



A MULTI-PERSPECTIVE EVALUATION OF AN INTERPROFESSIONAL INTRODUCTORY PHARMACY PRACTICE EXPERIENCE INTEGRATED IN A FEDERALLY-QUALIFIED HEALTH CENTER

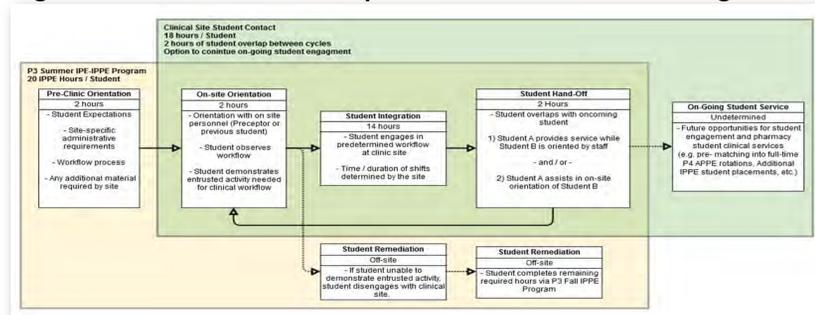
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BACKGROUND

The Interprofessional Provider IPPE Program (IP-IPPE):

- Third-year pharmacy students engage in 20-hours of experiential-based interprofessional clinical teamwork.^{1,2}
- In 2016, the program incorporated a new model by which cadres of pharmacy students were assigned to a Federally Qualified Health Center (FQHC) over the summer months.
- Students were expected to be incorporated into patient care by providers using an entrustable professional activity framework (figure 1).

Figure 1: 2016 Model for Interprofessional Provider IPPE Program



Salud Family Health Center – Commerce City, CO

- Part of a large system of Federally Qualified Health Centers providing primary care in mostly rural Northeastern Colorado.
- Eight out of 12 providers (MDs, FNP, and PAs) agreed to precept pharmacy students for IP-IPPE.
- Clinical pharmacists have been part of medical team for years, and provide wide range of services.

METHODS

Clinic Chart Review

- A retrospective chart review of 200 (39%) of IP-IPPE patient encounters

Provider Survey:

- Mix-methods survey data from providers describing the value of the IP Provider IPPE Program

Student Self-Assessment of Learning

- Participating students completed the Interprofessional Collaborative Competencies Attainment Survey (ICCAS)³

Provider Assessment of Student Learning

- A retrospective analysis of student performance as documented by the assigned Provider Preceptor

This study was approved by the Colorado Multi-Institute IRB.

FINDINGS

Figure 2: Demographics Encountered by Students

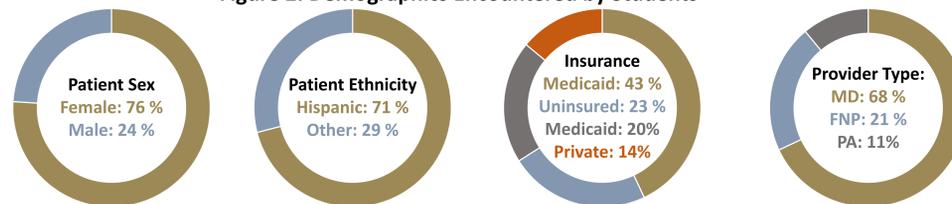


Figure 3: Commonly Encountered Diagnoses and Medication Classes

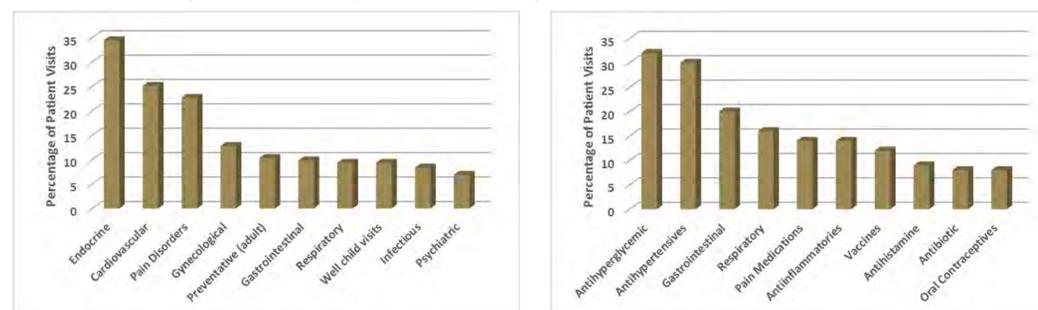


Table 1: Provider Survey Responses

| Item | Mean | Min | Max |
|---|------|-----|-----|
| The majority of my interactions with pharmacy students have been positive | 5 | 5 | 5 |
| My patients benefited from having interactions with pharmacy students | 4.8 | 4 | 5 |
| Pharmacy students in clinic improve the value of service provided | 5 | 5 | 5 |

Response scale: Strongly Disagree (1) – Strongly Agree (5)

Table 3: Provider Assessment of Student Outcomes

| Item: "The learner . . ." | Mean |
|--|------|
| 1. communicates respectfully with members of other health professions (communication) | 4.55 |
| 2. communicates with members of other health professions in a way they can understand, without using profession-specific jargon (communication) | 4.34 |
| 3. demonstrates an understanding of the roles and responsibilities of members of other health professions as related to care (respect) | 4.53 |
| 4. offers to help members of the other health professions when caring for patients (altruism and caring) | 4.47 |
| 5. coordinates with other health professions, patient/client, family, and caregivers to produce an optimal plan of care (excellence) | 4.42 |
| 6. contributes to decisions about patient care regardless of hierarchy / profession-based boundaries (excellence) | 4.42 |
| 7. works collaboratively with members of other health professions to resolve conflicts that arise in the context of caring for patients/clients (ethics) | 4.08 |
| 8. seeks clarification from members of other health professions about unclear information (accountability) | 4.45 |
| 9. works with members of other health professions to identify and address errors and potential errors in the delivery of care | 4.21 |

Response scale: Strongly Disagree (1) – Strongly Agree (5)

Table 2: Student Self-Assessment

| Item: "I was able to . . ." | Before | After |
|--|--------|-------|
| 1. Promote effective communication among members of an interprofessional (IP) team | 3.24 | 3.96 |
| 2. Actively listen to IP team member's ideas and concerns | 3.64 | 4.2 |
| 3. Express my ideas and concerns without being judgmental | 3.6 | 4.24 |
| 4. Provide constructive feedback to IP team members | 3.24 | 3.84 |
| 5. Express my ideas and concerns in a clear, concise manner | 3.4 | 4 |
| 6. Seek out IP team members to address issues | 3.24 | 3.96 |
| 7. Work effectively with IP team members to enhance care | 3.28 | 4.08 |
| 8. Learn with, from and about IP team members to enhance care | 3.32 | 4.24 |
| 9. Identify and describe my abilities and contributions to the IP team | 3.24 | 3.96 |
| 10. Be accountable for my contributions to the IP team | 3.24 | 4.08 |
| 11. Understand the abilities and contributions of IP team members | 3.4 | 4.36 |
| 12. Recognize how others' skills and knowledge complement and overlap with my own | 3.4 | 4.2 |
| 13. Use an IP team approach with the patient to assess the health situation | 3.24 | 4.04 |
| 14. Use an IP team approach with the patient to provide whole person care | 3.28 | 4.04 |
| 15. Include the patient/family in decision-making | 3.28 | 4 |
| 16. Actively listen to the perspectives of IP team members | 3.52 | 4.24 |
| 17. Take into account the ideas of IP team members | 3.4 | 4.12 |
| 18. Address team conflict in a respectful manner | 3.32 | 3.84 |
| 19. Develop an effective care plan with IP team members | 3.24 | 4 |
| 20. Negotiate responsibilities within overlapping scopes | 3.24 | 3.8 |

Response scale: Poor (1) – Excellent (5)

RESULTS

Clinic Chart Review

- Thirty-two students were precepted by 8 different providers (3 MDs, 3 FNPs, 2 PAs) over the course of 3 months.
- Students engaged with 516 patients (11% of all clinic patients) during the program time-frame (Figures 2 and 3)
 - A medication was started in 44% of visits, stopped in 8% of visits, and changed in 11%. Documented medication education was performed in 12% of visits.

Provider Survey

- Students had a positive impact on providers, as evidenced by survey results from 6 (75%) of preceptors (Table 1), as well as increase in enrolled preceptors the following year.
 - Providers endorsed value-added student roles occurring in clinic, including: conducting medication reconciliations, researching drug information, and providing medication education.

Student Self-Assessment of Learning

- Mean responses by 25 students (78% response rate) demonstrate improvement in every measure of the ICCAS instrument (Table 2).
- 22 (69%) of students indicated the experience significantly contributed to their development as interprofessional team members.

Provider Assessment of Student Outcomes

- All students successfully demonstrated the targeted clinical interprofessional teaming behaviors (Table 3).
- All providers indicated they would trust their assigned student to be a member of their interprofessional team.

CONCLUSIONS

- This innovative service allows pharmacy students the opportunity to compliment the roles of other professions in the healthcare team.
- This program allows other healthcare professionals to work with pharmacy students and learn what pharmacists can bring to a team.

REFERENCES

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2. Nuffer W, Gilliam E, McDermott M, and Turner CJ. Am J Pharm Educ. 2015;79(5) Article 62
3. Archibald D, Trumpower D, and MacDonald CJ. J Interprof Care. 2014;28*(6):553-8