An Interprofessional Clinical Integrations Pilot Program: Integrating Third-Year PharmD Students into Family Medicine Clinics

Eric H Gilliam PharmD; Kari L Franson PharmD, PhD
Arian Hilsendager, FNP; Erin Hagermam, PA
Benjamin Krikley, MD; Benjamin Chavez, PharmD

CU School of Pharmacy and Pharmaceutical Sciences – Aurora, CO
and
Salud Family Health Center – Commerce City, CO
Objectives

1. Describe the University of Colorado Clinical Integrations Program Vision

2. Describe the CU School of Pharmacy Clinical Integrations Pilot
   » Create value-added student placements in interprofessional settings
   » Optimize student placements for a win-win for both school and clinic
   » Evaluate success of the first pilot
CU IPE Program: New Focus on Clinical IPE

CU IPE Program

Classroom
Simulation
Practice

CI Phase 2: Learners contributing to IP care in roles common to their profession

Phase 1
Phase 2
Clinical Integrations: School of Pharmacy CI Phase 2 Pilot

- History:
  - CU SOP has placed students into primary care settings intentionally to learn from primary care providers since 2002\(^1\)
  - Colorado statues changed to allow non-pharmacist providers to supervise pharmacy interns in clinical work

The Pitch

Clinical Site: Student Contact
18 hours/Student
2 hours of student overlap between cycles
Option to continue ongoing student engagement

P3 Summer IPPE-IPPE Program
20 IPPE Hours/Student

Pre-Clinic Orientation
2 hours
- Student Expectations
  - Site-specific administrative requirements
- Workflow process
- Any additional materials required by site

On-site Orientation
2 hours
- Orientation with on-site personnel (Preceptor or previous student)
- Student observes workflow
- Student demonstrates entrusted activity needed for clinical workflow

Student Integration
14 hours
- Student engages in predetermined workflow at clinic site
- Time/duration of shifts determined by the site

Student Hand-Off
2 Hours
- Student overlaps with oncoming student
  1) Student A provides service while Student B is oriented by staff
     - and/or-
  2) Student A assists in on-site orientation of Student B

On-Going Student Service
Undetermined
- Future opportunities for student engagement and pharmacy student clinical services
  (e.g., pre-matching into full-time P4 APPE rotations, Additional IPPE student placements, etc.)

Student Remediation
Off-site
- If student unable to demonstrate entrusted activity, student disengages with clinical site.

Student Remediation
Off-site
- Student completes remaining required hours via P3 Fall IPPE Program
The IP Team

- Salud Family Health Center – Commerce City, Colorado
  - IP Primary Care Team Preceptors
    - Physicians
    - Nurse Practitioners
    - Physician Assistants
    - Clinical Pharmacist (Non-precepting role)
  - 21 Students:
    - Summer between 2nd and 3rd year students
SOP Student Roles and Interactions

Methods: IP Preceptor Debrief

» What roles did students have that were valuable to you?
  » Gathering HPI at start of visit
  » Conducting medication reconciliation
  » Identifying routine vaccinations needs
  » Counseling parents during wellness checks regarding OTC products (pediatric dosing)
  » Researching drug/dose information when creating plans
  » Following-up on prior authorization requests
Student Performance

- 9-item assessment with 5-point scale
- 1 global assessment item with Yes / No Response

“I would trust this individual to be on an interprofessional team”

![Mean Student Scores](chart1.png)

![Trust](chart2.png)
Student Evaluation of Experience

- Overall incredibly positive:
  - 100% of participating students agreed, he/she.
    - would recommend the experience to peers
    - felt they contributed directly to improved patient care
    - felt encouraged by their provider preceptor
    - participated in direct-patient care discussions with providers
    - described the provider preceptor as invested in the education of pharmacy students
# Student Reported Data Upon Completion

## Patient engagement

<table>
<thead>
<tr>
<th></th>
<th>Student Mean</th>
<th>Range</th>
<th>Program Cumulative Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of patients seen</td>
<td>20.6</td>
<td>10 – 26</td>
<td>est. 450</td>
</tr>
</tbody>
</table>

## Student confidence in working with an IP Team

<table>
<thead>
<tr>
<th>Mean level of confidence</th>
<th>Start</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.38</td>
<td>3.27</td>
</tr>
</tbody>
</table>

Retrospective pre-post assessment using a 4-point scale
Conclusion

- We learned:
  - Creating shared expectations across students and providers resulted in:
    - Increasing patient care opportunities for students
    - Increasing value of the student
    - Maintaining sustainability and consistency of the experience throughout the pilot
  - Providers trust students as IP team members