Elder Abuse Decision Support System (EADSS)

Kendon Conrad, Ph.D.¹,², Madelyn Iris, Ph.D.³, Jessica Mazza, MSPH¹,²

¹Chestnut Health Systems, ²University of Illinois at Chicago, ³CJE SeniorLife


With support from Illinois Department on Aging

NCPEA & NAPSA Webinar, July 17, 2012
APS Face Budget Cuts Despite More Demand

In 2009 the National Adult Protective Services Association (2009) conducted a survey of state budgets.

– Over half of respondents reported APS budget cuts of 13.5%
– There have been deep cuts to support services
– Two-thirds said that abuse reports to APS have increased by 24%.
How to Respond? Need Standardized Approach to EA

- Recent GAO recommendations to the U.S. Senate all pertain to facilitating the development of a nationwide APS data collection system (U.S. GAO, 2011).

  - Wide variation in the % of cases reported that were investigated:
    - Only 20% of cases reported were investigated in Minnesota while 87% were investigated in Illinois.

  - There was also great variation in the percentage of cases reported that were substantiated:
    - West Virginia - 2.1%
    - Minnesota - 3%
    - Utah - 4.7%

  *In contrast:*
    - Texas - 57.1%
    - Illinois - 53%
    - California - 27.9%

- Standardization can address this high variability with high quality input of clients, collaterals and case workers, and can facilitate communication regionally and nationally.
Why Care about Measurement?

Measurement quality affects treatment delivery

- Standards vary:
  - lack of agreement on what constitutes abuse and neglect, e.g., for conviction and sentencing

- Poor detection; poor screening → more suffering

- Amount of time and other resources clinicians devote to assessment is of uncertain quality

- Lack of ability to determine clients’ treatment needs makes it difficult to target interventions appropriately

- Program delivery costs must be met, despite lack of evaluation outcomes, i.e., need accountability
Program of Research

**Project 1**
(NIJ: ‘06–’08)

Conceptualize, develop, and field-test measures: Financial Exploitation & Psychological Abuse

**Project 2**
(NIJ: ‘09–’11)

End-user criteria for decision support system: including physical, sexual, & neglect; short screeners

**Project 3**
(NIJ: ’12–’14)

Prototype System: EADSS

Field-test of Web-based EADSS
Project 1 Goals: Conceptualizing and Measuring Financial Exploitation and Psychological Abuse of Older Adults

1. Conceptualize financial exploitation (FE) and psychological abuse (PA) constructs and develop item banks that represent these constructs

2. Refine procedures for obtaining sensitive information concerning FE and PA in the community

3. Develop new items and refine existing items assessing FE and PA

4. Conduct a full-scale field test of FE and PA assessment measures
Phase 2 - Focus Groups to Establish Face Validity and Ease of Use

- Used mixed focus group technique:
  - open-ended discussion regarding EA
  - review of the FE and PA measures
- Reviewed items, eliminated redundancies and irrelevant questions, revised wording, tested response categories
- Elicited EA investigation process from different perspectives
  - professionals & elder abuse investigators, senior services organization staff, Cook County Public Guardian’s Office, Illinois State’s Attorney’s Office, bankers
  - Consumers—cognitive interviews
Full Scale Field Test

- Recruited 7 elder abuse provider agencies in the Chicago area for full scale field test
- Trained elder abuse investigators to use FE and PA measures
- Data collection completed Nov. 18, 2008
- 227 completed cases with client, staff and IDoA forms
- Rasch analysis of results placed items on rulers of severity based on input from clients and staff.
References from Project 1


Sample Financial Exploitation Items

<table>
<thead>
<tr>
<th>In the past 12 months:</th>
<th>Yes</th>
<th>No</th>
<th>Suspected</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Has _____ used your money on themselves instead of for you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Has _____ bought things for you but not given you back your change?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. Has _____ borrowed money and not paid it back?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. Has _____ said they were buying something for you, but it was really for their own use?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. Has _____ taken your prized belongings (e.g., jewelry) without permission?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11. Has anyone switched some of your expensive items for cheaper ones?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Research Significance

• Measurement is a key to opening the field for scientific study. It is by using the items and the hierarchy developed in this study that behaviors can be located on rulers of severity.

• This measurement model may help to better estimate prevalence and enable more precise screening for triage into appropriate interventions.
Project 2: Developing an Elder Abuse Decision Support System

Goal: Devise a computer-based decision support system to facilitate assessment of alleged abuse allegations, standardize substantiation decision-making, and link care planning to case specifics

National Institute of Justice Grant #2009-IJ-CX-0202
Development of the Older Adult Mistreatment Assessment (OAMA)

- Retained the PA and FE from previous project
- Added items for: neglect, physical abuse, sexual abuse
- Conducted cross-walk of OAMA and current IDoA indicators
- Created additional components of the EADSS
  - Intake
  - Short Screener
  - Client Information Form
  - Alleged Abuser Information Form & Interview Guide
Feedback and Refinement of OAMA

• Iterative feedback & input from leadership and practitioners on OAMA
  – Multiple meetings with Illinois Department on Aging Elder Rights program Director, managers
  – Focus groups and interviews with Elder Abuse investigators and supervisors

• Conducted “environmental scan” of available infrastructure resources

• Met with Chestnut Health Systems personnel regarding design and technical requirements for the Decision Support System Generator.
Logic models of a typical information system and a computerized decision support system

### A. Typical Elder Abuse Computerized Information System

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Police, medical etc. call APS re: suspected abuse on 1-800 number.</td>
</tr>
<tr>
<td>2.</td>
<td>APS worker observes case and completes paperwork by hand.</td>
</tr>
<tr>
<td>3.</td>
<td>Some data are entered into a computerized data base, i.e., prone to error.</td>
</tr>
<tr>
<td>4.</td>
<td>Data are sent to state data base—no psychometrics, only items, no summary scores.</td>
</tr>
</tbody>
</table>

### B. Some Potential Characteristics of an Elder Abuse Computerized Decision Support System

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Police, medical, etc. use short OAMA screeners to assess suspected abuse before calling APS.</td>
</tr>
<tr>
<td>2.</td>
<td>APS workers use computerized OAMA measures &amp; can interview persons in various e-formats, including CAT—real-time data entry and scoring.</td>
</tr>
<tr>
<td>3.</td>
<td>Data entry already done, giving staff &amp; client measures of key constructs; system generates a written report from OAMA that staff can edit &amp; send.</td>
</tr>
<tr>
<td>4.</td>
<td>State receives standardized assessment that includes APS qual. &amp; quant. reports and client input w/ validated measures.</td>
</tr>
</tbody>
</table>
Initial Decision Process

**Input**
- Intake from reporter (demographics, short screener)

**OAMA Assessment**
- Information obtained from: client, collaterals, abusers, caseworker observation
- Case notes, photos, documents

**Analysis**
- Full Report of OAMA Findings
  - Physical, sexual, emotional, neglect, financial exploitation; abuser report
  - Bar charts indicating severity of abuse scores
  - Includes all symptoms/probs & case notes
  - Substantiation decision

**Design Care Plan**
- Identify intervention goals and choose recommendations based on summary scores and responses
- Determine availability and feasibility of recommended services to present to client (or proxy).

**Choice**
- Client (or proxy) accepts or rejects recommendations

**Implementation**
- Initiate services for the older adult.

**Iterative Decision Process (Every 90 Days, up to one year)**

**Input**
- Re-administer OAMA

**Full Report of OAMA Findings**

**Care Plan Reassessment** (Outcomes achieved?)

**Choice**
- Client (or proxy) accepts or rejects any new recommendations

**Close Case**
Levels of Decision Support System

- Clients
- Staff
- DSS Generator at Chestnut
- Client Data
- Scoring
- Reporting
- Care Plans
- DSS Tools
- Users (Caseworkers & Managers)
- Intermediary (Training and Support)
- DSS Builder (NIJ Team)
- Technical Supporter
- Chestnut Assessment Builder System with IDOA IS staff and NIJ project team

ADAPTIVE MODIFICATION: What actions/changes do users require? Feedback loop to inform decisions
Results

- The EADSS will lead to definitions, decision rules, laws, and policies that inform and support workers’ decisions and client autonomy.

- EADSS can improve the convenience, efficiency and quality of ANE assessments.
  - more accurate prevalence estimates and substantiation
  - more cost-effective elder abuse screening, detection, substantiation
  - better care planning/intervention processes

- EADSS reports will provide systematic and detailed information leading to improved processes for resource allocation, ANE treatment, adjudication, and policy.

- The EADSS model may prove applicable to other areas of criminal justice by providing a standardized assessment technology that generates reports for effective and efficient decision making.
Future. The 2012-2014 study will:

• Determine the efficacy of the web-based Elder Abuse Decision Support System (EADSS) for improving individual assessment, reporting, intervention and end-user utility as compared to standard protocols with Illinois serving as a test bed

• Estimate the psychometric properties of EADSS measures of abuse, neglect and exploitation (ANE)

Research design. Six elder abuse service providers in Illinois will be selected to field test EADSS, in a rolling administration of the new system. Standard ANE procedures of the agencies prior to EADSS implementation will be assessed as a comparison.
Acknowledgements

Co-investigators: John Ridings, PhD, Barth Riley, Ph.D., Edward Mensah, Ph.D.

Special thanks to key collaborators in Illinois: Illinois Department on Aging (Springfield, IL and Chicago, IL), Catholic Charities Senior Service (Harvey, IL), Center for New Horizons (Chicago, IL), Senior Services Associates Inc. (Aurora, IL)

Disclaimer: Do not cite, copy or distribute without permission of authors and the National Institute of Justice. This project was supported by Award No. 2006-MU-MU-0004, 2009-IJ-CX-0202, 2011-IJ-CX-0014 awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. The opinions, findings, and conclusions or recommendations expressed in this publication/program/exhibition are those of the author(s) and do not necessarily reflect those of the Department of Justice.
THANK YOU!

If you are interested in using the EADSS, obtaining more information, or for complete reports, email:

Kendon Conrad at kjconrad@uic.edu
Madelyn Iris at micki.iris@cje.net
Jessica Mazza at jmazza2@uic.edu
EADSS COMPONENTS

**INTAKE**
- Criteria
- Screener (5 types)
- AV Information
- AA Information
- Reporter Information
- Notes

**INTAKE REPORT**
- Summary of Intake
- Information relevant to Investigation

**INVESTIGATION**
- OAMA (Physical, Neglect, Psychological, Financial, Sexual)
- Client Information Form
  - demographics
  - health status
  - functional status
  - living arrangements
  - financial status
- Abuser Information Form
- Abuser Interview

**INVESTIGATION REPORT**
- Summary of Indicators
- Substantiation Findings
- Care Plan Recommendations
- Case Notes
- Summary of Abuser Information Form
- Summary of Abuser Interview