

From Classroom to Community: Engaging PT & OT Students in Service Learning Falls Prevention Screenings



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OUTLINE

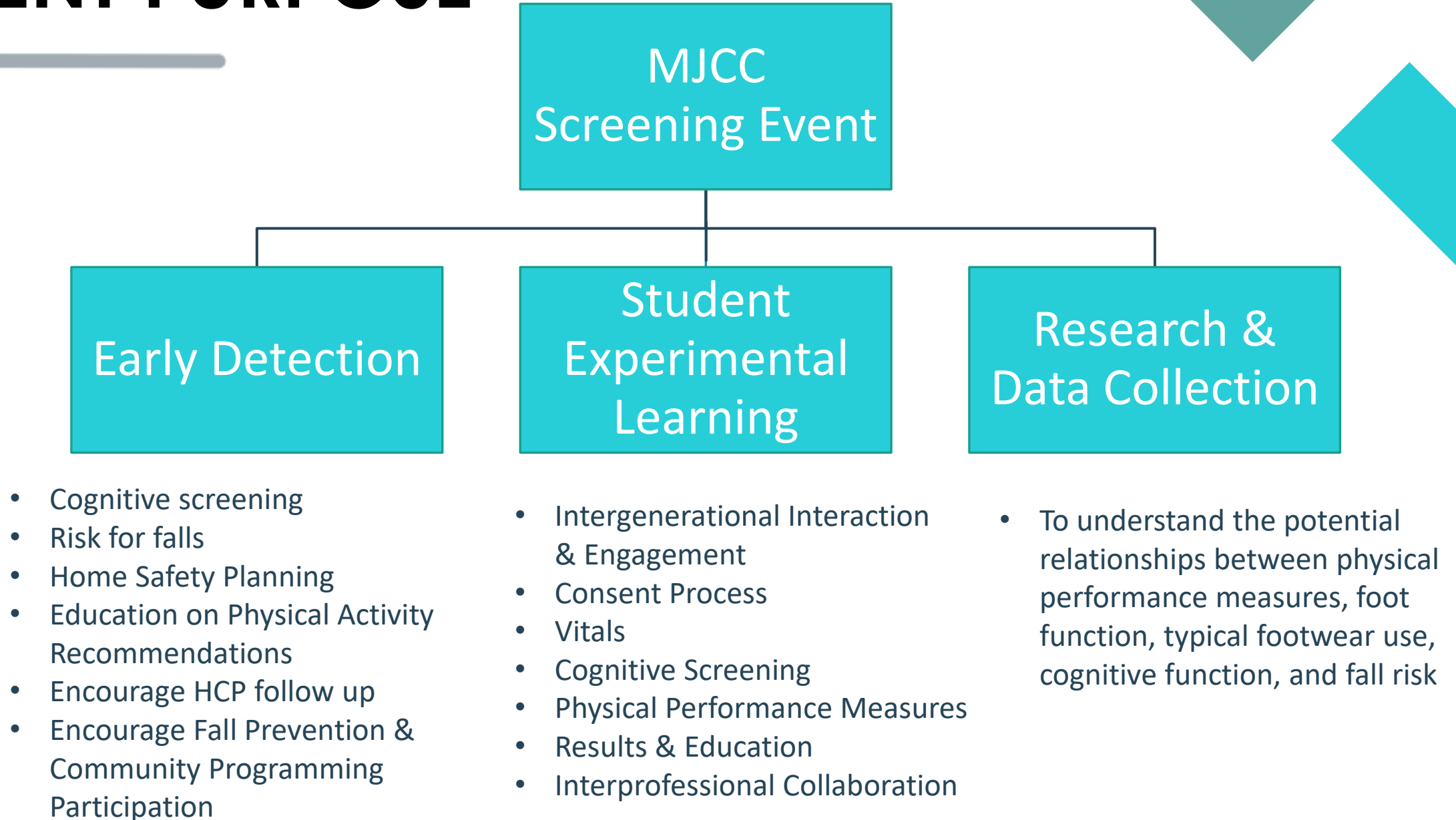
- Intro
- Event Overview, Timeline, Purpose, & Logistics
- Student Roles & Responsibilities
- Selected Screening Tools & Why
- Service-Learning
- Student Engagement
- Student Reflections and Learning Outcomes
- Best Practices and Lessons Learned

EVENT OVERVIEW:

2ND ANNUAL BALANCE AND MEMORY SCREEN

- **PARTNERS:** UHart & Mandell Jewish Community Center
- **WHEN:** THIS WEDNESDAY, March 12, 2025 (and March 2024)
- **WHO:**
 - Participants: Open to adults of the Greater Hartford area
 - Leaders: 2nd Year DPT Students, 1st Year MSOT Students, PT & OT Faculty, MJCC Staff
- **COST:** Absolutely free, open to all (members & non-members of the MJCC)
- **RESEARCH:** Participants can elect for completion of 5 additional brief measures

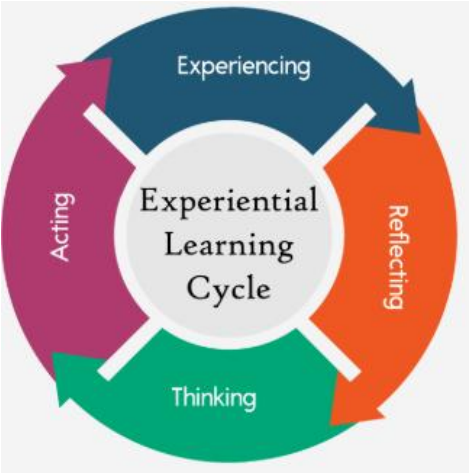
EVENT PURPOSE



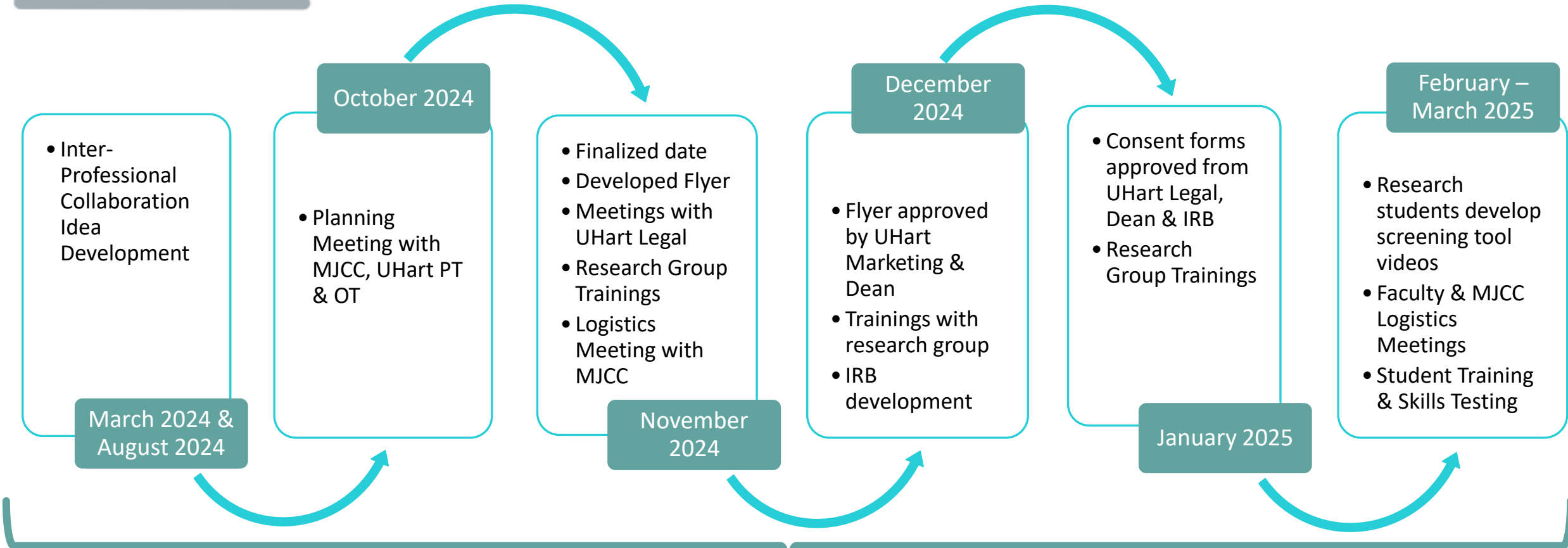
THE WHY



Less than half of older adults who fall talk to their doctor about it. Providers can proactively ask about falls.



EVENT TIMELINE:



**UNIVERSITY
OF HARTFORD**



2nd Annual Balance and Memory Screen,
March 12, 2025

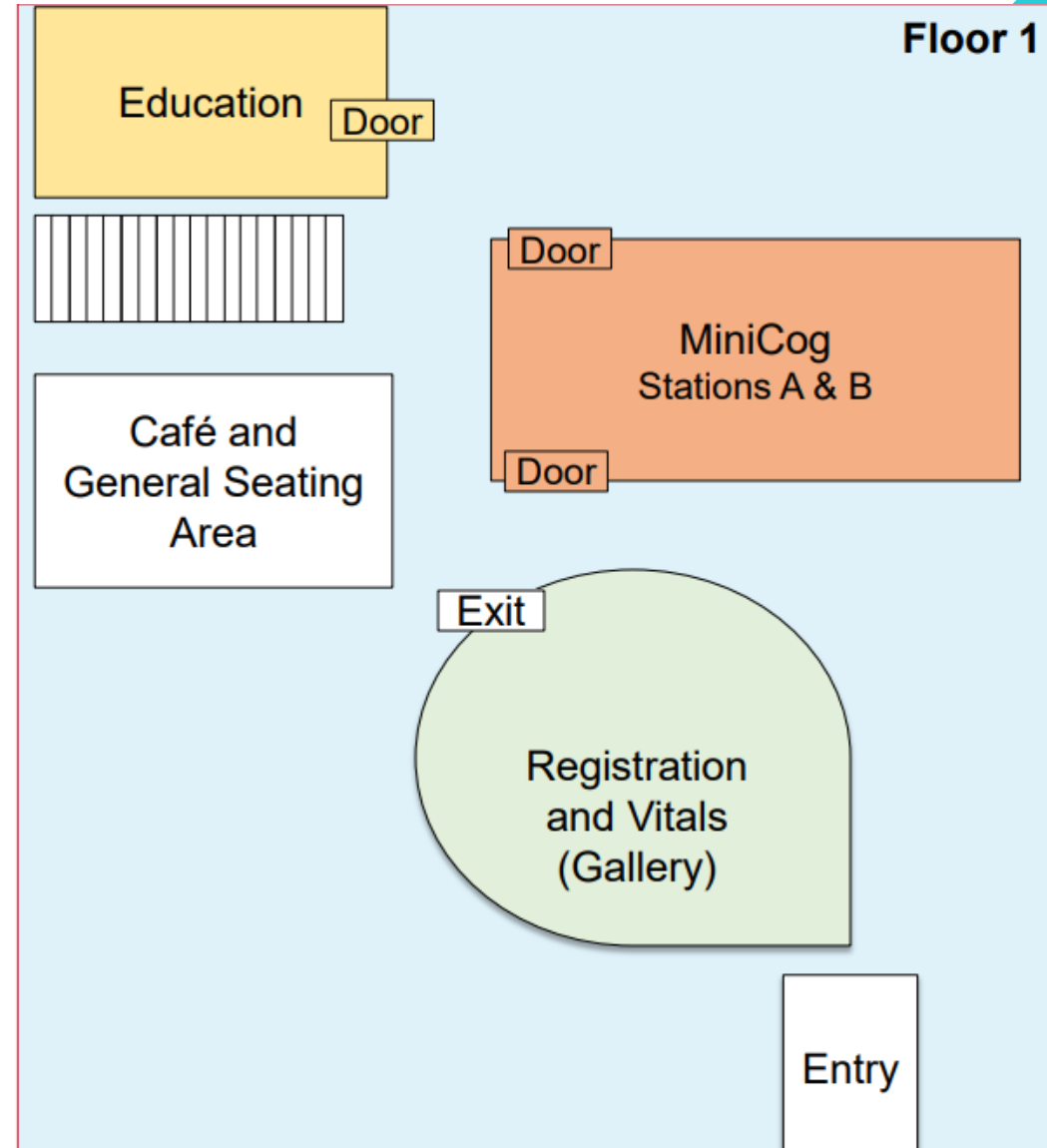
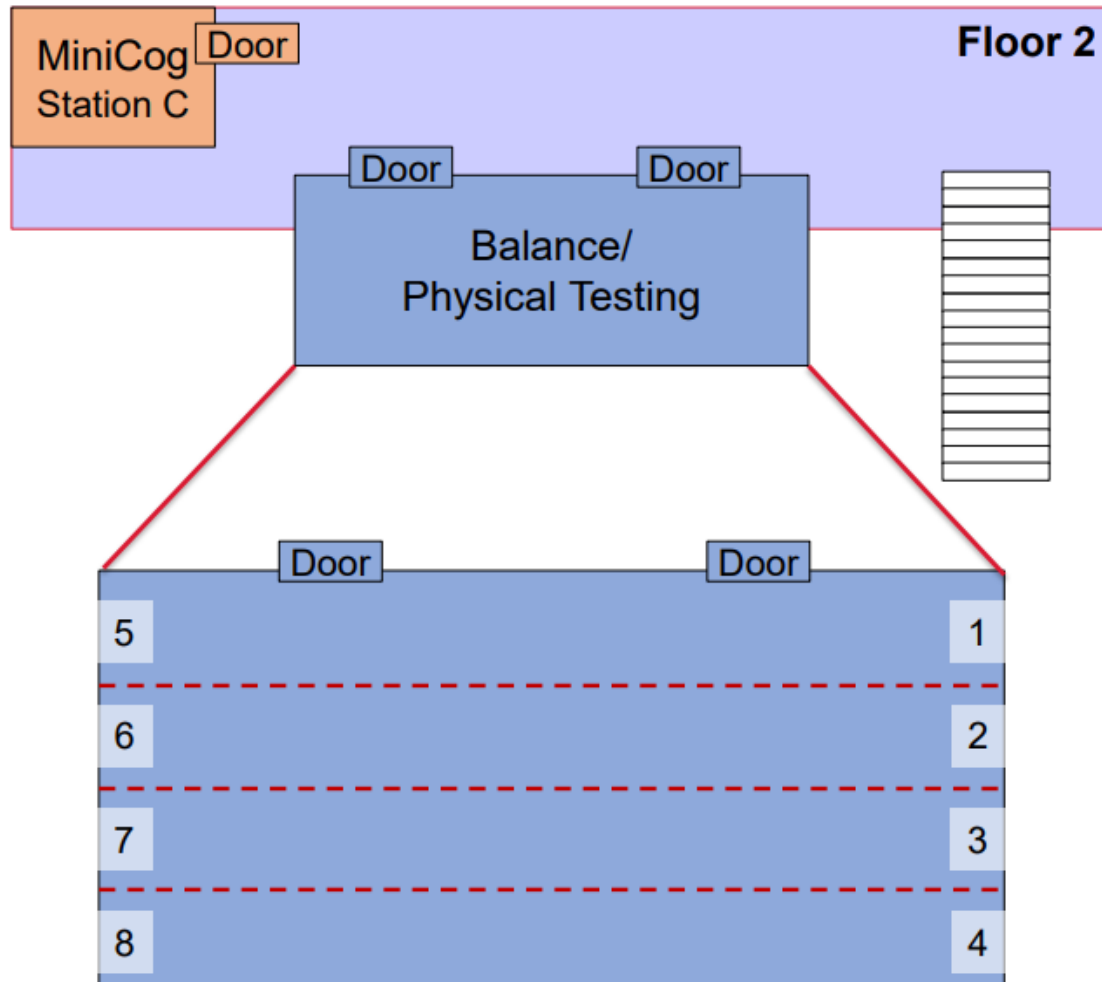
EVENT LOGISTICS

- Advertised through community center flyers, at exercise classes taught, community health presentations given
- Pre-Registration via Microsoft Forms
- Event Hours: 1pm – 4pm
- 8-9 older adults will start screens scheduled every 30 minutes
- 5 rooms
- Divided into 8 mixed PT & OT groups of 9-10 students
- Faculty distributed throughout 5 rooms for assistance



STUDENT TRAINING: EVENT LOGISTICS

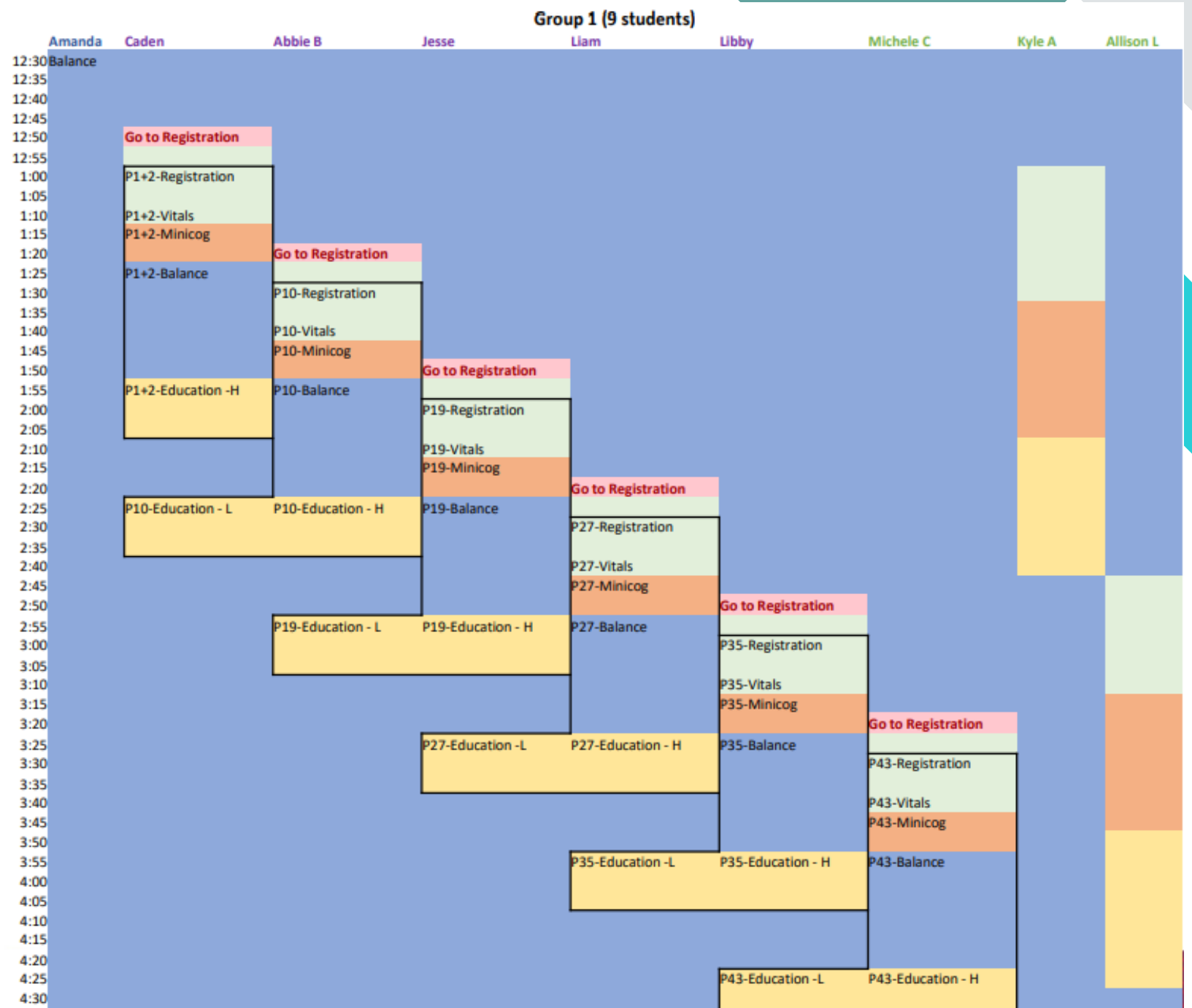
Map



STUDENT SCHEDULE

All students will:

- Serve as an participant escort
- Review consent forms, participant intake forms
- Perform Vitals
- Complete Cognitive Screening
- Perform Physical Screening
- Lead Results & Education
- Interact with team of OT & PT students



SCREENING

- There are numerous screenings that identify potential concerns: falls, cognitive decline, mood/QOL, fear of falling
- Screens can be done stand alone or in conjunction of one another
- Certain screens may be selected due to location/setting, population
- Although a number of them can be done without specific training, it is always best to have a professional who works with older adults and has background in fall prevention
- There are a number of factors that can result in falls and these factors need to be identified specifically to create the correct plan for the individual

SCREENING TOOL SELECTION

- [CDC STEADI Fall Prevention Toolkit](#)
- [CDC STEADI Stay Independent – Check Your Risk For Falling Questionnaire](#)
- [National Council on Aging Fall Prevention Awareness Week Toolkit](#)
- [National Council on Aging Falls Free Check Up - Questionnaire](#)
- [APTA Geriatrics Falls Prevention Awareness Toolkit - Guide for Professional and Community Engagement](#)
- [APTA Geriatrics Balance and Falls Screening Day Preparation List](#)

SCREENING TRAININGS

STEADI: Empowering Healthcare Providers to Reduce Fall Risk

[Print](#)



Health Care Professionals Trained in Fall Prevention

- Rehab Professionals: OT & PT
- Nursing
- Physicians, NPs, PAs

<https://www.cdc.gov/steady/provider-training/index.html>

<https://www.cdc.gov/steady/hcp/training/index.html>

SCREENING TOOLS & WHY

- ✓ Quick, practical, and valid measures for screening older adults in community setting

Outcome Tools	Purpose	Data
Self Report Measures		
*STEADI Stay Independent - Check Your Risk for Falling Questionnaire	Assesses personal risk of falling with questions on health, mobility, environment	<ul style="list-style-type: none"> •Validated fall-risk self assessment •>/= 4/14 indicates fall risk
Physical Performance Measures		
*Timed Up and Go (TUG)	Measures mobility, sit <> stand transfers, balance over ~10ft distance	<ul style="list-style-type: none"> •Validated fall risk measure •>/= 12 seconds indicates fall risk
TUG Cognitive	Multi-task mobility measure with cognitive dual task counting or semantic challenge	<ul style="list-style-type: none"> •Validated fall risk measure •>/= 15 seconds indicates fall risk
*30 Second Chair Rise Test	Assess muscle performance when moving from sit<>stand	<ul style="list-style-type: none"> •Validated for muscle performance •Age & Gender Matched Norms, below norms = fall risk
*4 Stage Balance Test	Assess static balance in 4 progressively more challenging positions	<ul style="list-style-type: none"> •Validated fall risk if 3rd Stage: Tandem Stance <10 sec

* CDC STEADI Recommended Tools

SCREENING TOOLS & WHY

Outcome Tools	Purpose	Data
Physical Performance Measures - Continued		
10 Meter Walk Test	Assess persons self-selected, preferred gait speed over short distance ~ 20 ft on level ground surface	<ul style="list-style-type: none"> •Valid measure, “6th Vital Sign” correlated to fall risk, ADLs difficulty, mortality, hospitalization, depression •≥ 1.0m/s for community ambulation •< 1.0 = less likely to achieve physical activity recommendations
Grip Strength – Hand Dynamometry	Assess strength of hand and forearm muscles	<ul style="list-style-type: none"> •Valid measure with correlations between grip strength and: fall risk, difficulty with ADLs, risk for cognitive decline, depression, BMD, nutritional status
Cognitive Measures		
MiniCog	Brief 3-5min cognitive screening tool	<ul style="list-style-type: none"> •Validated for recognition of possibility of cognitive difficulties, warranting further testing
Subjective Cognitive Complaint	Assess personal concern of cognitive difficulties	<ul style="list-style-type: none"> •Linkage with below age matched norm gait speed for risk of future cognitive impairment

* CDC STEADI Recommended Tools

SCREENING TOOLS

Outcome Tools	Where You Can Find The Tool
Self Report Measures	
*STEADI Stay Independent - Check Your Risk for Falling Questionnaire	<ul style="list-style-type: none"> CDC Stay Independent - Check Your Risk for Falling - PDF
Physical Performance Measures	
*Timed Up and Go (TUG)	CDC - Timed Up and Go Test - PDF CDC Timed Up and Go Test - Video
TUG Cognitive	Shirley Ryan Agility Lab - TUG Cognitive
*30 Second Chair Rise Test	CDC 30 Second Chair Rise Test - Video CDC 30 Second Chair Rise Test - PDF
*4 Stage Balance Test	CDC 4 Stage Balance Test - PDF CDC 4 Stage Balance Test - Video
10 Meter Walk Test – Preferred Gait Speed	Shirley Ryan Agility Lab - 10 Meter Walk Test ANPT 10 Meter Walk Test
Grip Strength - Hand Dynamometry	PT Education Solutions Grip Strength Hand Dynamometer – Video Shirley Ryan Agility Lab - Grip Strength Hand Dynamometer

* CDC STEADI Recommended Tools

RESULTS & EDUCATION

- Algorithm to Identify Fall Risk OR those at LOW RISK (Not “NOT” at risk)
- Use Age & Gender Norm & Cut-Off Score Data
- Personal Education Sheet with participant’s results to view with HealthCare Team
- Issue 1 or 2 Info Sheets on a “Plan” for referrals: High Risk vs Low Risk
- Home Safety Checklist
 - [AARP HomeFit](#)
 - [CDC Home Safety Checklist](#)

STEADI Algorithm for Fall Risk Screening, Assessment, and Intervention among Community-Dwelling Adults 65 years and older

START HERE

1 SCREEN for fall risk yearly, or any time patient presents with an acute fall.

Available Fall Risk Screening Tools:

- Stay Independent: a 12-question tool [at risk if score ≥ 4]
- Important: If score < 4 , ask if patient fell in the past year (If YES \rightarrow patient is at risk)

- Three key questions for patients [at risk if YES to any question]
 - Feels unsteady when standing or walking?
 - Worries about falling?
 - Has fallen in past year?
 - » If YES ask, “How many times?” “Were you injured?”

SCREENED NOT AT RISK

PREVENT future risk by recommending effective prevention strategies.

- Educate patient on fall prevention
- Assess vitamin D intake
 - If deficient, recommend daily vitamin D supplement
- Refer to community exercise or fall prevention program
- Reassess yearly, or any time patient presents with an acute fall

SCREENED AT RISK

2 ASSESS patient’s modifiable risk factors and fall history.

Common ways to assess fall risk factors are listed below:

Evaluate gait, strength, & balance

Common assessments:

- Timed Up & Go
- 4-Stage Balance Test
- 30-Second Chair Stand

Identify medications that increase fall risk (e.g., Beers Criteria)

Ask about potential home hazards (e.g., throw rugs, slippery tub floor)

Measure orthostatic blood pressure (Lying and standing positions)

Check visual acuity

Common assessment tool:

- Snellen eye test

Assess feet/footwear

Assess vitamin D intake

Identify comorbidities

(e.g., depression, osteoporosis)

3 INTERVENE to reduce identified risk factors using effective strategies.

Reduce identified fall risk

- Discuss patient and provider health goals
 - Develop an individualized patient care plan (see below)
- Below are common interventions used to reduce fall risk:

Poor gait, strength, & balance observed

- Refer for physical therapy
- Refer to evidence-based exercise or fall prevention program (e.g., Tai Chi)

Medication(s) likely to increase fall risk

- Optimize medications by stopping, switching, or reducing dosage of medications that increase fall risk

Home hazards likely

- Refer to occupational therapist to evaluate home safety

Orthostatic hypotension observed

- Stop, switch, or reduce the dose of medications that increase fall risk
- Educate about importance of exercises (e.g., foot pumps)
- Establish appropriate blood pressure goal
- Encourage adequate hydration
- Consider compression stockings

Visual impairment observed

- Refer to ophthalmologist/optometrist
- Stop, switch, or reduce the dose of medication affecting vision (e.g., anticholinergics)
- Consider benefits of cataract surgery
- Provide education on depth perception and single vs. multifocal lenses

Feet/footwear issues identified

- Provide education on shoe fit, traction, insoles, and heel height
- Refer to podiatrist

Vitamin D deficiency observed or likely

- Recommend daily vitamin D supplement

Comorbidities documented

- Optimize treatment of conditions identified
- Be mindful of medications that increase fall risk

FOLLOW UP with patient in 30-90 days.

Discuss ways to improve patient receptiveness to the care plan and address barrier(s)



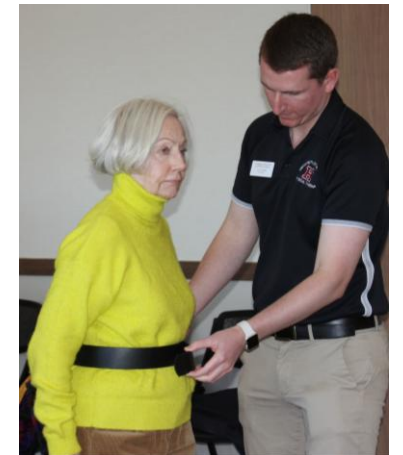
Centers for Disease
Control and Prevention
National Center for Injury
Prevention and Control

COLLABORATIVE VENTURE OF SERVICE-LEARNING



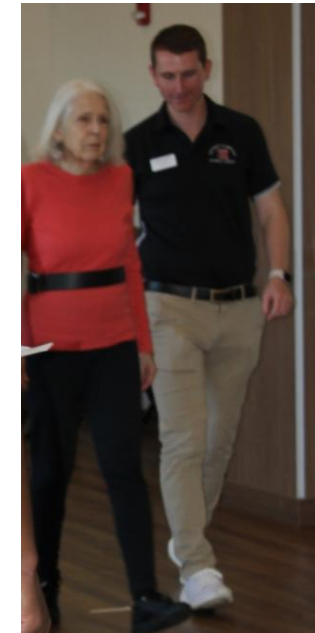
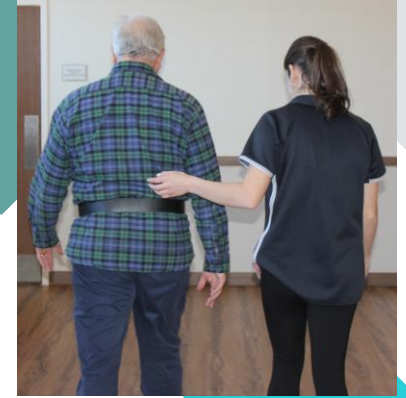
The Classroom to Community Connection

- Service-Learning goes beyond volunteerism or community service intentionally linking coursework to real-world community experiences
- Fosters reciprocal partnerships by emphasizing collaboration and reflection
- A purposeful pedagogy that enhances students' learning, strengthens community relationships, and ensures mutual benefit for all involved



STUDENT ENGAGEMENT

- Course Learning
 - Learning Modules 2-6 within first ½ of semester
 - Lecture Coursework
 - Lab Coursework Learning
 - Skills Training
 - On classmates & Outside volunteers
 - Skills Testing
 - Research on Evidenced-Based Fall Prevention Programs in US & Falls Free CT Guide
- Screening Tool Videos Development
 - Video Quizzes on screening tools, questions focused on standardization of procedures



MAKING SERVICE-LEARNING MEANINGFUL: STUDENT PERSPECTIVES

Personal Growth:

- “I walked away from this experience with a deeper appreciation for working with older adults – it’s not just about physical health, but also about connection and trust.”
- “This event reinforced why I chose this profession. Seeing the impact of a simple conversation or reassurance was incredibly fulfilling.”
- “I never thought I’d be interested in geriatrics, but this experience opened my eyes to how much of a difference we can make for this population.”



IMPACTFUL STUDENT PERSPECTIVES

Empathy and Communication:

- “It wasn’t just about giving them numbers – it was able making them feel heard and empowered to take action for their health”.
- I realized how I framed my words could completely change how someone felt about their results. A little reassurance went a long way.”
- “One participant told me that they were “too old to improve” and it was so rewarding to be able to challenge that mindset with education and encouragement.”



IMPACTFUL STUDENT PERSPECTIVES



Confidence Building:

- “At first, I was nervous about how to explain results in a way that was both honest and encouraging, but as the event went on, I become more confident in my ability to navigate those conversations”.
- “I wasn’t sure how to approach a participant who seemed upset about their results, but I learned that listening and validating their concerns made all the difference.”

IMPACTFUL STUDENT PERSPECTIVES

Teamwork & Collaboration:

- “The event really showed me how important it is to work as a team – we were able to seamlessly guide participants through the process and make it a positive experience for them.”
- “This experience reminded me how valuable it is to collaborate – when we combined our knowledge and skills, we were able to provide a much better experience for the participants.”



BEST PRACTICE & LESSONS LEARNED

Screening:

- Change screening set up
 - Was participant advances from 1 station to the next to now having 1 participant at 1 of 8 stations completing all physical performance screens
 - Goal: To enhance the participant and student experience
- More faculty assistance
- Make it interdisciplinary and continue to add more disciplines
- Seek grant funding and IRB approval to follow participants that consented to for status check-ins

BEST PRACTICE & LESSONS LEARNED

Service-Learning:

- Multiple logistics meetings and kept open communication with all partners before and during (and planning to, after the event!)
- Very helpful that the community partnership was already established
- Ensured that the service-learning opportunity was linked to course learning objectives and meeting the needs of the community
- Structure of research group and course student training was strong: video modules, lab trainings, skill check offs, lecture material, practice trials of running entire screen
- Promoting further achievement of course outcomes through intentional and structured reflection to facilitate reflection in, on, and for action, to deepen their understanding linking the academic content and the social need being addressed
- Will have post event de-brief with students in class

FUTURE DIRECTIONS

- Unified consensus on which screening measures
- Expansion on screening services provided throughout CT:
 - National Fall Prevention Week/Month
 - Specific semesters when “Geriatrics” courses are taught
- Further investigation into the development of interprofessional collaboration skills between healthcare professional students
- Growth in services available at one day screening events:
 - Also including: Nursing, Pharmacy, Law, Dental, Social Work, Optometry, Audiology, Podiatry

OT & PT PROFESSIONAL PROGRAMS IN CT

Occupational Therapist

University of Hartford
Sacred Heart University
Quinnipiac University
University of New Haven
Southern CT State University

Occupational Therapy Assistant

CT State Manchester
Goodwin University

Physical Therapist

University of Hartford
Sacred Heart University
Quinnipiac University
University of CT

Physical Therapy Assistant

CT State Naugatuck Valley
CT State Norwalk

SUMMARY: IMPACT OF EVENT

Screening Procedures/Tools:

- Screening tools for a one-day event for community dwelling older adults do assist in identifying risk for falls and probability of cognitive concerns for older adults
- Instills the need for further “Screen, Assess, Intervene” mentality to promote optimal aging

Students:

- Students gain meaningful hands on experience in falls prevention and cognitive screening through experimental service-learning
- Student reflections and post event debriefing feedback prove achievement of learning outcomes(confidence, clinical reasoning, skill development, and interpersonal skills) through service-learning pedagogy

Community Members:

- Positive Feedback from participants & request for more events
- Provides valuable health insights for older adults in the community
- Reinforces that multidisciplinary & interprofessional collaboration and team-based care is best practice for older adults

Community Partners:

- Strengthens community partnerships for long term impact



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THANK YOU!

