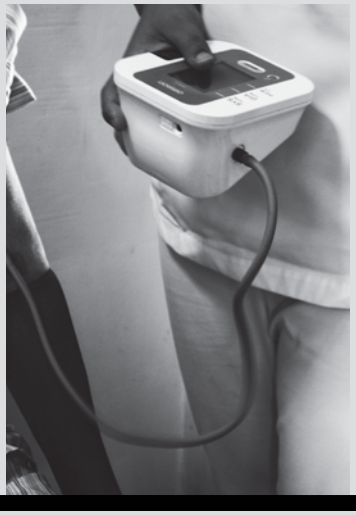

# READINGS

A SELECTION OF TEN READINGS ON TOPICS RELATED TO HOME CARE

# A SELECTION OF TEN READINGS ON TOPICS RELATED TO HOME CARE

**Selection of readings made by A/Prof Goh Lee Gan**

## READING 1 – INTERVENTIONS TO PREVENT HOSPITALISATIONS OF COMMUNITY-DWELLING OLDER ADULTS WITH DEMENTIA—SYSTEMATIC REVIEW

**Phelan EA,[1] Debnam KJ,[2] Anderson LA,[3] Owens SB.[4]A systematic review of intervention studies to prevent hospitalizations of community-dwelling older adults with dementia. Med Care. 2015 Feb; 53(2):207-13. PubMed PMID: 25588136; PubMed Central PMCID: PMC4310672.**

URL: http://www-ncbi-nlm-nih-gov.libproxy1.nus.edu.sg/pmc/articles/PMC4310672/ — Free full text.

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ABSTRACT

OBJECTIVES: To conduct a systematic literature review to determine if there were any intervention strategies that had any measurable effect on acute-care hospitalizations among community-dwelling adults with dementia.

DESIGN: Studies were identified by a professional research librarian and content experts.

SETTING: Community dwelling.

PARTICIPANTS: Participants were diagnosed with dementia, severity ranging from mild to severe, and were recruited from health care and community agencies.

MEASUREMENTS: A study met the inclusion criteria if it: (a) was published in English; (b) included a control or comparison group; (c) published outcome data from the intervention under study; (d) reported hospitalization as one of the outcomes; (e) included community-dwelling older adults; and (f) enrolled participants with dementia. Ten studies met all inclusion criteria.

RESULTS: Of the 10 studies included, most assessed health services use (ie, hospitalizations) as a secondary outcome. Participants were recruited from a range of health care and community agencies, and most were diagnosed with dementia with severity ratings ranging from mild to severe. Most intervention strategies consisted of face-to-face assessments of the persons living with dementia, their caregivers, and the development and implementation of a care plan. A significant reduction in hospital admissions was not found in any of the included studies, although 1 study did observe a reduction in hospital days.

CONCLUSIONS: The majority of studies included hospitalizations as a secondary outcome. Only 1 intervention was found to have an effect on hospitalizations. Future work would benefit from strategies specifically designed to reduce and prevent acute hospitalizations in persons with dementia.

PMCID: PMC4310672. PMID: 25588136 [PubMed - indexed for MEDLINE]

## READING 2 – OUTCOMES OF HOME-BASED PRIMARY CARE PROGRAMS FOR HOME BOUND OLDER ADULTS-SYSTEMATIC REVIEW

**Stall N,[1] Nowaczynski M, Sinha SK. Systematic review of outcomes from home-based primary care programs for homebound older adults. J Am Geriatr Soc. 2014 Dec; 62(12):2243-51. PubMed PMID: 25371236**

URL
http://onlinelibrary.wiley.com/doi/10.1111/jgs.13088/abstract;jsessionid=837A89CF7FD8FA3C43AEF5A60136C63E.f01t04 – Payment required

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Comment in
J Am Geriatr Soc. 2014 Dec; 62(12):2433-5.

ABSTRACT

OBJECTIVES: To describe the effect of home-based primary care for homebound older adults on individual, caregiver, and systems outcomes.

DESIGN: A systematic review of home-based primary care interventions for community-dwelling older adults (aged ≥65) using the Cochrane, PubMed, and MEDLINE databases from the earliest available date through March 15, 2014. Studies were included if the house calls visitor was the ongoing primary care provider and if the intervention measured emergency department visits, hospitalizations, hospital beds days of care, long-term care admissions, or long-term care bed days of care.

SETTING: Home-based primary care programs.

PARTICIPANTS: Homebound community-dwelling older adults (N = 46,154).

MEASUREMENTS: Emergency department visits, hospitalizations, hospital bed days of care, long-term care admissions, long-term care bed days of care, costs, program design, and individual and caregiver quality of life and satisfaction with care.

RESULTS: Of 357 abstracts identified, nine met criteria for review. The nine interventions were all based in North America, with five emerging from the Veterans Affairs system. Eight of nine programs demonstrated substantial effects on at least one inclusion outcome, with seven programs affecting two outcomes.Six interventions shared three core program components: interprofessional care teams, regular interprofessional care meetings, and after-hours support.

CONCLUSION: Specifically designed home-based primary care programs may substantially affect individual, caregiver and systems outcomes. Adherence to the core program components identified in this review could guide the development and spread of these programs.



PMID: 25371236 [PubMed - indexed for MEDLINE]

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## READING 3 – HOME DIURETIC PROTOCOL FOR HEART FAILURE

**Veilleux RP,[1] Wight JN,[2] Cannon A,[3] Whalen M,[4] Bachman D.[5] Home diuretic protocol for heart failure: partnering with home health to improve outcomes and reduce readmissions. Perm J. 2014 Summer; 18(3):44-8. PubMed PMID: 25102518; PubMed Central PMCID: PMC4116264.**

URL: http://www-ncbi-nlm-nih-gov.libproxy1.nus.edu.sg/pmc/articles/PMC4116264/ Free full text.

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ABSTRACT

CONTEXT: The management of heart failure (HF) is challenging, with high rates of readmission and no single solution. MaineHealth, a health care system serving southern Maine, has shown initial success with home health nurses partnering with physicians in the management of complex patients with HF using the MaineHealth Home Diuretic Protocol (HDP).

OBJECTIVE: To demonstrate that augmented diuretic therapy, both oral and intravenous, an evidence-based treatment for care of patients with HF experiencing fluid retention, can be delivered safely in the home setting using the HDP and can improve outcomes for recently hospitalized patients with HF.

DESIGN: In late 2011, the MaineHealth HDP was implemented in two hospitals and in the home health agency serving those hospitals. The patient population included recently hospitalized patients with a diagnosis of advanced HF, eligible for home health services and telemonitoring.

MAIN OUTCOME MEASURES: Home health nurses reported data on the patients managed using the protocol, including interventions made, physical findings, lab values, and patient disposition after each episode of care. Questionnaires were used to determine patient and clinician satisfaction.

RESULTS: Sixty patients meeting the criteria above were enrolled between November 2011 and January 2014. The protocol was initiated 84 times for 30 of these patients. Sixteen patients had multiple activations. The readmission rate was 10% and no adverse outcomes were observed. Clinician and patient satisfaction was 97% or greater.

CONCLUSION: The MaineHealth HDP can be delivered effectively and safely to improve outcomes, reducing readmissions and allowing patients to remain at home.

PMCID: PMC4116264 PMID: 25102518 [PubMed - indexed for MEDLINE]

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## READING 4 – EVIDENCE-BASED INTERVENTIONS IN HOSPITALISED COGNITIVELY IMPAIRED ADULTS

**Naylor MD,[1] Hirschman KB, Hanlon AL, Bowles KH, Bradway C, McCauley KM, Pauly MV. Comparison of evidence-based interventions on outcomes of hospitalized, cognitively impaired older adults. J Comp Eff Res. 2014 May; 3(3):245-57. PubMed PMID: 24969152; PubMed Central PMCID: PMC4171127**

URL: http://www-ncbi-nlm-nih-gov/pmc/articles/PMC4171127/ — Free full text.

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ABSTRACT

AIM: This article reports the effects of three evidence-based interventions of varying intensity, each designed to improve outcomes of hospitalized cognitively impaired older adults.

MATERIALS & METHODS: In this comparative effectiveness study, 202 older adults with cognitive impairment (assessed within 24 h of index hospitalization) were enrolled at one of three hospitals within an academic health system. Each hospital was randomly assigned one of the following interventions: Augmented Standard Care (ASC; lower dose: n = 65), Resource Nurse Care (RNC; medium dose: n = 71) or the Transitional Care Model (TCM; higher dose: n = 66). Since randomization at the patient level was not feasible due to potential contamination, generalized boosted modeling that estimated multigroup propensity score weights was used to balance baseline patient characteristics between groups. Analyses compared the three groups on time with first rehospitalization or death, the number and days of all-cause rehospitalizations per patient and functional status through 6-month postindex hospitalization.

RESULTS: In total, 25% of the ASC group were rehospitalized or died by day 33 compared with day 58 for the RNC group versus day 83 for the TCM group. The largest differences between the three groups on time to rehospitalization or death

were observed early in the Kaplan-Meier curve (at 30 days: ASC = 22% vs RNC = 19% vs TCM = 9%). The TCM group also demonstrated lower mean rehospitalization rates per patient compared with the RNC ($p < 0.001$) and ASC groups ($p = 0.06$) at 30 days. At 90-day postindex hospitalization, the TCM group continued to demonstrate lower mean rehospitalization rates per patient only when compared with the ASC group ($p = 0.02$). No significant group differences in functional status were observed.
CONCLUSION: Findings suggest that the TCM intervention, compared with interventions of lower intensity, has the potential to decrease costly resource use outcomes in the immediate postindex hospitalization period among cognitively impaired older adults.

PMCID: PMC4171127 PMID: 24969152 [PubMed - indexed for MEDLINE]

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## READING 5 – REMINISCENCE ON QUALITY OF LIFE OF RESIDENTS WITH DEMENTIA IN LONG-STAY CARE

**O'Shea E,[1] Devane D, Cooney A, Casey D, Jordan F, Hunter A, Murphy E, Newell J, Connolly S, Murphy K. The impact of reminiscence on the quality of life of residents with dementia in long-stay care. Int J Geriatr Psychiatry. 2014 Oct; 29(10):1062-70. PubMed PMID: 24633858.**

URL: http://onlinelibrary.wiley.com/doi/10.1002/gps.4099/epdf — payment required

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[1] School of Business and Economics, National University of Ireland Galway, Ireland.

ABSTRACT
BACKGROUND: There is increasing recognition of the potential use of reminiscence in maintaining or improving the quality of life of people with dementia. Despite being used widely in dementia care, evidence on the effectiveness of reminiscence remains uncertain. AIMS: This study aims to evaluate the effectiveness of a structured education-based reminiscence programme-the Dementia Education Programme Incorporating Reminiscence for Staff-for people with dementia residing in long-stay care settings in Ireland.
METHODS: Dementia Education Programme Incorporating Reminiscence for Staff is a two-group, single-blind, cluster randomised trial conducted in long-stay residential care settings in Ireland. The primary outcome was the self-rated quality of life of residents as measured by the Quality of Life-Alzheimer's Disease instrument.
RESULTS: Using an intention-to-treat analysis, we found that the estimated effect of the intervention on the quality of life of residents was a non-significant 3.54 ($p = 0.1$; 95% confidence interval -0.83, 7.90), expressed as the difference in mean improvement between the intervention and control groups. However, the per-protocol analysis yielded a significant effect for the intervention on the quality of life of residents of 5.22 ($p = 0.04$; 95% confidence interval 0.11, 10.34).
CONCLUSIONS: Reminiscence may, in certain circumstances, be an effective care option for people with dementia in long-stay settings with potential to impact positively on the quality of life of residents.



PMID: 24633858 [PubMed - indexed for MEDLINE]

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## READING 6 – PROMOTING INDEPENDENCE IN FRAIL PEOPLE

**Senior HE,[1] Parsons M, Kerse N, Chen MH, Jacobs S, Hoorn SV, Anderson CS. Promoting independence in frail older people: a randomised controlled trial of a restorative care service in New Zealand. Age Ageing. 2014 May; 43(3):418-24. PubMed PMID: 24598085.**

URL: http://ageing.oxfordjournals.org/cgi/pmidlookup?view=long&pmid=24598085 — Free full text.

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ABSTRACT

BACKGROUND: frail older people often require tailored rehabilitation in order to remain at home, especially following a period of hospitalisation. Restorative care services aim to enhance an older person's ability to remain improve physical functioning, either at home or in residential care but evidence of their effectiveness is limited.
OBJECTIVE: to evaluate the effectiveness of a restorative care service on institutional-free survival and health outcomes in frail older people referred for needs assessment in New Zealand.
METHODS: a randomised controlled trial of restorative care or usual care in 105 older people at risk of permanent residential who were follow-up over 24 months. The restorative care service was delivered in short-stay residential care facilities and at participants' residences with the aim of reducing the requirement for permanent residential care. It included a comprehensive geriatric assessment and care plan developed and delivered, initially by a multi-disciplinary team and subsequently by home care assistants.
RESULTS: compared with usual care, there was a non-significant absolute risk reduction of 14.3% for death or permanent residential care (8.8% for residential care and 7.2% for death alone) for the restorative care approach. There was no difference in levels of burden among caregivers.
CONCLUSIONS: restorative care models that utilise case management and multi-disciplinary care may positively impact on institutional-free survival for frail older people without adversely impacting on the health of caregivers.

PMID: 24598085 [PubMed - indexed for MEDLINE]

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## READING 7 – MEDICATION REVIEWS TO REDUCE MORTALITY AND HOSPITALISATION

**Wallerstedt SM,[1] Kindblom JM, Nylén K, Samuelsson O, Strandell A. Medication reviews for nursing home residents to reduce mortality and hospitalization: systematic review and meta-analysis. Br J Clin Pharmacol. 2014 Sep; 78(3):488-97. PubMed PMID: 24548138; PubMed Central PMCID: PMC4243900.**

URL: http://www-ncbi-nlm-nih-gov.libproxy1.nus.edu.sg/pmc/articles/PMC4243900/ — Free full text.

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ABSTRACT

AIMS: Medication reviews by a third party have been introduced as a method to improve drug treatment in older people. We assessed whether this intervention reduces mortality and hospitalization for nursing home residents.
METHODS: Systematic literature searches were performed (from January 1990 to June 2012) in Medline, EMBASE, Cochrane Library, ProQuest Nursing & Allied Health Sources and Health Technology Assessment databases. We included randomized and nonrandomized controlled trials (RCTs and non-RCTs) of medication reviews compared with standard care or other types of medication reviews in nursing home residents. The outcome variables were mortality and hospitalization. Study quality was assessed systematically. We performed meta-analyses using random-effects models.
RESULTS: Seven RCTs and five non-RCTs fulfilled the inclusion criteria. The mean age of included patients varied between 78 and 86 years. They were treated with a mean of 4-12 drugs. The study quality was assessed as high (n = 1), moderate (n = 4) or low (n = 7). Eight studies compared medication reviews with standard care. In six of them, pharmacists were involved in the intervention. Meta-analyses of RCTs revealed a risk ratio (RR) for mortality of 1.03 [medication reviews vs. standard care; five trials; 95% confidence interval (CI) 0.85-1.23]. The corresponding RR for hospitalization was 1.07 (two trials; 95% CI 0.61-1.87).
CONCLUSIONS: Our findings indicate that medication reviews for nursing home residents do not reduce mortality or hospitalization. More research in the setting of controlled trials remains to be done in order to clarify how drug treatment can be optimized for these patients.

PMCID: PMC4243900 PMID: 24548138 [PubMed - indexed for MEDLINE]

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## READING 8 – IN-HOME TELEHEALTH PROBLEM-SOLVING THERAPY FOR DEPRESSED, LOW-INCOME HOMEBOUND OLDER ADULTS

**Choi NG,[1] Marti CN, Bruce ML, Hegel MT, Wilson NL, Kunik ME. Six-month postintervention depression and disability outcomes of in-home telehealth problem-solving therapy for depressed, low-income homebound older adults. Depress Anxiety. 2014 Aug; 31(8):653-61. PubMed PMID: 24501015; PubMed Central PMCID: PMC4122624.**

URL: http://www-ncbi-nlm-nih-gov.libproxy1.nus.edu.sg/pmc/articles/pmid/24501015/ — Free full text.

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ABSTRACT

BACKGROUND: Despite their high rates of depression, homebound older adults have limited access to evidence-based psychotherapy. The purpose of this paper was to report both depression and disability outcomes of telehealth problem-solving therapy (tele-PST via Skype video call) for low-income homebound older adults over 6 months postintervention.
METHODS: A 3-arm randomized controlled trial compared the efficacy of tele-PST to in-person PST and telephone care calls with 158 homebound individuals who were aged 50+ and scored 15+ on the 24-item Hamilton Rating Scale for Depression (HAMD). Treatment effects on depression severity (HAMD score) and disability (score on the WHO Disability Assessment Schedule [WHODAS]) were analyzed using mixed-effects regression with random intercept models. Possible reciprocal relationships between depression and disability were examined with a parallel-process latent growth curve model.
RESULTS: Both tele-PST and in-person PST were efficacious treatments for low-income homebound older adults; however the effects of tele-PST on both depression and disability outcomes were sustained significantly longer than those of in-person PST. Effect sizes (dGMA-raw ) for HAMD score changes at 36 weeks were 0.68 for tele-PST and 0.20 for in-person PST. Effect sizes for WHODAS score changes at 36 weeks were 0.47 for tele-PST and 0.25 for in-person PST. The results also supported reciprocal and indirect effects between depression and disability outcomes.
CONCLUSIONS: The efficacy and potential low cost of tele-delivered psychotherapy show its potential for easy replication and sustainability to reach a large number of underserved older adults and improve their access to mental health services.


PMCID: PMC4122624 PMID: 24501015 [PubMed - indexed for MEDLINE]

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## READING 9 – CASE-MIX AND QUALITY INDICATORS IN CHINESE ELDER CARE HOMES

**Liu C,[1] Feng Z, Mor V. Case-mix and quality indicators in Chinese elder care homes: are there differences between government-owned and private-sector facilities? J Am Geriatr Soc. 2014 Feb; 62(2):371-7. PubMed PMID: 24433350; PubMed Central PMCID: PMC4385265.**

URL: http://www-ncbi-nlm-nih-gov.libproxy1.nus.edu.sg/pmc/articles/PMC4385265/ — Free full text.

Author information:
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ABSTRACT

OBJECTIVES: To assess the association between ownership of Chinese elder care facilities and their performance quality and to compare the case-mix profile of residents and facility characteristics in government-owned and private-sector homes.

DESIGN: Cross-sectional study.
SETTING: Census of elder care homes surveyed in Nanjing (2009) and Tianjin (2010).
PARTICIPANTS: Elder care facilities located in urban Nanjing (n = 140, 95% of all) and urban Tianjin (n = 157, 97% of all).
MEASUREMENTS: A summary case-mix index based on activity of daily living (ADL) limitations and cognitive impairment was created to measure levels of care needs of residents in each facility. Structure, process, and outcome measures were selected to assess facility-level quality of care. A structural quality measure, understaffing relative to resident levels of care needs, which indicates potentially inadequate staffing given resident case-mix, was also developed.
RESULTS: Government-owned homes had significantly higher occupancy rates, presumably reflecting popular demand for publicly subsidized beds, but served residents who, on average, have fewer ADL and cognitive functioning limitations than those in private-sector facilities. Across a range of structure, process, and outcome measures of quality, there is no clear evidence suggesting advantages or disadvantages of either ownership type, although when staffing-to-resident ratio is gauged relative to resident case-mix, private-sector facilities were more likely to be understaffed than government-owned facilities.
CONCLUSION: In Nanjing and Tianjin, private-sector homes were more likely to be understaffed, although their residents were sicker and frailer on average than those in government facilities. It is likely that the case-mix differences are the result of selective admission policies that favor healthier residents in government facilities than in private-sector homes.

 PMCID: PMC4385265 PMID: 24433350 [PubMed - indexed for MEDLINE]

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## READING 10 – INTERVENTIONS TO IMPROVE QUALITY OF LIFE FOR PEOPLE WITH PARKINSON'S DISEASE — SYSTEMATIC REVIEW

**Tan SB,[1] Williams AF, Kelly D. Effectiveness of multidisciplinary interventions to improve the quality of life for people with Parkinson's disease: a systematic review. Int J Nurs Stud. 2014 Jan; 51(1):166-74. PubMed PMID: 23611510.**

URL: http://www.sciencedirect.com/science/article/pii/S0020748913000977 — payment required

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[1] Nursing Division, Singapore General Hospital, Singapore. Email: tan.siok.bee@sgh.com.sg.
Erratum in Int J Nurs Stud. 2014 Oct;51(10):1418-9.

ABSTRACT

AIMS: To conduct a systematic review and critically evaluate the literature on the effectiveness of multidisciplinary interventions to improve quality of life for people with Parkinson's disease.
METHODS: An electronic search of the following publication databases was performed for records from 1995 to 2011: CINAHL PLUS (EBSCO), Joanna Briggs Institute, Pubmed, Web of Science (ISI), psycINFO, Scopus and Cochrane library. The keywords used were Parkinson's disease, nursing, allied health, doctor, intervention, quality of life, rehabilitation, multidisciplinary team and their various combinations. Key terms were matched to MeSH subject headings and exploded where relevant to include all subheadings and related terms to each key term used. 1808 articles were initially identified based on our selection criteria and the reference list of these articles was hand searched. Nine studies were included after this sifting process and critiqued by two reviewers.
RESULTS: Three randomised controlled trials and 6 non-randomised cohort studies were included. For these studies the level of evidence ranged from the Scottish Intercollegiate Network (SIGN) level of 1- to 2-. The outcome measures assessed were heterogeneous, including measures of disability of disease, stage of disease and various quality of life measures.
CONCLUSION: The evidence quantifying positive and sustained effects of multidisciplinary interventions to improve quality of life for people with Parkinson's disease is inconclusive. There has been relative lack of controlled experimentation to quantify therapy outcomes. The studies reviewed were varied and lacked long-term follow-up to quantify retention of the intervention. It is recommended that interventions to improve quality of life are tested in randomised controlled trials using standardised outcome measures, adequately powered samples and longer follow-up periods to assess intervention sustainability.

 PMID: 23611510 [PubMed - indexed for MEDLINE]