Practice Session:
Integrating Students into Interprofessional Practice

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Questions to Run On

- What settings work well for placement of IPE students?
- What are some challenges to establishing IPE programs, and solutions that have worked or appear promising?
HELP WANTED!

- Underserved / Safety Net
  - Limited resources (e.g., patient care space, supplies)
  - Limited specialists
  - Economy ↓, Demand ↑
  - Challenging barriers (literacy, culture, poverty)
  - ↑ stress / burnout → ↑ rate of provider turnover

- Geriatrics
- Psychiatry
University of Southern California
Safety Net IPE Programs

SHARE: SC MedWatch
To SHARE a helping hand.
The CHANCE for renewed life.

PharmD-initiated, MD, PA (8 yrs)

2 months

The USC Student-Run Clinic
A Patient-Centered Interdisciplinary Collaborative

MD, OT, PA, PharmD, PT (3 yrs)
Measuring IPE Student Impact

- Nationally-aligned measures of healthcare quality:
  - National Quality Forum and guidelines
  - PCMH, ACO, Meaningful Use standards

- Measures specific to certain disciplines that capture key services
### I. MEDICATION-RELATED PROBLEM (MRP)\(^1\)

#### Appropriateness and Effectiveness

1. Untreated medical problem
2. Drug dosing not adequate for treatment goals (dose, interval, or duration)
3. Treatment not optimal based on current evidence / guidelines
4. Monitoring standards not being followed

#### Safety (pADE / ADE)

5. Drug dosing excessive for treatment goals (dose, interval, or duration)
6. Incomplete / improper directions
7. No indication for medication prescribed
8. Polypharmacy (Rx not needed) / duplication
9. Contraindication
10. Adverse drug reaction (ADR)
11. Allergy
12. Drug interaction
13. Lab/diagnostic test indicated, not ordered

#### Nonadherence and Patient Variables

14. Abnormal lab result not addressed
15. Pharmacy / dispensing error
16. Medication overuse or misuse
17. Dose discrepancy between patient use & prescribed therapy
18. Using expired medication(s)

#### Miscellaneous

19. Medication underuse / poor adherence
20. Dosage form is not reasonable for patient
21. Inadequate patient self-management of lifestyle and other non-drug variables
22. Patient dissatisfied or refuses treatment, no rational reason given
23. Drug not available in prescribed strength
24. Inadequate refills between scheduled visits
25. Nonformulary / not cost effective drug choice
26. Illegible prescription
27. No follow-up appointment with PCP
28. Other
Medication-Related Problems Identified Through Student-Providing Medication Reconciliation (N= 360)

- 6% Drug interaction
- 38% Medication Safety (pADEs & ADEs), N=136
- 45% Nonadherence, N=163
- 11% Misc, N=38

Medication Safety Problems (N=136)
- Dose discrepancy... 51
- Duplication 25
- Med overuse or misuse 26
- Adverse drug reaction 12
- Drug dosing excessive 8
- Incomplete directions 6
- Allergy 2
- No indication 3
- Drug interaction 1

Appropriateness & Effectiveness, N=23

Nonadherence, N=163

Misc, N=38
### Overall Impact of Pharmacist and Student Intervention on Improving vs. Worsening of Asthma Control (N=143)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Likelihood of Improving vs. Worsening of Asthma Control Status. Multivariate <em>Logistic</em> Regression</th>
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<tbody>
<tr>
<td></td>
<td>Odds Ratio</td>
</tr>
<tr>
<td>Pharmacist Intervention group (vs. Usual Care)</td>
<td>2.885</td>
</tr>
<tr>
<td>Gender Male (vs. Female)</td>
<td>1.321</td>
</tr>
<tr>
<td>Asthma Comorbidities Yes (vs. No)</td>
<td>1.587</td>
</tr>
<tr>
<td>Psych Comorbidities Yes (vs. No)</td>
<td>0.783</td>
</tr>
<tr>
<td>Age</td>
<td>0.982</td>
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<tr>
<td><strong>ACT initial score</strong></td>
<td><strong>1.075</strong></td>
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<tr>
<td>Smoker</td>
<td>1.261</td>
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<tr>
<td># of total visits</td>
<td>1.051</td>
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<td># of days btw final and initial</td>
<td>1.000</td>
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**Student Intervention:** Monthly asthma education class for intervention group patients
Who We Are

200+ Student Volunteers
25+ Preceptors

4 Health Professions
Medicine
Occupational Therapy
Pharmacy
Physician Assistant

2 Clinic Sites
LAC + USC Urgent Care
Eisner + USC Med Center
Who We Are

We are students working together in interprofessional care teams to help deliver comprehensive care to the chronically ill and underserved population of Los Angeles.

Care Team
1 Clinic Coordinator
2 Medical Students
2 Pharmacy Students
1 OT Student
1 PA Student
Supervising Faculty

Patient Services
Preventative Screening
Lifestyle Modification
Medical Assessment
Medication Therapy Mgmt
Medical Home Linkage

Cycle Time
70 Min per Patient
The USC Student-Run Clinic: Focused Assessment Protocol
Eisner Family Medicine Center at California Hospital

STEP 6. PATIENT SELECTION

**Coordinator**
1. Review patient charts.
2. Select patients.
3. Confirm selection with attending physician.
4. Call patient from waiting room.
5. Provide patient with Wellness Questionnaire and AHRO Form.

**Inside Patient Room**

**Step 1. Chart Review - 10 Minutes**
1. Fill out OT Questionnaire.
2. Fill out AHRO MPSS questions.
3. Coordinator brings completed OT Questionnaire to the OT Student and completes AHRO MPSS to the Pre-Clinical MS.
4. Coordinator room the patient.

**Step 2. Pre-Assessment - 5 Minutes**
1. Obtain vital signs.
2. Ask AHRO MPSS screening questions.
3. Encourage patient to exam room once ready.

**Step 3. Medication Reconciliation - 10 Minutes**
1. Review patient chart with Clinical Medical Student.
2. Prepare focused interview questions and components of the physical exam based on patient chart.

**Step 4. Assessment - 15 Minutes**
1. Prepare for interview with MS3.
2. Prepare with MS4.
3. Prepare with attending physician.

**Step 5. Occupational Therapy - 5 Minutes**
1. Use OT Assessment Form to discuss potential OT goals and patient's willingness to change.

**Step 6. Planning - 10 Minutes**
1. Review planning.
2. Generate problem list.
3. Come up with treatment and follow-up plan.
4. Decide who goes back in to see the patient.

**Step 7. Treatment & Follow-Up - 10 Minutes**
1. Explain necessity of preventive services.
2. Perform preventive screenings.

**Step 8. Occupational Therapy - 15 Minutes**
1. Review Wellness Questionnaire.
2. Create OT goals.
3. Discuss multiple modifications if needed.
4. OT can move patient to separate room if necessary to clear exam area.

**Linkage**
1. Explain and negotiate follow-up plan with patient.
2. Obtain necessary follow-up plan with attending physician.
3. Ensure that patient has adequate resources for follow-up.

**Care Team Members**
1. MS1
2. MS2
3. Pharmacy Student
4. Occupational Therapy Student
5. Clinic Team Coordinator (MS1)
6. Clinical Medical Student (MS3/4)
7. Supervision: Attending Physician

**Updated: 9/12/12 - J. Li**

The USC Student-Run Clinic
A Patient-Centered Interdisciplinary Collaborative
Stand Together

The Clinic Protocol
Questions to Run On

- What settings work well for placement of IPE students?
- What are some challenges to establishing IPE programs, and solutions that have worked or appear promising?
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• Collect and share outcomes reflecting value (quality, safety, patient perception) |
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| Space                                                  | Break up students into smaller groups to focus on different themes at each visit |
| Limited practice models that match IPE models          | Lead by example, walk the talk                                           |