Technological Opportunities for Elder Abuse & Neglect Research

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Outline

1. EATI Island - Virtual Reality Simulation for Training Nurses & Social Workers on in-home caregiving quality assessments

2. Building an electronic care management system to enable the Community Complex Care Response Team primary prevention model

3. Other exciting possibilities ...
EATI ISLAND

Funded under the State of Michigan Office for Adult and Aging Services
Prevent Elder and Vulnerable Adult Abuse, Exploitation, Neglect Today
(PREVNT) initiative FY15

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Consultants: D. Reyes-Gastelum, MA & S.J. Pierce, PhD
& MI Adult Protective Services
Background on Educational Simulations

Low Fidelity v High Fidelity

Supports interpersonal communication skills, improved team performance, critical thinking & clinical reasoning in complex care situations, development of confidence in clinical skills....
Need for Evidence-Based Training

• Compliance with mandatory reporting among healthcare professionals is low

• Lack of applied training on elder abuse and neglect (EA/N) commonly cited as reason for lack of reporting

• Need for rigorous evaluations of EA/N educational interventions which include measures about changes in practice
Training Program Background

• Overarching Goal: to increase compliance with mandatory reporting through improved recognition of EA/N

• Target audience: Michigan’s Medicaid Waiver Program (In-home community based services)
  – Nurses & Social Workers
Training Development

• Needs assessment

• QualCare Scale
  – Direct observational rating scale
  – 52 items across 6 subscales: environmental, physical, medical care maintenance, psychosocial, human rights & financial
  – Completed after 1-3 hour comprehensive in-home geriatric assessment, may need multiple visits
Training Development

• Virtual Reality Platform
• 8 case scenarios each corresponding to a ‘house’ on EATI Island
  – Created character profiles for dyads
  – Each scenario had 2-3 subscales indicating deficiencies – varied to mimic real life
  – Custom designed the environment
Components of the Educational Intervention

- Mailed materials including intro letter, YouTube video demos, patient charts, laminated reference card and QualCare scales

- During training:
  - Introduction, reinforcement and Q&A
  - Group assessment
  - Completed electronic version of QualCare
  - Debriefing

- Evaluation data collected via online survey immediately following training and 4 weeks later
Training Evaluation

✓ Learner Satisfaction

✓ Knowledge/Skills Change
  – Inter-rater reliability for the QualCare ratings was $r=0.59$ (95% CI = 0.43 to 0.77)
  – PPV/NPV for each subscale were good
  – Reporting the decisions had a 99% accuracy

✓ Changes in Practice
  – At 4 week follow up, majority reported routine application of knowledge/skills gained on the qualcare scale & reporting in daily practice

Mitsunaga & Shores 1977
Technological Implications

• Experienced few implementation barriers
• Virtual reality is cost and time efficient
  – Most costs up front, once built/designed ready to do wide spread training
  – And reusable – multiple other applications for this training program
    • Student experiences, interdisciplinary learning, APS training, first responder training....
• Also other low/high fidelity options....
More Info …

Battle Creek
Community Complex Care Response Team

Funded by RWJF Systems for Action Portfolio
7/1/16-6/30/18

Carolyn Pickering, PhD, RN – UTHSCSA Nursing
Christopher Maxwell, PhD – MSU Criminal Justice
Katie Nurenberg – MSU Student Nurse/Site Project Manager
Fuad Abujarad, PhD – Yale Emergency Medicine
Ron Tatro – Elder Law of Michigan / Site Project Manager
Bonnie Hogoboom – Region 3B AAA / Site Project Manager
The goal of the CCCRT model intervention is to decrease vulnerability of older adults by promoting and supporting independence and capacity for self-care.

The idea behind the CCCRT is that by working together through a care model based on shared communication and information exchange that the various agencies in Battle Creek that provide services to older adults can (1) maximize service/resource availability for clients (2) maximize resources within the agency.
PROJECT BACKGROUND

- Calhoun County Elder Abuse Prevention Network Formed
- Identified need to share information between health & human service agencies
- Developed uniform consent form and informal coordinated community response team

2012 OVW

2015 Hartford Action Award

- Formalized CCR model protocol for coordinated case management
- Developed & piloted electronic case management system along with model protocol & uniform consent form
- Expanded stakeholders to become CCCRT

2016 RWJF S4A

- RCT to evaluate impact of CCCRT care model as primary prevention strategy
**CCCRT PROJECT CASE FLOW**

**Step 1: Referrals**
Bronson ED, BPD & EMS identify & refer older adults

**Step 2: Intake**
AAA Consents, Screens & Intakes older adults in REDCap N=300

**Step 3: CCCRT**
Coordinated Care Provided by Core Team Members enabled by shared communication and information exchange in REDCap
Care is holistic, patient centered, multi-sector, wrap-around services, involves CHWs
AAA is ‘lead’ agency responsible for opening and closing cases

**Step 4: Evaluation**
(1) Do CCCRT clients have delayed incidents of repeat ED use and/or elder abuse?
(2) What impact does referral source have on outcomes?

**How can this model be supported in ‘real world’ conditions?**

**Standard I&R**
# PROJECT STAKEHOLDERS

<table>
<thead>
<tr>
<th>Referral Partners</th>
<th>CCCRT core team</th>
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<tbody>
<tr>
<td>Battle Creek Police Department</td>
<td>Region 3B Area Agency on Aging [AAA]</td>
</tr>
<tr>
<td>Bronson Health System ED</td>
<td>Senior Health Partners (GEMS, prevention)</td>
</tr>
<tr>
<td>LifeCare Ambulance Services</td>
<td>Community Healthcare Connections (access for un/underinsured)</td>
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<tr>
<td></td>
<td>Bronson Primary Care</td>
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<tr>
<td>Integrated Health Partners (PCP)</td>
<td></td>
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<tr>
<td>Grace Health (FQHC)</td>
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Elder Law of Michigan

Michigan Adult Protective Services

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[Image: UT Health Science Center logo]
Testing of a Community Complex Care Response Team to Improve Geriatric Public Health Outcomes

This study evaluates Michigan’s Community Complex Care Response Team, a collaboration of three community agencies that provide services across the medical care, public health, and social and community services to decrease potential vulnerabilities and promote health, wellness, and independence in older adults. The

http://goo.gl/JwTvEs

More Info....
Other exiting possibilities

• Clinical Decision Support
  – AHRQ PA-16-282; PA-14-001

• mHealth & Wearables
  – AHRQ PA-14-001;
  – NIA PAR-14-119