



“Consensus Document on the Management of the Hospitalized Older Patient”.

INTRODUCTION

1. More than 25 years have passed since the Consensus Conference on Comprehensive Geriatric Assessment sponsored by the National Institute on Aging and the Office of Medical Applications of Research of The National Institutes of Health together with the National Institute of Mental Health, the Veteran Administration and the Henry J. Kaiser Family Foundation (1). From that time, much scientific and clinical evidences have accumulated pertaining the care of older patients. Thus, it is justified to propose an International Consensus Document on the management of older patients hospitalized because of acute diseases .
2. Worldwide, the life expectancy at birth is progressively increasing and in the most developed countries life expectancy has reached levels that were unimaginable a few decades ago. As a consequence, dependency ratio is steadily increasing (2), thereby raising concerns about the sustainability of the welfare systems. Some authors, however, authoritatively argue that this concern should be reconsidered in the light of the qualitative changes that occurred with longevity (3). In this scenario, the challenge for the future is to ensure that people around the world may be able to age with security and dignity and to continue fully participating in their societies (4).
3. Older people are among the main users of health services, particularly hospitals (5). Hospitalization plays a major role in the trajectory leading to functional impairment in older persons. Indeed, about 35% of older persons are discharged from the hospital with new disabilities compared to the pre-morbid baseline functional level (6-8).
4. For these reasons, it seems important to share the opinions of the international scientific geriatric societies in a consensus document which authoritatively declares what the appropriate approach and path to the older patient in hospital should be, in order to preserve, as far as possible, autonomy and quality of life during and after hospitalization of the older subject.

STATEMENTS

1. **As already defined in the 1987 Consensus Conference (1), the appropriate approach to hospitalized older patients is based upon the Comprehensive Geriatric Assessment (CGA), a methodology which generates a priority system of interventions and medical care aimed at preserving self-sufficiency and quality of life.**
2. **According to recent studies, the CGA-based approach has proved to reduce the rate of post-discharge institutionalization, death and disability in comparison with the traditional management, without any cost increase (9-21). In other words, older patients admitted to Geriatric wards who underwent a CGA-based multidimensional management were more likely to return home after hospitalization and were discharged from hospitals with better**

functional and cognitive status compared to those who received usual medical care. These benefits implies a smaller burden on families and health care or welfare systems compared to older patients who did not receive a CGA-based approach.

3. The benefits, in terms of lower rates of disability and institutionalization, are achieved only if the same team performs both the assessment and the clinical management; conversely, when assessment was performed by a consulting service and a second team provides clinical management, no significant benefit was demonstrated (20-22).
4. Best results are obtained when all members of the team involved in the management of acute elderly patients, i.e. physicians, nurses, social workers, clinical nutrition and physiotherapy staff members, have specific skills and experience in geriatrics and a geriatrician plays a leading role in the multidisciplinary team (19, 23-25).
5. The benefits of the specific approach to hospitalized older persons based on the CGA in terms of lower rates of disability and institutionalization and to stratify different mortality risk groups are obtained in older patients with specific clinical disorders, i.e. cancer (26), renal failure (27), and other common conditions leading to death in older age (28).
6. Drug treatment in hospitalized older patients is a challenging issue, because of the increased risk of adverse drug reactions and the limited usefulness of scientific evidence. The lack of evidence is due to the very common exclusion of older patients with comorbid conditions from randomized clinical trials and meta-analyses, which generate clinical practice guidelines for younger people (29, 30).
7. The CGA-based approach has proved effective in reducing the number of prescriptions and daily drug doses by facilitating discontinuation of unnecessary or inappropriate medications. CGA-based approach has also demonstrated an ability to optimize treatment by increasing the number of drugs taken in cases where under-treatment has been identified (31).
8. Daily review of drug treatment is strongly indicated in the hospital management of elderly patients in both medical and surgical settings (10, 23).
9. The perioperative phase (preoperative and postoperative) in older patients is particularly delicate. In this clinical setting, the multidisciplinary approach by a team involving the Geriatrician reduces the rate of adverse outcomes (16, 23, 32-35). In other words older patients with surgical diseases should be treated by both surgeons, anesthesiologist and geriatricians on the basis of specific paths that needs to be defined and validated.
10. Older patients hospitalized for acute diseases require specific paths to ensure continuity of treatment and care between hospital and home (9, 23). A specific task is to detect frailty at all levels of care by using CGA-based instruments suitable in the different settings and primary care (36)

REFERENCES

1. Geriatric Assessment Methods for Clinical Decision making. NIH Consensus Statement 1987 Oct 19-21;6(13):1-21.
<http://consensus.nih.gov/1987/1987geriatricassessment065html.htm>
2. United Nations – World Population Ageing 1950-2050 –Changing Balance between Age Group.
<http://www.un.org/esa/population/publications/worldageing19502050/pdf/81chapteriii.pdf>
3. Warren CS et al. Demography. Remeasuring aging. Science 2010; 329:1287-88
<http://www.sciencemag.org/content/329/5997/1287.summary>
4. United Nations – World Population Ageing 1950-2050 – Conclusions -
<http://www.un.org/esa/population/publications/worldageing19502050/pdf/92chaptervi.pdf>
5. National Hospital discharge Survey: 2007 Summary-
<http://www.cdc.gov/nchs/data/nhsr/nhsr029.pdf>
6. Creditor MC. Hazards of hospitalization of the elderly. Ann Intern Med 1993;118:219–23
7. Palleschi L et al. Functional recovery of elderly patients hospitalized in geriatric and general medicine units. The PROgetto DImissioni in GERiatria study. J Am Geriatr Soc 2011; 59:193-9.
8. Covinsky KE, Pierluissi E, Johnston CB. Hospitalization-associated disability: “She was probably able to ambulate, but I’m not sure”. JAMA 2011; 306: 1782-93.
9. Rubenstein LZ et al. Effectiveness of a geriatric evaluation unit. A randomized clinical trial. N Engl J Med 1984; 311:1664-70.
10. Landefeld CS et al. A randomized trial of care in a hospital medical unit especially designed to improve the functional outcomes of acutely ill older patients N Engl J Med 1995; 332:1338-44
11. Covinsky KE et al. Do acute care for elders units increase hospital costs ? A cost analysis using the hospital perspective. J Am Geriatr Soc 1997; 45:729-34.
12. Counsell SR et al. Effects of a multicomponent intervention on functional outcomes and process of care in hospitalized older patients: a randomized controlled trial of Acute Care to Elders (ACE) in a community hospital. J Am Geriatr Soc 2000; 48:1572-81
13. Saltvedt I et al. Reduced mortality in treating acutely sick, frail older patients in a geriatric evaluation and management unit. A prospective randomized trial. J Am Geriatr Soc 2002; 50:792-8.
14. Cohen HJ et al. A controlled trial of inpatient and outpatient geriatric evaluation and management. N Engl J Med 2002; 346:905-12
15. Saltvedt I et al. Acute geriatric intervention increases the number of patients able to live at home. A prospective randomized study. Aging Clin Exp Res 2004; 16:300-6.
16. Vidan M et al. Efficacy of a comprehensive geriatric intervention in older patients hospitalized for hip fracture: a randomized, controlled trial. J Am Geriatr Soc 2005; 53:1476-82
17. Baztan JJ et al. Effectiveness of acute geriatric units on functional decline, living at home, and case fatality among older patients admitted to hospital for acute medical disorders: meta-analysis. BMJ 2009; 338:b50
18. Van Craen K et al. The effectiveness of inpatient geriatric evaluation and management units: a systematic review and meta-analysis. J Am Geriatr Soc 2010; 58:83-92.
19. Ellis G et al. Comprehensive geriatric assessment for older adults admitted to hospital. Cochrane Database Syst Rev 2011 Jul 6;(7):CD006211

20. Ellis G et al. Comprehensive geriatric assessment for older adults admitted to hospital: meta-analysis of randomised trials. *BMJ* 2011 Oct 27; 343:d6553. doi:10.1136/bmj.d6553
21. Graf CE et al. Efficiency and applicability of comprehensive geriatric assessment in the Emergency Department: a systematic review. *Aging Clin Exp Res* 2011; 23: 244-54.
22. Reuben DB et al. A randomized trial of comprehensive geriatric assessment in the care of hospitalized patients. *N Engl J Med* 1995; 332:1345-50
23. NCEPOD: National Confidential Enquiry into Patient Outcome and Death. – http://www.ncepod.org.uk/2010report3/downloads/EESE_fullReport.pdf
24. British Geriatrics Society. Acute Care of Elderly People, update December 2012. . <http://www.bgs.org.uk/index.php/topresources/publicationfind/goodpractice/44-gpgacutecare>
25. Royal College of Physicians. Acute medical care for frail older people. March 2012.
26. Friedrich C, Kolb G, Wedding U. Comprehensive Geriatric Assessment in the Elderly Cancer Patient. *Onkologie* 2003; 26: 355-60.
27. Wiggins J, Bitzer M. Geriatric Assessment for the Nephrologist. *Semin Dial* 2012; 25:623-7.
28. Pilotto A, Panza F, Ferrucci L. A Multidimensional Prognostic Index in common conditions leading to death in older patients. *Arch Intern Med* 2012; 172: 594-5
29. Cherubini A et al. The persistent exclusion of older patients from ongoing clinical trials regarding heart failure. *Arch Intern Med* 2011; 171:550-6
30. Boyd CM et al. Clinical practice guidelines and quality of care for older patients with multiple comorbid diseases: implications for pay for performance. *JAMA* 2005; 294:716-24
31. Sergi G et al. Polypharmacy in the elderly: can comprehensive geriatric assessment reduce inappropriate medication use? *Drugs Aging* 2011; 28:509-18
32. Giusti A et al. Optimal setting and care organization in the management of older adults with hip fracture. *Eur J Phys Rehabil Med.* 2011; 47: 281-96
33. Friedman SM et al. Geriatric Co-Management of Proximal Femur Fractures :Total Quality Management and Protocol-Driven Care Result in Better Outcomes for a Frail Patient Population. *J Am Geriatr Soc* 2008; 56: 1349-1356
34. Kates SL et al. The Value of an Organized Fracture Program for the Elderly :Early Results. *J.Orthop Trauma* 2011; 25 : 233-237
35. British Geriatrics Society. Peri-operative Care for Older Patients Undergoing Surgery. January 2013. <http://www.bgs.org.uk/index.php/topresources/publicationfind/goodpractice/2402-bpg-pops>
36. Clegg A et al. Frailty in elderly people. *Lancet* 2013; 381: 752-62.