

# **2008 APTR Institute for Interprofessional Prevention Education Final Team Project Report**

## **Massachusetts College of Pharmacy and Health Sciences, Boston, MA**

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1. The IPE prevention initiative, “Lifestyle modifications and enhanced medication efficacy in older adults at risk for cardiovascular disease”, developed and implemented a health promotion curriculum to educate an interprofessional team of health professional students in community-based interventions to prevent or slow the progression of cardiovascular disease in older adults. Students enrolled were from programs of medicine (pre-medical) - 3, nursing - 2, pharmacy - 3, and health psychology - 2. Faculty represented all professions: Marie Dacey, EdD (Health Psychology), William McCloskey, PharmD (Pharmacy), Judy Murphy, PhD, RN, CNE (Nursing), Delia Anderson, PhD (Pre-medical studies). There was no existing core IPE faculty team prior to this project

2. Original goals were to:

- Develop knowledge and understanding of healthcare interprofessional teams and each member’s contributions to patient care.
- Increase knowledge of human development to include health promotion and disease prevention practices in older adults that may reduce risk of and/or help manage cardiovascular disease.
- Identify recommended lifestyle modifications in the areas of nutrition and physical activity that target age-specific needs and enhance medication efficacy in older adults.
- Identify patient-centered counseling strategies that support autonomy and foster healthy behaviors in older adults.

This project addressed secondary and tertiary prevention needs.

Educational methods included service-learning, pre/post community site visit discussions, web-based instruction and team collaboration, and classroom didactics. Students met once weekly throughout the 14-week Spring 2009 semester for didactic training or to participate in community-based activities through on-site visits to a senior care, assisted living facility. Didactics included discussion of ageism, healthy aging, cardiovascular health promotion, community needs assessment, interprofessional communication, team building skills, and health behavior counseling. Teaching methods included lecture, role play, case studies, peer editing, oral and poster presentation and discussion. A faculty member from each profession shared teaching and research responsibilities. All students were required to complete HIPAA and Protecting Human Research Participation (NIH Office of Extramural Research) training.

Each student was assigned to one of two teams at the beginning of the semester. After conducting a community needs assessment with staff and residents at the senior care facility, two 5-student interprofessional teams developed and delivered health education programs, each team developed and implemented a community-based project at the senior facility that targeted health promotion and disease prevention practices in older adults to reduce risk of and/or help manage cardiovascular disease. Development of interprofessional team skills were supported through this process. Team collaboration and processes were closely monitored through their established pbwiki.com web pages. This website facilitated communication and sharing of resources among team members, faculty and class participants. Faculty and staff supervised student contact with residents at the facility.

In addition to project proposal and implementation, additional course requirements included a professional role literature search, journal entries, and poster presentation. The professional role literature assignment summarized findings of review and reflected on the role of his/her profession on an interprofessional healthcare team. Students submitted a paper that summarized this literature and offered reflections on how this learning could be utilized in their future professional practice. Students posted these papers and shared their findings in class. Students periodically reflected on course objectives in light of assigned readings, class discussion, evolving project, and experiences. Questions were intended to promote self-reflection on team process and project implementation; engagement with the elderly; and communication challenges and facilitators. Upon completion of project implementation, students presented their findings in a school-wide poster session.

Each student earned 3 credits through registering for courses already offered by their respective programs: Directed Study (Pharmacy), Capstone seminar (Pre-med), or Independent Research Project (Nursing and Health Psychology)

3. The project progressed as planned and it was completed on schedule, concluding in May, 2009. There were a total of 10 students involved.

We originally thought that teaching would be divided fairly evenly between interprofessional team building and didactics related to health promotion with older adults. Proportionately more effort was devoted to interprofessional team building skills than anticipated.

One unexpected positive outcome was the overall success and reported impact of the two health promotion programs that the students presented at the senior care facility. The site coordinator reported during a 4-month follow-up phone interview that the residents at the facility continue to exercise, make more informed choices on foods, are a more cohesive group than prior to IPE project intervention, provide support for one another and use peer pressure to encourage one another to make healthier choices, and appear to have a more “positive spin on life”.

A second unexpected positive outcome was the faculty interprofessional team became stronger throughout the project. We realized that we were modeling for the students interprofessional team collaboration at its best.

A third unexpected positive outcome was that the two undergraduate psychology students on the team presented a poster on the project after its completion at the New England Psychological Association annual conference in October, 2009.

There were no unexpected negative outcomes.

The most successful instructional strategy was creating interprofessional teams at the beginning of the course and giving them a community-based project to independently develop, implement, and evaluate. This strategy compelled the teams to address team challenges and barriers while focusing on real issues with real deadlines, etc.

Optimally, students would have more knowledge about human development and health promotion needs of older adults before the course; or the course would be extended to allow more time for these topics as part of the didactic portion.

4. Although the community site was extremely receptive to the students and well-suited for the project, in retrospect we might have looked for another site which was geographically closer to the college, as it was a challenge for the students to travel by car and public transportation to get there, especially given their diverse busy schedules.

5. Given our experience thus far, the preparation we received through the APTR Institute was appropriate.

6. The major challenges we faced were:

- scheduling conflicts among students; individual program requirements made it difficult for students to meet consistently in an interprofessional course
- not having a designated IPE course number challenged us to creatively assign existing course numbers in individual programs for the various students involved in the course so everyone could get 3 credits
- convenient transportation and travel to the community site in the midst of already busy school days
- fitting in all didactics related to aging and health promotion while cultivating interprofessional understanding and collaboration

7. To evaluate the effectiveness of this project we conducted pre/post assessments of student attitudes toward interprofessional learning and knowledge of health promotion recommendations specific to older adults. We compared changes in the 10 students enrolled in the course with a control group of 10 randomly selected students who matched the enrolled students for year and program. Scales utilized were the Readiness for Interprofessional Learning Scale/RIPLS (Reid et al., 2006) and the Geriatric Knowledge Scale (Dacey et al, unpublished). We also conducted qualitative analysis of four reflective journals and final comments that students in the course submitted throughout the semester. The use of reflections as a valid measure to assess changes related to educational interventions is supported in the literature (Clark, 2009).

As the intervention group was not randomly assigned, but rather self-selected since students volunteered to participate in the program, quantitative results revealed some expected biases.

For example, the students enrolled in the project had significantly more positive attitudes toward team collaboration compared to controls both pre and post intervention ( $p < .001$ ). These students also reported a higher level of belief compared to controls both pre- and post-intervention that they were prepared to meet the needs of the elderly ( $p = .004$ ).

However, on a RIPLS subscale of singular 'professional identity', which measures the orientation towards one's own profession rather than team identity, there was a difference between intervention and control groups only at follow-up which approached significance ( $p = .061$ ). This change suggests that the educational experience had broken down the 'silo' interests that were equally present in both groups before the intervention. A second finding was that pre-intervention the intervention group demonstrated a strong and significant negative correlation; between the RIPLS subscale of 'patient-centeredness' and 'professional identity' ( $r = -.0771$ ;  $p = .009$ ), suggesting that students who had a higher investment in their own professional identity were less likely to be patient-centered. However, at follow-up, this correlation was neither as strong nor significant ( $r = -.051$ ;  $p = .889$ ), suggesting that after the course, students who had high investment in their own professional identity were also somewhat more likely than previously to be patient-centered.

Qualitative findings supports trend toward changes noted in the quantitative data. The themes that have been identified as areas of development as a result of the interprofessional education course are 1) increased communication & respect among professions; 2) increased confidence to function as a professional on an interprofessional healthcare team; and 3) a more positive attitude toward older adults.

8. Institutional changes associated with our involvement with the IPE project have included:

- Establishment of IPE as a priority for development at the college
- Establishment of an IPE advisory committee with the charge to develop and foster IPE initiatives throughout the college
- Enhancement of School of Arts & Sciences curricula to include IPE programming at the pre-professional level
- Faculty development seminar offering to all faculty by APTR IPE faculty to stimulate discussion of inclusion of IPE within existing courses

9. At this point we have not developed any new products that are appropriate to upload to the APTR Prevention Education Resource Center PERC website.

10. The Vice-President of Academic Affairs is strongly supporting expansion of IPE education at our institution. Interprofessional prevention education committees are beginning to form, e.g. the dental hygiene program is developing an initiative on oral health, and the Schwartz Center Educational Rounds, which provide interprofessional forums to address patient-centered care and communication, are going to be offered on all three college campuses within this academic year. In the future we hope to acquire a larger grant that will support another interprofessional initiative involving more students and community-based service learning.