TLEF Project – Final Report

Report Completion Date: (2021/12/01)

1. PROJECT OVERVIEW

1.1. General Information

Project Title:	Determining Pharmacy Student Competencies across Experiential Educational Contexts
Principal Investigator:	Dr. Kerry Wilbur
Report Submitted By:	Dr. Kerry Wilbur
Project Initiation Date: April 1, 2019	**Project Completion Date:** *August 31, 2021
Project Type:	☐ Large Transformation ☒ Small Innovation ☐ Flexible Learning ☐ Other: [please specify]

1.2. Project Focus Areas – *Please select all the areas that describe your project.*

☒ Resource development (e.g. learning materials, media)

☐ Infrastructure development (e.g. management tools, repositories, learning spaces)

☐ Pedagogies for student learning and/or engagement (e.g. active learning)

☐ Innovative assessments (e.g. two-stage exams, student peer-assessment)

☐ Teaching roles and training (e.g. teaching practice development, TA roles)

☐ Curriculum (e.g. program development/implementation, learning communities)

☐ Student experience outside the classroom (e.g. wellbeing, social inclusion)

☒ Experiential and work-integrated learning (e.g. co-op, community service learning)

☐ Indigenous-focused curricula and ways of knowing

☐ Diversity and inclusion in teaching and learning contexts

☐ Open educational resources

☐ Other: [please specify]

1.3. Final Project Summary

Competency-based education (CBE) as a training framework has been widely adopted across health professions in both Canada and abroad. This curricular design is intended to not only improve the quantity and quality of student feedback and the use of assessment data to promote lifelong learning, but to ensure patients are ultimately cared for by competent professionals. Pharmacy programs nationwide have anchored their educational outcomes around roles first devised by the Royal College of Physicians and Surgeons and organize expected teaching and assessment of competencies across seven main domains: Care Provider, Communicator, Collaborator, Leader/Manager, Health Advocate, Scholar, and Professional.

A core tenet of CBE is the opportunity for trainees to reinforce and shape development of existing knowledge and skills over time while engaged in direct patient care under the mentorship of experienced clinicians. However, learners move between different practicum sites and associated organizational cultures encountering a variety of patients (with diverse health conditions and treatments), families, and practice educators. Access to comparable learner experiences for programs with multiple sites and large student cohorts is at best challenging. Two broad practicum settings may be characterized for pharmacy students: community and hospital environments. While we should expect different pharmacy learning opportunities in these two distinct organizational contexts, we do not know if they encompass the breadth of outlined competency roles or if associated supervisory assessment and feedback of these roles are complementary or contradictory.

The main project objective was to characterize pharmacy student perceived opportunities for practice and demonstration of competencies in community and hospital practicum settings and to identify the feedback they receive in this regard. We collected longitudinal written diary data from fourth year pharmacy students during their 8-week long outpatient pharmacy practice experience (in community pharmacy) and their 8-week long inpatient pharmacy practice experience (in hospital pharmacy) to understand how they conceptualize and practice pharmacist and interprofessional competencies of health advocacy; collaboration; and communication.

1.4. Team Members – *Please fill in the following table and include __students__, undergraduate and/or graduate, who participated in your project.*

Name	Title/Affiliation	Responsibilities/Roles
Dr. Janice Yeung	Lecturer & Director, Office of Experiential Education	Co-Applicant/Advisor/Analyst
Dr. George Pachev	Lecturer & Director, Office of Educational Assessment	Co-Applicant/Advisor/Analyst
Dr. Arwa Nemir	Graduate Student (Faculty PharmSci)	Graduate Research Assistant
Ms. Amrinder Dhatt	Year 1 Student (Faculty PharmSci)	Undergraduate Researcher
Ms. Mojan Fazelipour	Year 2 Student (Faculty PharmSci)	Undergraduate Researcher
Mr. Tom Sun	Year 3 Student (Faculty PharmSci)	Undergraduate Researcher

1.5. Courses Reached – *Please fill in the following table with __past__, __current__, and __future__ courses and sections (e.g. HIST 101, 002, 2017/2018, Sep) that have been/will be reached by your project, including courses not included in your original proposal (you may adapt this section to the context of your project as necessary).*

Course	Section	Academic Year	Term (Summer/Fall/Winter)
PHRM471	All Sections	2019-2020	Summer/Fall/Winter
PHRM472	All Sections	2019-2020	Summer/Fall/Winter
PHRM271	All Sections	2020-2021	Summer
PHRM371	All Sections	2020-2021	Summer
*PHRM211	All Sections	2019-2020	Fall/Winter
*PHRM211	All Sections	2020-2021	Fall Winter
*PHRM211	All Sections	2021-2022 onward	Winter

*Program Enrichment Activity in Year 2 Pharmacy Curriculum

2. OUTPUTS AND/OR PRODUCTS

2.1. *Please __list__ project outputs and/or products (e.g. resources, infrastructure, new courses/programs). Indicate the current location of such products and provide a URL if applicable.*

Product(s)/Achievement(s):	Location:
Project Objective: Identify student perceived opportunities for practice and demonstration of competencies in community and hospital practicum settings	We collected almost 1,000 unique diary entries of student reflections of practicing select pharmacist/interprofessional competencies in community and hospital practice.
Project Objective: Identify student reported formative and summative feedback of competency assessment in community and hospital practicum settings	We collected over 100 unique diary entries of student reported feedback (from preceptor, other pharmacists, other health professionals or patients)
Project Objective: Devise program course content modifications to further augment pharmacy student practicum preparedness	We were unable to achieve this full project objective given the demands of revising our curriculum for online delivery over the concurrent 18 months of the project. We did extend development of course content (workshop design and delivery) related to the overlapping TLEF project related to health advocacy competency.
Additional Project Objective Achieved: health advocacy evaluation	We collected an additional 125 unique diary entries of student reported implementation of health advocacy during summer 2021 practicum courses of students who had completed the health advocacy workshop in 2019 and 2020.

2.2. Item(s) Not Met – *Please list intended project outputs and/or products that were not attained and the reason(s) for this.*

Item(s) Not Met:	Reason:
Project Objective: Determine practice educator views and reports of competencies and their assessment;	Our ability to recruit practice educator participant data (which would in turn inform training) was undermined by the COVID-19 pandemic. As our preceptor faced unprecedented challenges providing their usual daily care, our Program team decided to focus our efforts to support their maintenance teaching roles for our students on placement and pause asks for project participation. We similarly chose to instead emphasize COVID-19 health and safety additions to the student orientations at this time.
Project Objective: Develop and implement practice educator training in competency assessment	
Project Objective: Develop and deliver enhanced context-specific student orientations	

3. PROJECT IMPACT

3.1. Project Impact Areas – *Please select all the areas where your project made an impact.*

☒ Student learning and knowledge
☒ Student engagement and attitudes
☐ Instructional team-teaching practice and satisfaction
☐ Student wellbeing, social inclusion
☐ Awareness and capacity around strategic areas (indigenous, equity and diversity)
☐ Unit operations and processes
☐ Other: [please specify]

3.2. What were you hoping to change or where were you hoping to see an impact with this project? – *Please describe the intended <u>benefits of the project</u> for students, TAs, instructors and/or community members.*

As described in our stated aims, this project sought to determine both pharmacy student trainee experiences and the practice educator expectations across community and hospital learning and patient care environments to better prepare students joining these practice settings.

Students

The educational outcomes for pharmacy students across Canada are outlined in guiding documents which programs incorporate into the curriculum (instruction and assessment) of its local student body. Through the project data collection, we wanted to **understand how our students conceptualize these educational outcomes (or competencies) in the experiential component of their curriculum** (*off campus)* and **how they practice their ongoing development towards achieving expected program outcomes for graduating students.** Identifying and characterizing any potential gaps would help inform changes in our *on campus* curriculum in order to better equip our students for practicum courses.

Community Members (Practice Educators/Preceptors)

Identifying and characterizing any potential gaps in student conceptualization and practice of educational outcomes (or competencies) would expose opportunities to examine practice educators/preceptors workplace-based feedback (as reported by students) to support student development in this regard (and/or identify where professional development needs may lie with our practice educators/preceptors to better align with educational outcomes of the Program)

Instructors

Pursuant to our project findings among student and community members, we intended to enlist our instructors (e.g. professional practice skills faculty) in revising aspects of how we simulate patient care across low to high fidelity teaching and learning exercises as well as update any pre-practicum orientations offered to our students.

3.3. Were these changes/impacts achieved? How do you know they occurred? – *How did you measure changes/impacts? (e.g. collected survey data, conducted focus groups/interviews, learning analytics, etc.) Describe what was learned from this process. You are encouraged to include copies of data collection tools (e.g. surveys and interview protocols) as well as graphical representations of data and/or scenarios or quotes to represent and illustrate key themes.*

As described in our stated aims, this project sought to determine both pharmacy student trainee experiences and the practice educator expectations across community and hospital learning and patient care environments to better prepare students joining these practice settings. We were able to augment design and delivery of curricular content addressing one of the competencies explored in the diary data collection (advocate role) and conduct repeat measurement of student conceptualization and enactment in practicum settings following participation in the workshop/session.

Students

Please see supporting materials attached as part of Appendix B.

Community Members (Practice Educators/Preceptors)

We were unable to complete this project aim due to competing demands (among community members and Program members alike) during the pandemic.

Instructors

We were unable to complete this project aim due to competing demands (among community members and Program members alike) during the pandemic, but we have reviewed our teaching practices for health advocacy competency.

3.4. Dissemination – *Please provide a list of __past__ and __upcoming__ scholarly activities (e.g. publications, presentations, invited talks, etc.) in which you or anyone from your team have shared information regarding this project. Be sure to include author names, presentation title, date, and presentation forum (e.g., journal, conference name, event).*

Publication (Upcoming)

Wilbur K, Driessen E, Teunissen PW, Scheele F, Yeung J, Pachev G. Pharmacist trainees narrow scope of interprofessional collaboration and communication in hospital practice (under peer review)

Research Presentation

Dhatt A, Fazelipour M, Sun T, Nemir A, Wilbur K. Health advocacy in pharmacy student practice. Summer Student Research Program poster symposium, Vancouver, Canada (October 2021)

Conference Presentation (Past)

Wilbur K, Yeung J, Pachev G. Interprofessional competency development in clinical learning environments. UBC Centre for Health Education Scholarship, Celebration of Scholarship, Vancouver, Canada (October 7, 2020)

We expect more student-led publication of our advocacy (competency) data evaluating the impact of the health advocacy workshop in our curriculum. Our project team is also partnering with our Doctor of Pharmacy Program interprofessional education theme faculty member leads to analyze and report our collaboration (competency) data from the community pharmacy practice experiences.

4. **TEACHING PRACTICES** – *Please indicate if __your__ teaching practices or those of __others__ have changed as a result of your project. If so, in what ways. Do you see these changes as sustainable over time? Why or why not?*

The health advocacy competency has been the role most interrogated by this TLEF project. We are now annually engaged in how we may best socialize our students to advocacy for patients (beyond health promotion, disease screening, or even advocating for the profession) among our patient and faculty facilitator teams. There are also opportunities to link this content to our Community Service Learning course (PHRM 270) in more meaningful and intentional ways. Among the other competency roles, a faculty team has conducted preliminary review of student-submitted diary reflections for communication and collaboration during practicum courses. We are actively exploring how to address teaching practices in our curriculum, as well as in UBC Health Integrated Curriculum to understand how we can move past superficial information exchanges (described by students in the diaries) as enacted collaboration to more interdependent interprofessional *shared care.*

5. **PROJECT SUSTAINMENT** – *Please describe the sustainment strategy for the project components. How will this be sustained and potentially expanded (e.g. over the next five years). What challenges do you foresee for achieving the expected long-term impacts listed above?*

While we do not intend to maintain pharmacy student diary data collection as a reflective piece of their practicum course experiences, we continue to examine our existing data for opportunities to augment our curriculum content, pharmacy student preparation for experiential training, and pharmacy practice educator (preceptor). Specifically, we are seeking to develop how intentional and deliberate interprofessional collaboration (a pharmacist competency/educational outcome) can be embedded in practicum course experiences and resources to support our preceptors in this regard. This work will involve wider engagement of our Office of Experiential Education team and those in the Office of Educational Assessment. More formal discussions will be undertaken when we have synthesized more of our rich participant diary data (e.g. collaboration in community practice). As indicated in Section 4.0, we intend to continue delivery of our health advocacy workshop in the curriculum with further revisions according to the recent evaluative data we secured through the Summer 2021 extension of our TLEF project support.

Appendix B

Pharmacy Student Health Advocacy Competency Session

- o   Pre-session materials (zip file 1 attached electronically)
- o   In-session materials (zip file 2 attached electronically)
- o   Post-session student feedback (appended with this file)
- o   Post-session evaluation – students as health advocates in practice (poster appended with this file)

Post-Session Feedback

Health Advocacy Workshop 2020-2021

N=65 (30% response rate)

Q1 - How useful do you believe this introduction to health advocacy framework will be to your practice?

%
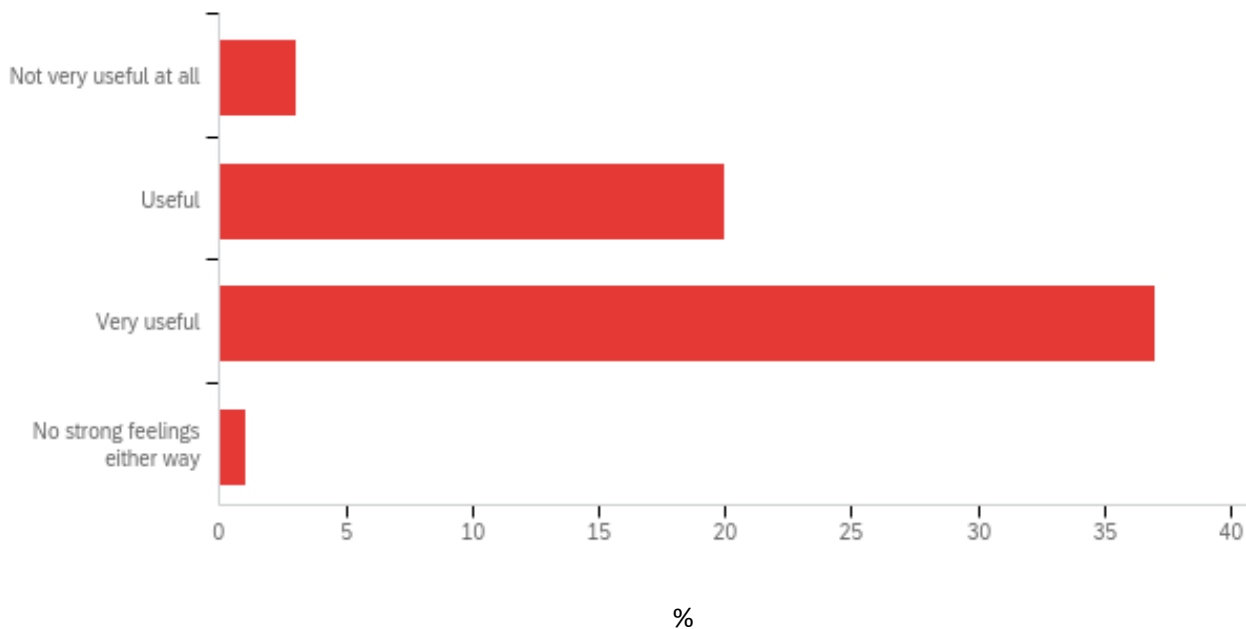
Q2 - In what ways has the workshop made you think differently about health advocacy?

In what ways has the workshop made you think differently about health advocacy?
It has made me think about the opportunities that are available for me to work on. It is important for me to pay attention to any changes that I could make in our profession to improve our patient's experiences.
Different categories of HA
It made me see how important it is for pharmacists to step in and advocate.
taught me that i can do it!
It really shows me the importance of implementing and being the change in practice. It not only impacts pharmacist but the patients aswell
Really stressed the importance of patient centred care
Highlighted the impact of health advocacy on a patient level and how it affects the lives of the family members

involved.

It allowed me to reflect more on health advocacy and gave me the opportunity to hear from the patient's perspective and its impact on them.

It made me think actively what health advocacy means and examples of real situations. I think I struggled a bit with the difference between advocacy and duties of a pharmacist as I believe those goals overlap.

There is more to it than simply fulfilling one's duties as a pharmacist, one may be expected to go above and beyond to help a patient (systems advocacy etc.).

made me realize what a big impact a small advocacy effort on my part can make for patients

Before the Health Advocacy Workshop, I was unaware of the different axis of advocacy: Systemic, Individual, Professional, and Community. It was very useful to have the articles in advance, then to expand on then within the zoom. Advocacy is not particularly a strong suit of mine; however, it is an area I wish to grow in and improve my confidence in order to create those individual impacts as well as system change both for AND with our patients and other health care providers.

Think more in terms of systematic changes that can occur in pharmacy

It made me ponder the difference between health advocacy in the sense of patients, and how that differs from professional advocacy which benefits us as pharmacists.

it helped me to think outside the box , considering more about the patients need.

I think health advocacy only happened at the systematical level, but it can also be as minor as making some phone calls.

It is not simply about promoting behaviours and practicing within our full scope, but pushing for changes on a systemic level that will contribute to health benefits for all patients

having someone come in and talk about their experience helped me see from the patients perspective

This workshop has allowed me to hear real-life examples of how practicing pharmacists contribute to health advocacy. It really helped to drive home the importance of the topic.

That health advocacy is more than just advancing the way health care is structured or operates optimally but being centered around the patient and their wellbeing.

Reading the patient case really brings health advocacy to the forefront from the patient point of view. The discussion also helped me to see how advocacy can take place in different areas such as from a system level change or a patient level change.

made me think a little more about how to involve the patient in health advocacy

It changed my perspective on how health advocacy affects all levels from individual to system level.

It helped me determine the different types of advocacy. To determine who is promoting advocacy and who is benefiting from this.

I think I learned more about health advocacy from my personal experiences than this workshop.

It made me think about what I can do and potential opportunities in the future

Importance of system changes and acknowledging the barriers that may exists. Working with patients to provide support.

It brought to light the aspects of health advocacy as prior to this session, it was a topic I was not very educated in.

It did not impact my thought process. I have an extensive background in this subject matter.

Advocacy is not limited to the scope of the professional.

It made me think about the barriers of health advocacy that pharmacists are facing

To reach out to support out of our own scope of practice

It made me thing how healthcare professionals can be passive about issues in delivering patient care & that we should learn from the families that are invested in rallying for change.

Made me see how small changes in the system can make things easier for patients

having great discussions with my breakout room facilitator

There's a lot of advocacy to be done in the healthcare system and everyone has an equal opportunity to participate in the advocacy.

showing patient experiences

To actively look for opportunities for advocacy.

patient-centered

I thought it was all about professional promotion, but now I know it is to be the voice for others for change

The advocacy framework. First time to learn about it.

consider the broader implications that health advocacy works in the health care spectrum

more patient focused

gave me more insight from a patient perspective

To think about taking some extra steps in your education (learn about dynamnics of other professions)

There are many different forms of health advocacy that I did not know existed!!

Relieving that it is a shared responsibility between systems, professionals, patients.

understanding my role as a leader and knowing where and when I can help my patients

The levels of health advocacy from the individual to the system levels.

Different layers and levels of advocacy that wasn't aware of before.

It taught me what health advocacy entitled

UBC Faculty of Pharmaceutical Sciences

The Novel UBC Health Advocacy Framework in Pharmacy Student Practice

Amninder Dhatt, Mojan Fazelipour, Tom Sun, Arwa Nemir, Kerry Wilbur

Background

- 'Health advocacy' is a competency in many health professional programs
- Systematic methods of teaching health advocacy have been lacking
- A recent structured frameworks aim to facilitate student understanding and conceptualization of health advocacy by modeling advocacy into levels of activity (agency vs activism) and role of advocate (shared vs directed)
- At UBC, a workshop has been developed to facilitate health professional student understanding and application of a novel structured framework for health advocacy

Objective

- To understand how integration of a health advocacy framework into pharmacy curriculum impacts student views of health advocacy opportunities in patient care during their experiential training.
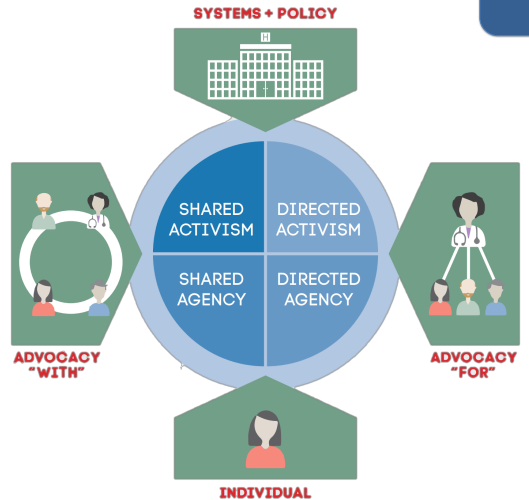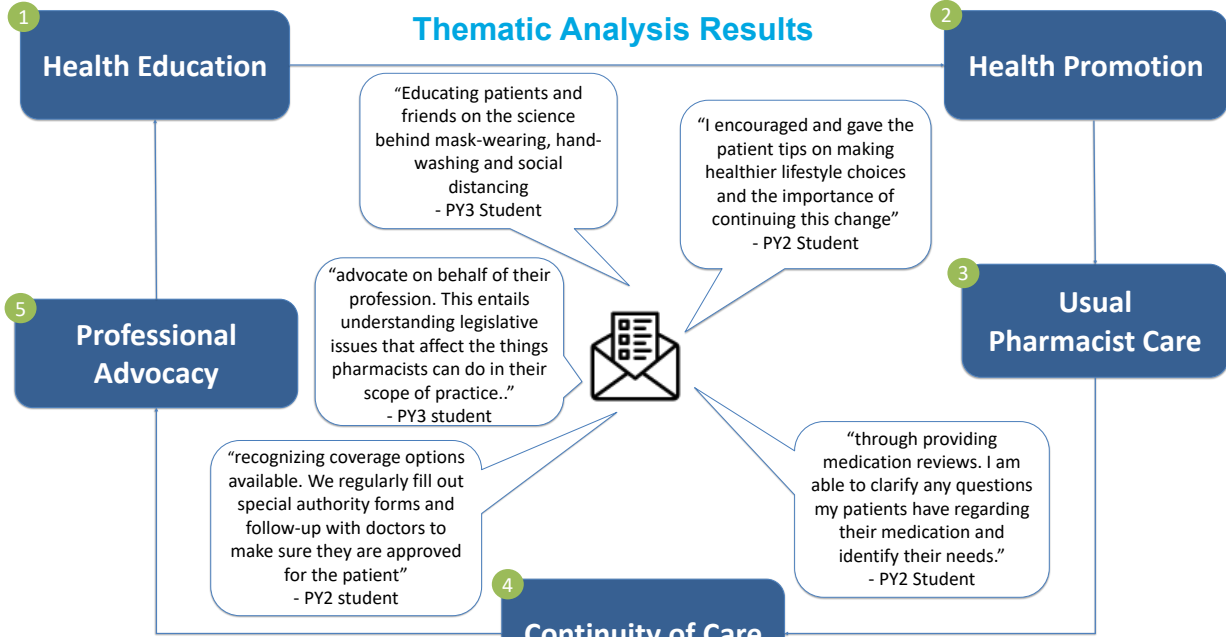
Methods

Study Design
Qualitative - Longitudinal Diary Study

Study Participants
- 12 second- and 11- third year pharmacy students
- During community pharmacy clerkships
- After completing the health advocacy workshop

Data Collection
Diary prompts for participant reflection were distributed online via Qualtrics® at predetermined intervals during the 4- or 8- week clerkships

Data Analysis
Was ongoing using reflexive thematic approach and guided by UBC advocacy framework to identify themes

Thematic Analysis Results

1 Health Education

"Educating patients and friends on the science behind mask-wearing, hand-washing and social distancing
- PY3 Student"

2 Health Promotion

"I encouraged and gave the patient tips on making healthier lifestyle choices and the importance of continuing this change"
- PY2 Student

3 Usual Pharmacist Care

"advocate on behalf of their profession. This entails understanding legislative issues that affect the things pharmacists can do in their scope of practice.."
- PY3 student

"through providing medication reviews. I am able to clarify any questions my patients have regarding their medication and identify their needs."
- PY2 Student

5 Professional Advocacy

"recognizing coverage options available. We regularly fill out special authority forms and follow-up with doctors to make sure they are approved for the patient"
- PY2 student

4 Continuity of Care

SYSTEMS + POLICY

SHARED ACTIVISM | DIRECTED ACTIVISM
SHARED AGENCY | DIRECTED AGENCY

ADVOCACY "WITH"

ADVOCACY "FOR"

INDIVIDUAL

UBC Health Advocacy Framework [1]

Synthesis

- Acts of usual pharmacist care were often overemphasized as health advocacy acts
- Pharmacy students mischaracterized self-reported practice examples into inappropriate categories of the UBC health advocacy framework
- No systems level advocacy activities were undertaken, but students identified barriers, such as limited timeframe

Implications

- Longer training periods in community pharmacy may allow for building relationship and thus more opportunities for advocacy

References
1. Hubinette, M., Dobson, S., Scott, I., & Sherbino, J. (2017). Health advocacy. Medical Teacher, 39(2), 128-135.
2. AFPC. (2017). Educational outcomes for first professional degree programs in pharmacy (Entry-to-Practice Pharmacy Programs) in Canada.
3. Braun V, Clarke V. Using thematic analysis in psychology. (2006). Qual Res Psychol, 3: 77–101.