



Improving Depression Care in Nursing Facilities Using Practice Improvement Education (PIE) Through a Mentored Approach

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BACKGROUND

Depression is common among long-term care residents. Recent changes to the Minimum Data Set (MDS 3.0) provide opportunities for improving diagnostic accuracy and depression care quality; yet how best to integrate MDS 3.0 data into quality improvement (QI) activities is untested.

Funding:

U.S. Department of Health Resources and Services Administration (HRSA/BHPr) for The California Geriatric Education Center (CGEC)

PROJECT OBJECTIVE

To build nursing home capacity to create and sustain QI processes, focused on depression screening and management, through education, on-site coaching, and technical assistance over a 6-month period by way of:

1. Facilitating MDS 3.0 Patient Health Questionnaire (PHQ-9) resident data collection and interpretation related to diagnosis and medication use; and
2. Educating, via team meetings, webinars, and technical assistance, to establish QI goals and related approaches. We determined progress through team self-appraisal of attitudes and care processes, mentor assessments, and resident level depression outcomes.

PIE NURSING HOME SETTINGS

The CGEC Practice Improvement Education (PIE) Project recruited and worked with five nursing home facilities across the State of California.

PIE Sites included:

Asbury Park (Sacramento, CA):

- Champions: Phonechia Thomas, BSW; Greg Tanoy; James Jordan
- Koco Bennet; Atherine Chambers, LVN; Ashkan Javaheri, MD; Pat Nix, RN; Yuen Ping, LVN; Christina Uster, CNA

Country Villa Broadway (San Gabriel, CA):

- Champion: Sonia Cardenas, NHA, MA
- Oscar Chien, MD; Katherine Robles, RN; Katy Liang, RN; Li Fang Jou, LVN; Grace Quintana; Tamar Murphy

Country Villa Plaza (Santa Ana, CA):

- Champions: Harmony Chavez, SWF; Rebecca Forest, NHA, MHCA
- Samir Azzam, MD; Melissa Delgado, LVN; Josephine Drew, RN; Zorana Gonzales, RN; Melanie Nassar, LVN; Wendy Valencia

Edgemore DPSNF (Santee, CA):

- Champions: Rebecca Ferrini, MD, MPH, CMD; Robert Gibson, PhD, JD
- Noel Avilucea; Chrystyne Curry, LMFT; Veronica McBride, MA; Anne Monaco, CTRS; Soyoung Phaymany, RN

Fredericka Manor Care (Chula Vista, CA):

- Champions: Judie Harrington, RN, BSN; Loraine Wiencek, LNHA
- Doug Greiner; Ron Hannah, LVN; Tess Liangco; Lida Luansing, RN; Julia Sink, RN; Vernon White, MD

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Across the five nursing homes, 35 staff members from the original teams participated in all PIE activities. Including staff turn over, a total of 41 nursing home staff were exposed to some training on QI in long term care setting.

TABLE 1: PIE Baseline & Descriptive Process Data (Summary April 2013)

	Overall	Site 1	Site 2	Site 3	Site 4	Site 5
Nursing Home Facility Characteristics						
# beds	709	145	59	174	192	139
# residents at baseline	615	106	55	166	191	97
Participants in 7/2011 CALTCM Training	12	4	3	3	1	1
"Original" Nursing Home Staff Team Composition (based on attendance at Mentor Visit #1)						
Doctors	4	0	1	1	1	1
Nurses	15	3	3	3	3	3
Social Workers	7	1	1	1	1	3
Administrators	5	2	1	1	0	1
Misc	4	0	1	1	1	1
Total Original PIE Staff Team Members	35	6	7	7	6	9
TEAM RETENTION - Number original team members retained [n (%)] (at Mentor Visit 1 AND at Mentor Visit 3)	24 (68.6%)	4 (66.7%)	6 (85.7%)	3 (42.9%)	3 (50%)	8 (88.9%)
TEAM COHESION - Proportion of "original" team present at ALL visits (1,2,3)	21/35= 60.0%	2/6= 33.3%	5/7= 71.4%	3/7= 42.9%	3/6= 50%	8/9= 88.9%
TEAM GROWTH - Number team members gained at Visit 3 (since Visit 1)	6	2	0	2	2	0

PHQ-9 Facility Data From MDS 3.0 Assessments and Administrative Data

Table 2: Cross Site PIE Baseline Resident PHQ-9 Data Including Staff Assessed Scores

Baseline PHQ-9 Score		Antidepressant Medication		Depression Diagnosis	
Range	N (%)	Yes N (%)	No N (%)	Yes N (%)	No N (%)
10+	20 (3.80)	10 (50.0)	10 (50.0)	12 (60.0)	8 (40.0)
5-9	78 (14.8)	34 (43.6)	44 (56.4)	30 (38.5)	48 (61.5)
0-4	412* (78.2)	131 (31.9)	279 (67.9)	151 (36.7)	259 (63.0)
Score: 99	17 (3.23)	10 (58.8)	7 (41.2)	10 (58.8)	7 (41.2)
TOTAL	527	525		525	

Note: Two additional data sets to be analyzed (Jan 2013 and May 2013)
*2 residents missing medication and diagnosis data

CGEC PIE Webinar Series (5)

I. PIE Project Overview & Using Your Depression Data (6/27/12) PIE Project components, goals, objectives and the importance of examining resident level data to identify potential areas for quality improvement. http://copper.adobeconnect.com/p5r20eulec7/	III. Treatment Initiation & Management (9/10/12) Team quality improvement strategies, such as Behavioral Activation in Long Term Care settings, identifying the evidence-base, key concepts/practical application and highlighted an interactive role play with a case study/problem scenario. http://copper.adobeconnect.com/p7hsnu8i3cr/
II. Identification and Diagnosis of Depression (8/20/12) Team approaches for depression care including team structure and team process. http://copper.adobeconnect.com/p97vtqttey2/	IV. Treatment Management & Monitoring (10/26/12) Depression management and monitoring options, team quality improvement strategies and ideas for incorporating PIE activities into future Quality Assurance Practice Improvement (QAPI) initiatives. http://copper.adobeconnect.com/p1kenr4vot/
V. Accomplishments, Lessons Learned & Sustainability (1/10/13) Capstone webinar – summary project activities and outcomes. Provided the opportunity for sites to report on their Quality Improvement projects, their approach to managing challenges and their key accomplishments. http://copper.adobeconnect.com/p29poik5501/	

METHODS

Development:

- Conducted monthly PIE Committee meetings
- Developed PIE Webinar Series and mentor visit guide

Implementation:

- Facilitated three interprofessional mentor pair visits with established NH PIE Implementation Teams to:
 - establish facility-level PIE goals
 - establish team processes and "rules of conduct"
 - facilitate team development
 - educate, model, and practice QI methods
 - facilitate data collection and problem solving
 - focus teams on using data to identify and solve QI problems

Program Evaluation:

- Program Level Data Collection
- Nursing Home Staff Pre-Post Survey (team self appraisal of attitudes and care processes, competency levels)
- Resident Level Data Collection (PHQ-9 score and Behavioral Activation activities)

OUTCOMES

Webinars:

- Average participation rate was 59% (range from 37-78%).
- Webinars grounded in four competencies from the Partnership for Health in Aging (PHA) Multidisciplinary Competencies in the Care of Older Adults (2010).

Mentoring Visits:

- Mentors reviewed site specific PHQ-9 scores with staff during visits and data were used, for example, to identify residents with PHQ-9 scores greater than 10 who were not treated and are potential candidates for Behavioral Activation.
- Quantitative and qualitative data was collected to demonstrate project gains and changes with each team.

Nursing Home Staff Outcomes:

- Awaiting follow-up post survey data (May 2013) to examine changes in self-reported competency in depression care, attitudes toward team care, and assessment of team fitness.
- Each team completed Implementation Planning for Depression Care in Nursing Home Assessment. Documented considerable gains within some domains (Treatment Planning & Delivery, Treatment Based on Outcomes, Relapse Prevention, and Setting, Staffing & Supervision).

Resident Level Outcomes:

- Resident level data collection including PHQ-9 score and Behavioral Activation activities is ongoing.

CONCLUSIONS / LESSONS LEARNED

- NH characteristics do not predict interest in Quality Improvement and Commitment to team processes
- Structured educational mentoring in the context of NH team building is feasible
- Interdisciplinary NH teams can use data to identify problems and generate solutions
- NH team facilitation creates new learning and solutions to quality challenges
- This approach may be applicable to other nursing home clinical conditions