Hawaii Inter Professional Team Collaboration Simulation

HIPTCS

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- The Donald W. Reynolds Foundation Next Steps educational grant
- The John A. Hartford Foundation Center of Excellence in Geriatrics, University of Hawaii
- The Pacific Islands Geriatric Education Center (HRSA grant)
What is HIPTCS?

- Hawaii
- Inter
- Professional
- Team
- Collaboration
- Simulation
HIPTCS

Collaborative effort between
- UH John A. Burns School of Medicine,
- UH Manoa School of Nursing,
- UH–Hilo Daniel K. Inouye College of Pharmacy
- UH Myron B. Thompson School of Social Work,
- School of Public Health Studies.
The Learning Environment
The Translational Health Science Simulation Center

- **A Simulation Lab**
  - Formed out of a partnership with UH, three major medical centers and insurance companies in Hawaii
  - Simulation to enhance patient safety, teamwork, and transdisciplinary collaboration.
  - Utilizes realistic care setting, actors, and facilitators from the different schools.

- **Use of Technology for Distance Learning**
  - Video teleconference
  - Collaborative use of Google docs
Learner Type

- Students in their clinical training
  - 3rd year medical students
  - 3rd semester nursing students
  - 3rd year pharmacy students
  - Social work students on their clinical rotations
Goal: To Achieve Core Competencies for Interprofessional Collaborative Practice

- **Competency Domain 1:** Values/Ethics for Interprofessional Practice
- **Competency Domain 2:** Roles/Responsibilities
- **Competency Domain 3:** Interprofessional Communication
- **Competency Domain 4:** Teams and Teamwork

*IPEC sponsors:
American Association of Colleges of Nursing
American Association of Colleges of Osteopathic Medicine
American Association of Colleges of Pharmacy
American Dental Education Association
Association of American Medical Colleges
Association of Schools of Public Health
Mamoa Larsen is an 84 year old Samoan woman admitted to the hospital from the ED two days ago for confusion, history of falls, and a recent syncopal episode at home.

Mamoa is insistent on living at home.

Mamoa’s daughter is concerned about her mother’s safety if she returns home to live independently.
Pre-work

- We prepare students through homework to be done prior to the session.
- Watch a youtube video of an example of interdisciplinary team rounds with the patient/family; Complete a Team Observation Tool.
- Listen to a short audio-clip of Mamoa’s monologue (describing her social situation).
- Chart Review: Physician notes, Nursing Admission Assessment, Medication Administration Record (MAR).
- Fill out a GICS form & identify top 3 priorities.
The set-up

For each room:
- 2 Medical students
- 4 Nursing students
- 2 Social work students
- 4 Pharmacy students (Hilo)

For each room:
- Mamoa’s daughter
- 1 Medical student
- 1 Nursing student
- 1 Social work student
- 1 Pharmacy student (Hilo)

Icebreaker
Team Meeting (n=11)

Family Meeting (n=5)

210 miles
50 nursing students
43 pharmacy students (on neighbor island via videoconference)
33 medical students

N=126 third year students, 3 disciplines
Part I: Icebreaker

- We begin the session with a teamwork icebreaker that highlights teamwork strategies.
  - Introductions: Two truths and a lie
  - Online puzzle (10 min.) First identify the team leader, and a “scribe” who will be the only one who can move the puzzle pieces, and a timer.
  - Debrief icebreaker (communication and teamwork strategies)
Part II: Team Meeting

- Students apply lessons learned during the icebreaker and utilize pre-work information to collaborate as a team to:
  - Obtain consensus on the top 3 priorities
  - Develop a preliminary plan of care to be discussed with the family
Part III: Family Meeting

- One representative from each discipline meets with the family to:
  - Determine the families’ priorities.
  - Negotiate a mutually agreeable patient/family centered discharge plan of care.
Part IV: Facilitator Debriefing

- The session is concluded with facilitator debriefing with the students for future interprofessional practice.
  - Facilitators receive training before the session
  - Facilitators utilize the Team Observation Tool as a framework for debriefing.
Evaluation: Demonstrate IPE core competencies

- At the end of the session, students should be able to demonstrate an improved attitudes, knowledge and skills for an inter-professional team approach to discharge planning for a geriatric client.
# IPE Pre/Post Questionnaire

**Attitudes: 1=Strongly Disagree, 5=Strongly Agree**

| Q1. Patient/family at the center of interprofessional health care delivery. |
| Q2. Embrace cultural diversity & individual differences of pts & populations. |

**Skills: 1=Low Confidence, 5=High Confidence**

| Q3. Able to use full scope of knowledge/skills of IDT to provide excellent care. |
| Q4. Able to communicate to clarify each team member’s responsibilities. |
| Q5. Able to choose effective communication tools to enhance team function. |
| Q6. Able to communicate information in an understandable manner. |
| Q7. Able to integrate the knowledge and experience of other professions. |
| Q8. Able to share accountability with other professions, pts and communities. |

**Overall Experience with IPE-SIM**

| Q9. How satisfied were you with your ability to work through the simulations? |
| Q10. How well did the teleconference technology work for the simulation? |
Educational Effectiveness of an Interprofessional Teamwork Simulation Exercise for Nursing, Pharmacy and Medical Students at the University of Hawaii

T Hayashi, A Wen, L Wong, C Ma, S Tokumaru, M Deutsch, D Ing, D Sakai, C Bell, P Jusczak, K Masaki

Dept of Geriatric Medicine & Office of Medical Education, Schools of Nursing and Pharmacy, University of Hawaii

The investigators retained full independence in the conduct of this research.
Attitudes Pre/Post Scores

Summary Score: 4.65 (P<0.0001)
Cultural Diversity: 4.65 (P=0.0008)
Patient-Centered Care: 4.66 (P<0.0001)
Skills Pre/Post Scores

<table>
<thead>
<tr>
<th>Skill</th>
<th>Pre Score</th>
<th>Post Score</th>
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<tr>
<td>Summary Score</td>
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<tr>
<td>Share Accountability</td>
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<td>IDT Integration</td>
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<td>Understandable</td>
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<td>Team Communication</td>
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<td>IDT Responsibilities</td>
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<td>IDT Knowledge</td>
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<td>0.47</td>
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</tbody>
</table>

All P values <0.0001
Course Satisfaction

- MD: Technology: 3.24, Overall Satisfaction: 3.88
- Pharm: Technology: 2.98, Overall Satisfaction: 3.81
- Nursing: Technology: 3.65, Overall Satisfaction: 4.18
Challenges & Opportunities

- **Learning Environment: Simulation Lab**
  - Challenges: Technical support, actors, recruitment and coordination of many faculty to provide feedback
  - Opportunities: Meeting other disciplines and understanding their roles before independent practice. Opportunity for feedback

- **Learner Type: students beginning clinical experiences**
  - Challenges: Coordination between schools
  - Opportunities: Introduction of teamwork in clinical settings

- **Topic: Discharge Planning**
  - Challenges: may not know importance of IDT.
  - Opportunities: Common scenario, Student realize how important it is for involvement of other disciplines for safe discharge and person-centered care.
Thank You!
Team-based Interprofessional Competency (TIC) Training

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Medical Director, UCLA Alzheimer’s and Dementia Care Program
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University of California Los Angeles
Acknowledgements

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Objectives

- Develop a team-based interprofessional competency workshop in dementia screening and management
- Measure learner satisfaction and change in attitudes and confidence in dementia screening and management
Team-based Training for Dementia

- Alzheimer’s and related dementias are under-recognized and under-diagnosed
- Each patient-clinician encounter is an opportunity to detect, diagnose and intervene
- Dementia care is a team sport
  - Medical
  - Behavioral
  - Psychosocial
  - Community-based services
  - Goals of care
The Professions

- Physicians / Nurse Practitioners
- Nurses
- Pharmacists
- Social Workers
TIC Training Components

- Identification of minimum profession-specific competencies for dementia
  - Highlight overlaps and interprofessional collaboration opportunities
- Writing/piloting competency stations
- Recruiting & training faculty facilitators and actors
- Creating evaluation measures
Why Team Competency?

- Frances mentioned to her social worker that she forgets to take her coumadin occasionally
- Harry told his pharmacist he got lost driving to the pharmacy
- Marian’s daughter told her doctor that she hasn’t slept for days because her mother wanders at night
- Joe confided in his nurse that his blood sugars have been high since the microwave ‘stopped working’ and now eats only twinkies
- Lucia tells the nurse practitioner that she has trouble remembering names
Defining Dementia Competencies

- Physicians / Nurse Practitioners
  - American Geriatrics Society / American Medical Association / Society of General Internal Medicine / American Board of Family Medicine Foundation

- Nurses
  - American Association of Colleges of Nursing / John A. Hartford Foundation Institute of Geriatric Nursing

- Pharmacists
  - American Association of Colleges of Pharmacy

- Social Workers
  - John A. Harford Foundation
Physicians/NPs

AAMC (Medical Students)

• Recognize, compare and contrast among the clinical presentations of delirium, dementia, and depression
• Formulate a differential diagnosis and implement initial evaluation in a patient who exhibits delirium, dementia, or depression
• In an older patient with delirium, urgently initiate a diagnostic work-up to determine the root cause (etiology)
• Perform and interpret a cognitive assessment in older patients for whom there are concerns regarding memory or function
• Develop an evaluation and non-pharmacologic management plan for agitated demented or delirious patients.

Minimum Geriatric Competencies for IM/FM Residents

• Appropriately administer and interpret the results of at least one validated screening tool for each of the following: delirium, dementia, depression, and substance abuse
• Recognize delirium as a medical urgency, promptly evaluate and treat underlying problem
• Evaluate and formulate a differential diagnosis and workup for patients with changes in affect, cognition, and behavior (agitation, psychosis, anxiety, apathy)
• In patients with dementia and/or depression, initiate treatment and/or refer as appropriate.
Nurses

• Incorporate into daily practice valid and reliable tools to assess the functional, physical, cognitive, psychological, social, and spiritual status of older adults.
• Assess older adults’ living environment with special awareness of the functional, physical, cognitive, psychological, and social changes common in old age.
• Assess family knowledge of skills necessary to deliver care to older adults.
• Recognize and manage geriatric syndromes common to older adults.
• Recognize the benefits of interdisciplinary team participation in care of older adults.
Social Workers

• Assess cognitive functioning and mental health status of older clients (e.g. depression, dementia)
• Administer and interpret standardized assessment and diagnostic tools that are appropriate for use with older adults (e.g. depression scale, Mini-Mental Status Exam).
• Provide social work case management to link elders and their families to resources and services
• Use educational strategies to provide older persons and their families with information related to wellness and disease management (e.g. Alzheimer’s disease, end-of-life care).
Pharmacists

• Ensure patients and caregivers can **adhere to the drug regimen** (including administration techniques) included in their therapeutic plan(s)
• Evaluate the actual or potential impact of drug-drug, drug-disease, and drug-food **interactions** on patient outcomes
• Develop **monitoring plans** to determine if the therapeutic objective(s) is/are being achieved
TIC Training Components

• Identification of minimum profession-specific competencies for dementia
  • Highlight overlaps and interprofessional collaboration opportunities

• Writing/piloting competency stations

• Recruiting & training faculty facilitators and actors

• Creating evaluation measures
TIC Stations

STATION 1: Dementia Screening
• Case: A 75 year-old woman who presents with forgetfulness reported by her son.
• Activity: List questions to assess patient presenting with cognitive/behavioral changes. Demonstrate ability to administer and interpret a Mini-Cog assessment.

STATION 2: Differential Diagnosis
• Case: A 69 year-old woman who had total hip arthroplasty last night. Upon admission, you performed a Mini-Cog, CAM and PHQ-2; results all negative. You come to check in on her the next day.
• Activity: Observe the video and determine if person is demented or delirious. Determine management plan for delirious patient.
TIC Stations

STATION 3: Caregiver Stress

• Case: A caregiver of a woman with advanced dementia comes to clinic and the physician speaks with her about caregiver stress.

• Activity: Assess caregiver stress by using the Modified Caregiver Strain Index (MCSI) assessment. Interview the standardized caregiver (actor) and if caregiver is stressed, list suggested management.

STATION 4: Management / Team Care Plan

• Case: A 65 year-old woman presents to urgent care with a headache and a bruise on her forehead but no recollection of fall.

• Activity: Interview the standardized patient (actor) and perform a team interview to determine if she has dementia; craft a team care plan and give recommendations to enhance medication safety.
TIC Training Components

• Identification of minimum profession-specific competencies for dementia
  • Highlight overlaps and interprofessional collaboration opportunities
• Writing/piloting competency stations
• Recruiting & training faculty facilitators and actors
• Organize trainees into teams
• Creating evaluation measures
The Training

**Faculty**
- 10 faculty trained to facilitate four interactive competency stations.
- Faculty comprised of physicians, social workers, nurse practitioners, nurses, and a pharmacist.

**Trainees**
- Trainees were organized into teams of 5-6 members representing each profession.
- Each team rotated through all stations with tasks requiring interprofessional collaboration.
- Program was held annually for 3 years, with 40-48 professionals trained per year.
TIC Training Evaluation

• Learners composition by profession
• Retrospective pre-/post-survey of attitudes/confidence on dementia screening and management; intention to teach others
Outcomes

2012 – 2014 Trainees by Profession
N = 117
Outcomes

Average Pre & Post Self-Assessed Ratings for Ability/Confidence (n=117)

- Overall Competence in Dementia Screening: Before 3.34, After 4.46
- Assessing for Caregiver Stress: Before 3.38, After 4.60
- Managing Medications in Dementia: Before 3.43, After 4.28
- Prescribing Care Plan for Patient with Dementia: Before 3.38, After 4.35

All statistically significant at $p < 0.0001$
Outcomes

Average Pre & Post Self-Assessed Ratings for Ability/Confidence in Dementia Screening (n=117)

- Use of Mini-Cog
  - Before: 3.13
  - After: 4.68

- Use of CAM
  - Before: 2.6
  - After: 4.2

- Screening for Dementia
  - Before: 3.37
  - After: 4.5

- Overall Competence in Dementia Screening
  - Before: 3.34
  - After: 4.46

All statistically significant at p <0.0001
Outcomes: Use of Toolkit Materials

3 Months Post Training

• Change in Teaching:
  • 89% of participants reported feeling "confident"/"very confident" teaching about this topic

• Change in Practice:
  • Participation led to changed/modified approach to:
    - history taking/dementia screening (69%)
    - differential diagnosis (delirium vs. dementia) (40%)
    - caregivers stress (72%)
    - community support and services (64%)
Dissemination: Web-based TIC Workshop

Online Education Choose Team

California Geriatric Education Center
Dementia Screening and Management

CHOOSE A TEAM ROLE
Choose the clinical role you will assume during the training from the options below then click the ‘NEXT’ button.

SOCIAL WORKER
PHARMACIST
NURSE
PHYSICIAN

Certification in Dementia Screening and Management
Online Learning Module

Station One: Part A - History Taking
Certification in Dementia Screening and Management

Instruction
From the list, choose at least three questions you will need to ask a patient who presents with memory problems. As a part of the assessment process, you should always consult with at least one other member of your interdisciplinary team before choosing your response. Click on the team member's picture and right-click to hear what the rest of your team has to say about Mrs. Rossi.

Assessment
Choose at least three options from the list below:

- Is there a family history of Parkinson's or brain tumors?
- What is the nature of the change in behavior/cognition?
- When was the last CT or MRI of the brain performed?
- What is the course of the change?
- Has the patient been exposed to fumes or chemicals?
- Any change in performance of ADLs/ADLs?
- Any recent changes in life situation, mood, status of health?
- Have there been any changes in dietary patterns?
- When was the change in behavior/cognition first observed?

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Conclusion

• The Team-based Interprofessional Competency (TIC) Training in Dementia Screening and Management is an innovative team education model that is effective in teaching dementia screening and management in medical, nursing, pharmacy and social work practitioners.
Dissemination: Web-based TIC Workshop

Online Education Choose Team
GeroNET > Online Education Choose Team

California Geriatric Education Center
Dementia Screening and Management

CHOOSE A TEAM ROLE
Choose the clinical role you will assume during the training from the options below then click the 'NEXT' button.

- SOCIAL WORKER
- PHARMACIST
- NURSE
- PHYSICIAN

Certification in Dementia Screening and Management
Online Learning Module

Zaldy Tan

Consult a Team Member
- PHYSICIAN
- NURSE
- SOCIAL WORKER
- CAREGIVER

NEXT

Instruction
From the list, choose at least three questions you will need to ask a patient who presents with memory problems.

As a part of the assessment process, you should always consult with at least one other member of your interdisciplinary team before choosing your response. Click on the team member who places you right to hear what the rest of your team has to say about Ms. Rossi.

Assessment
Choose at least three options from the list below:

- Is there a family history of Parkinson's or brain tumors?
- What is the nature of the change in behavior/cognition?
- When was the last CT or MRI of the brain performed?
- What is the course of the change?
- Has the patient been exposed to fumes or chemicals?
- Any change in performance of ADLs/ADL?
- Any recent changes in life situation, mood, status of health?
- Have there been any changes in dietary patterns?
- When was the change in behavior/cognition first observed?

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Successful Aging & Frailty Evaluation (SAFE) IP Education in a Clinical Learning Environment

Katherine Thompson, MD
Megan Huisingh-Scheetz, MD MPH
Learning Environment

- SAFE clinic:
  - Consultative frailty clinic
  - IP team care model: MD, APN, SW, RN (+/- others as needed)
  - South Side of Chicago (high incidence of frailty, low resource setting)
  - Comprehensive frailty assessment (physical function, cognition, social, emotional)
  - Challenge: IP education for learners must integrate with clinical needs
  - Opportunity: Learners participate in a real-world IP team-based care model
Learner Types

• Graduate Medical Education trainees
  – UCM IM Residents
    • Most subspecialty career-bound
    • Few opportunities for IP ed
  – Geriatrics Fellows

• Variety of other learners
  – PA, medical, APN students
  – PM&R, Family Med residents
  – Physical therapists, social work interns
IP Education module

• Care of frail patients: excellent opportunity for IP education!

• Goals:
  – Teach core competencies for IP Collaborative Practice
  – Apply core competencies in clinical setting
  – Reflect on IP teamwork as it applies to learner’s current & future practice
IP Education module

• Education module components:
  – Didactic intro to frailty, comprehensive geriatric assessment, IP teamwork
  – Perform comprehensive evaluation of frail patient in SAFE clinic with IP team
  – Lead IP team meeting to discuss patient and care plan
  – Written reflection on team member roles, value and importance

INTERPROFESSIONAL TEAM PATIENT ENCOUNTER REFLECTION
Residency Portfolio

*What team members were involved in this patient’s care? Describe how each contributed to the patient’s care.*

*Was there any conflict or disagreement amongst the team members regarding the care plan? If so, how was this resolved?*

*Who (if anyone) led the team? Why do you think that is?*
## IP Learners

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<th>145</th>
<th>IM Residents</th>
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<th>PA students</th>
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<tr>
<td>10</td>
<td>Med-peds residents</td>
<td>4</td>
<td>APN students</td>
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<td>2</td>
<td>Family med residents</td>
<td>4</td>
<td>SW students</td>
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<tr>
<td>5</td>
<td>Geriatrics Fellows</td>
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<td>Physical therapists</td>
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<td>1</td>
<td>PM&amp;R resident</td>
<td>6</td>
<td>Medical students</td>
<td></td>
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IP education module satisfaction: Average rating of 4.2/5
Reflection: Themes

• TEAMWORK SKILLS:
  – “I gained a thorough appreciation for the **importance of good moderating, communication, and facilitation** in these interprofessional dialogues.”
  – “Often times, especially when taking care of geriatric populations with many complex medical and social issues, we tend to become very weary quickly. This meeting not only promotes the best care for the patient, but also provides a strong **support for one another**.”

• APPRECIATION FOR SOCIAL DETERMINANTS OF HEALTH:
  – “Having the discussion with SW really **gave me an insight in to how things are at home**…knowing that background allowed us to address the best ways to get the (patient’s) children involved in care.”
  – “As a physician, we do not always know the **behind the scenes difficulties** of pts in obtaining medications, nutrition supplementation or getting access to services. **Working with the interprofessional team helps you get a sense of the work involved in keeping the pt healthy overall**.”
Reflection: Themes

• APPRECIATION FOR PERSPECTIVES OF OTHERS:
  – “Having different perspectives on the patient was very important because it help (sic) me understand the patient social life as a whole”
  – “The nurse practitioner gave me guidance about how to appropriately evaluate and treat this geriatric patient’s complaints.
  – “I was impressed on how much each person of the team was able to contribute to the overall care of the patient.”

• INCREASED WILLINGNESS TO ENGAGE IP TEAM IN FUTURE:
  – “I will be much less hesitant to utilize the services of social workers in the future, especially in coordinating care in socially complex situations.”
  – “I have come to realize that my role as a physician compels me to ask for input from those more knowledgeable, or with different skills.”
  – “I will take this perspective forward with me and also recognize that this approach should not be limited to older patients.”
Challenges & Opportunities

- **Learning environment**: “Real world” clinical environment
  - Challenges: Time constraints, schedule conflicts, urgent patient issues
  - Opportunities: Memorable encounters, real & evolving patient issues, practicing IP providers

- **Learner type**: Graduate Medical Education learners
  - Challenges: learners more differentiated
  - Opportunities: more clinical & IP knowledge, can apply to future practice

- **Topic**: Frailty
  - Challenges: complex pt issues can be overwhelming for learners
  - Opportunities: Ideal pt population for IP team

- **Teaching methods**: Mixed (didactic, clinical experience, reflective writing assignment)
  - Challenges: lack of learner buy-in, brief experience (1-2 pt encounters)
  - Opportunities: Reflection reinforces clinical IP learning