Different Strokes for Different Folks

Reaching students in group activities to learn from and about each other’s professions
Workshop Structure

• 40 minutes, 10 minutes per program
• 5 minutes break into small groups
• 45 minutes discuss and plan your own program
Different Approaches

- **UNMC**: “Using Interactive Role Play to Teach IP Geriatric Care”
- **KUMC**: “Building an IP Geriatric Care Program through TeamSTEPPS“
- **UTSW**: “An IP Introduction to Long-term Care”
- **VCU**: “Large scale longitudinal team-based virtual problem solving”
UNMC: Geriatric Team-Based Care Objectives

• Develop an IP care plan integrating their discipline’s plan with that of other professions.

• Identify 3 types of professional competencies:
  – complementary competencies unique to a profession;
  – common competencies held by more than one profession;
  – IP collaborative competencies e.g. team skills, communication skills, and an understanding of roles and responsibilities.

• Use SBAR tool to structure IP communication

• Improve orientation toward IP care compared to multidisciplinary care.
The Student Activity: Pre-work

- Online modules Team Work and Communication, IHI or TeamSTEPPS (Includes SBAR)
- Review the case provided as Situation and Background from individual professions perspective.
- Formulate your Assessment and Plan
The Student Activity: Small Groups

Session will produce:

• A care plan for a hypothetical older adult from the perspective of each profession on the team.
• A customized IP care plan for the same patient.
• Improved student knowledge of professional competencies.
• Improved student orientation and trust toward IP team-based care.
The Student Activity: Small Groups

• One student serves as team leader. A student from a profession with one representative. Facilitator coaches the leader.

• PART 1. Students from each profession use SBAR to develop a Rx plan from that profession’s perspective.

• Part 2. Work as an IP team to develop a collaborative plan incorporating perspectives of all professions in the team

• Then, compare recommendations of individual professions to the team’s recommendations
# Distribution of Students by Profession

(Proportion completing evaluation \( \frac{342}{382} = 89\% \))

<table>
<thead>
<tr>
<th>Profession</th>
<th>(%) Completing</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician</td>
<td>(96%)</td>
<td>122</td>
<td>35%</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>(86%)</td>
<td>75</td>
<td>21%</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>(100%)</td>
<td>55</td>
<td>16%</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>(89%)</td>
<td>41</td>
<td>12%</td>
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<tr>
<td>Occupational Therapy</td>
<td>(100%)</td>
<td>30</td>
<td>9%</td>
</tr>
<tr>
<td>Physician Assistant</td>
<td>(100%)</td>
<td>17</td>
<td>5%</td>
</tr>
<tr>
<td>Public Health</td>
<td>(42%)</td>
<td>5</td>
<td>1%</td>
</tr>
<tr>
<td>Medical Nutrition</td>
<td>(100%)</td>
<td>3</td>
<td>1%</td>
</tr>
<tr>
<td>Speech Language</td>
<td>(100%)</td>
<td>3</td>
<td>1%</td>
</tr>
<tr>
<td>Social Work</td>
<td>(50%)</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>352</td>
<td>100%</td>
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</tbody>
</table>
Are you Likely to Use SBAR?
Association between Profession and Perceptions of Team Efficiency and Team Trust

![Bar chart showing the association between profession and perceptions of team efficiency and team trust.](image-url)
## Change in Perceptions of Team Functioning Across the Three Phases of Team Development

<table>
<thead>
<tr>
<th>Role Specialization</th>
<th>Multi-Professional</th>
<th>Inter-professional</th>
<th>Trans-professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team roles are specialized and everyone concentrates on her or his own tasks.</td>
<td>Roles are specialized but everyone is expected to interact.</td>
<td>Although roles are specialized, everyone must also be prepared not only to complement, but to replace each other when necessary.</td>
<td></td>
</tr>
<tr>
<td>Before: 12.6%</td>
<td>Now: 1.4%</td>
<td>Before: 71%</td>
<td>Now: 65.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task Inter-dependence</th>
<th>Multi-Professional</th>
<th>Inter-professional</th>
<th>Trans-professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tasks are usually performed in a determined sequence.</td>
<td>Tasks are partly interdependent and must be coordinated.</td>
<td>Team members as well as their tasks are interdependent.</td>
<td></td>
</tr>
<tr>
<td>Before: 9.6%</td>
<td>Now: 3.5%</td>
<td>Before: 63%</td>
<td>Now: 52.8%</td>
</tr>
<tr>
<td></td>
<td>Multi-Professional</td>
<td>Inter-professional</td>
<td>Trans-professional</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td><strong>Coordination</strong></td>
<td>Coordination is based on supervision or standardization within professions.</td>
<td>Every profession has to coordinate their plan with others.</td>
<td>Coordination is achieved by direct close interaction and flexibility.</td>
</tr>
<tr>
<td></td>
<td>Before: 9.9%  Now: 1.5%</td>
<td>Before: 55%  Now: 40.1%</td>
<td>Before: 35.9%  Now: 58.6%</td>
</tr>
<tr>
<td><strong>Role Inter- dependence</strong></td>
<td>Do your job the best way you know.</td>
<td>Do your job and co-operate with other professions.</td>
<td>Do your job in an interactive way with other professions and be ready for continuous adjustments.</td>
</tr>
<tr>
<td></td>
<td>Before: 5.0%  Now: 0.3%</td>
<td>Before: 40%  Now: 21.9%</td>
<td>Before: 55.7%  Now: 77.8%</td>
</tr>
</tbody>
</table>
Materials in the Meeting Notes

- Facilitators Guide
- Profession Specific SBAR tools: Medicine (PA), Nursing, Pharmacy, OT, PT, Nursing, Dentistry, Speech Therapy, Dietetics, Social Work, Public Health
- Evaluation tools: facilitators and students
Join the UNMC Table

A complete, adaptable, effective, and fun approach to IP Education
An Interprofessional Introduction to Long-term Care Activity

Thomas O. Dalton, MD
Assistant Professor, Internal Medicine
Division of Geriatric Medicine
UT Southwestern Medical Center
SAGE Next Steps IPE Activities

Convergence (MS1, HP, RN, Pharm)

Senior Mentor Program (MS1, HP)

Intro to Long-term Care (MS2, HP)

Disclosing Medical Error Simulation (MS2, HP, RN)

Meet the Health Care Team (MS3, HP)

EHR Case-based IP Learning (MS2, MS3, HP)

Eisenberg ACE Service (MS3, MS4, HP, Pharm)
IP Introduction to Long-term Care
UTSW Colleges

- Class of 240 divided into 6 Colleges
  - Colleges divided into small “Mentor Groups” of about 6 students
- Weekly small group sessions for pre-clerkship students (MS1-MS2)
- Monthly small group sessions for clerkship and post-clerkship students (MS3-MS4)
- Help students master competencies in 4 domains:
  - Patient care
  - Communication and interpersonal skills
  - Interprofessional collaboration
  - Professionalism
UTSW School of Health Professions

- Physical therapy
- Clinical nutrition
- Physician assistant studies
- Prosthetics-orthotics
- Clinical rehabilitation counseling
Commitment

- School of Medicine
  - Dean
  - Course Director
  - Facilitators from Geriatric Medicine Faculty
- School of Health Professions
  - Dean
  - Educational Leadership from each school
  - Facilitators from all schools
- Long-term Care Facilities
  - Administrator
  - Director of Nursing
Logistics

• Time/Scheduling
  – What works for most programs?
  – Who is flexible?

• Room
  – 2 long-term care facilities to accommodate numbers and small group space

• Distribution of learners into small groups
  – What’s ideal?
  – What’s acceptable?

• LTC facility resident participation
Objectives and Content (simplified)

• Define “long-term care”
• Describe difference between various sites of care (cost, staffing, functional level of residents, etc.)
• Demonstrate “Get-Up and Go” exam
• Demonstrate ability to perform and interpret a Mini-Cog
• Demonstrate ability to take a social history from an older adult
• Understand the role of IP team members
• Understand basic principles in IP communication
Faculty Development

### Windsor Faculty Guide Pocket Card

**What kind of patients can and cannot stay at this facility?**

- Independent living provides housekeeping, laundry and room service.
- Assisted living provides assistance with ADLs such as dressing and medication administration. Continence care also provided.
- Memory care (3rd and 4th floors) can accommodate patients with dementia. These are locked units to prevent wandering.
- Gardenia “pampered care” (1st floor) can accommodate bed bound patients who require 2 person transfer.
- Patients with needs such as IV lines, telemetry, aggressive wound care, tube feeds, acute rehab cannot be accommodated.

**What are the costs? What do these costs cover? Who pays these costs?**

- Private, out of pocket pay:
  - Independent living: $1,800 – 5,000
  - Assisted Living: $3,000 – 6,200
  - Memory Care: $3,900 – 7,700
- Price dependent on whether the apartment is a studio, one bedroom or two bedroom.

**What are the meals like? What is a patient needs a special diet?**

- Restaurant style dining: Chef can accommodate special diets such as low salt.
- Residents in ALF and ILF need to be able to self feed.
- Residents in memory care and pampered care can obtain help with feeding. Two activity directors or staff.

**What activities are there for the residents to do?**

- Happy hour on Friday afternoon, exercise and fitness classes, worship services, movies, dinner dances. There is a full service hair salon, a dog park, a putting green, and a massage therapist.

**What if a resident wants to go shopping? Transportation?**

- Windsor has 3 vehicles for shopping or doctor appointments. Up to a 10 mile radius is free. Transportation to UTSW, Baylor and Presby are free. $20.00 an hour outside of 10 miles.

**Who gives the medications?**

- Med aid. Training is the same as a CNA (60 hours of classroom and 40 hours of hands on training) plus 2 weeks of additional training in medication administration.

**What happens if the resident gets sick? Is there a doctor in house to see the patient? What happens if there is an emergency?**

- 6 LVNs are on staff during daytime hours. One RN is present during the day and on call by phone overnight.
- There is no doctor in house, though several doctors do house calls to patients. Many patients do not have a doctor that sees them at the facility, and they continue to see their primary doctor in the office. If there is a true emergency, 911 is called and the patient is brought to the ER.

**What happens if there is a medical need in the middle of the night?**

- Staff can call the RN on call, or 911, depending on the acuity of the need.

---

UT Southwestern Medical Center

Funded by the D.W. Reynolds Foundation
Teaching Format: Student Pre-work

- Review syllabus
- Roles & Responsibilities Module
Teaching Format: The Visit
Teaching Format: The Visit
Evalua2ons

IP Communica0on is Important
Syllabus was Good
Visit Well Organized
Valuable Experience

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
Come Join Our Table
The Case of Mattie Johnson:
Using an Interactive Web-based Platform to Address Large Scale Interprofessional Education

Peter Boling, MD
Sarah Hobgood, MD
Thank you

- Peter Boling, MD
- Alan Dow, MD
- Deborah DiazGranados, PhD
- Kelly Lockeman, PhD
- Moshe Feldman, PhD
- Charles Alexander, MA
Interprofessional Education (IPE) is critical to improving health and healthcare delivery.

Providing enriching, longitudinal IPE experiences for large numbers of learners faces a number of barriers. Documenting learning from IPE experiences is especially challenging and of increasing importance for accreditation.

Lawlis et al. JIC. 2014
Virginia Commonwealth University

53 acre Health Science campus
- 5 health professional schools: Allied Health, Dentistry, Medicine, Nursing, Pharmacy
- Tertiary academic medical center
- 3,200 clinical learners
- Variety of schedules and class structures

Monroe Park campus
- School of Social Work, departments of psychology and health & human performance

Distant training sites
- Inova-Fairfax (70 miles north)
- UVA (70 miles west)
- Hundreds of community preceptors
Virtual Case Learning Cycle

1. Receive case information
2. Summarize case data in EHR
3. Answer individual questions
4. Answer group questions
5. Complete peer evaluations

High-Value Learning
Web-based case system infrastructure

• Supports large numbers of learners and teams
• Serves discipline-specific information to participants automatically
• Accepts data from learner into e-chart format
• Stores responses to multiple-answer questions
  – By individuals, and by team
• Stores documented on-line discussion by team
• Captures system-use data for each learner
• Stores 360 peer and preceptor evaluations
User Numbers for Our Case

• ~600 users annually
• Medicine, Nursing, Pharmacy, Social Work
• Plans to include Allied Health (OT, PT)
• Runs 9 - 11 weeks, each semester
• Approximately 50 teams per semester
• Each team has 5-8 students from the 4 different schools, at least 1 from each school
• 2-4 teams per faculty member (1-2 hours/week)
TEAM CHARTER

TEAM: VCU Demo Team 1

PROCUTOR(S):
- Browning, Joel (jlbrowning@vcu.edu)
- Stephens, Christ (jstephens@vcu.edu)
- How, Alan (ahow@mcom-vcu.edu)
- Proctor, Kelly (kellyproctor@vcu.edu)

The goals for the team charter are to facilitate efficient and effective patient-centered care planning AND to create a foundation for a positive, respectful learning experience for ALL team members. Thus, the charter should outline peer expectations regarding group dynamics and processes. At a minimum, team members should discuss AND identify peer expectations regarding the following:

- shared values and goals;
- time management;
- expectations for team member roles and responsibilities, involvement, and/or contributions;
- member contact information and methods of communication;
- conflict management.

1. Shared Values and Goals

Discuss and record principles that represent your team’s core goals and values for this project (i.e., Professionalism, Mutual Respect, etc.):

2. Schedule of Responsibilities/Team Member Contributions:

Module 1: Closes Friday, July 25, 2014 at 11:59:59 PM

- Ensure members complete team tasks:
- Enter profession-specific information by: [ ]
- Answer individual questions by: [ ]
- Answer group questions and complete peer evaluations by: [ ]
- Review and send required team materials by: [ ]

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Case of Mattie Johnson

PATIENT CASE

- Vital Signs
- Recent Medical History
- Past Medical and Surgical History
- Social History
- General Physical Exam
- Functional Status
- Cognitive Status
- Test Results
- Treatment Plan
- Discharge Plan

UNIT QUIZ

1. The problem being considered during Mattie's office visit is the reported urinary tract infection. Based on the available information, which of the following statements are true based on the data?

2. Most of the symptoms noted by the patient are causing concern. To create a list of possible causes, which of the following would be appropriate to assess based on the data?

Test questions

Clinical data
Multiple Answer Questions Generate Points

You are a member of Congress. The Pope says we need a cleaner environment, but my primary donors and constituents make lots of money by degrading it? What should you do. Choose all that apply.

• Homicide • - 5
• Adopt new policy • + 5
• Resign from office • + 3
• Convert to new religion • - 3
• Take a vacation • - 3
• Beg for mercy • - 3
360 Peer Evaluation Tool

Case of Mattie Johnson

EVALUATION SCORE BOX

<table>
<thead>
<tr>
<th>Member</th>
<th>Points Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>5.6</td>
</tr>
<tr>
<td>Unit 2</td>
<td>6.71</td>
</tr>
<tr>
<td>Unit 3</td>
<td>5.8</td>
</tr>
<tr>
<td>Unit 4</td>
<td>8</td>
</tr>
</tbody>
</table>

6 points per member

Your scores

Slider bars, 0-10 points

TEAM MEMBERS

Gregory Hause

Betty Bean - Nursing Student
Chandra Chetty - Pharmacy Student
David Dennis - Social Work Student
Ellen East - Physical Therapist
Joe Franco - Medical Student

VIRGINIA COMMONWEALTH UNIVERSITY
Evaluation Process

Geriatric Content Knowledge

- Questions built in multiple response format
  - Reduced impact of chance
  - More representative of actual patient management decisions
- Calculated knowledge scores
  - Individual scores
  - Team scores

Interprofessional Education

- Team Charter
- Peer Evaluation
- Preceptor Evaluation
Validated

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Individual Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Individual Logins</td>
<td>0.32*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Individual EHR Entries</td>
<td>0.33*</td>
<td>0.32*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Individual Message Board Posts/Replies</td>
<td>0.39*</td>
<td>0.50*</td>
<td>0.28*</td>
<td></td>
<td></td>
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<tr>
<td>5. Individual Message Board Views</td>
<td>0.35*</td>
<td>0.46*</td>
<td>0.25*</td>
<td>0.80*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Team Score</td>
<td>0.18*</td>
<td>0.23*</td>
<td>0.07</td>
<td>0.34*</td>
<td>0.27*</td>
<td></td>
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<tr>
<td>7. Team Size</td>
<td>-0.03</td>
<td>-0.01</td>
<td>-0.10</td>
<td>-0.12</td>
<td>-0.03</td>
<td>0.02</td>
<td></td>
</tr>
</tbody>
</table>

*Correlations significant at $p < .001$

Relationship between Activity & Score

- Correlations between case activity measures and individual total score are moderate but statistically significant ($p < .001$).
- In both years, team interaction in the form of message board posts and replies had the highest correlation with score.
Correlation

- Cumulative peer rating for all students was highly correlated with the cumulative preceptor rating \((r = .60, p < .001)\).

Outcomes

Virtual Case Peer Evaluations

- Peer ratings are highly correlated with preceptor ratings \((r = .60)\).
- Peer ratings are moderately correlated with case activity measures \((r = .39)\).
### Average Percent Correct for Questions in Each AAMC Competency Domain

<table>
<thead>
<tr>
<th>Domain</th>
<th>Fall</th>
<th>Spring</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>0.66</td>
<td>0.64</td>
<td>0.65</td>
</tr>
<tr>
<td>II</td>
<td>0.70</td>
<td>0.68</td>
<td>0.69</td>
</tr>
<tr>
<td>III</td>
<td>0.75</td>
<td>0.69</td>
<td>0.72</td>
</tr>
<tr>
<td>IV</td>
<td>0.82</td>
<td>0.38</td>
<td>0.68</td>
</tr>
<tr>
<td>V</td>
<td>0.75</td>
<td>0.73</td>
<td>0.74</td>
</tr>
<tr>
<td>VI</td>
<td>0.69</td>
<td>0.70</td>
<td>0.70</td>
</tr>
<tr>
<td>VII</td>
<td>0.75</td>
<td>0.74</td>
<td>0.74</td>
</tr>
<tr>
<td>VIII</td>
<td>0.78</td>
<td>0.75</td>
<td>0.77</td>
</tr>
</tbody>
</table>

### Range and Distribution of Overall Average Percent Correct Scores

<table>
<thead>
<tr>
<th>Domain</th>
<th>Mean</th>
<th>Lowest Score</th>
<th>25th Percentile</th>
<th>Median</th>
<th>75th Percentile</th>
<th>Highest Score</th>
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</thead>
<tbody>
<tr>
<td>I</td>
<td>0.65</td>
<td>0.00</td>
<td>0.54</td>
<td>0.67</td>
<td>0.77</td>
<td>1.00</td>
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<tr>
<td>II</td>
<td>0.69</td>
<td>0.32</td>
<td>0.59</td>
<td>0.68</td>
<td>0.76</td>
<td>1.00</td>
</tr>
<tr>
<td>III</td>
<td>0.72</td>
<td>0.09</td>
<td>0.62</td>
<td>0.76</td>
<td>0.85</td>
<td>1.00</td>
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<tr>
<td>IV</td>
<td>0.68</td>
<td>0.38</td>
<td>0.38</td>
<td>0.74</td>
<td>0.90</td>
<td>0.90</td>
</tr>
<tr>
<td>V</td>
<td>0.74</td>
<td>0.40</td>
<td>0.67</td>
<td>0.75</td>
<td>0.82</td>
<td>1.00</td>
</tr>
<tr>
<td>VI</td>
<td>0.70</td>
<td>0.35</td>
<td>0.62</td>
<td>0.69</td>
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<tr>
<td>VII</td>
<td>0.74</td>
<td>0.44</td>
<td>0.66</td>
<td>0.74</td>
<td>0.82</td>
<td>1.00</td>
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<tr>
<td>VIII</td>
<td>0.77</td>
<td>0.49</td>
<td>0.71</td>
<td>0.77</td>
<td>0.83</td>
<td>0.95</td>
</tr>
</tbody>
</table>
Data on Medication Management from AY 2015

Distribution of percent_correct_Mean
Strengths

• Overcomes logistical challenges inherent in longitudinal IPE experience
• Adaptable content and high usability
• Automated data generation each semester
  – Student evaluation
  – Curriculum evaluation
Constraints

• Cost
  – Creating platform = high, is done
  – Need to lease platform
  – Maintenance = modest

• Need for some local IT support

• Need “buy in” from each participating school
  – Must be required, time commitment, schedules

• Need for faculty proctors
Thank you!

If questions please contact Sarah Hobgood at sarah.hobgood@vcuhealth.org or Peter Boling at peter.boling@vcuhealth.org