Multidisciplinary Geriatrician-Guided Discharge Planning Effectively Reduces Readmissions

STUDY QUESTION

Does a multimodal inpatient discharge planning process reduce emergency readmissions or ED recidivism in geriatric adults?

STUDY DESIGN

Design: Pragmatic Zelen-method randomized controlled trial

Setting: Acute geriatric units (AGU) in one of five demographically diverse university hospitals or one private clinic in Paris from April 2007 to October 2008. Patients: Consecutive patients over age 70-years admitted to the AGU in an emergency. Exclusion criteria included anticipated length of stay less than 5 days, unlikely survival beyond 3 months, palliative care, anticipated barriers to follow-up, or absence of health insurance.

Description of Intervention: Four intervention-dedicated geriatricians (IDG) with focused training on patient communication assessed AGU patients for three interrelated problems amenable to acute management: depression, protein-energy malnutrition, and medication management. The IDG was not part of the routine care team, but performed standardized reviews of all chronic diagnoses with their medication management for each participant and screened for depression or malnutrition. The IDG organized and ran four structured patient-centric educational sessions. Upon discharge, the IDG provided patients, caregivers, and outpatient physicians with a brief report letter. The control group received standardized care from the AGU that included comprehensive geriatric assessments without the IDG.

Outcomes: Emergency hospitalization or ED recidivism at 3- and 6-months.

MAIN RESULTS

The mean age of participants was 86 years and 92.7% of IDG participants received the intervention. In total, 70% of IDG participants had at least one major chronic drug modification recommended to the AGU team, while 43% and 78% were diagnosed with depression or malnutrition, respectively. The IDG participants had lower rates of emergency hospitalization or ED visits at 3-months (23% vs. 30.5%, NNT = 13) and 6-months (35.3% versus 40.8%, NNT = 18), though the latter was not statistically significant. The cost savings of the intervention was \$635 per participant.

CONCLUSION

This intervention was effective in reducing rehospitalizations and ED visits for very elderly participants 3 but not 6 months after AGU discharge.

ABSTRACTED FROM

Legrain S, Tubach F, Bonnet-Zamponi D, et al. A new multimodal geriatric discharge-planning intervention to prevent emergency visits and rehospitalizations of older adults: the Optimization of Medication in AGEd Multicenter Randomized Controlled Trial, *J Am Geriatr Soc* 2011; 59: 2017-2028.

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Clinical Impact Rating: Geriatric Emergency Medicine 5/7

COMMENTARY by Chris Carpenter, MD, MSc (Washington University)

Readmissions and ED recidivism are major economic and quality improvement challenges to clinicians and hospital administrators and targeted care bundles are one effective solution.[1] Forty percent of geriatric ED patients return within three-months.[2] A hospital discharge process focused on effective transitions of care is one proven mechanism to prevent 30-day recidivism as is comprehensive geriatric assessment (CGA).[3, 4] However, the pragmatic reality is that most institutions lack a geriatrician with sufficient time to dedicate to CGA in the ED or even in the AGU, if the hospital has an AGU. While the effectiveness of this study is impressive, real-world application of this model is a challenge. Indeed, even the study authors had to stop data collection prematurely because the IDG were pulled away for more pressing clinical responsibilities. Nonetheless, clinicians must continue exploring efficient methods to restore health and avoid short-term recidivism.

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- 2. McCusker J, Cardin S, Bellavance F, Belzile E: Return to the emergency department among elders: patterns and predictors. Acad Emerg Med 2000, 7(3):249-259.
- 3. Jack BW, Chetty VK, Anthony D, Greenwald JL, Sanchez GM, Johnson AE, Forsythe SR, O'Donnell JK, Paasche-Orlow MK, Manasseh C *et al*: **A reengineered hospital discharge program to decrease rehospitalization: a randomized trial**. *Ann Intern Med* 2009, **150**(3):178-187.
- 4. Ellis G, Whitehead MA, O'Neill D, Langhorne P, Robinson D: **Comprehensive geriatric assessment for older** adults admitted to hospital: a systematic review *Cochrane Database of Systematic Reviews* 2011(Issue 7. Art. No.: CD006211. DOI: 10.1002/14651858.CD006211.pub2).