ESP VA Evidence Synthesis Program

Synthesizing evidence for VA leadership to improve the health and health care of Veterans

Katherine Ramos, PhD, MA, M.Ed
Psychologist
Megan Shepherd-Banigan, PhD, MPH
Health Research Scientist
Karen Goldstein, MD, MSPH
Co-Director Durham ESP
Eleanor McConnell, PhD, RN
Clinical Nurse Researcher

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ESP Center
Durham VA Health Care System

ESP VA Evidence Synthesis Program

Discussants:

Michele Karel PhD, ABPP

National Mental Health Director, Geriatric Mental Health

Office of Mental Health

Department of Veterans Affairs Central Office

Elizabeth Czekanski DNP, MS, RN, PMH-BC, NE-BC

Associate Director, Mental Health

National Clinical Nurse Advisor, Mental Health

Office of Nursing Services

Jaime Halaszynski MSW, LCSW

Facility Based Project Assistant, National Social Work PACT Staffing Program

Lead, National Social Work Elder Justice Clinical Implementation Team

What is the ESP?

ESP

The VA **Evidence Synthesis Program (ESP)**, established in 2007, helps VA fulfill its vision of functioning as a continuously learning health care system. We provide timely, targeted, independent syntheses of the medical literature for the VHA to translate into evidence-based clinical practice, policy, and research.

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What is the ESP?

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- ESP reports are used to help:
  - Develop clinical policies informed by evidence
  - Implement effective services and support VA clinical practice guidelines and performance measures
  - Set the direction for future research to address gaps in clinical knowledge
- Four ESP Centers across the US
  - Directors are VA clinicians and recognized leaders in the field of evidence synthesis, and have close ties to the AHRQ Evidence-based Practice Center Program
- ESP Coordinating Center in Portland
  - Manages national program operations, ensures methodological consistency and quality of products, and interfaces with stakeholders
  - Produces rapid products to inform more urgent policy and program decisions
- To ensure responsiveness to the needs of decision-makers, the program is governed by a Steering Committee composed of health system leadership and researchers

The ESP accepts topic nominations throughout the year, and nominations are considered every 4 months.

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ESP Locations

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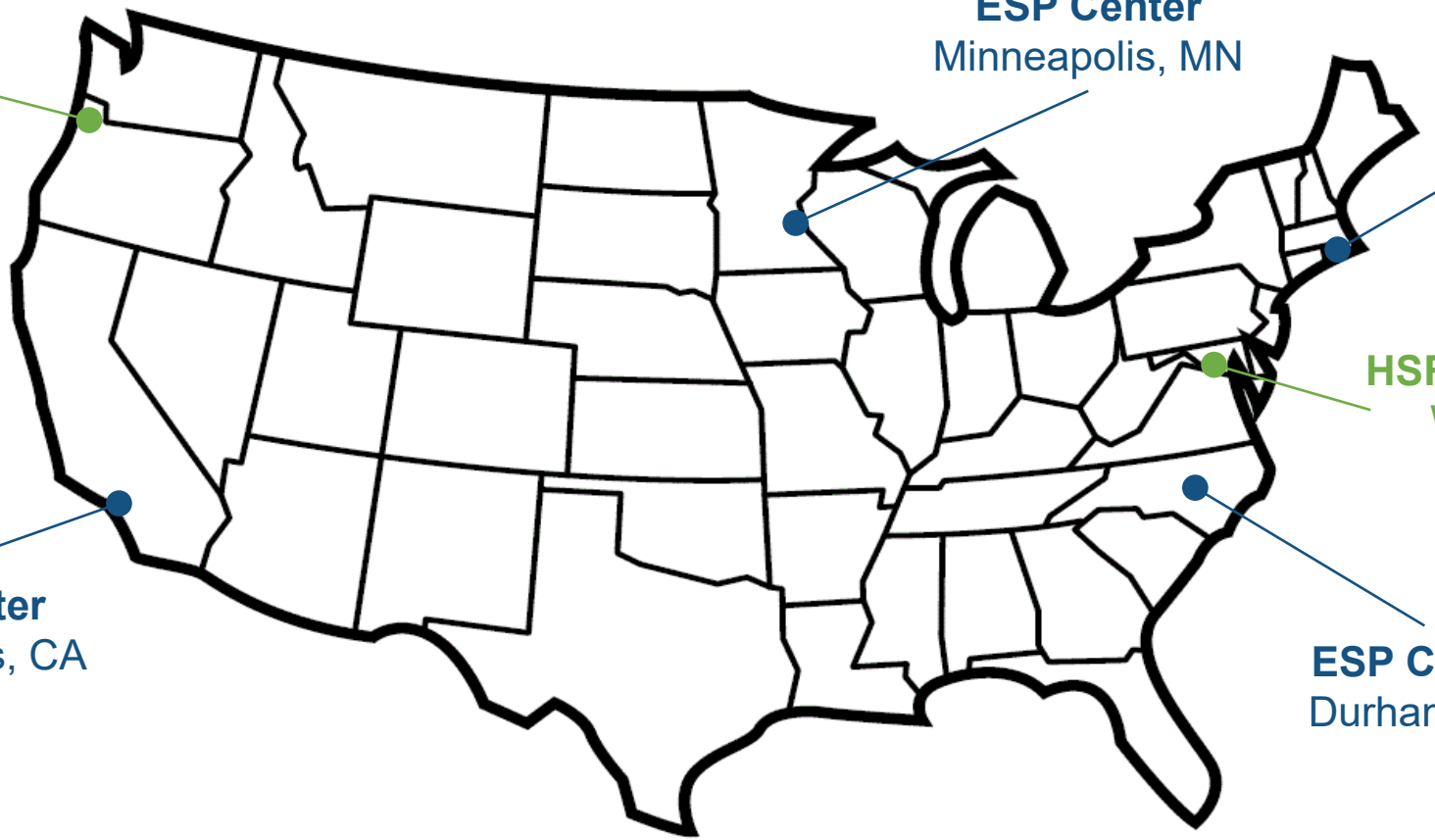

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Care for Older Adults with Distress Behaviors: Health Care Team-focused Interventions

November 2023

Full-length report available on ESP website.

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Authors

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Megan Shepherd-Banigan, PhD
Katherine Ramos, PhD
Cara McDermott, PharmD, PhD
Eleanor S. McConnell, PhD, RN
Sudha R. Raman, PhD
Dazhe Chen, PhD
Tatyana Der, MD, MHSc
Amir Alishahi Tabriz, MD, PhD, MPH
Joel C. Boggan, MD
Nathan A Boucher, DrPH, PA, MS, MPA, CPHQ
Scott M. Carlson, MD
Letha Joseph, DNP, APRN, AGPCNP-BC
Catherine A. Sims, MD
Jessica E. Ma, MD
Adelaide M. Gordon, MPH
Paul Dennis, PhD
Julee Snyder, MPH
Morgan Jacobs, MPH
Sarah Cantrell, MLIS, AHIP
Jennifer M. Gierisch, PhD, MPH
Karen M. Goldstein, MD, MSPH

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Veterans Health Administration
Health Systems Research

Disclosures

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The findings and conclusions in this document are those of the author(s) who are responsible for its contents and do not necessarily represent the views of the Department of Veterans Affairs or the United States government. Therefore, no statement in this presentation should be construed as an official position of the Department of Veterans Affairs. No investigators have any affiliations or financial involvement (*eg*, employment, consultancies, honoraria, stock ownership or options, expert testimony, grants or patents received or pending, or royalties) that conflict with material presented.

Acknowledgments

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Operational Partner

Operational partners are system-level stakeholders who help ensure relevance of the review topic to the VA, contribute to the development of and approve final project scope and timeframe for completion, nominate technical expert panel members, provide feedback on the draft report, and provide consultation on strategies for dissemination of the report to the field and relevant groups.

Michele Karel PhD, ABPP
National Mental Health Director, Geriatric
Mental Health
Office of Mental Health
Department of Veterans Affairs Central Office

Acknowledgments

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Technical Expert Panel (TEP)

To ensure robust, scientifically relevant work, the TEP guides topic refinement; provides input on key questions and eligibility criteria, advising on substantive issues or possibly overlooked areas of research; assures VA relevance; and provides feedback on work in progress.

Maureen Haske-Palomino, DNP, MSN, GNP-BC
Chief, Specialty and Inpatient Advanced Practice Providers
ONS/Madison VAMC

Scott Hutton, PhD, RN, MBA, FAAN
Director of Operations
Workplace Violence Prevention Program, OMHSP

Steve Weintraub, MD, MS
Chief of the Division of Hospital Medicine
St. Louis VAMC

Marianne Shaughnessy, PhD, AGPCNP-BC, GS-C, FAAN
Director
Geriatric Research, Education and Clinical Centers

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Background

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Distress behaviors are highly prevalent among older adults with cognitive and mental disorders

Behaviors can be exacerbated by over- or under-stimulation, unmet needs; unintentionally present in residential settings

Manifestations of patient distress and are highly challenging for health care systems, providers, and paid caregivers, leading to:

- Poor care provision, quality of life
- Staff burnout, low morale

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Background

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Historically, some common strategies to manage distress behaviors are ineffective, not patient-centered (e.g., anti-psychotic medications, restraints)

Effective patient-centered, nonpharmacological approaches to support these patients and paid caregivers/providers are needed and guideline concordant, including

- Training healthcare workers/teams, adjusting workflow to promote positive change (e.g., STAR-VA)

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Background

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Study Goal

- Assess effectiveness of nonpharmacologic staff/clinic focused interventions to reduce patient distress behaviors in residential settings or transitions

Key Questions

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What is the effect of health care team-focused interventions designed to manage persistent or recurrent distress behaviors among older adults…

- in long-term residential or inpatient health care settings
- between health care settings
- inpatient mental health settings

on patient, staff, and utilization outcomes?

Methods

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Distress behaviors

- Physical or verbal aggression
- Repeated vocalizations
- Yelling
- Pacing
- Wandering
- Hoarding
- Handling objects unsafely
- Sexual disinhibition
- Psychosis
- Disengagement or apathy

Methods

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- Rigorous evidence synthesis methodological approach
- *A priori* registered protocol: CRD42023402760 (PROSPERO)
- Searched Ovid MEDLINE, Elsevier Embase and Ovid PsycInfo (December 2002 – December 2022)
- Dual-review of titles/abstracts and full-text for eligibility
- All abstraction over-read by a second reviewer
- Intervention characteristics evaluated for complexity using iCAT-SR
- Risk of bias assessed using Cochrane ROB tools for randomized trials and other intervention study designs
- For KQ1, prioritized randomized trials and those with low to moderate risk of bias
- Strength of evidence assessed via GRADE

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Methods

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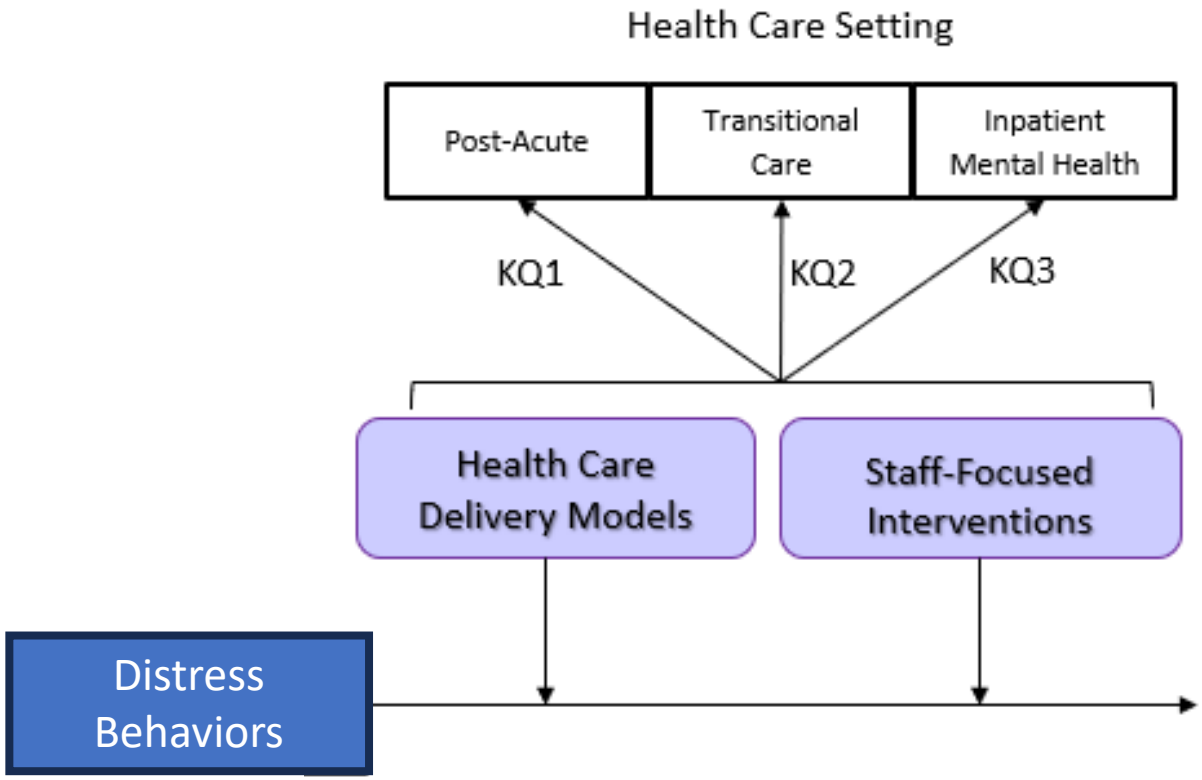
Included:

- Interventions primarily intended to improve health care staff knowledge and behaviors related to distress behavior management
- Adults ≥ 50 years at elevated risk of persistent or recurrent distress behaviors
- Residential, long-term, inpatient health care settings
- Transitional health care settings

Excluded:

- Solely patient-directed interventions (e.g., patient-tailored music)
- Delirium
- Intoxication
- Pediatric populations

Analytic Framework



Outcomes

Patient:
- Distress Behaviors (*eg*, agitation, aggression)
- Mental and/or Medical Symptom Management
- Quality of Life

Staff:
- Morale
- Satisfaction
- Safety
- Efficacy
- Competence

Utilization:
- Length of Stay of care setting
- Discharge
- Readmission
- Costs of Care

Literature Flow Diagram

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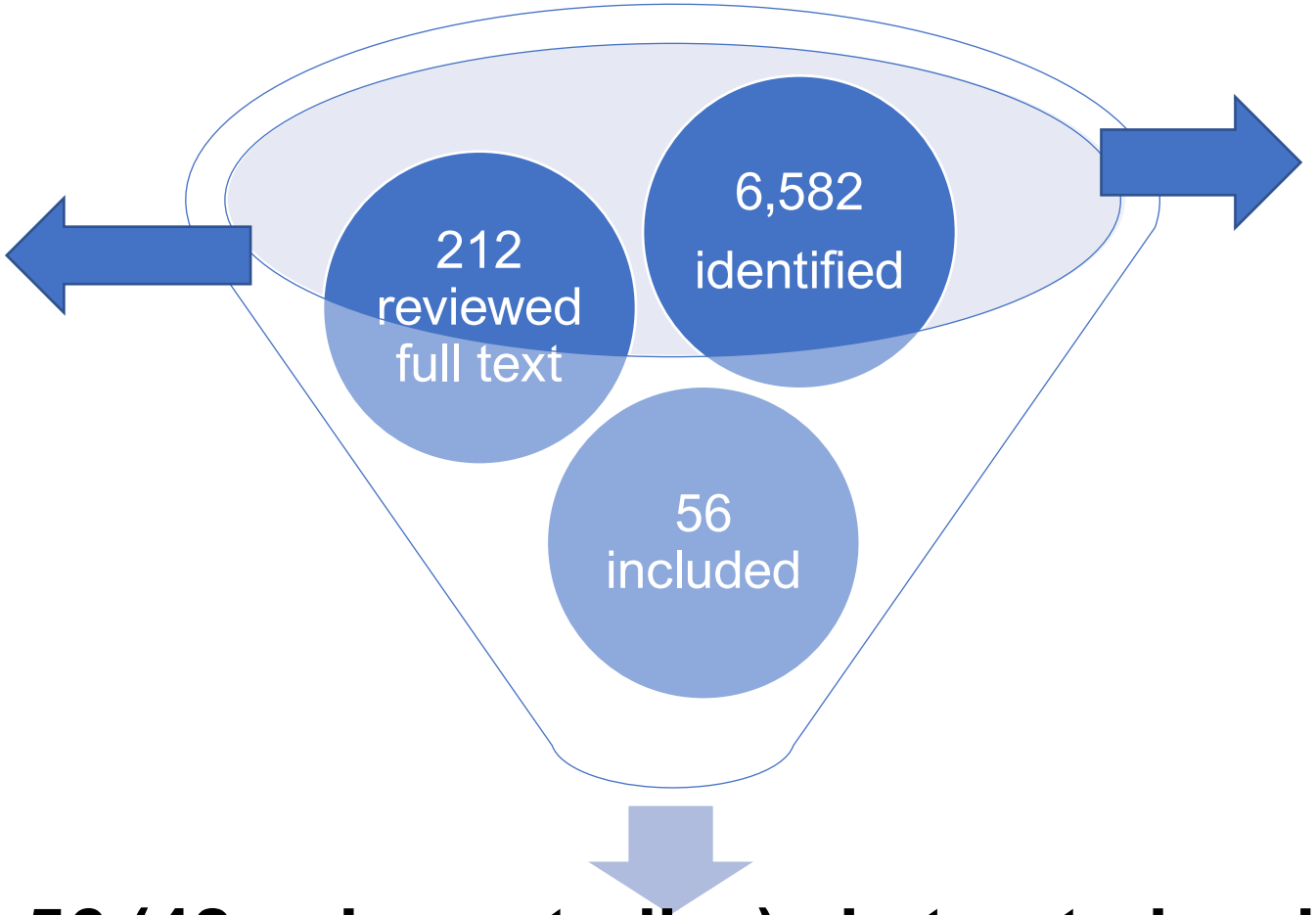

56 (48 unique studies) abstracted and categorized by focus area

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Evidence Profile

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34 unique studies

- Long-term care/inpatient: 29 low/moderate risk of bias
- Transitions of care: 2
- Inpatient mental health: 3

Mean age range: 63.9 to 89.8

Countries:

- USA (n = 10), Europe (n = 18), Australia/NZ (n = 4), Japan (n = 1), Canada (n = 2)

Intervention Groupings

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Patient-focused Intervention Activities

- Staff intervenes on patient via assessment and care planning.

Health Care Worker-focused Activities

- Interventions to enhance staff abilities, knowledge or skills to manage distress

Health Care Worker and Patient-Focused Intervention Activities

- Combo of patient and HCW activities

Health Care Worker, Patient, and Environment-Focused Intervention Activities

- Combo of patient and HCW activities + modifying the environment to minimize distress.

Measures

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Distress Behaviors

- Cohen-Mansfield Agitation Inventory (CMAI)
- Neuropsychiatric Inventory (NPI)
- Subscales of the above

Quality of Life

- DEMQOL-Proxy
- EQ-5D index
- QUALID
- QUALIDEM

Antipsychotic Use

- # reduction of medication

Study characteristics: Long-term residential and inpatient settings

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All among patients in NH or LTC facilities

Mostly patients with dementia

Cluster randomized

Study characteristics: Long-term residential and inpatient settings

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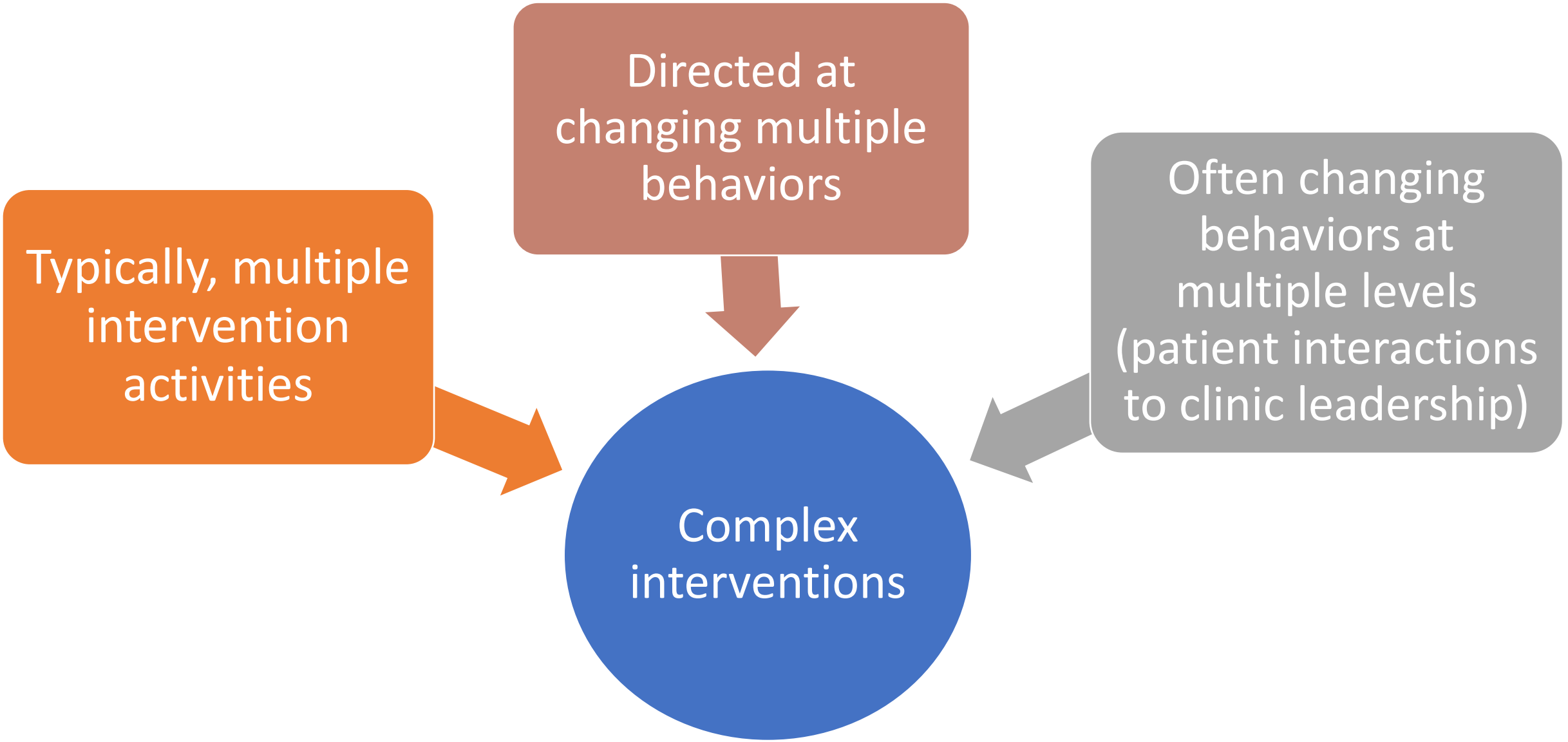

Findings: Long-term residential and inpatient settings

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Patient-Focused Intervention Activities Only
(N =3 studies; 365 patients)

Intervention Components:

- Diagnose distress behaviors
- Assessment and care planning
- Ongoing support for distressed behaviors
- Medication management
- Life histories

Agitation:

- No significant intervention effects by CMAI
- Some short term (<2 week) improvement by Agitation Behavior Mapping Instrument

Findings: Long-term residential and inpatient settings

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Health Care Worker-Focused Intervention Activities Only
(N=6 studies; 1,689 patients)

Intervention Components:

- Providing education on dementia
- Building staff skills or implementing a tool

- Single 2-hour session→ 2-day seminar and 6 monthly group meetings

Agitation:

- CMAI: 3 studies
  - no significant improvement
- NPI: 4 studies
  - Improvement short-term (4-8 weeks)
  - No long-term improvement (7-8 months)

Quality of Life:

- No significant effect

Antipsychotic use:

- No significant effect

Findings: Long-term residential and inpatient settings

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Health Care Worker and Patient-Focused Intervention Activities
(n= 17studies; 6,377 patients)

Intervention Components:

- Most common: assessing resident behaviors for care planning
- 3-hour lecture to 2 days per week for 10 months
- 4-20 months duration

Agitation

CMAI 11 studies

- Meta-analysis of 7 studies – no reduction (SMD –0.31 (-0.78, 0.16)

NPI 9 studies

- Meta-analysis of 5 studies – moderate, but non-significant reduction (SMD –0.47 (-1.18, 0.24)

- Notable heterogeneity
- More components may be more effective

Findings: Long-term residential and inpatient settings

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Health Care Worker and Patient-Focused Intervention Activities
(n= 17studies; 6,377 patients)

Intervention Components:

- Most common: assessing resident behaviors for care planning
- 3-hour lecture to 2 days per week for 10 months
- 4-20 months duration

Quality of Life
9 studies

- Meta-analysis of 5 studies found medium to large beneficial effect with SMD 0.71 (0.39, 1.04)

Anti-psychotic Use
8 studies

- Meta-analysis of 6 studies found reduced odds of medication use with OR 0.45 (0.22, 0.91)

Findings: Long-term residential and inpatient settings

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Health Care Worker, Patient, & Environment-Focused Intervention Activities
(N = 3 studies; 432 patients)

- No significant effect on agitation, quality of life

Findings: Transitions of Care

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Two studies evaluated patient distress behaviors during transitions to more supportive residential settings.

- One study (N=116) found a significant reduction in distress behaviors among 14 patients… with no change in the other 112 patients.
- The second study found no change in "negative affect or inappropriately engaged" behaviors.

Findings: Mental Health Inpatient Settings

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Two primarily staff-focused interventions were evaluated across 3 articles.

- A theoretically driven, multifaceted intervention with 10 packaged activities (e.g., Safewards) was found to reduce the rate of conflicts per shift by 15% and the rate of containment events by 26.4%.
- A second evaluation of a single-site staff education program with ongoing monitoring reduced the average number of aggressive incidents toward peers or objections by 6 to 2.

Key Points

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- **Focus on Dementia Care in Long-Term Residential Settings**
  - Most studies involved dementia patients in long-term settings

- **Short-Term vs. Long-Term Benefits On Distress Behaviors**
  - HCW-only interventions (skills building and education) → short-term gains
  - HCW + Patient interventions → improved QOL, reduced antipsychotic use, distress reduction was inconclusive but in the direction of being beneficial

- **Continued Gaps in Research**
  - Few studies examined interventions involving transitions in care locations or that evaluated multi-faceted interventions from inpatient mental health settings.

Take Home Points & Implications

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- **Interventions that prioritize quality of life and other potential mechanisms offer a novel route to address distress and hold promise for significant improvements in patient care.**

- **Insufficient evidence base to assess the impact on healthcare worker outcomes remains.**

- **Addressing distress is clearly complex and may require multi-level interventions to target distress behaviors.**

Limitations

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- **Identified Literature**
  - Most of literature from long-term care settings of patients with dementia
  - Complex interventions – multiple behaviors and clinical practices
    - Could not determine effectiveness of individual intervention components
  - Very little found related to transitions of care
  - Staff turnover generally not reported
  - Definition distress varies across studies

- **Our approach**
  - Did not include workplace violence literature
  - Interventions not primarily focused on distress behavior management

Discussants

ESP

Michele Karel PhD, ABPP

National Mental Health Director, Geriatric Mental Health

Office of Mental Health

Department of Veterans Affairs Central Office

Elizabeth Czekanski DNP, MS, RN, PMH-BC, NE-BC

Associate Director, Mental Health

National Clinical Nurse Advisor, Mental Health

Office of Nursing Services

Jaime Halaszynski MSW, LCSW

Facility Based Project Assistant, National Social Work PACT Staffing Program

Lead, National Social Work Elder Justice Clinical Implementation Team

Moderator:

Eleanor McConnell, PhD, RN

Core Investigator, GRECC, Durham VA Health Care System

Co-Director, VA Quality Scholars Program, Durham VA Health Care System

Associate Professor, Duke University School of Nursing Senior Fellow, Duke Center for the Study of Aging and Human Development

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Questions?

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If you have questions, feel free to contact:

Karen Goldstein, MD, MSPH

Co-Director Durham ESP

karen.goldstein@va.gov

Ramos K, Shepherd-Banigan M, McDermott C, McConnell ES, Raman SR, Chen D, Der T, Tabriz AA, Boggan JC, Boucher NA, Carlson SM, Joseph L, Sims CA, Ma JE, Gordon AM, Dennis P, Snyder J, Jacobs M, Cantrell S, Gierisch JM, Goldstein KM. Health Care Team Interventions to Reduce Distress Behaviors in Older Adults: A Systematic Review. Clin Gerontol. 2024 Jul 2:1-16. doi: 10.1080/07317115.2024.2372424. Epub ahead of print. PMID: 38954524.

LINK to full ESP report

ESP on the Internet

ESP on the VA Intranet

Contact the ESP Coordinating Center

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