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Chronic Illness Management in Teams of Urban Multidisciplinary Scholars (CIMTUMS) -- Part II


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allocating palliative care services.

Purpose: To systematically review and summarize current medical literature regarding the factors predictive of mortality in an inpatient population above 65 years of age.

Methods: Nondisease-specific prognostication indices that predict 1-year mortality in an inpatient population of adults over age 65 were included. We excluded studies that estimated intensive care unit, disease-specific or in-hospital mortality. A MEDLINE, CINAHL, Ovid and Cochrane literature search of English-language articles that developed and/or validated a prognostication index to predict mortality was performed. Review of 3,600 citations revealed 53 articles that reported variables associated with mortality. Based on the inclusion criteria, 9 studies were included in the final analysis. Data was extracted from the 9 studies using the following parameters: adequate method of description of population, nonbiased selection of patients, low loss to follow-up, adequate prognostic factor measurements, adequate outcome measurements and methods of validation. We performed qualitative analysis on 5 studies and 4 studies were pooled for a quantitative meta-analysis.

Results: The 1-year mortality rate for the 21,338 patients included in all the studies was 31% (95% confidence interval [CI]: 31.3–32.6); mean age was 80.6 years. Factors significantly associated with mortality included male sex (odds ratio [OR]: 1.25, 95% CI: 1.09–1.42; $P < 0.001$), congestive heart failure (OR: 0.41, 95% CI: 0.37–0.45; $P < 0.001$), chronic obstructive pulmonary disease (OR: 3.2, 95% CI: 0.42–24.9; $P = 0.26$), myocardial infarction (proportion 0.39; $P < 0.001$), and cerebrovascular disease (proportion 0.38, 95% CI: 0.32–0.44; $P < 0.001$).

Conclusion: One-year mortality for inpatients aged > 65 years was high and associated with male sex, chronic obstructive pulmonary disease and congestive heart failure. Generalization of these findings to all older adults should be made with caution because of insufficient published information. In the future, our results may be used to develop a prognostication tool that draws patient data in real time from the EHR to identify vulnerable older adults in the hospital with end-of-life needs.

Chronic Illness Management in Teams of Urban Multidisciplinary Scholars (CIMTUMS) — Part II

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Background: Diabetes is a major contributor to morbidity and mortality as well as the single most expensive health care condition in the world. Numerous interventions have attempted to improve control of this disorder and reduce its complications. Traditional care for diabetes centers on an individual clinician. More recently, recognition of the central role of the patient has come into vogue. Payors, including Medicare, now cover up to 13 hours of diabetes

self-management and education programs annually. Patient-centered medical home efforts add an aspect of inclusiveness, but retain a medical focus and are being increasingly advocated and trained. To date, no research has focused on the use of interprofessional learning teams simultaneously delivering care and learning to work together.

Purpose: This project contributes to the development and training of interprofessional learner teams to enhance patient care. Intended outcomes include learner attitude and behavior changes and improvement in diabetic patients' biomarkers, empowerment and satisfaction.

Methods: Teams of 6–9 learners from eight fields and three universities work with cohorts of 6–21 African-American diabetic patients. The project includes team training, implementation of a diabetes self-management education (DSME) program and weekly telephone coaching. Learners complete the Centers for Disease Control and Prevention's TeamSTEPPS teamwork attitude questionnaire pre- and postintervention. Patients are recruited from the Aurora Midtown Clinic, which serves a largely Medicare/Medicaid population in Milwaukee's central city. Registries are searched for patients who fall out of quality goals; they are recruited by team members, with a target of 25 to 30 willing patients to complete the five DSME sessions and 4-week phone coaching around SMART goals. Patient biomarker data is tabulated, and pre- and postintervention Diabetes Empowerment Scale completed.

Results: Three cohorts of 42 patients and 23 students have completed the program. Patients demonstrated high attendance rates, improved diabetes knowledge and self-management skills, and a trend in improvement in diabetes control compared to age/gender-matched controls. Students did not show a change in interprofessional attitude.

Conclusion: Challenges included coordinating schedules, demonstrating change of attitude in self-selected students, and discipline-specific supervision requirements. These programs demonstrated feasibility of concept for an interprofessional student-led DSME program to enhance patient care, with high student interest and engagement.

A Meta-Analysis of Incidence and Risk Factors of Trastuzumab-Induced Cardiotoxicity in Breast Cancer

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Background: A monoclonal antibody, trastuzumab targets the human epidermal growth factor receptor 2 (HER2)