

VA



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of Veterans Affairs



# A Team-Based Intervention for Distress Behaviors in Dementia: Lessons Learned in VA Community Living Centers

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# STAR-VA INTERVENTION AND TRAINING PROGRAM



STAR-VA<sup>1</sup> is a person-centered, interdisciplinary, behavioral approach to managing challenging behaviors among CLC<sup>2</sup> residents with dementia



A CLC Mental Health (MH) Professional (“Behavioral Coordinator”) and Registered Nurse (“Nurse Champion”) work with entire team, including direct care staff



Four core components

1. Realistic expectations
2. Effective communication
3. ABC<sup>3</sup> problem-solving
4. Pleasant events



Training Program: Competitive site selection process  
Intensive virtual workshop, 6 months of consultation, competency based



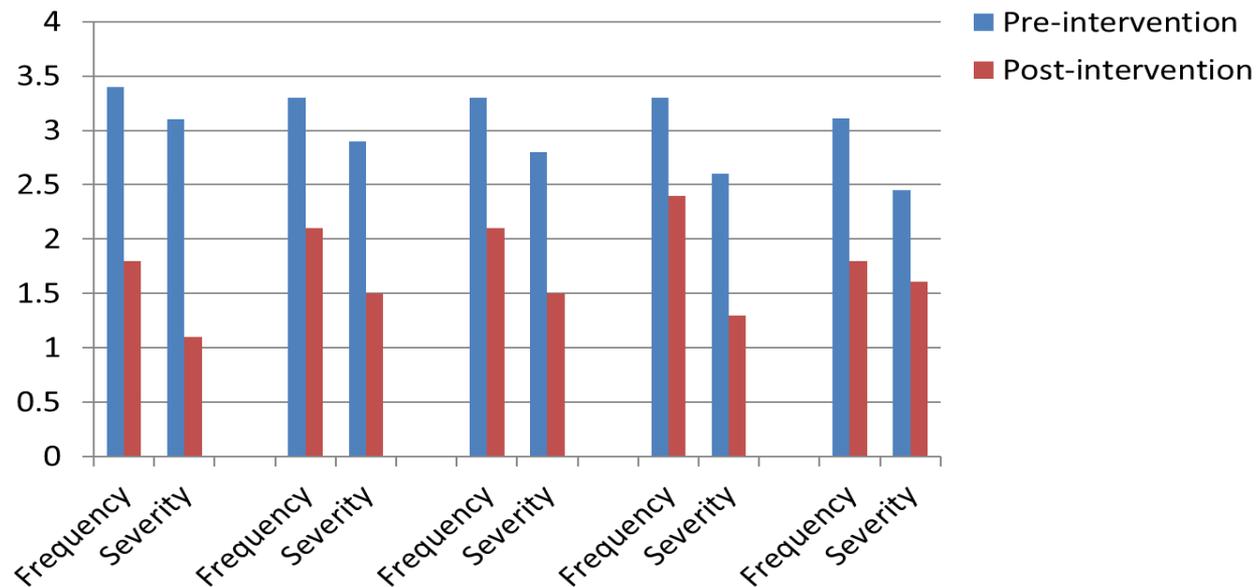
2010: Pilot program  
2013-2018: *Annual training* - 17-23 sites/year  
95/134 CLCs trained at least once  
*Retraining*  
2014-2018: 41 CLCs, 9 retrained 2X

<sup>1</sup>Adapted from Staff Training in Assisted Living Residences (STAR; Teri et al., 2005); <sup>2</sup>Community Living Center; <sup>3</sup>Activator-Behavior-Consequence



# STAR-VA TRAINING PROGRAM EVALUATION OUTCOMES

- Pre-post clinical outcomes for STAR-VA Veteran cases, 2013-17
  - Significantly decreased frequency, severity of target behaviors



- Significantly decreased symptoms of depression, anxiety, agitation
- Increased self-reported confidence among trainees



# FURTHER EVALUATION NEEDED

- Positive training program outcomes; however...sustaining a new care approach is challenging
  - E.g., staff turnover, teamwork challenges, resistance to new approaches, time, varying leadership priorities
  - Many facilities requesting retraining – not sustainable
  - Facilitators and barriers to local program sustainment?
- Need for evaluation of program impact on key system outcomes
  - Challenges given national roll-out, no controlled study
  - STAR-VA evaluation grant





# PARTNERED QUERI EVALUATION: TEAM AND ACKNOWLEDGEMENTS

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**QUERI**  
VA Quality Enhancement Research Initiative



# PARTNERED QUERI EVALUATION: AIMS

## Develop and validate

Aim 1: Develop and validate a **quality indicator** for monitoring the prevalence of Distress Behaviors in Dementia (DBD), using Minimum Data Set (MDS) items, validated by STAR-VA measures

## Evaluate

Aim 2: Evaluate the **longitudinal impact** of STAR-VA by comparing site and resident outcomes at trained and untrained CLCs on DBD, psychotropic use, staff injuries

## Examine

Aim 3: **Examine variations** in the sustained implementation of STAR-VA using qualitative methods with a purposeful sample of trained CLCs using Knowledge Reservoir (KR) domains

## Goal

Goal: Use outcomes to develop a strategy to implement and evaluate a **tailored intervention** to support CLC teams **in sustaining STAR-VA/positive outcomes**



# AIM 1: DEVELOP MDS 3.0 DISTRESS BEHAVIOR IN DEMENTIA INDICATOR

- MDS behavior items factor analysis result in two internally consistent factors:
  - Distress Behavior in Dementia Indicator (DBDI)
  - Wandering scale
- MDS Distress Behavior in Dementia Indicator (DBDI) is:
  - significantly related across administrations when given closer in time
  - significantly related to validated measures (Cohen-Mansfield Agitation Inventory) as predicted
  - sensitive to change





# MDS 3.0 DISTRESS BEHAVIOR IN DEMENTIA INDICATOR (DBDI)



**IF I4200 Alzheimer's Disease or I4800 Dementia, THEN ADD:**



E0200A Physical behavior symptoms directed toward others	0-3
E0200B Verbal behavior symptoms directed toward others	0-3
E0200C Other behavior symptoms not directed toward others	0-3
E0800 Rejection of Care	0-3



E0500A Put the resident at risk of physical illness/injury	0,1
E0500B Significantly interfere with the resident's care	0,1
E0500C Significantly interfere with the resident's participation in activities/social interaction	0,1



E0600A Put others at significant risk of injury	0,1
E0600B Significantly intrude on the privacy or activity of others	0,1
E0600C Significantly disrupt care or living environment	0,1



**Total Score**

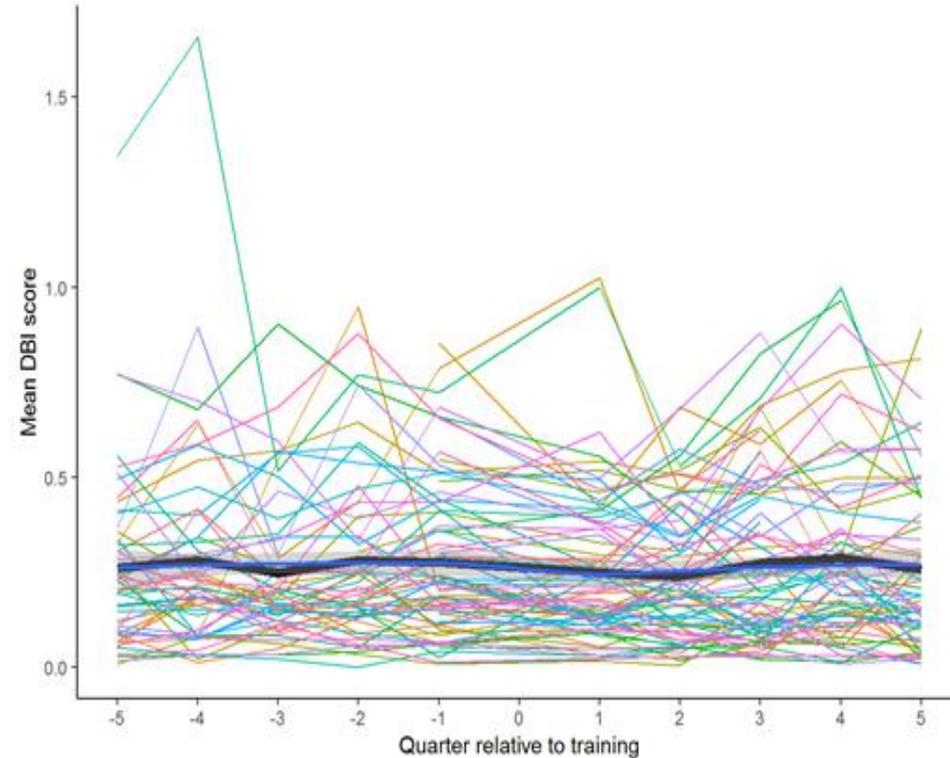
**0-18**



# AIM 2: IMPACT ON MDS 3.0 DISTRESS BEHAVIOR IN DEMENTIA INDICATOR

## STAR-VA impact on MDS DBDI:

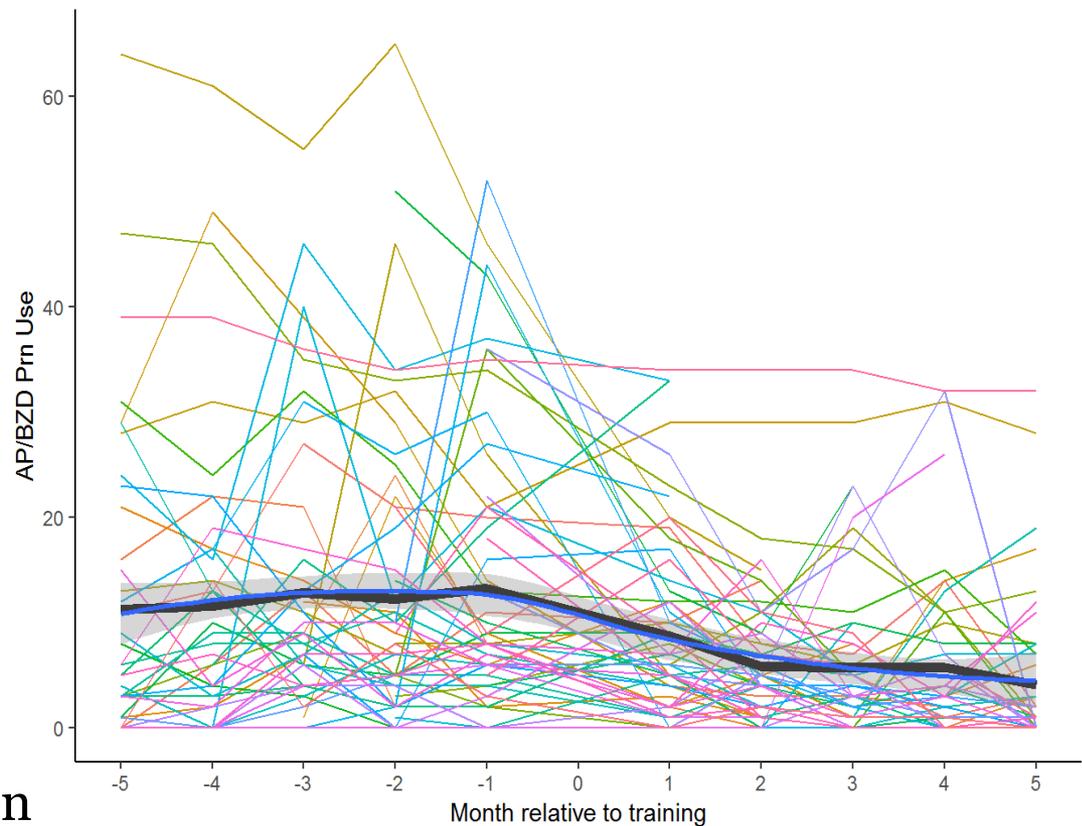
- MDS DBDI decreased from pre- to post-intervention
- No significant difference over time in routine MDS DBDI for STAR-VA cases compared to eligible residents at untrained CLCs
  - Routine CLC administration of MDS DBDI records fewer behaviors compared with STAR-VA administered DBDI
  - Missing data, misaligned assessments
  - Little change captured over time





## AIM 2: IMPACT ON PSYCHOTROPIC PRESCRIBING

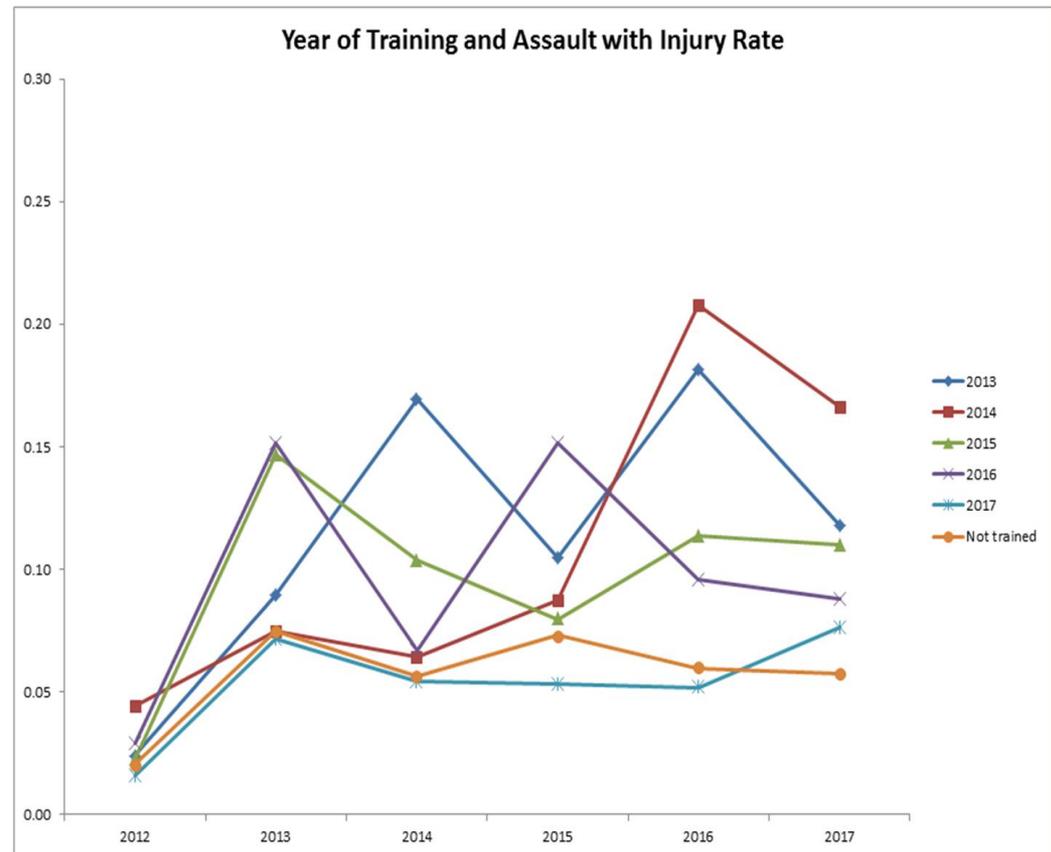
- Compared training cases to matched comparison residents at untrained CLCs, accounting for baseline medication use and other factors
- Significant decrease in dose equivalents of as-needed antipsychotic and benzodiazepine meds prescribed for agitation/anxiety in STAR-VA cases (figure) versus comparisons
- Less significant decreases in total antipsychotic and benzodiazepine medication dose equivalents for STAR-VA cases and overall for CLCs trained compared with untrained CLCs





## AIM 2: IMPACT ON CLC STAFF INJURY RATES

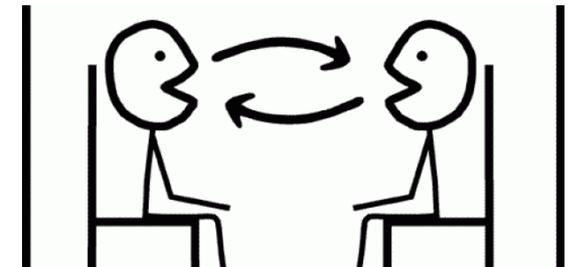
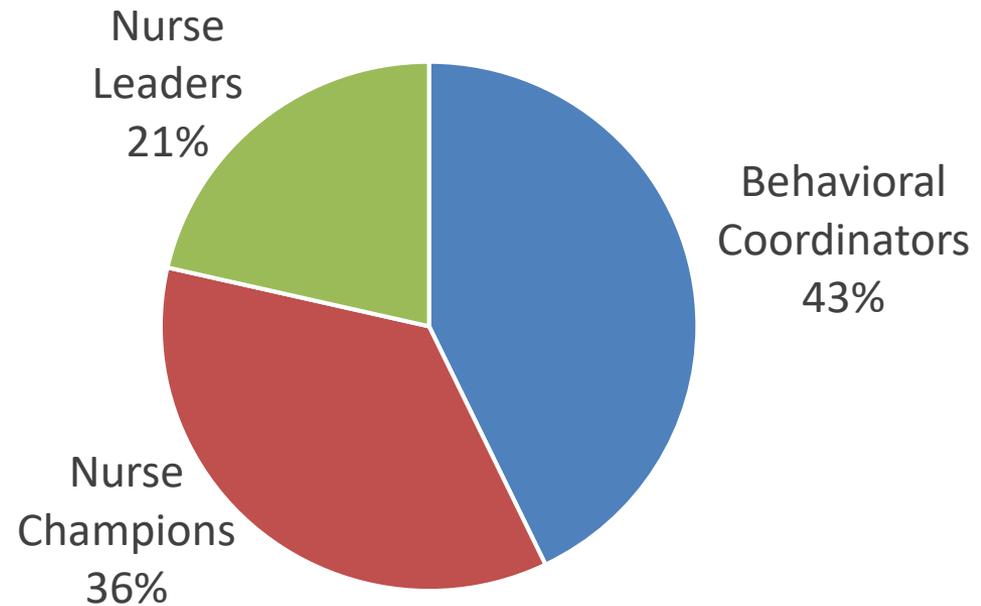
- Compare staff injury rates due to assault in CLCs that completed STAR-VA training relative to untrained CLCs, accounting for baseline staff injury rates and other factors
- STAR-VA CLCs start with higher rates of staff injury, disruptive behavior reports, DBDI, prevalence of dementia, depression, anxiety, ADC and MH FTE
- Assault with staff injury rates significantly decrease the year of and following completion of STAR-VA training, compared to CLCs not trained





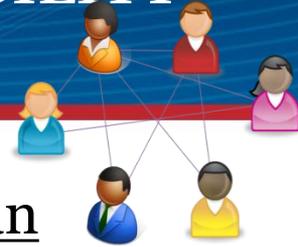
# AIM 3: VARIATION IN SUSTAINMENT INTERVIEW SAMPLE

- 20 CLCs recruited
- 39 interviews conducted from Dec 2018-June 2019
  - 42 respondents
- STAR-VA sustainment
  - 30% fully sustained implementation
  - 65% somewhat to mostly sustained implementation
  - 5% very little





# AIM 3: KNOWLEDGE RESERVOIR SUSTAINABILITY FRAMEWORK



- “Sustainable change refers to the continual presence in an organization of all or most of the practices/ activities of an intervention or program” (p. 89)
- “Organizational memory refers to the storage of embodiment of knowledge in various knowledge reservoirs within the organization...the ability of an organization to sustain new initiatives, to institutionalize the initiatives in the organization’s standard operating procedures and to ‘routine’ the initiatives to make them a permanent component of the organization” (p. 90)

Verani, T., Lemieux-Charles, L., Davis, D. A., & Berta, W. (2009). Sustaining change: Once evidence-based practices are transferred, what then? *Longwoods Review*, 6, 89-96.



# KNOWLEDGE RESERVOIR SUSTAINMENT FRAMEWORK

<b>Knowledge Reservoir</b>	<b>Definition</b>
<b>People</b>	Organizational members carry information about organization best practices, who knows what, past experience, knowledge from social network, etc.
<b>Relationships</b>	Relationships between people, how organizational members interact
<b>Organizational Information Space/Tools</b>	Physical and temporal space that allows for organizational members to share information with each other (e.g., emails, conference room)
<b>Structure of Performance</b>	Roles (expectations of individuals, correct behaviors), reporting relationships and departmental or project responsibilities



# KNOWLEDGE RESERVOIR SUSTAINMENT FRAMEWORK

<b>Knowledge Reservoir</b>	<b>Definition</b>
<b>Routines and Procedures</b>	Usual routines members use to do their work, standard operating procedures
<b>Artifacts and Policies</b>	Documents such as policies and procedures, documenting systems, information technology, reports, educational manuals, etc.
<b>Culture</b>	Values, beliefs and attitudes that get reflected in stories, language, behavior and interactions, organizational priorities



# AIM 3: USEFULNESS/HELPFULNESS



## For Staff

- Provided structure and framework
- Supported understanding of dementia-related behaviors, actions
- Promoted staff well-being
- Increased collaboration within the team

*"it gave me guidance how to address and deal with behavior problems. It was a learning process for me... it really allows me to structure some of the way in which we can incorporate these behavioral interventions"*

## For Veterans

- Reduced anxiety
- Reduced difficult behaviors
- Reduced the need for prescribed medication

*"listening to residents really helps lower anxiety, it gives them something to do in these situations where they feel helpless and having that intervention reduces their [anxiety], it makes for a more pleasant environment "*

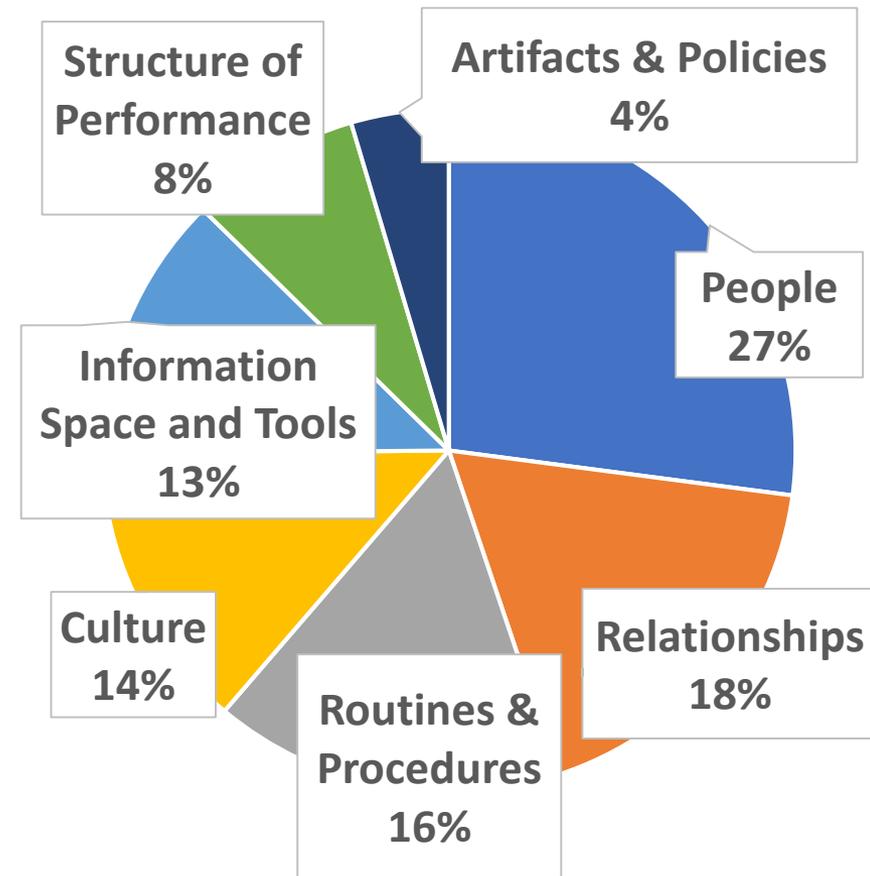
*"I have seen a tremendous decline in behaviors...once [staff were] more educated on dementia and its expectations and those behaviors, things started getting better and we have come a long, long way"*

***"When STAR-VA is no longer a tool, staff turn to medication"***



# AIM 3: VARIATIONS IN SUSTAINED IMPLEMENTATION OF STAR-VA

- Qualitative analysis of interview data using the knowledge reservoir (KR) framework for EBP sustainability
- Common themes supporting sustained implementation:
  - People – champions, leaders, direct care workers, the whole team
  - Relationships – team meetings, 1:1 in the moment discussions
  - Routines and Procedures – routine meetings, trainings, documentation
  - Culture – commitment to person-centered care, relative priority, collaborative team





# AIM 3: BARRIERS AND FACILITATORS TO SUSTAINED STAR-VA IMPLEMENTATION

## Key Barriers

- Staff turnover, workload, burnout
- Relationship and teamwork challenges
- Limited, inconsistent leader support
- Inconsistent documentation, training
- Low/mixed staff buy-in and ownership
- Unsupportive/competing culture
- Not integrated into performance expectations or policies

## Key Facilitators

- Strong passionate BC and NC team
- The whole team involved
- Regular teamwork and open communication, e.g. meetings, rounds, huddles
- Consistent leader support
- Routine documentation, integration of STAR-VA into care plans
- Staff buy in, enthusiasm, pride
- Supportive, person centered culture
- Integrated into performance expectations, policies, staff recognition



# SUSTAINING STAR-VA QUERI: SUMMARY



STAR-VA implemented more often in CLCs with higher rates of dementia, MH diagnoses, DBDI, disruptive behavior reports, staff injuries

Teams view STAR-VA useful and helpful

MDS Distress Behavior in Dementia Indicator (DBDI) is reliable, valid, and sensitive to change

- Routine MDS DBDI under-reports and not aligned with timing of intervention

STAR-VA results in significant decreases in staff injuries and use of as-needed antipsychotic and benzodiazepine medications

- STAR-VA does not impact current routine behavior measures

Relationships, People, Routines and Procedures, Information Sharing, and Culture are key to sustainability

Matching barriers to strategies based on expert consensus – needs assessment, implementation blueprint, network weaving



# STAR-VA PROGRAM: NEXT STEPS



- Use MDS DBDI to provide routine feedback to CLC teams to guide care (supplement with more frequent assessment)
- Develop STAR-VA sustained implementation guide and checklist
  - Readiness assessment, implementation steps, sustainment strategies
- Encourage teams to select and track Quality Improvement (QI) outcomes
- Partner with ongoing CLC QI/teamwork initiative
  - Engage and empower direct care staff
  - Use huddles for communication, problem-solving
- Foster supportive leadership and work culture
  - Champion succession planning, ongoing consultation
  - Regional communities of practice





# STAR-VA RESOURCES



For information about STAR-VA, including link to the intervention manual, citations, and an on-line broadcast providing a program orientation, see:

[https://www.mentalhealth.va.gov/healthcare-providers/docs/STAR-VA\\_Overview.pdf](https://www.mentalhealth.va.gov/healthcare-providers/docs/STAR-VA_Overview.pdf)

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# QUESTIONS

