

## A SELECTION OF TEN CURRENT READINGS ON TOPICS RELATED TO COMPLEX CARE

Selection of readings made by A/Prof Goh Lee Gan

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### READING 1 – CURRICULUM ON CARE FOR COMPLEX PATIENTS

**Osborn J(1), Raetz J, Huntington J, Overstreet F, Ross V, Charles C, Mauksch L. A Curriculum on Care for Complex Patients: Resident Perspectives. Fam Med. 2016 Jan;48(1):35-43. PubMed PMID: 26950664.**

URL: <http://www.stfm.org/FamilyMedicine/Vol48Issue1/Osborn35> (Free Full Text)

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(1) Department of Family Medicine, University of Washington.

#### ABSTRACT

**BACKGROUND AND OBJECTIVES:** Caring for patients with a challenging mix of medical, psychological, and social problems may easily overwhelm residents. We developed a month-long "Care for Complex Patients" curriculum for second-year residents to improve their ability to care for this group of patients by increasing their understanding of why the care is complex and by building communication, teamwork, and resource management skills.

**METHODS:** Surveys and focus groups were used to assess the impact of the curriculum. Quantitative and qualitative methods were used to evaluate responses.

**RESULTS:** Between 2008 and 2010, 24 residents completed our rotation. Eighty-three percent completed the pre-curriculum and post-curriculum surveys. Residents' self-ratings significantly improved in all 11 complex care management skills, and residents reported increased confidence when working with patients whose care was complex. Residents were surprised to learn about all the community resources and began using these resources when providing care for these patients. Despite rating themselves improved, a large number of residents still rated themselves as not competent in many of the skills.

**CONCLUSIONS:** A curriculum for residents focused on education in 11 key skill areas in the care of complex patients led to increased self-confidence and willingness to provide complex care. However, 1 month of training is an insufficient amount of time to help most learners achieve self-assessed ratings of capable and competent in using these key skills when caring for complex patients. PMID: 26950664 [PubMed — in process]

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### READING 2 – TEACHING MULTIMORBIDITY MANAGEMENT

**Maguire S(1), Hanley K(1), Quinn K(1), Sheeran J(1), Stewart P(1). Teaching multimorbidity management to GP trainees: a pilot workshop. Educ Prim Care. 2015 Nov;26(6):410-5. doi: 10.1080/14739879.2015.1101848. PubMed PMID: 26808937.**

URL: <http://www.tandfonline.com/doi/abs/10.1080/14739879.2015.1101848> (Payment required)

Author information:

(1) Donegal Specialist Training Scheme in General Practice, Education Centre, St. Conal's Hospital, Letterkenny, Ireland.

#### ABSTRACT

Multimorbidity, the presence of more than one chronic condition simultaneously, has a significant impact on people who experience it and on the healthcare system. General Practitioners (GPs) are ideally situated to provide the complex care required for someone whose health needs to cross the boundaries of individual specialties. It has been suggested that medical and postgraduate general practice education needs to adapt to address the new challenges of multimorbidity. We present an

educational approach to the teaching of multimorbidity management in a postgraduate general practice training setting. We demonstrate that a workshop using simulated multimorbidity cases and facilitated by experienced GPs improves knowledge of and confidence in managing multimorbidity in primary care.

DOI: 10.1080/14739879.2015.1101848 PMID: 26808937 [PubMed — in process]

### READING 3 – FACTORS CONTRIBUTING TO PATIENT CARE COMPLEXITY

**Mount JK(1), Massanari RM(2), Teachman J(3). Patient care complexity as perceived by primary care physicians. Fam Syst Health. 2015 Jun;33(2):137-45. doi: 10.1037/fsh0000122. Epub 2015 Apr 20. PubMed PMID: 25893538; PubMed Central PMCID: PMC4461487.**

URL: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4461487/> (Free Full text)

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(1) Department of Human Services and Rehabilitation. (2) Critical Junctures Institute. (3) Department of Sociology.

#### ABSTRACT

**INTRODUCTION:** Currently there are various definitions of patient care complexity with little consensus. The numbers of patients with complex care needs are increasing. To improve interventions for "complex patients" and appropriately reimburse healthcare providers it is important to determine the characteristics or contextual factors contributing to complexity.

**METHOD:** Action research methods were used to enhance an explicit understanding of complexity. Several conferences were organized and primary care physicians, nurses, social science faculty, and patients shared their perspectives on patient care complexity. A subset of attendees created a complex patient screening tool, which was piloted by 12 primary care physicians with 267 patients to identify which factors contribute to complexity.

**RESULTS:** Complex patients were found to differ significantly from noncomplex patients based on factors associated with complexity. Based on latent class analysis, 58% of complex patients were characterized by multiple diagnoses, mental health issues, and a lack of effective participation in their care plans, while 42% of patients were considered complex because of multiple diagnoses only. In contrast, 90% of the noncomplex patients had no discernable pattern of health issues, while 10% of noncomplex patients had mental health and insurance issues that were easily managed. These results identify several factors that distinguish patients with complex care needs from those without complex care needs. The results also illustrate the heterogeneity within classes of patients identified as having complex care needs or non-complex needs.

**DISCUSSION:** By identifying factors contributing to complexity, this research has important implications for enhancing the management of patients with complex care needs.

(c) 2015 APA, all rights reserved). DOI: 10.1037/fsh0000122 PMCID: PMC4461487 PMID: 25893538 [PubMed - indexed for MEDLINE]

### READING 4 – WHAT ARE THE COMMON GERIATRIC ISSUES AND SYNDROMES IN PRIMARY CARE IN OLDER ADULTS?

**Thompson K(1), Shi S(2), Kiraly C(2). 2: Thompson K(1), Shi S(2), Kiraly C(2). Primary Care for the Older Adult Patient: Common Geriatric Issues and Syndromes. Obstet Gynecol Clin North Am. 2016 Jun;43(2):367-79. PubMed PMID: 27212097.**

URL: <http://www.sciencedirect.com/science/article/pii/S0889854516000231> (Payment required)

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ABSTRACT

Older adults are the fastest growing segment of the US population and the majority of older adults are women. Primary care for the older adult patient requires a wide variety of skills, reflecting the complexity and heterogeneity of this patient population. Individualizing care through consideration of patients' goals, medical conditions, and prognosis is paramount. Quality care for the older adult patient requires familiarity with common geriatric syndromes, such as dementia, falls, and polypharmacy. In addition, developing the knowledge and communication skills necessary for complex care and end-of-life care planning is essential. Copyright © 2016 Elsevier Inc. All rights reserved. DOI: 10.1016/j.ogc.2016.01.010 PMID: 27212097 [PubMed - in process]

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**READING 5 – CARE OF OLDER ADULTS WITH CHRONIC CONDITIONS AND FUNCTIONAL IMPAIRMENT.**

**Kogan AC(1), Wilber K(2), Mosqueda L(1). Person-Centered Care for Older Adults with Chronic Conditions and Functional Impairment: A Systematic Literature Review. J Am Geriatr Soc. 2016 Jan;64(1):e1-7. doi: 10.1111/jgs.13873. Epub 2015 Dec 2. Review. PubMed PMID: 26626408.**

URL: <http://dx.doi.org/10.1111/jgs.13873> (Payment required)

Author information: (1) Department of Family Medicine and Geriatrics, Keck School of Medicine of USC, University of Southern California, Alhambra, California. (2) Davis School of Gerontology, University of Southern California, Los Angeles, California.

ABSTRACT

Person-centered care (PCC) shifts focus away from the traditional biomedical model in favor of embracing personal choice and autonomy for people receiving health services. It has become an important avenue for improving primary care, and older adults remain a priority target for PCC because they are more likely to have complex care needs than younger individuals. Nevertheless, despite a growing body of evidence regarding its use, PCC still lacks an agreed-upon definition. A literature review was conducted to explore extant scholarship on PCC for older adults, assess corresponding definitions of PCC, and identify important elements of quality PCC. Nearly 3,000 articles published between 1990 and 2014 were identified. Excluding search results outside the parameters of this study, the final review comprised 132 nonduplicate sources focused on patient-centered care or PCC in older adults. Fifteen descriptions of PCC were identified, addressing 17 central principles or values. The six most-prominent domains of PCC were holistic or whole-person care, respect and value, choice, dignity, self-determination, and purposeful living. The body of evidence reviewed suggests that PCC is an important area of growing interest. Although multiple definitions and elements of PCC abound-with many commonalities and some overlap-the field would benefit from a consensus definition and list of essential elements to clarify how to operationalize a PCC approach to health care and services for older adults. This work guided the development of a separate American Geriatrics Society expert panel statement presenting a standardized definition and a list of PCC elements for older adults with chronic conditions or functional impairment.

© 2015, Copyright the Authors Journal compilation © 2015, The American Geriatrics Society. DOI: 10.1111/jgs.13873 PMID: 26626408 [PubMed - indexed for MEDLINE]

**READING 6 – REDUCING DISABILITY IN OLDER ADULTS FOLLOWING CRITICAL ILLNESS.**

**Brummel NE(1), Balas MC, Morandi A, Ferrante LE, Gill TM, Ely EW. Understanding and reducing disability in older adults following critical illness. Crit Care Med. 2015 Jun;43(6):1265-75. doi: 10.1097/CCM.0000000000000924. Review. PubMed PMID: 25756418; PubMed Central PMCID: PMC4640688.**

URL: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4640688/> (Free Full text)

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Comment in: Crit Care Med. 2015 Jun;43(6):1340–1.

**ABSTRACT**

**OBJECTIVE:** To review how disability can develop in older adults with critical illness and to explore ways to reduce long-term disability following critical illness.

**DATA SOURCES:** We searched PubMed, CINAHL, Web of Science and Google Scholar for studies reporting disability outcomes (i.e., activities of daily living, instrumental activities of daily living, and mobility activities) and/or cognitive outcomes among patients treated in an ICU who were 65 years or older. We also reviewed the bibliographies of relevant citations to identify additional citations.

**STUDY SELECTION:** We identified 19 studies evaluating disability outcomes in critically ill patients who were 65 years and older.

**DATA EXTRACTION:** Descriptive epidemiologic data on disability after critical illness.

**DATA SYNTHESIS:** Newly acquired disability in activities of daily living, instrumental activities of daily living, and mobility activities was commonplace among older adults who survived a critical illness. Incident dementia and less severe cognitive impairment were also highly prevalent. Factors related to the acute critical illness, ICU practices, such as heavy sedation, physical restraints, and immobility, as well as aging physiology, and coexisting geriatric conditions can combine to result in these poor outcomes.

**CONCLUSIONS:** Older adults who survive critical illness have physical and cognitive declines resulting in disability at greater rates than hospitalized, noncritically ill and community dwelling older adults. Interventions derived from widely available geriatric care models in use outside of the ICU, which address modifiable risk factors including immobility and delirium, are associated with improved functional and cognitive outcomes and can be used to complement ICU-focused models such as the ABCDEs.

DOI: 10.1097/CCM.0000000000000924 PMCID: PMC4640688 PMID: 25756418 [PubMed - indexed for MEDLINE]

**READING 7 – TELEPHONE SUPPORT PROGRAMME FOR PATIENTS AT RISK OF READMISSIONS**

**Morello RT(1), Barker AL(1), Watts JJ(2), Bohensky MA(3), Forbes AB(1), Stoelwinder J(1). A Telephone Support Program to Reduce Costs and Hospital Admissions for Patients at Risk of Readmissions: Lessons from an Evaluation of a Complex Health Intervention. Popul Health Manag. 2016 Jun;19(3):187-95. doi: 10.1089/pop.2015.0042. Epub 2015 Aug 3. PubMed PMID: 26237303.**

URL: <http://online.liebertpub.com/doi/pdf/10.1089/pop.2015.0042> (payment required)

Author information: (1) Department of Epidemiology and Preventive Medicine, School of Public Health and Preventive Medicine, Monash University, Victoria, Australia. (2) Deakin Health Economics Population Health Strategic Research Centre, Deakin University, Victoria, Australia. (3) Melbourne Epi Centre, The Royal Melbourne Hospital, The University of Melbourne, Victoria, Australia.

### ABSTRACT

This study aimed to evaluate the effectiveness of a telephone health coaching and support service provided to members of an Australian private health insurance fund-Telephonic Complex Care Program (TCCP)-on hospital use and associated costs. A case-control pre-post study design was employed using propensity score matching. Private health insurance members (n=273) who participated in TCCP between April and December 2012 (cases) were matched (1:1) to members who had not previously been enrolled in the program or any other disease management programs offered by the insurer (n=232). Eligible members were community dwelling, aged  $\geq 65$  years, and had 2 or more hospital admissions in the 12 months prior to program enrollment. Preprogram variables that estimated the propensity score included: participant demographics, diagnoses, and hospital use in the 12 months prior to program enrollment. TCCP participants received one-to-one telephone support, personalized care plan, and referral to community-based services. Control participants continued to access usual health care services. Primary outcomes were number of hospital admission claims and total benefits paid for all health care utilizations in the 12 months following program enrollment. Secondary outcomes included change in total benefits paid, hospital benefits paid, ancillary benefits paid, and total hospital bed days over the 12 months post enrollment. Compared with matched controls, TCCP did not appear to reduce health care utilization or benefits paid in the 12 months following program enrollment. However, program characteristics and implementation may have impacted its effectiveness. In addition, challenges related to evaluating complex health interventions such as TCCP are discussed. (Population Health Management 2016;19:187-195). DOI: 10.1089/pop.2015.0042 PMID: 26237303 [PubMed — in process]

## **READING 8 – CASE STUDY ON CARE OF HOMEBOUND SUPER OBESE PATIENT**

**Pagels JL(1). Care of a Homebound Super Obese Patient: A Case Study. Home Healthc Now. 2016 Mar;34(3):140-5. doi: 10.1097/NHH.0000000000000351. PubMed PMID: 26925939.**

URL: <http://pt.wkhealth.com/pt/re/lwwgateway> (Payment required)

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Comment in Eur Respir J. 2011 Sep;38(3):514-5.

### ABSTRACT

Obesity is becoming more prevalent in the United States with almost 40% of the population being overweight or obese. A new category, defining super obesity as a body mass index of 50 or higher, has been added. The purpose of this article is to use a case study to develop a more thorough understanding of the complex care needs of the super obese patient and how home healthcare clinicians can use technology to advocate for super obese patients who are home and bedbound. A review of the literature and discussion will be provided. Potential technologies involved in provision of care will also be explored. Finally, a summary of the case along with proposed solutions will be offered.

DOI: 10.1097/NHH.0000000000000351 PMID: 26925939 [PubMed - in process]

## READING 9 – MULTI-MORBIDITY, FRAILTY, AND SELF-CARE ARE IMPORTANT CONSIDERATIONS IN THROMBOPROPHYLAXIS IN OLDER ADULTS

**Ferguson C (1), Inglis SC(2), Newton PJ(2), Middleton S(3), Macdonald PS(4), Davidson PM(5). Multi-morbidity, frailty and self-care: important considerations in anticoagulant drugs. Outcomes of the AFASTER study. Eur J Cardiovasc Nurs. 2016 Apr 1. PMID: 27036952.**

URL: <http://cnu.sagepub.com/cgi/pmidlookup?view=long&pmid=27036952> (Payment required)

Author information: (1) Graduate School of Health, University of Technology Sydney, Australia [caleb.ferguson@uts.edu.au](mailto:caleb.ferguson@uts.edu.au). (2) Centre for Cardiovascular and Chronic Care, Faculty of Health, University of Technology Sydney, Australia. (3) St Vincent's Health Australia (Sydney), Australia Australian Catholic University, Australia. (4) St Vincent's Hospital, Sydney, Australia Victor Chang Cardiac Research Institute, Darlinghurst, Australia. (5) Centre for Cardiovascular and Chronic Care, Faculty of Health, University of Technology Sydney, Australia School of Nursing, Johns Hopkins University, Baltimore, MD, USA.

### ABSTRACT

**BACKGROUND:** Chronic heart failure (CHF) and atrial fibrillation (AF) are complex cardiogeriatric syndromes mediated by physical, psychological and social factors. Thromboprophylaxis is an important part of avoiding adverse events in these syndromes, particularly stroke. **PURPOSE:** This study sought to describe the clinical characteristics of a cohort of patients admitted to hospital with CHF and concomitant AF and to document the rate and type of thromboprophylaxis. We examined the practice patterns of the prescription of treatment and determined the predictors of adverse events.

**METHODS:** Prospective consecutive participants with CHF and concomitant AF were enrolled during the period April to October 2013. Outcomes were assessed at 12 months, including all-cause readmission to hospital and mortality, stroke or transient ischaemic attack, and bleeding.

**RESULTS:** All-cause readmission to hospital was frequent (68%) and the 12-month all-cause mortality was high (29%). The prescription of anticoagulant drugs at discharge was statistically significantly associated with a lower mortality at 12 months (23 vs. 40%;  $p=0.037$ ; hazards ratio 0.506; 95% confidence interval 0.267-0.956), but was not associated with lower rates of readmission to hospital among patients with CHF and AF. Sixty-six per cent of participants were prescribed anticoagulant drugs on discharge from hospital. Self-reported self-care behaviour and 'not for cardiopulmonary resuscitation' were associated with not receiving anticoagulant drugs at discharge. Although statistical significance was not achieved, those patients who were assessed as frail or having greater comorbidity were less likely to receive anticoagulant drugs at discharge.

**CONCLUSION:** This study highlights multi-morbidity, frailty and self-care to be important considerations in thromboprophylaxis. Shared decision-making with patients and caregivers offers the potential to improve treatment knowledge, adherence and outcomes in this group of patients with complex care needs.

© The European Society of Cardiology 2016. DOI: 10.1177/1474515116642604 PMID: 27036952 [PubMed - as supplied by publisher]



## READING 10 – COMMUNITY LIVING OLDER ADULTS BENEFIT FROM INTEGRATED CARE

**Uittenbroek RJ (1), Kremer HP(2), Spoorenberg SL(3), Reijneveld SA(3), Wynia K(3),(2). Integrated Care for Older Adults Improves Perceived Quality of Care: Results of a Randomized Controlled Trial of Embrace. J Gen Intern Med. 2016 Jun 6. [Epub ahead of print] PubMed PMID: 27271728.**

URL: <http://link.springer.com/article/10.1007%2Fs11606-016-3742-y> (Payment required)

Author information:

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### ABSTRACT

**BACKGROUND:** All community-living older adults might benefit from integrated care, but evidence is lacking on the effectiveness of such services for perceived quality of care.

**OBJECTIVE:** To examine the impact of Embrace, a community-based integrated primary care service, on perceived quality of care. **DESIGN:** Stratified randomized controlled trial.

**PARTICIPANTS:** Integrated care and support according to the "Embrace" model was provided by 15 general practitioners in the Netherlands. Based on self-reported levels of case complexity and frailty, a total of 1456 community-living older adults were stratified into non-disease-specific risk profiles ("Robust," "Frail," and "Complex care needs"), and randomized to Embrace or control groups.

**INTERVENTION:** Embrace provides integrated, person-centered primary care and support to all older adults living in the community, with intensity of care dependent on risk profile.

**MEASUREMENTS:** Primary outcome was quality of care as reported by older adults on the Patient Assessment of Integrated Elderly Care (PAIEC). Effects were assessed using mixed model techniques for the total sample and per risk profile. Professionals' perceived level of implementation of integrated care was evaluated within the Embrace condition using the Assessment of Integrated Elderly Care.

**KEY RESULTS:** Older adults in the Embrace group reported a higher level of perceived quality of care than those in the control group ( $B=0.33$ , 95 %  $CI=0.15-0.51$ ,  $ES\ d=0.19$ ). The advantages of Embrace were most evident in the "Frail" and "Complex care needs" risk profiles. We found no significant advantages for the "Robust" risk profile. Participating professionals reported a significant increase in the perceived level of implementation of integrated care ( $ES\ r=0.71$ ).

**CONCLUSIONS:** This study shows that providing a population-based integrated care service to community-living older adults improved the quality of care as perceived by older adults and participating professionals. DOI: 10.1007/s11606-016-3742-y PMID: 27271728 [PubMed - as supplied by publisher]