institute (CPSI) has recently developed the "Patient Safety Competencies Framework".  As they prepare to roll this out across Canada over the coming year, they would very much like to obtain health professional students' perspectives on how patient safety is addressed in their curricula, including the role of courses and clinical placements.*

*Students in several health professional programs across the county are being asked to complete this web-based questionnaire asking about patient safety in the curriculum.  The questionnaire takes approximately 12 minutes to complete.  The questionnaire was developed with research funds from CPSI and York University and is being administered by York University.*

*Note that **only summary results will be provided to CPSI** --in other words, your individual responses will not be revealed.  **No survey results will be given back to your program**.*

*The survey is completely anonymous – no one will know whether you have chosen to participate or what your individual answers are.  We hope you will take this opportunity to help provide the student perspective on this important issue.*

*The following link will take you to the survey* http://xxxx/xx.xxx *Because we are not tracking who completes a questionnaire we ask that do not complete the survey more than once.*

*Many thanks.*