

Comprehensive geriatric assessment for older adults admitted to hospital: meta-analysis of randomized controlled trials

STUDY QUESTION

Is inpatient comprehensive geriatric assessment (CGA) for frail older adults admitted to hospital as an emergency more effective than routine or general medical care in hospital?

STUDY DESIGN

Design: Meta-analysis of randomized controlled trials (RCTs)

Setting: Inpatient hospital

Patients: Participants were adults aged 65 or older who were admitted to hospital care as an emergency, including all unplanned, unscheduled, or acute presentations.

Description of Intervention: In April 2010 the investigators searched the EPOC Register (including studies awaiting assessment), the Controlled Trials Register (CCTR), the Database of Abstracts of Reviews of Effects (DARE); the Cochrane Central Register of Controlled Trials (CENTRAL); Medline (from 1966); Embase (from 1980); CINAHL (from 1982); and AARP Ageline (from 1978). They also hand searched high yield journals and conference proceedings and the reference lists of any relevant reviews. Three independent reviewers screened titles and abstracts of papers to identify randomized controlled trials comparing comprehensive geriatric assessment with usual care versus general medical ward care.

Outcomes: Primary: living at home. Secondary: death; residential care; dependence; death or deterioration; activities of daily living; cognitive status; readmissions; length of stay; and use of resources.

MAIN RESULTS

The investigators identified 22 relevant RCTs with 10,315 participants. Odds of living at home were higher in those with CGA (OR 1.16, 95% CI 1.05 to 1.28). Subgroup analysis showed that this effect was only present in those trials with CGA wards (OR 1.22, 95% CI 1.10 to 1.35), mobile CGA teams showed a trend towards worse outcomes (OR 0.75, 95% CI 0.55 to 1.01). A similar pattern was seen for residential care admission. CGA subjects had a significant reduction in death or deterioration (OR 0.76, 95% CI 0.64 to 0.9). There was an overall benefit to CGA for cognition. There were no difference between groups in mortality, dependence, death or dependence, ADLs, or readmission; meta-analysis could not be done for length of stay or costs.

CONCLUSION

Inpatient CGA is associated with greater odds of living at home, lower odds of living in residential care, lower odds of death or deterioration, and improved cognition. The effects are consistent in geriatric wards, and are not replicated in mobile consult teams.

ABSTRACTED FROM

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COMMENTARY by Scott Wilber, MD, MPH (Summa Akron City Hospital)

While comprehensive geriatric assessment in the hospital is associated with improved outcomes for older patients admitted to the hospital as an emergency, the improvements are small, found only with CGA wards (rather than mobile CGA consult teams), and are limited to living at home, cognition, and the composite outcome of death or deterioration). This study did not identify improvements in function, readmission, length of stay, or cost.[1] Other systematic reviews of CGA for frail older adults discharged rapidly from ED or inpatient settings failed to demonstrate a benefit.[2, 3] Hospitals will have to weigh the cost of developing CGA units with the small benefits seen, and should not expect an improved finances through reduced costs, length of stay, or readmissions to offset these costs. While this information may inform advocates of geriatric ED wards and CGA in the ED, the results cannot be extrapolated to the ED as the patient populations and settings differ.[4]

REFERENCES

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