

Medical Students' Self Reported and Observed Competencies In Geriatrics

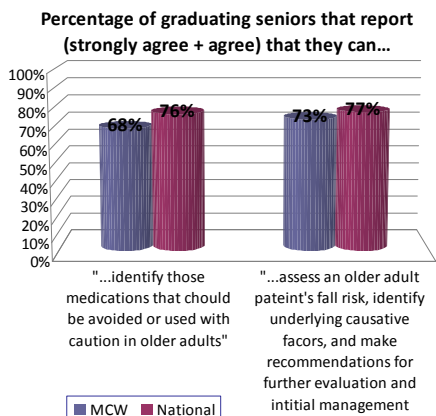
Richard Leake, Maria Burzynski, Diane Brown, MS, Edmund Duthie, MD, Dawn Bragg, PhD,
Deborah Simpson, PhD, TGIF Clerkship Collaborative

Department of Medicine, Office of Educational Services, and the Injury Research Center.



Introduction

- In 2000, geriatric patients made over 200 million visits to doctor in outpatient settings:
 - 1/3: no prescriptions given
 - 1/3: 1 or 2 drugs prescribed
 - 1/3: 3 or more drugs prescribed
- Geriatric patients prescribed inappropriate medications = 7.8 % of all doctor visits¹
- Each year, over 1/3 of persons >65 y.o. fall²
- Current medical school curriculums:³
 - Lack content and consistency in providing training in treating injury
 - Lack training in providing prevention guidelines to patients
- The 2008 AAMC Graduation Questionnaire included items from the AAMC/Hartford Consensus Conference on Minimum Geriatric Competencies for Medical Students (MGCMS) and reveal:



Purpose

- Do students actually demonstrate these minimal geriatric competencies during required clerkships?
- We report the results from an observational study of third-year medical students (M3's) clinical encounters specific to falls and medication competencies.
- Aging of U.S. population demands that physicians be competent to care for older adults.

Materials and Methods

Observational Study

- Study Subjects: M3 students rotating on 1 of 6 clinical services
 - Family Medicine, Internal Medicine, Psychiatry, Neurology, Anesthesiology, and Trauma Surgery
- Observation Period: June 9-July 21, 2008
- Observers: Two rising M-2 students

Observation Checklist Development

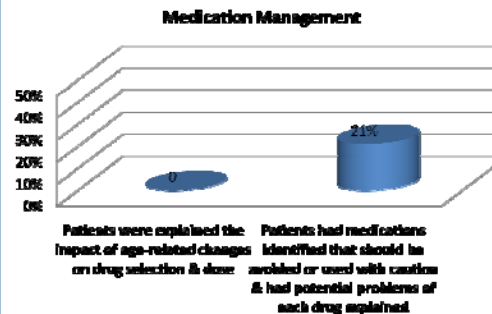
- "Tag-along" observations focused on behaviors derived from:
 - Consensus Conference on Geriatrics Minimal Competencies for Medical Students
 - Associated evidence-based protocols and research specific to each competency⁴
- Checklist contained 4 main categories
 - Falls, Medications, Literacy, and Abuse
 - 34 main items with 15 sub items
- Data entered into Microsoft Excel™
- Data analysis using SPSS for Windows

Observer Training and Agreement Checks

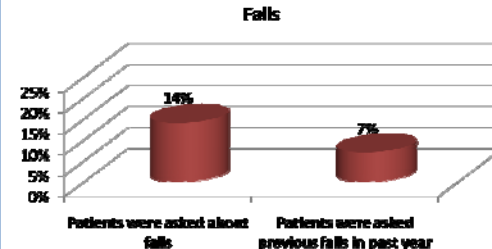
- Trained by a geriatrician & medical educators
- Maintained inter-observer agreement:
 - Video observation of a standardized patient
 - Comparison of observations

Results

- Total visits observed = 113; 58 M3's observed
- 29 (26%) geriatric patients
- Of the 29 visits:



- Medication reviews w pts > 65 yo by rotation ($p < .05$)
 - Family Medicine: 72%; Internal Medicine: 20%
 - Other Rotations: 0%



- Student' queries regarding fall etiology in >65 ($p < .01$)
 - Neurology: 100%; Internal Medicine: 40%
 - Family medicine: 5%; Other rotations: 0%

Discussion

- While medical students' report competence in geriatric medication management, direct observation reveals that self-reported competence does not equal behavior in the geriatric clinical encounter.
- M3's do not demonstrate minimal geriatric competencies for falls and medication management.
- Medical student curriculum should be modified to educate students how to assess and to safely prescribe medications to geriatric patients.
- This baseline data will serve to guide curricular interventions aimed at preparing students to achieve minimal competencies in geriatric medication management.

Next Steps

- Confer with clerkship directors about findings and consider curriculum revision.
- Assess the efficacy of any curriculum revision with follow-up observational study.

Literature Cited

- Goulding, M.R. 2004 Inappropriate Medication Prescribing for Elderly Ambulatory Care Patients *Arch Intern Med* 164:305-312..
- Tinetti, ME. "Preventing Falls in Elderly Patients." *The New England Journal of Medicine* 2003; 348:1, 42-49.
- Phelan MB, Falimirski MR, Simpson D, Czinner ML, Hargarten SW. "Competency-based strategies for injury control and prevention curriculums in undergraduate medical education." *Injury Prevention* 2007; 13:6-9.
- Leipzig, R.M., L. Granville, D. Simpson, et al. "Don't Kill Granny": A Consensus on Geriatric Competencies for Graduating Medical Students. *Academic Medicine* (In press).

Study Partially Funded by:

- National Institute on Aging Training Grant (1T35AG029793-02);
- Wisconsin Geriatric Education Center Grant Subcontract to MCW (US DHHS-HRSA 1 D31HP08836-01-00)
- MCW Injury Research Center (CDC R49 CE001175-02)