Resource Description:

Continuous Quality Improvement project addressing the important issue of osteoporosis and fracture reduction, focusing upon hospitalized elders that is completed by the faculty, residents and students on an inpatient service.
Purpose:

Continuous Quality Improvement is an area of current intense interest as we aim to improve the medical care we provide by decreasing errors, standardizing into clinical practice what we have learned from evidence based recommendations, and making more efficient our methods of organizing systems of care. The Accreditation Council for Graduate Medical Education (ACGME) has recognized the physician’s key role in this process with the addition of two competencies, Practice Based Learning and Improvement and Systems Based Practice. Practice Based Learning emphasizes the need to individually reflect upon care and means of improvement, and Systems Based Practice focuses on the physician’s role in the organization aimed at improving means of providing excellent routine care.

Within this context, the purpose of this module is to serve as a tool to learn the rationale, basis for, and techniques associated with CQI, practice based learning and systems based practice while focusing specifically on the issue of osteoporosis and fracture reduction in at risk hospitalized patients. This module, while acting as a CQI project for the team, is meant to serve as an educational tool for learning about osteoporosis, fracture reduction, and the importance of addressing this topic in the hospital setting.

Educational AIMS:

1. The student/resident will learn to utilize the core points of CQI, Practice Base Learning and Systems Based Practice by working through a specific project aimed at improving the care of hospitalized older patients who are at risk for osteoporosis and fractures.
2. The student/resident will understand the importance of osteoporosis and fracture reduction for elderly patients who are hospitalized and identify means to reduce their risk of future fracture and complications.
Learning Objectives:

1. The resident/student will learn about the background of CQI and its current impact upon medical care and training.

2. The resident/student will be aware of the addition of PBL and SBP to the “core competencies” of graduate medical education and will gain an understanding of what this means for their future practice, CME, and recertification.

3. The resident/student will learn about the importance of osteoporosis and fracture reduction for hospitalized patients who are at high risk for future problems.

4. The resident/student will work through a CQI chart audit project, looking at patients on the inpatient service, to learn how to identify patients at risk for future fractures. Through chart audits and review, the resident/student will gain an appreciation for the need to assess patients for osteoporosis and fracture risk.

5. The resident/student will understand the impact of including a plan for the prevention of future fractures in the discharge instructions and medications.

6. The resident/student will work with the team to identify possible organizational means to incorporate fracture reduction and the treatment of osteoporosis into the standards of care for older patients, including the hospital setting as an important point of contact with this vulnerable population.

Intended Audiences:

1. GME: This project is primarily aimed at residents in Internal Medicine and Family Medicine

2. UME: Medical students on the inpatient team are to be included in the project

3. Faculty on the inpatient service will work with the team to complete the project
Prerequisites:

1. Faculty: Faculty need to understand the basis of CQI and its importance as emphasized by the ACGME in its addition of PBL and SBP to its core competencies required of all residents. Faculty should read the general overview of CQI that is included in the set of materials, and become familiar with the power point style presentation that summarizes and outlines the background and main points relating to CQI and medical education. This material is accessible on the website: www.med.unc.edu/aging/ace.

2. Faculty should have a knowledge relating to osteoporosis screening, treatment and fracture reduction, and understand how this topic fits into the care of patients in the inpatient setting and should review the Osteoporosis overview document.

3. Residents and students will be given a short power point presentation outlining the background and main points relating to CQI and medical education – see power point presentation. This is accessible on the site: www.med.unc.edu/aging/ace.

Included Materials:

1. CQI as an Educational Tool: Background and Overview

2. CQI overview: Power Point Presentation

3. Osteoporosis and Fracture Reduction: Overview document in word format and power point

4. CQI: Osteoporosis/Fracture Reduction Module. Brief background and chart audit

5. Pretest for students and residents

6. Post test for students and residents

Required Resources:

1. Access to medical records through WebCIS

2. Power point presentation: can download from the ACE website.

3. CQI Overview: accessible on our website, in Word format.

4. Osteoporosis module and chart audit: forms on website and in Word format
Procedures for Implementation:

1. Faculty/Attending reviews the overview document describing CQI, PBL, SBP and its importance and processes. Also review osteoporosis document and Power point as background knowledge.

2. Attending reviews the power point presentation that serves as a brief instructional guide about CQI

3. Attending gives brief (10 minute) presentation based upon the power point materials to the residents and students outlining the basics of CQI, PBL, SBP

4. A brief pretest is given to the residents/students to complete (10 minutes)

5. Attending gives a brief (15 minute) discussion about osteoporosis and fracture reduction and how this topic is of importance for hospitalized elders.

6. The team, led by the attending, spends the next 20 minutes reviewing the medical records on their inpatient service. The chart audit for osteoporosis/fracture reduction will serve as the template. Each patient’s record is reviewed and the results are documented on the audit sheet. No patient record numbers or other identifying data is to be used on this sheet. Faculty collects the audit sheet at the end of the session.

7. The team is instructed to think of ways to improve care for the patients on the service who are risk for future fractures over the next 2 weeks. In addition, the team should review the osteoporosis/fracture reduction module and power point materials on the web site.

8. Two weeks later, a post test is given to the students and residents (10 minutes). This test will include questions relating to CQI and also will include an assessment of attitudes regarding the use of CQI as an educational tool: Did this means of instruction aide in learning about osteoporosis and fracture reduction?

9. At this same time, a repeat chart audit, using the same type form as the original, is done for the patients on the service and reviewed by the team (20 minutes)

10. The team discusses any observations, problems, or changes that were identified. The team discussed any recommendations for system based changes.
References:

2. ACGME Outcome Project: General Competencies. Feb 1999.
17. Ashton CM. Invisible Doctors: making a case for involving medical residents in hospital quality improvement programs.

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