Chapter 1 : UAB - School of Nursing - News - $M grant will establish primary care RN workforce

Prev Chronic Dis ; The objective of this study was to describe how researchers have applied CCM in US primary care settings to provide care for people who have diabetes and to describe outcomes of CCM implementation. We summarized details on CCM application and health outcomes for 16 studies. Results The 16 studies included various study designs, including 9 randomized controlled trials, and settings, including academic-affiliated primary care practices and private practices. We found evidence that CCM approaches have been effective in managing diabetes in US primary care settings. Organizational leaders in health care systems initiated system-level reorganizations that improved the coordination of diabetes care. Disease registries and electronic medical records were used to establish patient-centered goals, monitor patient progress, and identify lapses in care. Primary care physicians PCPs were trained to deliver evidence-based care, and PCP officeâ€"based diabetes self-management education improved patient outcomes. Only 7 studies described strategies for addressing community resources and policies. Conclusion CCM is being used for diabetes care in US primary care settings, and positive outcomes have been reported. Future research on integration of CCM into primary care settings for diabetes management should measure diabetes process indicators, such as self-efficacy for disease management and clinical decision making. Top of Page Introduction Diabetes is a major cause of heart disease and stroke among adults in the United States and is the leading cause of nontraumatic lower-extremity amputations, new cases of blindness, and kidney failure 1â€"3. In , the Centers for Disease Control and Prevention reported that Comprehensive models of care, such as the original Chronic Care Model CCM 4,5 , advocate for evidence-based health care system changes that meet the needs of growing numbers of people who have chronic disease. CCM was developed 4,5 to provide patients with self-management skills and tracking systems. The model represents a well-rounded approach to restructuring medical care through partnerships between health systems and communities. CCM comprises 6 components that are hypothesized to affect functional and clinical outcomes associated with disease management. The 6 components 4,5 are 1 health system â€" organization of health care ie, providing leadership for securing resources and removing barriers to care , 2 self-management support ie, facilitating skills-based learning and patient empowerment , 3 decision support ie, providing guidance for implementing evidence-based care , 4 delivery system design ie, coordinating care processes , 5 clinical information systems ie, tracking progress through reporting outcomes to patients and providers , and 6 community resources and policies ie, sustaining care by using community-based resources and public health policy. The sum of these CCM component parts are purported to create more effective health care delivery systems that institute mechanisms for decision support, link health care systems to community resources and policies, deliver comprehensive self-management support services for patients, and operate and manage patient-centered clinical information systems. Despite evidence indicating widespread application of CCM to multiple illnesses, such as diabetes, congestive heart failure, and asthma 6 , no summative reviews have investigated how CCM has been applied in diabetes care. The objective of this study was to determine how CCM has been applied in US primary care settings to provide care for people who have diabetes and also to describe outcomes of CCM implementation. Methods Data sources This study identified English-language peer-reviewed research articles describing CCM-based interventions for managing type 1 and type 2 diabetes in US primary care settings ie, hospital-network outpatient clinics, private practices, and community health centers. Each database was separately searched. We conducted our analysis in October Study selection Inclusion criteria specified that studies 1 be published after the formal inception of the original CCM 5 ; 2 use the original CCM 4,5 instead of the expanded CCM 7 ; and 3 describe CCM-based interventions to manage

and treat diabetes in US primary care settings. We searched for articles published between January and October We excluded studies that took place outside of the United States, reported secondary data, or represented an editorial, commentary, or a literature review. We identified studies Figure and reviewed them in 3 steps. First we reviewed the abstracts; 76 manuscripts met inclusion criteria, and 79 were excluded. We then reviewed the full articles; 43 articles were retained, and 33 were excluded. After additional review, we excluded 27 articles and retained 16 for data extraction. We determined which of the 6 CCM components had been applied to each intervention and how the component s had been applied. We then qualitatively assessed the outcomes of each component that was applied in each study. The study selection process was conducted by 1 author K. The same author K. Top of Page Results The 16 studies 9â€"24 Table 1 included 9 randomized controlled trials 9â€"17 , 2 prospective cohort studies 18,19 , 3 natural experiments 20â€"22 , 1 qualitative study 23 , and 1 cross-sectional study Study settings included academic-affiliated primary care practices 10,12â€"14,21,23 , private practices 11,16,17,20 , community health centers 15,24 , safety net clinics 18,19,22 , and a hospital 9. Only 6 of 16 studies 11,12,16â€"18,20 implemented all 6 CCM components Table 2. The studies focused primarily on people aged 50 to 70 years. Health system â€" organization of health care Support from health care leaders stimulated organizational changes 9â€"12,14,16â€"22, Two studies 19,20 revised the health care system to redefine health care team roles eg, nurses, instead of PCPs, became responsible for conducting foot examinations. These changes improved the quality of diabetes care and rates of eye examinations, and were associated with improved HbA1c levels, blood pressure, cholesterol, and weight 19, Health system reorganization also helped to establish diabetes self-management training programs 12,16,17 that identified and intervened with patients at risk for developing complications 17 and improved clinical and behavioral outcomes 12, Self-management support We found that diabetes self-management education DSME generally improved psychosocial and clinical outcomes in patients with diabetes. Twelve of 16 studies administered individual DSME sessions 10â€"12,14â€"21,24 , and 9 studies 10â€"12,15â€"17,19,20,24 administered group sessions using both group- and individual-level approaches. Facilitators, such as Certified Diabetes Educators CDEs or nurses, provided instruction on various topics, such as medication compliance, goal setting, foot care, and interpretation of laboratory results 10â€"12,14â€"17,20, Follow-up telephone calls allowed clinicians to monitor patient progress toward meeting diabetes-management goals that were set during individual office visits 10,15,18, For example, Schillinger et al 15 found that weekly automated prerecorded tailored telephone calls from nurses were associated with improvements in interpersonal processes of care, physical activity and function, and slightly better metabolic outcomes eg, HbA1c, blood pressure, cholesterol. Lyles et al 23 found that the use of a secure e-mail connection and a smartphone to upload glucose readings via a wireless Bluetooth device allowed some participants to feel better connected with their nurse case manager. However, some participants found this communication system to be unstructured and preferred regular interaction eg, face-to-face with their nurse case manager; some participants found the smartphones to be frustrating because of technical difficulties associated with these unfamiliar technologies Decision support Specialized decision support services for diabetes care were provided to PCPs eg, endocrinologists and nurse practitioners via telephone and e-mail 18 , problem-based learning meetings 11,12,14,16,17 , and telemedicine technology Individual patient reports were also provided to health care teams for reviewing clinical trends eg, HbA1c, blood pressure, lipids and initiating clinical responses to laboratory results eg, medication adjustments 9,10,20, In several studies 10â€"12,14,16â€"18 , this training was associated with improved diabetes knowledge among patients and improved levels of HbA1c and high-density lipoprotein HDL cholesterol. Instituting these programs in PCP offices allowed for better communication between CDEs, PCPs, and patients, which contributed to lower HbA1c levels 10â€"12,18,20,24 ; better adherence to medication and adjustment processes; and stronger support networks located in more personalized settings 10,11,15â€"17,19,20, One study 12 even noted that providing DSME programs in PCP offices instead of hospital settings resulted in a 2- to 3-fold increase in the number of patients reached with diabetes education. Clinical information systems Collaborative clinical

information systems using disease registries and electronic medical records enabled multiple health care providers eg, PCPs, nurse practitioners, nurses, CDEs, physician assistants, medical assistants to review detailed reports on laboratory and examination results and identify lapses in diabetes care eg, missed visits, laboratory appointments, and examinations. These systems helped patients and providers set self-management goals and review progress reports to determine whether patients met their predetermined goals 9,11,12,14,16â€"18,20,21,23, Improved tracking ie, using electronic patient registries or electronic medical records of individual health outcomes eg, HbA1c trends provided an expedient way to manage patient information 9,12â€"15,18â€"23 and also improved provider responses eg, medication adjustment to clinical data 9,10,13â€"15,18â€" For example, the Medical Archival Retrieval System MARS stored data and generated robust reports for providers on laboratory results, visits, medications, health insurance, comorbid conditions, medical procedures, and billing charges Community resources and policies Seven studies 11,12,16â€"18,20,24 specified strategies for using community resources and forming public policy. Collaborations between community leaders and physicians 11,16,17 and between pharmaceutical companies and health plans 20 led to support for PCP training sessions on how to use CCM for diabetes management. Hospital and PCP collaborations within the community, such as partnerships between the University of Pittsburgh Medical Center and western Pennsylvania community hospitals and PCP offices 12 , provided greater access to funding, information systems, and administrative support for CCM implementation 11,12,16, Top of Page Discussion The findings of these studies contribute to a qualitative understanding of the relationship between the application of CCM components and diabetes outcomes in US primary care settings. Although the original CCM has been critiqued for not adequately meeting the needs of diverse patient populations with diabetes 7 , our systematic review supports the idea that CCM-based interventions are generally effective for managing diabetes in US primary care settings. One meta-analysis 27 determined that no single component of the CCM was imperative for improved outcomes. However, it is important to determine the combination of components that will likely produce optimal patient and provider outcomes. Our review suggested that incorporating multiple components together in the same intervention can help facilitate better CCM implementation eg, using the decision-support component to train providers on guidelines such as the ADA Standards of Care and using the delivery system design component to remodel the care delivery process to provide self-management support through DSME in PCP offices. In several studies, organizational leaders in health care systems initiated system-level reorganizations that facilitated more comprehensive and coordinated diabetes care. Changing staff roles and responsibilities to more efficiently treat diabetes was 1 strategy that produced clinical benefits. Reorganized care can also support better training programs for patients to help them self-manage diabetes. Future system-level CCM reorganizations should create clear access points for providers to intervene with patients who are at risk for diabetes complications. Some organizations have already begun to do so. For example, the Rockwood Clinic Foundation revised its mission statement to include fundraising for research and development in new methods of chronic care delivery, which has resulted in increased funding for training materials, glucometers, blood pressure monitors, and laboratories In several studies 10â€"12,14,16â€"18 , providing administrative support to train PCPs in implementing evidence-based care was associated with improved patient engagement that led to positive health outcomes. It is important to determine whether provider training delivered through telecommunication and distance learning technologies can provide ample decision-support training to PCPs. Another area worth investigating is whether the longitudinal use of decision support in different primary care practice settings eg, private practices, community health centers, hospitals improves patient outcomes. Delivery system design was identified as an important strategy for integrating DSME into primary care settings through addressing patient barriers to care such as accessibility to DSME and availability of staff to assist with diabetes care Our review supports the idea that DSME improves psychosocial and clinical outcomes. DSME fostered learning about proactive diabetes self-care practices and self-management skills. Offering DSME in primary care settings, rather than solely hospital settings, enhances the reach of such programs in a more intimate, socially supportive venue.

Other culturally tailored non-CCM interventions 29 have demonstrated larger absolute reductions in HbA1c than nontailored interventions. Cultural factors eg, food preparation, views of illness should be considered when designing, implementing, and evaluating DSME for these underserved groups It is also noteworthy that none of the reviewed studies addressed the needs of pediatric patients diagnosed with either type 1 or type 2 diabetes. Diabetes is becoming more common in children and adolescents 32 ; Rapley and Davidson 33 have advocated for the adoption of CCM programs aimed at adolescent patients with diabetes to help bridge the gap between pediatric and adult care. More personalized, patient-centered interactions eg. Many studies 9,10,12,14,18,20, 21,23,24 used disease registries and electronic medical records to establish patient goals, monitor patient progress, and determine lapses in patient care. Assimilating clinical information systems into user-friendly, portable digital technologies ie, smartphones, iPads may enable patients and providers to view and respond to laboratory results more regularly. For older populations of chronic disease patients the age group sampled in most of the reviewed studies , training programs on the use of digital technologies for diabetes self-management may reduce the anxiety and barriers to access that may currently exist 23, Involving patients in exploratory focus groups to inform the development of assistive technologies can customize educational technology and address usability concerns among unique patient populations Future studies on diabetes self-management support within the broader CCM framework should attempt to refine the use of information and communications technologies to empower, engage, and educate patients Finally, community-level partnerships pooled human and fiscal resources to provide diabetes management services 11,12,16â€"18,20, However, strategies for using community resources and developing policies were described in only 7 studies. A meta-analysis 27 also found that few studies addressed the community resources and policies component of CCM. More public-private partnerships need to be developed between providers and community organizations to address barriers to care and explore culturally appropriate community-based services eg, cooking classes, exercise programs, nutrition counseling, self-monitoring assistance for underserved populations and neighborhoods. Other models have sought to improve the community resources and policies component of the CCM. The Innovative Care for Chronic Conditions ICCC model espoused by the World Health Organization 33,37 is comparable to the Expanded Chronic Care Model proposed by Barr and colleagues 7 ; it introduces prevention efforts, social determinants of health, and enhanced community participation as core components of chronic disease care. Future studies should investigate how different derivations of CCM components contribute to changes in diabetes care within primary care settings. This study had several limitations. We used only a few search terms, so all relevant studies may not have been identified.

Chapter 2 : Self-Management In Chronic Heart Failure

This is a practical book for nurses on the management of patients with chronic cardiac disease. With the number of patients who have survived a heart attack but need continuous monitoring increasing, the role of nurse specialists is becoming ever more important. This book provides the necessary.

Patient self-management is proposed to be a cornerstone of CHF outcomes,3 although evidence to support this is limited. Nevertheless, low health literacy needs to be addressed in an effort to improve knowledge and self-management skills. A variety of strategies has been proposed to support patient self- management, such as early and targeted screening of patients to identify and resolve capacity deficits e. For example, whole system informing self-management engagement WISE training involves an assessment of patient needs, motivation and capacity, shared decision making and agreement on a management plan to support patient self- care; WISE training has produced improvements in patient outcomes in several chronic disease settings,14 but is untested in CHF. Both depression and anxiety are associated with poor adherence to medical regimens,15 this in turn having a marked effect on patient self-management. The management of depression in cardiac patients therefore is extremely important if patients are to become engaged in self-management. Specialist programmes were introduced to address the individual and complex care requirements in CHF and to encourage patient self- management. A total of CHF patients were randomised to an education and counselling programme or to education alone enhanced standard care. Outcomes were assessed after 12 months; the study did not show a benefit of self-management counselling on mortality or hospital readmissions compared to education alone. Shao et al18 found that CHF patients who were randomised to a week nurse-led self-management programme, which emphasised patient self-efficacy to control sodium and fluid intake SeSFC , showed significantly better symptom control and management than usual care patients, but that both groups had similar health service utilisation. No significant differences in hospital admissions or length of stay in hospital were observed between groups over a month period. Smeulders et al20 found that the self-care benefits of a 6-week nurse-led CHF self-management programme were no longer evident six months post-treatment compared with patients who had been randomised to usual care. Research evidence to support a pivotal role for self-efficacy in the clinical outcomes of CHF self-management is, however, limited. CHF nurses were trained to optimise patient self-efficacy and patients were engaged in behavioural modification strategies. The study failed to identify a benefit of treatment on mortality or hospital readmission compared with usual care. Taken together, these findings suggest that interventions designed to support patient self-management may improve symptom monitoring and compliance,6 but fall short of reducing mortality risk or hospital admissions. While it is possible that such symptoms may not be adequate markers of CHF exacerbation,23 poor patient engagement in self-management interventions probably explains at least some of the limited efficacy of such programmes. To our knowledge, the extent to which patient engagement may have been undermined by known psychosocial confounders, such as depression, has not been reported and would be a useful addition to future research. Nevertheless, there will always be some inherent limitations. Symptom and weight changes are generally the results of fluid retention and volume overload. However, volume changes tend to be consequent to pressures changes and therefore could be a relatively late indicator for mandating management changes, such as changes in diuretic dosage. A new approach has been to use implanted devices for measuring pressure change. Examples include devices that can directly measure left atrial pressure or pulmonary artery pressure. Monitoring of pulmonary pressure, for example, provides important information at least a couple of days before changes in patient weight are apparent. Thus, a change in diuretic dosage can be instituted earlier and this has been demonstrated to be effective in significantly reducing heart failure hospital admissions. However, in the future, devices are only likely to be used in selected individual patients. Recommendations to Promote Patient Self-management: They recommend a systems approach to self- management that integrates support for patients, practitioners and service providers; however, evidence of efficacy and the training and

resource requirements to implement such programmes are needed. Indeed, research suggests that the link between patient confidence and self- care1,34 may depend on the quality of the patientâ€"health professional relationship. Related work points to the potential for e-health to be integrated into patient social networks to optimise self-management. Health-promoting, social support may improve patient self- management behaviours. For example, the ROMEO trial27 showed a significant benefit of group education sessions for diabetes patients, scheduled quarterly over a period of two years, on knowledge, health behaviours and quality of life outcomes compared with usual care. Reeves et al44 found that self-management was associated with social connectedness and that the support offered by social networks was responsive to the changing needs of heart disease and diabetes patients. Although Heisler et al45 found no benefit of a CHF peer-support programme compared to usual care on hospital readmissions or mortality, most of the participants did not engage with the programme. Poor engagement in self-management interventions, whether at the level of the patient or practitioner, is common; e-health strategies may offer a means by which to more seamlessly integrate programmes into existing systems of care, patient lifestyles, and their social networks. Nonetheless, there is potential to harness social networks via social media platforms to enhance self-management49 and some evidence to support this approach in diabetes patients. Other approaches, such as the PLANS initiative, use e-health platforms to tailor access to community resources as a means by which to support self-management as it is contextualised in everyday life. Conclusions and Future Directions Self-management is considered a cornerstone of CHF outcomes; however, poor patient adherence is common. Patients and their partners may be empowered to self-care through a supportive relationship with their healthcare professional, but can be limited by the complex demands of maintaining their regimen. Strategies designed to optimise patient self-management have shown some success in improving symptom monitoring, but these have not translated to reduced hospital admissions or mortality risk. There is high-level evidence to support patient medication adherence, exercise training and smoking cessation to reduce hospital admissions and mortality risk. The Patient Care Committee of the Heart Failure Association of the European Society of Cardiology2 provides a good summary of the evidence â€" and evidence gaps â€" supporting patient self-management. Future research that systematically evaluates programme components to identify drivers of positive outcomes is needed to develop this evidence base. Recent developments point to a role for social networks in self-management support,42 although efficacy is not yet well-established. Vassilev et al43 suggest that social networks may effect change in self-management by improving awareness and access to network resources, adjusting social roles, relationships and communication in response to needs and through collective efficacy to achieve behavioural goals. Future research that harnesses a social network perspective to enlist and mobilise collective resources through e-health interventions may improve self-management in chronic disease settings. Heart failure self-care interventions to reduce clinical events and symptom burden. Research Reports in Clinical Cardiology ;5:

This is a practical book for nurses on the management of patients with chronic cardiac disease. With the number of patients who have survived a heart attack but need continuous monitoring increasing, the role of nurse specialists is becoming ever more important.

Advanced Search Abstract Despite major advances in treatment options for heart failure patients, morbidity and mortality remain unacceptably high. Frequent readmissions are distressful for patients and are associated with large costs for society. In an attempt to improve care for heart failure patients and thereby reduce morbidity and hospital readmissions, specialised heart failure clinics have emerged over the last 10 years. In particular, clinics relying, at least in part, on nurses specially trained in heart failure have gained popularity. This review of the published literature describes the wide variety of designs and the types of interventions taking place in such heart failure clinics. A total of 18 randomised studies comparing heart failure clinics using nurse intervention with conventional care have been published to date, and the majority of these have shown either a reduction in hospital readmissions or shortening of hospitalisations in the intervention group. These findings are supported by the results of several non-randomised, controlled investigations. Thus, it is concluded that heart failure clinics using nurse intervention should be an integrated part of the care process for patients with heart failure wherever possible. We argue that ongoing attention should be paid to the quality of care delivered by the clinics to ensure that the benefit of this intervention strategy persists. One possible, practical method to apply such continuous quality assurance may be by means of electronic medical record databases. See page for the editorial comment on this article doi: Such side effects are generally more common in clinical practice than reported in randomised clinical trials as recently shown for spironolactone. These data raise the inevitable question: With this in mind, a number of different initiatives were started which seeked to address and overcome these challenges in the outpatient management of HF patients. The initiatives have differed considerably in both patient populations and intervention methods ranging from the model of physician-directed programmes for transplant candidates to nurse-led programmes focusing on emotional support. Irrespective of the profile of the program, the term "Heart Failure Clinic" has generally been used to describe the initiative, although some also are described as Heart Function Clinics or disease management programmes. The first clinics to report their results were founded in the United States and soon thereafter results were reported from clinics in the United Kingdom, Australia and Sweden. Some clinics have not specialised in HF treatment alone, but rather included patients with chronic diseases, such as diabetes and chronic obstructive pulmonary disease. Others have included open access diagnostic units for rapid echocardiographic evaluation of patients with suspected HF. It is the aim of this review to describe the various types of reported clinics and their interventions, to critically evaluate the evidence for their efficacy, and to present the need for ongoing documentation of the impact of the intervention and discuss possible methods for doing so. Search strategy A Medline search including papers in English from to was conducted using either the term "heart failure, congestive" or "cardiac output, low" combined with one of the following MeSH terms "disease management", "case management", "comprehensive health care" or the text words "heart failure clinic", "cardiomyopathy clinic", "nurse practitioner". This search strategy yielded articles. Furthermore, reference lists of relevant original and review articles were studied to identify studies missed in the initial search. Studies, describing efficacy of specialised heart failure programmes, which included more than 20 patients, were included in the tables and analyses of this review. Studies including unselected patients with chronic diseases were only included if the results of HF patients were separately reported. Studies randomising hospitals rather than individual HF patients to various intervention strategies were not included in the tabular presentation of the randomised trials. Pilot studies were included unless the study patients were also included in the data material of a later phase study. Using these criteria 18 randomised trials and 13 non-randomised studies were identified. Variations among HF clinics and their interventions Patient populations There are few

available data to describe which patients are offered treatment and follow up in HF clinics. However, from these reports, it is not possible to make firm conclusions on the clinical characteristics of patients referred to current HF clinics since the data only represent clinics from which studies have been published. Also, it is plausible that the referral pattern is subject to change e. Clearly, the populations treated in different HF clinics are likely to be highly unequal and will reflect, among other things, the clinical and research interests of the physician, the most pressing needs of different communities, and the availability of adequate resources. Interventions and follow-up Interventions that take place in the clinics appear to vary considerably. In some cases clinical pharmacologists or pharmacists contribute to this process. Education focuses mainly on the nature of the HF disease process by teaching the patients about regular weighing and compliance with medical therapy and fluid restriction, but it may also comprise introduction of a flexible diuretic regimen i. Patients are taught about the side-effects of cardiovascular drugs and how to react in case of worsening HF symptoms. Some clinics also provide physical training programmes directed by physiotherapists. As HF patients in general are elderly and often have limited social resources, emotional and social support is being provided in some clinics this is the main service provided 42 and the task of addressing these issues may be shared among nurses, social workers and, in some instances, a hospital priest. Follow-up of patients may take place in the clinic, by means of home visits, by telephone calls, or by a combination of these methods. Follow-up may be undertaken with fixed intervals or the visits or calls may be scheduled as needed. The use of home visits makes it possible to reach some of the most ill HF patients NYHA class 4 who may not be followed in a conventional HF clinic simply because the transport to the clinic is too exhausting. Home visits may also give additional insights into the environment of the patient that are valuable in directing educational efforts and identifying gaps in care. Consequently, the use of home visits and telemonitoring could potentially have great impact on morbidity in HF. Design and prevalence of HF clinics There are few quantitative data on the organisation and prevalence of HF clinics, and most of our information is secondary coming from the clinical studies, which have been conducted in HF clinics. Furthermore, even in the published trials it is often difficult to sort out the relative contribution of nurses and doctors in the clinics. Many individual clinics have been established without any publication of the clinic design. Thus, the information available may be severely biased. Two types of HF clinics have generally been reported to date: The degree of diagnostic and therapeutic independence exerted by the nurse in the former type of clinic is highly variable and often difficult to determine from descriptions in the literature. Presumably as a consequence, several terms have been used to describe clinics in which the nurse has independent patient contact, for instance: Since no clear definition of the concept exists, in the present review, we have chosen exclusively to use the term nurse-directed HF clinic for those clinics in which a nurse has been described to play a primary role in the follow-up care for HF patients. In nurse-directed clinics, patients may also be seen by a physician, but generally the term applies to clinics in which a nurse with special training in HF sees patients independently at least on some clinic visits for evaluation and treatment, not just education. Clinics in which a physician usually a cardiologist primarily deals with the patients are referred to as physician-directed clinics. In these clinics, nurses and other health care professionals are a support capacity perhaps for education and routine nursing tasks but would rarely have direct independent responsibility for patient care. To our knowledge, the only complete, published registry of the distribution of HF clinics and their design in a well-defined geographical area comes from Sweden. These clinics were all nurse-directed. Few reports exist on physician-directed HF clinics. These clinics appear mainly to be operating in university hospitals, and many primarily serve selected patients with the most advanced degrees of HF, e. Based on the published clinical studies, it seems that most of the HF clinics are nurse-directed. In these clinics a cardiologist typically makes an initial evaluation of the patient and decides on a treatment plan. Subsequently, nurses with special training are primarily responsible for the care of the patient, in particular fulfilling the treatment plan, including changes in medication within given limits, and follow-up of the patient. The cardiologist may or may not see the patient at fixed intervals or be called upon for supervision when further medical examination or treatment is necessary. Furthermore, both nurse and

physician-directed clinics may offer services from other professionals such as pharmacists, physiotherapists, dieticians, and social workers. This complicates direct comparisons of studies of the effect of different HF programmes and their interventions. Most studies focus on frequency of rehospitalisations or duration of hospital stay as the primary endpoint. Secondary endpoints vary but most often include mortality, drug utilisation or dosages, hospital costs, and quality of life. Some studies include indices of functional capacity. The studies fall in two categories, non-randomised and randomised studies. Non-randomised studies The non-randomised studies are designed in different ways. Either the number of hospitalisations in a cohort of HF patients is recorded in a fixed period of time before and after the patients have been referred to a HF programme, 36,37,53,55,56,62,64 or the number of HF related admissions are recorded in a fixed period prior to and after a HF programme serving the referral area has been opened. On the other hand, as well as the risk of publication bias, there are some important shortcomings of these studies. Furthermore, selection bias may hamper the conclusions of studies in which the control groups were constructed using patients that by choice of their physician were not referred to a HF clinic, even if the groups were matched by sex and age. We identified 13 non-randomised studies including up to patients Table 1. Patients were recruited from a broad spectrum of HF populations ranging from primary care patients 63 to patients on heart transplant waiting lists. In all but two studies, 56,65 effect on readmission rates was reported and in these studies interventions were associated with a reduction of hospitalisation rate, 35–37,50,53–55,62–64 although the reduction was not significant in one study 63 and was documented only in a subgroup in another. The table includes a pilot study, 60 but excludes a multi-centre study where hospitals rather than patients were randomised to usual care or a HF management programme. With few exceptions 43,51 the patients included in the randomised trials were comparable to the patient populations seen in epidemiological HF surveys, especially with regards to age and gender. Follow-up time ranged from 3 to 18 months with a median of 6 months. Intervention focused mainly on patient education and pharmacological optimisation. Nurse intervention was used in all studies whereas home visits were employed in half of the trials. With respect to readmission rates, eight studies were positive, nine were neutral and one reported increased readmission rates in the intervention group see Table 2. The latter 51 differs from the other studies by including not only HF patients, but also patients with diabetes and chronic obstructive pulmonary disease as the primary diagnosis. Thus, it is possible that the negative outcome is a consequence of the lack of HF-specific education and optimisation of HF-related medications in the intervention group. Two meta-analyses have been conducted and both have shown a significant reduction in readmission rates. Thus, by qualitative analysis of the available data, it appears that intervention in HF clinics reduces readmission frequency. Furthermore, the data suggest that programmes involving home visits are more effective than programmes without this option see Table 2. This remains, however, to be proven in a clinical trial comparing usual HF clinic care with the combination of HF clinic and home care. Although mortality was lower in the intervention arm in some trials, 33,38 no clear overall reduction in this endpoint was seen. Increased mortality with intervention was not observed. Several studies provided estimation of costs in the two arms and, apart from the studies by Weinberger et al. However, as noted previously, most trials included elderly individuals and mortality rates were high. Due to the nature of the trials they are all unblinded. The investigators and team members are likely, on some occasions, to have been involved in the decision to admit or not to admit patients with increasing HF symptoms. Thus, there is potential to influence the primary endpoint in one group. However, there are no data indicating that patients in the intervention arms have been inappropriately denied hospitalisation. In contrast, several studies have shown higher quality of life scores in the intervention group. The need for quality assurance When a drug is shown to be effective in a randomised clinical trial it may be recommended for future treatment of patients similar to the ones included in the trial. Unless conditions are changed e. Although also proven effective in a well-conducted trial, a constant effect may not necessarily be true for an operator-dependent intervention such as a surgical procedure or care delivered in a HF clinic.

Chapter 4 : Effects of a nurse-led heart failure clinic on hospital readmission and mortality in Hong Kong

This study is a retrospective data analysis of HF patients aged 65 years or above and had medical follow-ups in a cardiac out-patient or nurse-led HF clinic. The socio-demographic and clinical characteristics of the HF patients were retrieved from medical records. Patients' outcomes, namely.

The work must be attributed back to the original author and commercial use is not permitted without specific permission. Abstract Background Heart failure HF is a physically and socially debilitating disease that carries the burden of hospital re-admission and mortality. As an aging society, Hong Kong urgently needs to find ways to reduce the hospital readmission of HF patients. This study evaluates the effects of a nurse-led HF clinic on the hospital readmission and mortality rates among older HF patients in Hong Kong. Methods This study is a retrospective data analysis that compares HF patient in a nurse-led HF clinic in Hong Kong compared with HF patients who did not attend the clinic. The nurses of this clinic provide education on lifestyle modification and symptom monitoring, as well as titrate the medications and measure biochemical markers by following established protocols. Results The data of a total of 78 HF patients were included in this data analysis. The mean age of the patients was Approximately half of the HF patients were male Most of the HF patients No other statistically significant difference existed between the socio-demographic and clinical characteristics of the two groups. The HF patients who did not attend the nurse-led HF clinic demonstrated a significantly higher risk of hospital readmission [odd ratio OR: However, such a difference did not reach statistical significance when the effects of age and blood pressure were adjusted. Conclusions The finding of this study suggests the important role of nurse-led HF clinics in reducing healthcare burden and improving patient outcomes among HF patients in Hong Kong. Heart failure, Hospital readmission, Mortality, Nurse-led clinic 1. Introduction Heart failure HF , an inadequacy of the pumping function of the heart, is a major public health concern. The lifetime risk of developing HF is one in five, and it affects over 23 million people worldwide. Synthesized evidence supports the idea that the secondary prevention intervention delivered by nurses can improve the outcomes of all-cause mortality and reduce hospital readmission among HF patients. The concept of evidence-based management for HF patients by a nurse-led clinic was well received in Hong Kong and served as the foundation for the establishment of a nurse-led HF clinic in a local public hospital. The aim of the present study is to evaluate the effects of this nurse-led HF clinic on the hospital readmission and mortality rates among older patients with chronic HF. Methods This study is a retrospective data analysis of HF patients aged 65 years or above and had medical follow-ups in a cardiac out-patient or nurse-led HF clinic. The socio-demographic and clinical characteristics of the HF patients were retrieved from medical records. Patients who attended the nurse-led clinic also had regular monitoring of their physiological parameters, including jugular venous pressure, blood pressure and body weight. The data measured at baseline, three months and six months afterwards were also retrieved from medical records for analysis. Nurse-led HF clinic The clinic was led by trained cardiac rehabilitation nurses. All nurses received weeks in-service training, which was conducted at a specialist outpatient clinic of the hospital. During the training, the nurses were provided with cognitive input on the in-depth patho-physiology and management of HF, as well as hands-on practice for physical assessments, HF symptom monitoring and medication adjustment. Management guidelines for the initiation of treatment and the protocol for diuretic titration and biochemical marker measurement were established under the supervision of a consultant physician. The guidelines and all the protocols of patient assessment, symptom monitoring and prescribed treatment were approved by the departmental committee. Patients who attended the clinic were referred either from out-patient clinics or wards before being discharged. All new patients attending the HF clinic were reviewed by a consultant and a cardiac rehabilitation nurse, and a HF management plan was formulated upon discussion with the patients. Patients received regular follow-ups, in particular during the first week after discharge, for early detection of deterioration and treatment readjustment as needed. Moreover, patients and their caregivers were provided

with educational discussions on self-care, lifestyle modification and symptom to support them on HF self-management. Facilitating early management before hospitalization was required. Thus, nurses at the clinic educated patients on self-monitoring of symptoms, particularly the increase in shortness of breath, body weight and edematous change. Nurses could also adjust the diuretic dosage based on the condition of the patient in the clinic. Intensive follow-ups at the clinic and daily phone consultations were arranged for the patients until their conditions, such as shortness of breath and edematous status, became stable. Follow-up schedules for the patients ranged from weekly to bi-monthly; patients attended the nurse-led HF clinic for an average of six months. Cardiac out-patient clinic Patients who refused to attend the HF clinic could have medical follow-ups at the cardiac out-patient clinic. They usually received a regular medical consultation at the cardiac out-patient clinic every four to eight weeks after discharge. No structured educational or supportive intervention was provided. Data analysis Socio-demographic and clinical data were summarized with the appropriate descriptive statistics. Logistic regression analysis was performed to determine the between-group differences in hospital readmission and mortality, while one-way ANOVA analysis was used to examine the within-group changes of clinical parameters among patients who attended the nurse-led HF clinic. All the statistical analyses were conducted using SPSS The level of statistical significance was set at 0. Results The data analysis included a total of 78 HF patients with a mean age of Nearly one-third of the patients suffered from atrial fibrillation. In addition, people who did not attend the clinic possibly had less social support less frequently married, lived less frequently with their families and depended more on Comprehensive Social Security Assistance than those who did attend. No other statistically significant difference existed between the socio-demographic and clinical characteristics of the two groups Table 1. Clinical characteristics of HF patients. Attended nurse-led clinic Did not attend nurse-led clinic P-value.

Chapter 5 : Continuity of Care: The Transitional Care Model

Nurse-led care consisted of guidelines based, software supported integrated chronic care supervised by a cardiologist. The primary endpoint was a composite of cardiovascular hospitalization and cardiovascular death.

Yoon, ScD Suggested citation for this article: Preventable hospitalizations for congestive heart failure: Prev Chronic Dis ;9: In anticipation of changes in the national health care system, we report baseline rates of these hospitalizations and describe trends by race over 15 years. Results Approximately three-fourths of the hospitalizations occurred among people aged 65 years or older. Our results confirm recent findings that preventable CHF hospitalization rates are declining in whites more than blacks. Alarmingly, rates for younger black men are on the rise. Top of Page Introduction Studies and expert committees have identified conditions for which many hospitalizations could be avoided if patients received early access to good-quality health care 1,2. Clinical guidelines are available for the diagnosis and management of CHF 4,5 , and evidence exists that physicians could better adhere to these guidelines 6. Other ways to reduce the likelihood of hospitalization are disease management programs eg, increased follow-up and self-management programs including symptom monitoring, weight monitoring, or medication dosage adjustment 7,8. Prevention of future hospitalizations can occur even before symptoms of CHF occur. Evidence-based strategies in the outpatient setting for these patients include control of hypertension and low-density lipoprotein cholesterol, use of angiotensin-converting enzyme inhibitors if appropriate, smoking cessation, physical activity, weight management, and diabetes management 4,9. The Patient Protection and Affordable Care Act PPACA aims to increase access to outpatient care and improve the quality of such care through implementation of evidence-based outpatient management systems and strategies We used national hospital survey data to describe pre-PPACA baseline rates of preventable CHF hospitalizations and describe racial differences in these rates over time. Although others have examined similar trends over time 11,12 , 1 group of researchers recently reported a decline in national CHF hospitalization rates for blacks and whites aged 65 years or older We extend these recent findings by examining more years of data and by examining both younger and older adults. We anticipate our results being useful now and in the future to help monitor the effect of changes in the national health care system. Details of the sampling design for each year of the study are provided on the NCHS website www. We calculated population-based hospital discharge rates according to specifications published by the Agency for Healthcare Research and Quality AHRQ for PQI 8, congestive heart failure admission rate To be defined as a preventable hospitalization, the numerator consists of all nonmaternal discharges of people aged 18 years or older with the following International Classification of Diseases, Ninth Revision, Clinical Modification ICDCM principal diagnosis codes: After that, AHRQ requires that the following principal diagnoses codes be included in the numerator: Specifications require that maternal discharges identified using major diagnostic category 14 pregnancy, childbirth, and puerperium be excluded from the numerator. AHRQ further specifies that preventable hospitalizations for CHF exclude from the numerator transfers from another institution including a hospital, skilled nursing facility, or intermediate care facility database missing this information before and discharges with cardiac procedure codes in any field. Excluded were people hospitalized with procedures such as implants and maintenance of pacemakers, surgical procedures for repair of heart valves, revascularization, coronary bypass surgery, heart transplants, and other such procedures. Because of these exclusions, the most serious cases of CHF were eliminated, leaving those hospitalizations that are believed to be most preventable. People who received diagnostic testing eg, echocardiograms, catheterization, stress testing or who received nonsurgical treatments eg, diuresis, medication adjustments were included in the numerator. Eligible hospitalizations defined as above will hereafter simply be called hospitalizations for CHF. We used the confidential database for this analysis, which allowed us to use sampling design variables to calculate standard errors around estimates. We used 2 categories of race for this analysis: The geographic areas included in the study were the 4 census regions: Northeast, Midwest, South, and West For insurance

type, we used Medicare, Medicaid, private insurance, and other. We used only the principal source of payment to derive these categories. Statistical analysis We estimated the total weighted number of hospitalizations for CHF each year from through for people aged 18 or older. Because we analyzed only records for which CHF was the primary reason for the hospitalization and because we were interested in studying a smaller subgroup of the population ie, blacks , we combined 2 years of data to obtain a larger number of reliable estimates for through Because half samples were used in and , we combined 3 years of data to obtain reliable estimates for through Consequently, we had 7 analytic periods , , , , , , and We summed census population estimates over these same periods and used them to calculate rates per , population. We also directly standardized rates for each period and racial group by age and sex using the Census population as the standard. We did not develop confidence intervals around the denominators because they were derived from a census of the population. We used the t test to determine whether the slope was significantly different from zero. We did not test for nonlinear trends because of the complexity of interpreting curves with a restricted number of points and the difficulty of explaining transformed rate data. This translates to a weighted number of 15,, hospitalizations for adults in the United States during the year study period, an average of 1,, each year. Approximately three-fourths of preventable hospitalizations for CHF were among people aged 65 or older Table 1. For women, the crude rates for preventable CHF hospitalizations increased with age for both racial groups in each period Table 2. In all subgroups of women, the crude estimates for black women were higher than those for white women during all 7 periods Table 2. For white women, we found a significant decreasing linear trend for those aged 45 through 64 and for those aged 65 or older. For black women, we found a decreasing linear trend for those aged 65 or older Table 2. For white and black women, the highest rate occurred among those aged 65 or older; it peaked in through for whites 1, Crude rates for preventable CHF hospitalizations among men increased with age during every period Table 3. In all subgroups of men, the point estimates for black men were significantly larger than for white men Table 3. We found an increasing linear trend in rates for black men aged 18 to For white men aged 65 or older we found a decreasing linear time trend Table 3. For white and black men, the highest rate occurred among those aged 65 or older; it peaked in through for whites 1, Age- and sex-standardized rates also show that blacks had higher rates of hospitalization for CHF than did whites Figure. The negative linear trend for whites was significant and the negative trend for blacks was of borderline significance. The slopes for whites and blacks were not significantly different from each other. Age- and sex-standardized preventable hospitalization rates for congestive heart failure in the United States across 7 periods. The slopes for blacks and whites were not significantly different from each other. National Hospital Discharge Survey, Our results generally confirm recent findings 11 demonstrating a significant declining linear trend in CHF hospitalizations for people aged 65 or older. However, we did not find that black men in this age group experienced these same declining rates. In fact, we found a significant increasing linear trend for black men aged 18 to Other investigators have reported racial differences in preventable CHF hospitalizations. Using hospital data from through in California for people aged 20 to 64, Davis and colleagues found that non-Hispanic black men and women had unadjusted rates that were 4. Using data from 22 states, Laditka and others studied a similarly aged population of non-Hispanics and found that black men were 3. In , Russo et al studied hospitalizations for people aged 18 or older from 23 states and found that age- and sex-adjusted rates for non-Hispanic black men and women combined were 2. Using the through NHDS but with a different case definition than in our study, Zhang and Watanabe-Galloway found that blacks aged 65 or older had higher CHF hospitalization rates than did whites Among adults aged 45 to 84, blacks have approximately twice the incidence of CHF as whites 22 , and blacks with CHF may have more comorbidities such as uncontrolled high blood pressure 23, This higher incidence and comorbidities may be reflected in the higher hospitalization rates among blacks Furthermore, blacks, when affected by heart failure, experience a unique epidemiology and natural history ie, disease occurring at an earlier age resulting in more substantial left ventricular dysfunction , which also may contribute to these increased rates The cost of medications and type of insurance may create barriers to appropriate care, for example, by leading to the underuse of dietary

and medication therapies Blacks are less likely than whites to receive medical care such as appropriate diagnostic procedures, thrombolytic therapy, and revascularization procedures for acute coronary syndrome 29 , and these delays in receiving quality care could help explain the higher hospitalization rates for blacks. Our study contributes to the literature in the following ways: Our study also has several limitations. These missing values likely are disproportionately occurring in the white population because hospitals that did not report race had a higher proportion of white discharges than hospitals that did; thus, our results may overestimate the differences in rates between blacks and whites We believe that because the differences between racial groups are already large, it is unlikely that the distribution would be so skewed as to eliminate the differences between the 2 groups Also, because our findings are supported by many other researchers 12, , we believe that these differences are likely real. Second, starting in , NCHS allowed abstractors to record multiple races and to record them as such in the database, likely leading to some people who would have been classified before as either black or white now being classified as multiracial. The difference between blacks and whites is smaller in our study than in previously published studies, most likely because we did not exclude all Hispanics from our groups of blacks and whites other studies used the classification of non-Hispanic white compared to non-Hispanic black. Our results and those of others indicate that CHF hospitalizations are higher among blacks than whites. It also appears that rates are dropping in a linear fashion for whites, mainly because of decreasing rates in the population aged 65 or older. It is alarming that in most subpopulations of blacks, rates are either remaining level or are increasing; most disturbing is the increasing linear trend for younger black men. Primary care strategies such as heart failure disease management programs 8 and aggressive comprehensive risk factor management 4,9 may help close this gap between blacks and whites and younger and older Americans. We advocate for continuing surveillance of these trends and suggest that these preventable hospitalizations may be a useful metric for monitoring changes associated with health care reform. In addition, further studies aimed at examining the potential reasons for such racial differences are needed. These studies will likely require merging data from various data sources and using multivariate analyses. Acknowledgments This research received no specific grant from any funding agency in the public, commercial, or nonprofit sectors. Rates of avoidable hospitalizations by insurance status in Massachusetts and Maryland. Guide to prevention quality indicators: Agency for Healthcare Research and Quality;

Chapter 6 : Nurse-led clinic - Wikipedia

Nurse-led Clinic takes care of patients with chronic heart di- sease (pts), heart failure (pts) and advanced heart failure (pts), outpatient and home management of pa-.

Some tools above are also collected consistently from all enrollees intervention and comparison. For common symptoms or risks, a set of evidence-based decision responses are available for use by APRNs. For example, valid and reliable tools that prevent delirium or falls or more effectively manage pain may be core elements of plans of care. In general, APRN application of effective palliative care strategies, modified to respond to unique patient issues, is common. For complex symptom management, plans of care also may include consultation with palliative care specialists. To further assist patients and family caregivers to understand early symptom recognition, providers consistently ask them to identify factors that contribute to exacerbations of chronic conditions McCauley et al. Guided by individual patient goals and unique learning styles and preferences, the APRNs utilize multiple teaching strategies and tools Plans for patient and family caregiver learning are developed in collaboration with the whole team, integrated into the entire care plan, and implemented and reassessed over multiple encounters. Patient and family caregivers are provided a written plan for urgent and emergent situations that includes appropriate clinician or provider contact information. A personal health record also is provided and periodically updated. The promotion of healthy behaviors is consistently addressed in the care plan and may include strategies to increase exercise, make appropriate food choices, and obtain preventive care e. The APRN reviews prescription and over-the-counter medications with each patient and their family caregivers. Reminder or dose organization systems, plans for obtaining refills, and access to community-services to assist with managing co-pays also are common strategies used to foster adherence. Promoting emotional health is essential for encouraging behavioral change. The APRN collaborates with the entire team to identify and fortify sources of emotional support, including community based organizations, peer groups, and the inclusion of family and friends. Collaborating Use of health information technology APRNs encourage consensus about plans of care among older adults, family caregivers, and members of the care team. Outreach to all involved physicians e. Use of health information technology, including electronic health records EHRs and secure email systems, may greatly facilitate collaboration. While requiring substantial up-front investment, this multidisciplinary approach streamlines plans of care, decreases burden on patients and family caregivers to coordinate care and contributes to enhanced outcomes Cowan et al. Promoting Continuity Between in-person visits, APRNs contact patients by phone and they are available by telephone seven days a week. The TCM is designed to prevent breakdowns in care across settings e. Each APRN begins to work with the patient, family caregivers, and care team at hospital admission; the same APRN implements the plan of care in the skilled nursing facility SNF , if referred, or in the patient home, substituting for traditional skilled care provided by nurses. APRNs visit their patients within 24 hours of hospitalization, daily throughout the hospitalization, within 24 hours following hospital discharge to SNF or patient home, and at least weekly throughout the first month. Subsequently, APRNs visit patients at least bi-weekly. Between in-person visits, APRNs contact patients by phone and they are available by telephone seven days a week. Typically, this initial phase of intervention occurs over a two month period range one to three months. As noted earlier, the research team is currently assessing the effects of longer-term follow-up on the care and outcomes of older adults with MCCs. Fostering Coordination APRNs promote communication and connections between hospital, post-acute, and community-based staff members, including facilitating transfer of essential information Hirschman et al. APRNs identify formal and informal services received prior to hospitalizations and determine need for continuation of services following patient transition s to home. In collaboration with patients, family caregivers, and other team members, APRNs may also identify additional appropriate services, such as palliative or hospice care, and work with patients to ensure seamless transitions to such programs. Standard tools have been constructed to assess cross-cutting metrics, such as

adherence to contact pattern e. Additionally, our research team has established metrics to benchmark adherence to each TCM core component. Others may not have resources e. The University of Pennsylvania team recognizes that, while some healthcare settings and communities choose to adopt the TCM core components as described above, multiple factors may affect how other sites implement this evidence-based care management approach. Some TCM users have chosen to adapt one or more core components to reflect local customs and practices. Outcomes Measuring changes over time in key outcome domains Key patient and family caregiver outcomes have been used to assess the effectiveness of the TCM both in past research and in the implementation of the model in multiple health systems and communities. Measuring changes over time in key outcome domains such as patient symptoms, functional status e. Assessing patient, family caregiver, and collaborating clinician perspectives about the model e. Changes in resource use e. Both the cost to implement the program e. Summary Currently, the team is examining the potential of the TCM to add value to emerging care delivery models including PCMHs, accountable care organizations, community-based palliative care programs and population health models. The core components of the TCM described above are the product of years of rigorous, multidisciplinary efforts to generate and translate research. The University of Pennsylvania team has greatly benefited from the partnership of multiple funders, health systems, payers, purchasers, and nationally recognized leaders in health system. Widely disseminated, the TCM has been recognized as a top-tiered, evidence based approach that, if scaled, could have a major positive effect on the population of Medicare beneficiaries transitioning from hospital to home Coalition for Evidence-Based Policy, Currently, the team is examining the potential of the TCM to add value to emerging care delivery models including PCMHs, accountable care organizations, community-based palliative care programs and population health models. Additionally, we are testing the model with expanded patient populations e. Since , she has been a member of the Transitional Dr. Care Model team lead by Dr. She has over 20 years of clinical practice experience and runs the Transitional Care Model seminar course at the University of Pennsylvania School of Nursing. She has been a member of the Transitional Care Model team as a clinical expert for over 20 years. He has been the chief health economist for the Transitional Care Model for over 20 years. Naylor is the Marian S. She is the architect of the Transitional Care Model. The association of co-morbid symptoms of depression and anxiety with all-cause mortality and cardiac rehospitalization in patients with heart failure. Making the case for ongoing care. Robert Wood Johnson Foundation. Ability of hospitalized patients to identify their in-hospital physicians. Archives of Internal Medicine, 2 , Health literacy and day hospital readmission after acute myocardial infarction. BMJ Open, 5 6. Functional health literacy and the risk of hospital admission among Medicare managed care enrollees. American Journal of Public Health, 92 8 , Health literacy and the risk of hospital admission. Journal of General Internal Medicine, 13 12 , The association of longitudinal and interpersonal continuity of care with emergency department use, hospitalization, and mortality among Medicare beneficiaries. The clinical characteristics of Medicare beneficiaries and implcations for Medicare reform. Care, health, and cost. Health Affairs Millwood , 27 3 , Information deficits in home care: A barrier to evidence based disease management. The Braden scale for predicting pressure sore risk: Reflections after 25 years. Clinical utility of the Braden scale for predicting pressure sore risk. Decubitus, 2 3 , , A qualitative analysis of an advanced practice nurse-directed transitional care model intervention. Gerontologist, 52 3 , A simple method for the assessment of palliative care patients. Journal of Palliative Care, 7 2 , Setting value-based payment goals--HHS efforts to improve U. New England Journal of Medicine, 10 , Six-item screener to identify cognitive impairment among potential subjects for clinical research. Medical care, 40 9 , Improving the quality of transitional care for persons with complex care needs. Journal of the American Geriatrics Society, 51 4 , Journal of Nursing Administration, 36 2 , Teaching older adults to self-manage medications: Preventing adverse drug reactions. Journal of Gerontological Nursing, 31 4 , Risk factors and implications. The Ochsner Journal, 14 4 , Rehospitalization for heart failure: Circulation, 4 , Effectiveness of self-management interventions on mortality, hospital readmissions, chronic heart failure hospitalization rate and quality of life in patients with chronic heart failure: Patient Education and

Counseling, 78 3 , Screening for alcohol and substance use for older people in geriatric hospital and community health settings. International Psychogeriatrics, 27 1 , Untangling the concepts of disability, frailty, and comorbidity:

Section 3: Managing Care: From the Organization to the Individual. 5 Organizational aspects of chronic cardiac care. 6 Individual aspects of chronic cardiac care. Section 4: Optimizing Chronic Cardiac Care. 7 Establishing a nurse-led program of chronic cardiac care.

General medicine Summary The National Heart Foundation of Australia assembled an expert panel to provide guidance on policy and system changes to improve the quality of care for people with chronic heart failure CHF. The recommendations have the potential to reduce emergency presentations, hospitalisations and premature death among patients with CHF. Best-practice management of CHF involves evidence-based, multidisciplinary, patient-centred care, which leads to better health outcomes. A CHF care model is required to achieve this. Although CHF management programs exist, ensuring access for everyone remains a challenge. This is particularly so for Aboriginal and Torres Strait Islander peoples, those from non-metropolitan areas and lower socioeconomic backgrounds, and culturally and linguistically diverse populations. Lack of data and inadequate identification of people with CHF prevents efficient patient monitoring, limiting information to improve or optimise care. This leads to ineffectiveness in measuring outcomes and evaluating the CHF care provided. Expanding current cardiac registries to include patients with CHF and developing mechanisms to promote data linkage across care transitions are essential. As the prevalence of CHF rises, the demand for multidisciplinary workforce support will increase. Workforce planning should provide access to services outside of large cities, one of the main challenges it is currently facing. To enhance community-based management of CHF, general practitioners should be empowered to lead care. Incentive arrangements should favour provision of care for Aboriginal and Torres Strait Islander peoples, those from lower socioeconomic backgrounds and rural areas, and culturally and linguistically diverse populations. Ongoing research is vital to improving systems of care for people with CHF. Future research activity needs to ensure the translation of valuable knowledge and high-quality evidence into practice. Chronic heart failure CHF remains a major public health problem. CHF is not a static syndrome; individuals with CHF are at high risk of progressive cardiac dysfunction resulting in either sudden cardiac death or acute hospitalisation. Despite significant advances in CHF management, clinical outcomes are poor and associated with escalating health care costs. Initial diagnostic delay is often due to under-recognition of early heart failure symptoms. This is compounded by limited availability of public sector services, particularly in rural and remote areas. Additionally, patient data are not shared across health services, largely due to lack of integrated information systems and care coordination. These problems are amplified among marginalised populations. Availability of culturally appropriate services that provide earlier prevention, detection and management of CHF needs to be improved. Among people hospitalised with CHF, those who receive evidence-based, multidisciplinary care have better health outcomes than those who do not. This is not intended as a prescriptive guideline, rather a set of principles to assist health departments, health network administrators, clinicians and consumers in improving care systems for people living with CHF. Our intended audience is policymakers, health system managers, consumers and health professionals in acute and primary care, including cardiologists, general practitioners, nurses, dietitians and other members of the multidisciplinary team. The consensus development process is outlined in Box 1. The expert panel identified four themes and five principles to inform the consensus statement Box 2. The recommendations Box 3 based on these themes have the potential to reduce the likelihood of emergency presentations, hospitalisations and premature death among patients with CHF. Chronic heart failure care model Best-practice management of CHF involves evidence-based, multidisciplinary, patient-centred care, which leads to better health outcomes. Against a background of recent national health reform linking improved person-centred care with performance and funding arrangements, there is increasing interest in how to realign care systems accordingly. Research suggests that individuals value easy access to services, coordinated care, and information and honesty about their prognosis. These

networks have significant influence in improving care systems and outcomes, and can evaluate variance in care quality within and across jurisdictions, with the authority to develop funding models, including care packages. They can facilitate improvements in CHF care by fostering awareness, communication, partnerships and links; by engaging leaders across sectors; and by providing advice and advocacy for policy, planning and funding. Although multidisciplinary CHF management programs exist across Australia, ensuring access for all patients who would benefit remains a challenge. Research has shown that this has an impact on patient outcomes, 41 and national guidelines have been developed to reduce this heterogeneity in Australia. Lack of identification of people with symptomatic CHF prevents efficient patient monitoring. Expansion of cardiac registries to include patients with CHF could improve identification. Recall between health care providers to ensure appropriate assessments and treatments are completed at pre-agreed intervals is also often uncoordinated. An electronic health record potentially offers the ideal tool to track, document and supply CHF patients or their carers and health care providers with the appropriate health care information, on demand, to optimise care. Further, we do not have standardised outcomes to measure and evaluate care effectiveness and enable international and national benchmarking activity. The definition of a quality indicator must be specific, complete, clearly worded and verified across different user groups. These problems could be reduced through the use of better process measures. Increasingly, hospital readmission is becoming an important indicator of health care outcomes, as it can be used to identify potentially preventable admissions. However, as a sole indicator, it can be problematic due to difficulties with interpretation, utility in the clinical environment, and problems such as poor attendance at outpatient clinics, which does not necessarily reflect poor hospital care. An operational definition for readmission needs to clearly identify the diagnosis-related group or major disease classification associated with the index admission. Over a longer period, as readmissions occur due to the chronic nature of the disease, event-free survival provides a measure of quality. This may be through the introduction of funding incentives or provision of nurse practitioners and practice nurses in primary care. Any incentive arrangements should favour provision of care for Aboriginal and Torres Strait Islander peoples, those from lower socioeconomic backgrounds and rural areas, and culturally and linguistically diverse populations. Research and quality improvement activity priorities arising from this consensus statement are those relating to CHF care models including development of readmission risk assessment models , access to meaningful data for management and benchmarking, and workforce planning. Focused investigative teams, such as clinical CHF research networks, could lead this work. In addition, more work needs to be undertaken among populations for whom frequent access to mainstream services is limited; namely Aboriginal and Torres Strait Islander peoples, those from non-metropolitan areas and lower socioeconomic backgrounds, and culturally and linguistically diverse populations. Individuals with CHF have specific management needs. Future research should consider roles of specialty care teams eg, cardiology, general medical and the role of telehealth. Conclusion The current and future burden of CHF compels us to strive for equitable outcomes for all Australians. A national policy framework, with agreement between states, territories and the federal government, needs to be developed and implemented to tackle the increasing burden of CHF. Governments at national and state levels, together with cardiac clinical networks, need to ensure that evidence-based care models for people with CHF are standardised, with equitable access. The core principles and recommendations described in this consensus statement should be incorporated into the various CHF systems of care operating across states and territories. Implementing these recommendations has the potential to improve the quality of care provided to individuals with CHF, reducing associated costs for both the individual and the community. Improvements could be seen not only in the care experienced by patients and their families, but also in clinical and operational benefits. Implementing multidisciplinary, patient-centred care approaches can shorten lengths of stay in hospital, reducing health care costs and improving clinician and patient satisfaction. This work needs to be underpinned by nationally recognised standards for outcome measurement that are universally recognised and easily applied in practice. Data systems need to support evidence-based decision making, while providing feedback relating to standardised performance measures.

Our health care workforce needs to be equipped to deal with the increasing burden of disease associated with CHF, with training, education and research around the delivery of multidisciplinary care in an increasingly complex environment. These recommendations, if adopted, have the potential to facilitate and promote optimal and equitable health outcomes for all Australians diagnosed with CHF. A relevant literature search was performed, limited to evidence from human studies published in English between and This was complemented with hand searching of reference lists from reviews and personal collections of the expert panel, and additional peer-review. As there is limited evidence around the system changes required, these consensus recommendations are based on expert opinion. They are not exhaustive, and many other changes and actions can be implemented by both individuals and organisations to improve care outcomes. The recommendations are generally broad, rather than prescriptive, and many can be implemented with minimal resourcing.

Chapter 8 : - NLM Catalog Result

Implementation of a nurse-led education programme for chronic heart failure patients during hospitalisation, and strategies supporting their self-management at home: a prac- tice development project in the context of the Swiss healthcare system.

If you have any questions while reviewing this information, please contact us. We are happy to answer any questions you may have. Before your appointment Important information for patients who are coming to see a cardiologist in the Kaufman Center for Heart Failure Treatment and Recovery If your appointment is scheduled at least one week away, you will be asked to send your records, including medical history, test results and films such as echocardiogram, cardiac catheterization, chest X-ray, MRI or CT , prior surgery and intervention reports, and device implantation reports. All information should be sent in the same package clearly marked with your name and address via Airborne Express, Federal Express, or certified U. If you do not have a fax machine, please bring your records and films to your appointment. Patients who are evaluated for a heart transplant or LVAD evaluation take part in a specialized program that begins at the pre-surgery stage and continues through hospitalization and recovery. Communication occurs through the Heart Transplant office. Please review the complete process on the Heart Transplant Program Website. We will assist you with the process for surgical review. Traveling to Cleveland Clinic We would like to make traveling to Cleveland Clinic as easy as possible. If you have any questions, please visit: During your appointment You will first meet with a physician assistant who will collect your information and begin your evaluation. The diagnosis and treatment of heart failure involves: Thorough history and exam 2. Diagnostic imaging studies 3. Patient management and recommendations You will then meet with a physician from the Kaufman Center for Heart Failure Treatment and Recovery who will review your records and prior films, take a medical history and perform a physical exam. Depending on your history and prior testing, you may need to have specialized imaging tests. Depending on the tests you need, your cardiologist will either meet with you later that day to review the tests with you and determine if you need additional consultations with other Center specialists. Or, your cardiologist will follow up with you by phone. Your cardiologist will provide you with specific instructions on your plan of care. How long will you stay at Cleveland Clinic? To complete all testing, you will need to stay in the Cleveland area 1 to 2 days. After your visit Because symptoms of heart failure vary from patient to patient, your need for follow-up care will be tailored to your needs and discussed with you during your visit. In , the staff participated in more than 20 active protocols. The goals of research are to manage acute heart failure, improve long-term survival, improve patient care and outcomes, minimize postoperative morbidity among patients who have heart transplants, and evaluate the safety and effectiveness of MCS devices. Basic Research Scientists in the Kaufman Center for Heart Failure, in collaboration with members of the Lerner Research Institute, study the failing human heart in our research labs. Initial results are promising.

Chapter 9 : George M. & Linda H. Kaufman Center for Heart Failure Treatment and Recovery | Cleveland C

Contents: Pathophysiology and epidemiologic burden of chronic cardiac disease -- Key therapeutic targets in chronic cardiac care -- Slowing the progression of cardiovascular disease: innovative approaches to cardiac rehabilitation and secondary prevention -- Chronic CHF management programs: an exemplar for chronic cardiac care -- Organisational.