University of Missouri-Kansas City

Student Attitudes and Readiness Outcomes of a Community-Based Interprofessional Education Program Focused on Practice and Change Innovation – Year 1
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Background:

• Extended student experiences at two urban community clinics

• IP healthcare teams of Advanced Practice Nursing, PharmD and Dental students

• Students gained advanced knowledge and skills in caring for vulnerable populations

• First clinically-based IPE course at UMKC
Methods:

• Community team building
  recruited nurse practitioners to precept students

• Primary care collaboration in two urban clinics
  Community based and Federally funded health center

• Community of practice

• Students guided by knowledge rather than by task

• Student skills and expertise based on professional roles in patient assessment
Methods:

• Pre-clinical modules focused on four IPE goals:
  • roles/responsibility
  • values/ethics
  • IP communication
  • teams/teamwork
  • plus diversity
• Emphasis on working with vulnerable populations
Methods: Students and Providers

• *Readiness for Interprofessional Learning Scale* – pre-clinical

• *Interprofessional Collaboration Scale* – post-clinical

• *Attitudes Toward Health Care Teams Scale* – pre/post

• *Team Skills Scale* – pre/post

• *Cultural Competence Assessment* – pre/post

• Focus groups - post
Preliminary results: After 1st semester rotations:

- 4 NP students
- 8 Pharmacy students
- 2 Dental students
- 12 females, 2 males
- 93% White, 7% Mixed
- 30 years old (mean, 22-49 range)
- 22.7 days (mean, 17-36 range) on rotation
Preliminary results – patients seen – Clinic 1

Small, young community-based health center:

- 2 NP students, 4 Pharmacy students, 2 Dental students
- 221 patients seen (67% female; 0 - 65+ yrs)

Race/Ethnicity

- White: 26
- Black: 66
- Hispanic: 5
- Asian: 1
- Other: 2

Most Frequent Diagnoses
- 26 – Essential Hypertension
- 24 – General medical exam
- 20 – Health supervision infant/child
- 16 – Diabetes Mellitus
- 11 – General Symptoms
- 10 – Other Disorders, Joint
- 10 – Other Disorder, Back
- 10 – Abdominal/pelvic symptoms
Preliminary results – patients seen – Clinic 2

Large, urban federally-qualified healthcare center:

- 2 NP students, 4 Pharmacy students
- 490 patients seen (66% female; 0 - 65+ yrs)

**Race/Ethnicity**

- White: 45
- Black: 13
- Hispanic: 6
- Asian: 10
- Other: 26

**Most Frequent Diagnoses**

- 75 – Health supervision infant/child
- 64 – Vaccination
- 54 – General medical exam
- 53 – Essential Hypertension
- 32 – Normal pregnancy
- 25 – Special investigation/exam
- 20 – Secondary Diabetes Mellitus
- 20 – Disorders of lipoid metabolism
Preliminary results – students (n=14)

- **Readiness for Interprofessional Learning Scale** (McFadyen et al., 2005)
  - 19 items, 1 = strongly disagree to 5 = strongly agree
  - Administered at baseline

Students showed very high readiness to participate on IPCP teams, and a very high level of openness to learn from/with other students.
Preliminary results – students (n=11)

- **Interprofessional Collaboration Scale** (Kenaszchuk et al., 2010)
  - 14 items, 1 = strongly disagree to 4 = strongly agree
  - Administered at end of rotation

Students reported high levels of communication among team members, high cooperation and collaboration, and low professional isolation.
Preliminary results – students (n=10)

- **Team Skills Scale** (Hepburn, Tsukuda, & Fasser, 1998)
  - Assesses team members’ perceptions of their own skills
  - 17 items rated on 5 pt scale, 1=Poor, 2=Fair, 3=Good, 4=Very Good, and 5=Excellent (possible range 17 – 85)
  - Administered at baseline and end of rotation

Students reported significant increase in perceived team skills

\( t = 2.397, p = .04 \)

- Pre: 60.6
- Post: 69.8
Student Feedback

Conducted focus group after 1st rotations:

- We [nursing and pharmacy] have different guidelines we follow. [Great to] discuss why and how we do this….get to same goal but learned differently. I was thinking ‘this is my specialty’ but they knew things I didn’t know and I could go to them for answers.

- Never experienced a patient who wasn’t grateful to have both professions. They were thankful and felt confident of the treatment plan

- Even if I don’t continue in an IPCP, I will approach things differently, instead of assuming what each other knows.
Student Feedback

Conducted focus group after 1st rotations:

- Working with the same people on a regular basis helped, then we knew their style and how they interact with patients.

- Liked working on patient case presentations. Allowed us to work together. It would be nice to have more of these, perhaps on specific disease states or drug presentations.
Provider Feedback
Conducted focus group after 1st rotations:

• [Could see it was an] eye opener to the students, to see what each other does.

• Pushing pharmacists into role of talking to patients, success for them to see aspects of care they’d never see in a pharmacy.

• Helpful to patients who don’t know how to take meds correctly. Good to have 1:1 with patient and pharmacists versus in pharmacy atmosphere…more personal and comfortable for patients.

• I knew pharmacy’s role, and had to coax them into taking extra steps at first. Worked best if both [pharmacy and NP] students in room at the same time with patient…they complemented each other.
Provider Feedback

Conducted focus group after 1st rotations:

• A big thing with students or healthcare professionals is they are scared to consult. So, great that the students see it is acceptable to ask, and see that no one person knows everything.

• Pharmacy and NP students learned and benefitted from having pharmacy preceptors there to ask questions.

• [A barrier was] having all of the people in the same room [NP student, pharmacy student, provider, patient, patient’s parent, translator], and have a pleasant patient experience, and still include education for students.
Results:

• Team informed care decisions
• Acquiring new perspectives regarding vulnerable patient populations
• Improved communication through interactions with team members
• Opportunities to serve as change agents within own professions
Results:

- Instilled confidence in challenging situations
- Overcoming preconceived assumptions
- Established a platform for open and honest communication
- Integral to team socialization
- Impacted health delivery and desired outcomes
Conclusions:

• Project ongoing in the community
• Outcomes guiding IPE curriculum development
• Challenges occurred regarding scheduling
• Challenges regarding recruitment of APRNs
• Smaller clinical teams advantageous for team cohesiveness
• Flexibility paramount
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Questions?

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References:


