A Depression Care Management Intervention for Home Health Nurses

Argie Jamaica Rivera MAN, BSN, RN

Arizona State University, Arizona

Abstract

Purpose: To examine the implementation of a web-based depression care management training program to increase home health nurses' knowledge and attitudes regarding depression.

Background and Significance: The Centers for Disease Control and Prevention reported in 2015 that the incidence of major depression in elderly receiving home health service rose to 13.5% compared to less than 5% with those not receiving care in the community.

Materials and Methods: An intervention program was offered to a convenience sample of home health nurses caring for elderly in the community. The Depression CARE for Patients AT Home (depression CAREPATH), which is an evidenced-based online training program consisting of didactic resources about depression screening and depression care management and e-learning modules. Participants were given a pre and post survey to assess their knowledge of the material. Additionally demographic information was obtained via self-report.

Results: A total of 8 out of 18 home health nurses participated in the study. All were females; 13% Caucasian and 88% were Asian. There's an average of 37 years old (SD 14.7, range 23-58) and had 3 years of experience (SD 2.07, range <1-6). The mean depression CAREPATH knowledge total pre-test score was 15 (SD 1.85, range 13-18), while the mean total post-test score was 18.13 (SD 0.99, range 17-19). There was a difference in the depression knowledge test scores at baseline. All the participants obtained a passing score for the post-test (80%). The mean R-DAQ total pre-test score was 71 (SD 13.37, range 53-71) and mean total post-test score was 68, (SD 3.48, range 62-70). The professional confidence in depression attitude indicated agreement post intervention, except with the feeling comfortable in working with physical illness than mental illness (pre intervention 62.5%, post intervention 100%). Participants agreed that home health nurses are well placed and more confident in assisting patients with depression (pre

intervention 75%, post intervention 100%). In addition, participants felt more confident in assessing suicide risk post intervention in patient s presenting with depression. Based from Wilcoxon Signed-ranks test, there was a statistical difference, z = -2.536, p = .01, between the depression knowledge pre and post-test scores, which indicates that there is an increase in depression knowledge after the intervention. However, there was no significant difference, z = -846, p = .397 between the depression attitude, which indicate that there is no change in depression attitude after the intervention.

Conclusion: For this sample depression knowledge was increased post intervention, however, increase in knowledge did not significantly alter the depression attitude. Further study in a larger more diverse sample is needed for this intervention.

Keywords: Depression care management, depression knowledge, depression attitude, depression, elderly, home health nurses.

Depression Care for Home Health Nurses

The shift in caring for the elderly in need for nursing services from acute inpatient settings to in home health care has validated the need for the home health nurse (De Vliegher et al., 2014). However, not all home health nurses are well trained to address the increasing complexity of managing depression among homebound patients (Brody & Groce-Wollord, 2013). Thus, the Community Preventative Services Task Force (2014) suggested the adaptation of a home-based depression care management intervention and suggests this intervention should involve an active screening for depression, measurement based outcomes, trained depression care managers, case management, patient education, and a supervising psychiatrist. The active screening protocol focuses on who requires the depression care management (DCM) and is indicated for those with depressive symptoms with or without a diagnosis or use of an antidepressant. However, there is no standardized DCM policy and procedure for home health agencies to follow and implement (Liebel & Powers, 2015).

The Depression CARE for Patients AT Home (depression CAREPATH) is an evidenced-based online training program for generalist home health care nurses, physical therapists, and other health care professionals in a home health setting, which consists of didactic resources about depression screening and depression care management e-learning module (Bruce et al, 2011; Liebel & Powers, 2015). The depression CAREPATH protocol assists and guides home health nurses in assessing depression during home visits and reporting pertinent findings to physicians; in coordinating care with physicians and specialists for further comprehensive assessment, in diagnosing and treatment; in antidepressant medication management; and in evaluating plan of care.

Background and Significance

Elderly

The goal of the Healthy People 2020 (2014) is to promote mental health and prevent mental illness by providing adequate mental health services, specifically to address the leading health indicator of reducing the suicide rate. Depression is a significant cause of disability and most commonly associated with suicide, as 50% of patients who commit suicide are depressed. This suggests that one elderly patient commits suicide every 80 minutes (AAS, 2014; WHO, 2012). Fifteen percent of elderly suffers from behavioral health problems, which is linked to decreased adherence to treatment, quality of life, and functioning (SAMHSA/AoA, 2013). Likewise, significant life changes, history of depression, lack of leisure activities aggravate the depressive symptoms in elderly patients (Magnil, Janmarker, Gunnarsson, & Björkelund, 2013).

To address these concerns the Centers for Medicare and Medicaid Services (2015) included the PHQ-2 in the OASIS-C, which is a process measure to evaluate how home health agencies utilized evidenced-based care. The home health quality measures specifically for depression, measures the percentage of patients being screened for depression, physician-ordered plan of care, which includes intervention for referral, medication and monitoring (CMS, 2014). Results from these screens can identify patients who are depressed and a plan of care can be initiated.

Depression Care Management

Depression was reported as the fourth leading contributor to the global burden of mental illness in 2000, and is projected to reach second place in the ranking by the year 2020 (WHO 2012). Bruce et al. (2011) elaborated that the Depression Care for Patients At Home (Depression CAREPATH) protocol could be one tool that can be used to address the burden of depression.

The protocol includes the active screening and DCM protocols. Initially, the screening protocol focuses on which patient would require the DCM and is indicated for those with depressive symptoms with or without a diagnosis or antidepressant. For example, patients with positive PHQ-2, but with a score of less than 10 on PHQ-9 are considered to be mildly depressed. If this is identified the suggested intervention includes health education and monitoring the PHQ-9 score weekly for 2 weeks to identify if the condition continues to worsen. For patients with a PHQ-2 score of 2 or less, treatment recommendation is to do weekly reassessment only to assess for change for 2 weeks.

Bao et al. (2015) conducted a qualitative study to assess the gap between actual and best depression care practices in home health care and the barriers in addressing gaps. Between February to November 2012, 20 nurses and administrators from five home health agencies in five states in the Northeast, Midwest and South United States were recruited. The semi-structured interview guide consisted of domains and depression care practices before the intervention. Findings showed that all five key areas, which include screening, assessment, case coordination, antidepressant management, patient education, and goal setting, are within the current function of home health nurses. However, results indicated the participants demonstrated low self-efficacy and stigma with depression care, lack of knowledge about best practices, insufficient medication management and ineffective interdisciplinary care. In addition, the importance of primary care providers in the quality improvement of depression management in home health care was identified (Bao et al., 2015).

Home Health Nurse

De Vliegher et al. (2014) conducted a systematic review and noted reasons that identify the underrepresentation of the home health nurses' technical skills. These include lack of professional gold standards and questionable validity of tools for measuring the home health nurses' activities, lack of standardized definition of home health nurse's function, and diversity of financial and reimbursement systems. Although there is a concern with reimbursement from Medicare, there are various approaches to address this matter, which includes the DCS-type interventions within the home health coverage, to contract Medicare Part B- qualified providers, to pay directly to contract agents, and to provide home health care to an outpatient agencies (Cabin, 2010).

A qualitative descriptive study conducted by Liebel & Powers (2015) shows that home health nurses are confident in proving quality care to patients with disabilities, but have mixed views about integrating depression care in daily practice. Mitchell & Kakkadasam (2011) conducted a meta-analysis to identify the clinical accuracy of nurses in identifying depression in primary, secondary and nursing homes. Result shows that only 26.3% of community health nurses correctly identified people with depression, while 94.8% were correctly identified as nondepressed. Although, primary care nurses have higher rate of detecting depression, the rates of misclassification cannot be understated. Thomson, Lang, & Annells (2008) performed a systematic review of the effectiveness of in-home community nurse led interventions for the mental health of older persons. Findings suggest that home health nurses are required to utilize a standardized validated assessment tool to evaluate the effectiveness of in-home community nurse led interventions as well as for more accurate detection of depression. Both studies emphasized the importance of training and utilizing standardized validated assessment tools in enhancing the quality of nursing patient care by accurately screening and detecting depression among older adults.

Advanced clinical training in the DCM is essential for home health nurses to adequately

address homebound patients. Delaney et al (2011), found out that there is an increase in self-efficacy and attitude in providing care for depressed elderly post depression program. To further address the study's objectives, a pre and post-test design, appraisal of the self- efficacy, and self-reported attitude were utilized to evaluate the effectiveness of the Phase I program development of the depression CAREPATH program (Delaney et al., 2011). Aside from integrating new model of training and education for home heath agencies, the therapeutic nurse-patient relationship needs to be utilized to sustain more effective health reforms (Liebel & Powers, 2015). This article coincides with the study completed by Flojt, Le Hir, and Rosengren (2014), which emphasize the importance of learning activities and collaboration, thus influences patient's safety.

As a whole, evidence found regarding this topic requires further research studies that focus on depression care management, home health nurses, and elderly population.

Internal Evidence

In a home health agency in Las Vegas, Nevada, that provides home health services to 18 years old and above patients, 95% have medical/ surgical concerns, which are either referred by a hospitalist or primary care provider for skilled nursing, physical or occupational therapy services. These patients are deemed to be homebound and require taxing effort to leave home unassisted. These patients are at risk to suffer from anxiety and depression due to medical and behavioral comorbidities and multiple life stressors. In addition, the home health agency provides psychiatric skilled nursing care to 5% of the patient population, who have been evaluated and deemed stable to live at home.

Patients who feel depressed and hopeless, either as a medical co-morbidity or psychiatric illness are being referred to a medical social worker for further assessment. This referral may

initially be sent from the field home health nurse to the RN case manager assigned to the case. If pre-determined criteria are met, a psychiatric consult will be initiated and coordination of care will be reported to the director of nursing (DON). Generally it takes 3 to 4 weeks to schedule an appointment for an initial psychiatric evaluation. In this home health agency, not all home health nurses are familiar with care of the mentally ill which limits their ability to care for these patients. This review of the background and significance of the problem and initial search led to the clinically relevant PICOT question; "In home health nurses (P), how does a web-based depression care management training program, specifically the depression CAREPATH (I) compared to treatment as usual (C) affects knowledge and attitude towards depression?

Evidence Synthesis

Search Strategy

A database search was conducted using the following databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), Psychology Information (PsycINFO), and PubMed Ovid MEDLINE. The three keywords for the exhaustive research are home health nurse (HHN), depression care management (DCM), and elderly (E). For each keyword, the symbol "()" was utilized to include synonym words. This process was conducted throughout the search. For HHN keyword, home health nursing (HHNg) and home health agency nurse (HHAN) were included. Synonyms for DCM keyword included depression care program (DCP) and depression care (DC). Lastly, old age (OA), and aged population (AP) are included in the E keyword.

Index terms used for search in EBSCOhost database included home health nurse (HHN), depression care management (DCM), and elderly (E). Limits applied included English language, and dates from 2005 to 2016. Searched were conducted combining HHN, DCM, and E yielded 3

results. Both HHN and DCM combined yielded 6 results and combining DCM and E yielded 106 studies (Appendix A1).

The PsychINFO database search was performed with the following index terms: home health nurses (HHN), depression care management (DCM), and elderly (E). Limits included date from 2005 to 2016 with record, methodology, and supplemental data selected for all. Searches were conducted combining HHN, DCM, and E yielded 47 studies. Manual reviews of yield studies were completed for relevance to research question (Appendix B1).

A PubMed database advanced search was performed with the following terms: home health nurses (HHN), depression care management (DCM), and elderly (E). Limit applied includes studies published in the last 5 years. Combining HHN, DCM, and E yielded 59 studies. Manual review of yield studies was completed for relevance to research question (Appendix B2). After an extensive database research, ten studies have been chosen for inclusion. One hundred nine studies were reviewed for the literature review, however several studies were removed due to: insufficient sample size, non-relevant variables and interventions, inadequate and weak research design and methodology, poor documentation, and impertinent results. The ten studies included in the literature review met the inclusion criteria for this study and were relevant to the PICO question. One study each research study was reviewed; data were extracted, and organized in a synthesis tables for comparison and examination (Appendix E &F).

Critical Appraisal and Synthesis of Evidence

For this research study, ten studies have been chosen for inclusion; all studies were evaluated utilizing the rapid critical appraisal tool and are illustrated in the evidence tables for analysis of data (Appendix F). The two SRs are level I evidence, two RCTs are level II evidence, the 1 quasi-experimental study is a level III evidence, the two cohort studies are level IV

evidence, one systematic review of descriptive and qualitative studies is level V evidence, and two descriptive studies are level VI evidence. Most of the studies were of high quality noting the standard deviation (SD), level of significance (p), and effect size (ES). High volume of studies with large sample sizes was included in the SR and SR with MTA studies (Appendix E). All studies required depression as diagnosis, and home health or community as target setting.

All studies excluded cognitively impaired elderly, severely mentally impaired. Seven out of ten studies implemented a depression management intervention, which differs with mode of delivery, focused competencies, and key areas to address (Figure E). Few of the research studies stated a theoretical framework (Appendix E). These showed the transferability and feasibility of implementation. Validity and reliability of evidence is assumed by utilizing standardized measuring tools for outcome measures. Nine out of the ten studies identified outcome measures, while one study discussed the lack of valid instrument (Appendix E).

A moderate degree of homogeneity was identified among the research studies in terms of population demographics. Majority of the participants were between the ages 47 to 80 and most were female (Appendix F). Ages 60 and above was not frequently represented (Appendix F). This may affect the transferability as the age range of the elderly population is between 60 years and above. Also, some of the studies were conducted internationally. However, the strict exclusion criteria address this weakness (Appendix E).

Conclusion about Evidence

DCM demonstrated improvement in patient's outcomes. Although, not every study was able to show statistically significant outcomes, and there are various depression management program models, all research studies showed positive development toward addressing depression in a home health setting. Depression management interventions are feasible, reliable, sustainable,

and may be implemented by home health nurses. A multifactorial evidenced based DCM, which includes standardized protocol, validated tools, nurse education for implementation, and collaborative care has the ability to detect depression symptoms, provide adequate intervention, and adequate referral.

Project Purpose

The purpose of this evidenced-based project is to examine the implementation of Depression CAREPATH, a web-based depression care management-training program in increasing the home health nurses' knowledge and attitude toward depression.

Evidenced-Based Practice Model and Its Application

The Stetler Model of Research Utilization is an evidenced-based model that examines the application of evidence to initiate organizational change, and utilizing research in critical thinking and decision making in clinical practice (NCCMT, 2010). This model includes a five-phase process (Stetler, 2001), and its applicability to this evidenced-based project will be discussed in this section.

Phase I: Preparation – Purpose, content & sources of research evidence. The PICO format organizes the pertinent variables in the study. Initial research studies were gathered, while refining the PICO question yielded little relevant results. Internal evidences from a home health agency was considered and explored.

Phase II: Validation – Credibility of findings, and potential for qualifiers of applications. In this phase, extensive database research was conducted and yielded one hundred nine studies, which were reviewed based on the inclusion and exclusion criteria for the literature review.

Phase III: Comparative evaluation/decision making – Synthesis and decision. Based from the exhaustive literature review, the depression care management program demonstrated improvement in patient's outcomes. All research studies showed positive development toward addressing depression in a home health setting. There are many potential obstacles and challenges that may be encountered in implementing this plan. Obstacles have been identified including obtaining approval for the project, acceptance of the project by the home health agency, data collection, analysis, and utilization of evidence in actual practice. Challenges include recruitment of participants and active participation, short-lived benefit of intervention, and resistance to change.

Phase IV: Application – Action for change. At program onset, the goal was to recruit home health nurses and to schedule a specific date for the study implementation. The depression CAREPATH is the intervention in this study (Appendix G).

Phase V: Evaluation. A pre/post test research design was employed, which included the participants' demographic profile, Revised Depression Attitude Questionnaire (R-DAQ), and the Depression CAREPATH questionnaire.

Theoretical framework

The conceptual framework for this research study was the Chronic Care Model (CCM). This model was chosen as it focuses on disease management and quality improvement. The healthcare system, as the barrier is the theoretical underpinning of CCM, thus CCM serves as an evidenced-based guideline and synthesis for clinical practice (Holm & Severinsson, 2012). The CCM consists of six components: community resources and policy; the health system and the organization of health care; self-management support; delivery system design; decision support; and clinical information systems (Wagner et al., 2001). To further explore the six components of

the CCM, and how each component intertwined was further explained (Appendix H). The depression care management program focuses on integrating behavioral to medical care, which will improve future partnership with local home health agencies and to develop health policy reforms. This program intervention will improve the provision of quality patient care in the community.

Planned Outcomes and Link to Conceptual Model

Home health nurses were the participants in this study. The planned outcomes that were measured are the home health nurses' knowledge and attitude towards depression, with both the Revised Depression Attitude Questionnaire (R-DAQ) and Depression CAREPATH questionnaire. These outcomes are linked to the conceptual model, as having a well-trained home health nurses and clinical team are integral in improving and sustaining quality measures. Since, previous research studies have concluded a positive outcomes of utilizing depression care management, the ultimate goal of this study was to increase the depression knowledge and attitude of home health nurses.

Methods

Human Subject Protection

Privacy and confidentiality. During the study implementation, the privacy and confidentiality rights were discussed. A unique code number was assigned using a predetermined formula to protect the identity of the participant and was used for data collection. The primary researcher and mentor had access to the data. During data collection, the data from the questionnaires were collated and tabulated electronically. The identifier and data were separated, and the questionnaires were shredded for HIPAA regulation compliance.

Consent process. Written consents were obtained prior to the program implementation.

Participants were instructed to sign a consent stating the purpose, significance, and program outline. Participants were provided enough time to read the participation letter and to decide if they want to participate. The study inclusion criteria include more than 6 months of clinical experience in a home health setting and willingness to participate. Exclusion criteria include intake coordinators and office managers, who do not provide direct home health care.

Description of Population and Setting

This study was conducted on a convenience sample of 18 home health nurses, who worked at a home health agency in the Southwest, who met the inclusion criteria. These were verified with the agency's intake coordinator, HR personnel, and DON.

Project Description & Recruitment

Prior to implementation of the program eligible staff were recruited via an introductory text and placement of an informational flyers on staff bulletin boards. Reminders via text messaging were sent 2 weeks and one day prior to intervention. The program was conducted at a time determined to be agreeable to the agency, convenient for participants, and the home health care agency office. Participants were not compensated for their participation

Data Collection

The initial data collection included the demographic profile of home health nurses: age, gender, race, and years of experience in a home health setting. The home health nurses' attitude toward depression and depression knowledge were assessed by utilizing the R-DAQ and Depression CAREPATH questionnaire respectively. As mentioned in the consent process section, the study inclusion criteria included more than 6 months of clinical experience in a home health setting, nurses who provide direct patient care, and willingness to participate. There were 24 home health nurses in the home health agency. Six out of 24 home health nurses, were

excluded due to inactive status, on vacation and maternity leave, and less than 6 months of experience. Out of the 18 home health nurses, who met the criteria, only 8 participants completed the intervention due to refusal to participate and conflict with work schedule. These were verified with the agency's intake coordinator, HR personnel, and Director of Nursing (DON).

Instrument

Depression attitude. The R-DAQ is a 22-item scale, rated on 5-point Liker scale from 1 'totally disagree to 5 'I totally agree, which focuses on the healthcare workforce in evaluating their attitude towards depression (Haddad et al., 2015). The 22-item attitude statements note participants level of agreement, while combining agree and strongly agree, and also includes items that are reversed for summary scale scoring, but are not scored reversely in this project. Haddad et al (2015) conducted psychometric testing and found good internal consistency (a = 0.84), satisfactory test-retest reliability correlation coefficient of 0.62 (95% C.I. 0.37 to 0.78). The tool includes three sub-scales namely professional confidence, therapeutic optimism/pessimism, and a generalist perspective (Haddad et al., 2015).

Depression knowledge. A 20-item questionnaire, provided by the Depression CAREPATH was utilized to assess and evaluate the participants' knowledge. This post-test is included in the e-learning module of the depression CAREPATH program, and the questions are directly related to the program. Each questions in the 20- items depression CAREPATH was worth 1 point. A grade of 80% or 16 out of 20 correct answers are needed to pass the course and participants can take the final test twice.

Data Analysis

All data were analyzed using Statistical Package for the Social Sciences (SPSS v.

Descriptive statistics of the demographics, knowledge and attitude towards depression indicated with standard deviation, mean, number, and percentage as appropriate.

Data Outcomes

Interpretation of Results

Demographics. In total, 8 out of 18 home health nurses completed the study intervention, with a response rate of 44.4%. All were females 13% Caucasian and 88% were Asian. There's an average of 37 years old (SD 14.7, range 23-58) and had 3 years of experience (SD 2.07, range <1-6).

Descriptive measures. An overview of the knowledge towards depression of home health nurses can be found in Appendix J Table J1. The mean depression CAREPATH knowledge total pre-test score was 15 (SD 1.85, range 13-18), while the mean total post-test score was 18.13 (SD 0.99, range 17-19). There was a difference in the depression knowledge test scores at baseline. All the participants obtained a passing score for the post-test (80%).

An overview of the attitude towards depression of home health nurses can be found in Appendix J Table J2. The mean R-DAQ total pre-test score was 71 (SD 13.37, range 53-71) and mean total post-test score was 68, (SD 3.48, range 62-70). The median score for the RDAQ total pre-test score was 77, which indicates that 50% score fair either below or above 77. The median score for the RDAQ total post-test score was 70, which indicates that 50% score fair either below or above 70.

The professional confidence in depression care indicated agreement post intervention, except with the feeling comfortable in working with physical illness than mental illness (pre intervention 62.5%, post intervention 100%). Participants agreed that home health nurses are well placed and more confident in assisting patients with depression (pre intervention 75%, post

intervention 100%). In addition, participants felt more confident in assessing suicide risk post intervention in patient s presenting with depression. Although there is a high agreement in terms of professional confidence, there is a need to assess the factors related to work setting preferences before implementing a depression care management program (Appendix K).

In terms of the therapeutic optimism/pessimism about depression views, home health nurses considered the nature of depression and depression management as optimistic post intervention. There's a high improvement in how participants considered depression to be related to poor stamina (Pre-intervention 75%, Post intervention 12.5%). However, 75% of the participants considered lack of self-discipline and will power as the main cause of depression pre and post intervention. The generalist perspective about depression showed a high agreement both the pre and post intervention (Appendix K).

Non-parametric tests.

For the depression knowledge, A Wilcoxon Signed-Ranks Test indicated that the total post score was statistically significant higher than the total pre-test scores z = -2.536, p = .011. The results indicate that there is an increase in depression knowledge after the intervention (Appendix L). A Wilcoxon Signed-Ranks Test indicated that the total depression attitude post score was not statistically significant higher than the total pre-test scores z = -.846, p = .397. The results indicate that there is no change in depression attitude after the intervention (Appendix M).

Discussion

The proponent conducted a quantitative descriptive research design, testing the implementation of a depression care management program to identify the home health nurses' depression knowledge and attitude.

Limitations

The major limitation of this study is the small sample size from a convenience sample on a fairly homogenous population. Although multiple attempts and 2 intervention dates were offered to recruit additional participants, scheduling was a challenge as the nursing staff works in the community. This affects the findings' generalizability and might have biased results.

Recommendation

To address the small sample size and to increase the retention of participants, administrators of the home health agencies should incorporate the depression care management in the new hire orientation program and to provide home health nurses' incentives during the inservice training. In addition, further research studies should focus on measuring factors that affect work preferences. The study can be also replicated to more than one home health agency.

Implication & Future research

Patient. The depression CAREPATH is a multi-disciplinary depression care management approach, which complies with the Community Preventative Services Task Force recommendation.

Provider. Utilizing an evidenced-based practice program in a home health setting increases the competencies of nurses in making critical decision-making and coordination of care.

System. For the administrative standpoint, the depression care management is a cost-effective intervention, since there is no need to employ psychiatric specialized nurses, nor increase the frequency of home health nurse visit. The additional cost is primarily in conducting in-service training for home health nurses, office staff, intake coordinators, and RN case manager. With the implementation of a DCM and its positive influence in quality patient outcomes, utilizing the DCM might increase the home health agency's total revenue with

increase in referrals from psychiatric nurse practitioners, psychiatrist, and primary care providers.

Sustainability. The DCM includes a start-up toolkit for home health agency and an elearning module.

Conclusions

The findings of this study show that home health nurses have minimal to moderate knowledge of depression, and that the intervention increased their depression knowledge. With this, the DCM can be utilized by other home health agencies, as it addressed the continuous need to utilize evidenced-based practices in a home health setting and it can also serve as an initial tool to address sustainability of change locally and nationally. Incorporating the depression care management protocol on home health nurses' visits can increase the detection of depression, improve treatment and outcomes. Home health nurses can assess, evaluate, and monitor patient's overall well being, while collaborating to PCP for recommendation and treatment.

References

- American Association of Suicidology. (2014). Depression and Suicide Risk. Retrieved from:

 http://www.suicidology.org/Portals/14/docs/Resources/FactSheets/2011/DepressionSuicide2

 014.pdf
- American Association of Suicidology. (2014) Elderly Suicide Fact Sheet: Based on 2012 Data. Retrieved from:

http://www.suicidology.org/Portals/14/docs/Resources/FactSheets/Elderly2012.pdf

- Aakhus, E., Granlund, I., Odgaard-Jensen, J., Oxman, A. D., & Flottorp, S. A. (2016). A tailored intervention to implement guideline recommendations for elderly patients with depression in primary care: a pragmatic cluster randomized trial. Implementation Science, 111-15 15p. doi:10.1186/s13012-016-0397-3
- Bao, Y. Y. (07/2014). Psychiatric services (Washington, D.C.): Misalignment between Medicare policies and depression care in home health care: Home health provider perspectives.
 American Psychiatric Publishing, Inc. doi: 10.1176/appi.ps.201300158
- Bao, Y., Eggman, A., Richardson, J., Sheeran, T., & Bruce, M. (2015). Practices of DepressionCare in Home Health Care: Home Health Clinician Perspectives. Psychiatric Services,66(12), 165-168 4p. doi:10.1176/appi.ps.201400481
- Brody, A. A., & Groce-Wofford, T. M. (2013). Feasibility of Implementing a Web-Based

 Education Program in Geriatric Pain and Depression for Home Health Care Nurses. Home

 Health Care Management & Practice, 25(6), 274-278 5p. doi:10.1177/1084822313494785
- Bruce, M. L., Raue, P. J., Sheeran, T., Reilly, C., Pomerantz, J. C., Meyers, B. S., ... Zukowski,
 D. (2011). Depression Care for Patients at Home (Depression CAREPATH): Home Care
 Depression Care Management Protocol. Home Healthcare Nurse, 29(8), 480–489.
 http://doi.org.ezproxy1.lib.asu.edu/10.1097/NHH.0b013e318229d75b

- Cabin, W. D. (2010). Lifting the home care veil from depression: OASIS-C and evidence-based practice. Home Health Care Management & Practice, 22(3), 171-177. doi:http://dx.doi.org/10.1177/1084822309348693
- Centers for Medicare and Medicaid Services. Decision memo for screening for depression in adult. Retrieved from: https://www.cms.gov/medicare-coverage-database/details/ncadecision-memo.aspx?NCAId=251
- Centers for Medicare and Medicaid Services. (Last modified: 08/05/2015)Quality_measures.

 Retrieved from: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/HHQIQualityMeasures.html
- Centers for Medicare and Medicaid Services (October, 2014). Home health quality measures process. Retrieved from: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/Downloads/Home-Health-Measures-Process-Tables-rev-10-27-14.pdf
- Centers for Disease Control and Prevention (March 5, 2015). Depression is not a normal part of growing older. Retrieved from: http://www.cdc.gov/aging/mentalhealth/depression.htm
- Cepoiu, M., McCusker, J., Cole, M. G., Sewitch, M., Belzile, E., & Ciampi, A. (2008).

 Recognition of depression by non-psychiatric physicians—A systematic literature review and meta-analysis. Journal of General Internal Medicine, 23(1), 25-36.

 doi:http://dx.doi.org/10.1007/s11606-007-0428-5
- Community Preventative Services Task Force (2014). Interventions to reduce depression among older adults: Home-based depression care management. Retrieved from: http://www.thecommunityguide.org/mentalhealth/depression-home.html
- Delaney, C., Fortinsky, R., Doonan, L., Grimes, R. L. W., Terra-Lee, P., Rosenberg, S., & Bruce,

- M. L. (2011). Depression screening and interventions for older home health care patients:

 Program design and training outcomes for a train-the-trainer model. Home Health Care

 Management & Practice, 23(6), 435-445. doi:http://dx.doi.org/10.1177/1084822311405459
- De Vliegher, K., Declercq, A., Aertgeerts, B., Gosset, C., Heyden, I., & Moons, P. (2014). The Activity Profile of Home Nurses: A Systematic Review. Home Health Care Management & Practice, 26(4), 257-265 9p. doi:10.1177/1084822314527293
- Ekers, D., Murphy, R., Archer, J., Ebenezer, C., Kemp, D., & Gilbody, S. (2013). Nursedelivered collaborative care for depression and long-term physical conditions: A systematic review and meta-analysis. Journal of Affective Disorders, 149(1-3), 14-22. doi:http://dx.doi.org/10.1016/j.jad.2013.02.032
- Flöjt, J., Hir, U. L., & Rosengren, K. (2014). Need for Preparedness: Nurses' Experiences of Competence in Home Health Care. Home Health Care Management & Practice, 26(4),223-229. doi:10.1177/1084822314527967
- Haddad, M., Menchetti, M., McKeown, E., Tylee, A., & Mann, A. (2015). The development and psychometric properties of a measure of clinicians' attitudes to depression: the revised
 Depression Attitude Questionnaire (R-DAQ). *BMC Psychiatry*, 15, 7.
 http://doi.org.ezproxy1.lib.asu.edu/10.1186/s12888-014-0381-x
- Holm, A. L., & Severinsson, E. (2012). Chronic care model for the management of depression: Synthesis of barriers to, and facilitators of, success. *International Journal Of Mental Health Nursing*, 21(6), 513-523. doi:10.1111/j.1447-0349.2012.00827.x
- Liebel, D. V., & Powers, B. A. (2015). Home Health Care Nurse Perceptions of Geriatric Depression and Disability Care Management. Gerontologist, 55(3), 448-461 14p.doi:geront/gnt125

- Magnil, M., Janmarker, L., Gunnarsson, R., & Björkelund, C. (2013). Course, risk factors, and prognostic factors in elderly primary care patients with mild depression: A two-yeas observational study. Scandinavian Journal Of Primary Health Care, 31(1), 20-25 6p. doi:10.3109/02813432.2012.757074
- Mitchell, A. J., & Kakkadasam, V. (2011). Ability of nurses to identify depression in primary care, secondary care and nursing homes—A meta-analysis of routine clinical accuracy.

 International Journal Of Nursing Studies, 48(3), 359-368 10p.

 doi:10.1016/j.ijnurstu.2010.05.012
- National Collaborating Centre for Methods and Tools (2011). *Stetler model of evidence-based practice*. Hamilton, ON: McMaster University. (Updated 18 March, 2011) Retrieved from http://www.nccmt.ca/resources/search/83.
- SAMHSA/AoA. (2013). Issue Brief 8: Integration of behavioral health and physical health care.Retrieved from: https://www.ncoa.org/resources/issue-brief-8-integration-of-behavioralhealth- and-physical-health-care/
- Scheerder G., De Coster I. & Van Audenhove C. (2008) Community pharmacists' attitude towards depression: a pilot study. Research in Social and Administrative Pharmacy 5, 242–252. doi:10.1016/j.sapharm.2008.08.008.
- Shao, H., Peng, T., Bruce, M., & Bao, Y. (2011). Diagnosed depression among medicare home health patients: national prevalence estimates and key characteristics. Psychiatric Services, 62(5), 538-540 3p. doi:10.1176/appi.ps.62.5.538
- Stetler, C. B. (2001). Updating the Stetler Model of Research Utilization to facilitate evidence-based practice. *Nursing Outlook*, *49*, 272-279.

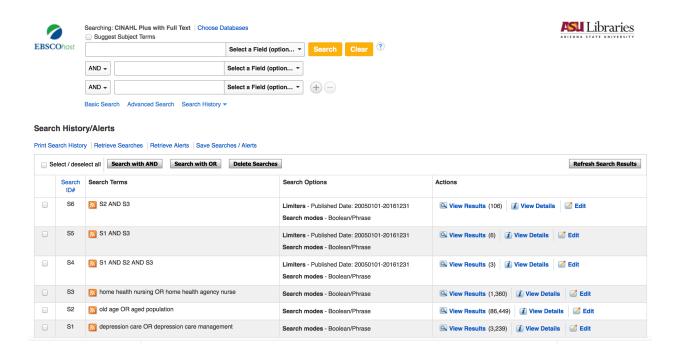
- Thompson, P., Lang, L., & Annells, M. (2008). A systematic review of the effectiveness of inhome community nurse led interventions for the mental health of older persons. Journal Of Clinical Nursing, 17(11), 1419-1427 9p. doi:10.1111/j.1365-2702.2008.02287.x
- Van Daele, T., Vansteenwegen, D., Hermans, D., Van den Bergh, O., & Van Audenhove, C.
 (2015). Home nurses and patient depression. Attitudes, competences and the effects of a minimal intervention. *Journal Of Advanced Nursing*, 71(1), 126-135. doi:10.1111/jan.12476
- Wagner, E. H., Glasgow, R. E., Davi, C. *et al.* (2001). Quality improvement in chronic illness care: A collaborative approach. *The Joint Commission Journal on Quality Improvement*, 27, 63–79.
- Weill Cornell Research Partnership. (2010). Depression Care Management: Depression CAREPATH final test. Retrieved from:

 https://mentalhealthtrainingnetwork.org/course/finalquizintro/6379
- World Health Organization (2012). *Mental Health Depression*. [Cited 31 Jan 2012]. Available from: URL: http://www.who. int/mental_health/management/depression/definition/en/#
- U.S Department of Health and Human Services (2014). Health People 2020 Leading Health Indicators: Mental Health. Retrieved from:
 - $https://www.healthypeople.gov/sites/default/files/HP2020_LHI_Mental_Hlth_0.pdf$

Appendix A

Figure A1

EBSCOhost Database Screenshot



Appendix B

Figure B1

Proquest Database Screenshot

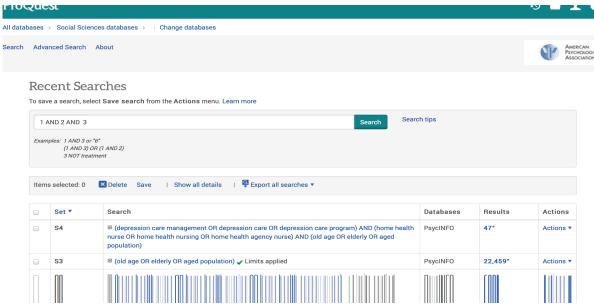
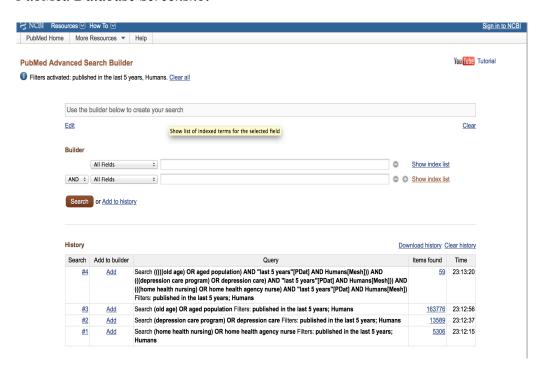


Figure B2

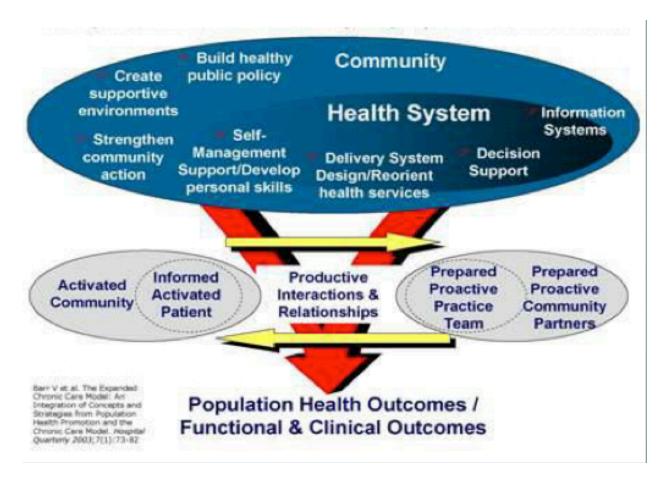
PubMed Database Screenshot



Appendix C

Figure C

Chronic Care Model



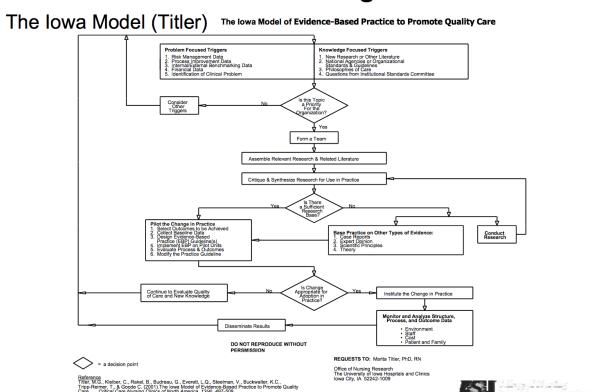
Appendix D

Figure D

The Iowa Model

© Fineout-Overholt, 2009

Models of EBP for Organizations



Revised April 1998 © UIHC