High value, cost conscious care education

2. Theoretical Framework/Background/Significance to CDIM:

From 1990-2007, hospital expenditures increased an average of 7.2% per year.\textsuperscript{1} Medicare fee for service inpatient spending totaled $114 billion in 2009. While major procedures, evaluation, and management services only increased by approximately 30% from 2000-2009, both imaging and tests increased by 85% during that same period.\textsuperscript{2} Because of this, the AAMC recommends that clinical skills curricula train students to select, justify, and interpret clinical tests and imaging.\textsuperscript{3} Annually, 60% of medical students rate their education in medical economics to be inadequate.\textsuperscript{4}

It is likely that students experience this inadequacy not because of poorly executed curriculum but because the curriculum to address these skills is lacking. However, a description of the breadth and depth of medical school curriculum on high value cost conscious care (HVCC) has never been collectively published. A first step in widespread curricular reform is to understand the current state of education on this topic nationally.

Internal Medicine educators are leading the charge in creating and delivering these educational efforts through the "Choosing Wisely" campaign and could become natural leaders in student education on this topic. To date, these efforts have focused on practicing physicians and residents. These skills are critical for practicing physicians and are likely to be better developed if good habits are formed early in a trainee's education. In the process of curricular reform, it will be helpful to have clerkship directors' expertise on the appropriateness of specific HVCC subtopics for basic clerks and subinterns. This information could help inform the creation of specific HVCC objectives for medical students. It is equally important to understand clerkship directors' opinions on the methods to deliver education and ensure student competency on these topics.

3. Hypotheses/Research Question:
   a. Hypotheses
      i) The Internal Medicine Clerkship is an optimal time in medical school to teach students about high value cost conscious care.
      ii) Currently, most medical schools spend very little time instructing and assessing students in high value cost conscious care.
      iii) Clerkship directors do not feel medical students have adequate instruction in HVCC.

b. Research Objectives
   a) Assess the optimal time to teach HVCC in medical school.
   b) Describe the current frequency and types of HVCC curriculum taught in Medicine Clerkships and subinternships in US allopathic medical schools

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c) Describe the current frequency and types of assessment in competence HVCC in Medicine Clerkships and subinternships in US allopathic medical schools

d) Measure the value Clerkship Directors (CDs) place on specific HVCC competencies for 3rd year medical students

e) Measure which methodologies CDs feel are most appropriate to teach HVCC

f) Describe current barriers to implement HVCC curriculum in clerkships and subinternships

4. Survey Items [less than 20 items is encouraged - the CDIM Research Committee may edit/shorten if needed]:

1. The optimal course(s) to teach students about high-value cost-conscious care are (check all that apply):
   a. Pre-clinical basic science or pathophysiology courses
   b. Pre-clerkship clinical skills courses
   c. Pre-clerkship ethics/public health courses
   d. Medicine clerkship
   e. Surgery Clerkship
   f. Psychiatry Clerkship
   g. Neurology clerkship
   h. Pediatrics clerkship
   i. Emergency Medicine clerkship
   j. Subinternship
   k. Capstone/prep for internship course
   l. Other______________________
   m. This topic should not be taught to medical students

2. At my institution, we have an adequate number of faculty with the necessary skills and knowledge to teach about high value cost conscious care in the clerkship
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly Agree
   e. Neutral
   f. Don’t know

3. The curriculum during our internal medicine clerkship has components focused on high value cost conscious care (structured learning experiences beyond informal clinical experiences).
   a. Yes (Continue to question 4)
   b. No (Skip to question 9)
   c. 

4. Approximately how many hours of formal instruction is devoted to this topic on your clerkship?
   a. List______ (free text)

5. During the clerkship, do you feel the amount of students’ instruction in high value cost conscious care was
6. Which topics related to HVCC are covered during your clerkship (check all that apply)?
   a. Healthcare costs and payment models
   b. Statistical concepts relevant to HVCC
   c. Balancing benefits with harms and costs
   d. High value medication prescribing
   e. Barriers to cost-conscious care
   f. Cost-effectiveness analysis
   g. Screening
   h. Overuse and misuse of diagnostic laboratory tests
   i. Overuse and misuse of diagnostic imaging tests
   j. Comparative effectiveness evidence
   k. Other (list as many as needed)________________________

7. What educational strategies are used to teach high value cost conscious care during your Internal Medicine Clerkship? (check all that apply)
   a. Problem based learning
   b. Interactive computer based modules (i.e. SIMPLE)
   c. Lecture
   d. Standardized patient encounters
   e. Small group discussions
   f. Structured reflection on clinical experiences
   g. Informal instruction on the wards
   h. Other________________________________________________________

8. What methods are used to assess students’ competency in high value cost conscious care during your Internal Medicine Clerkship? (check all that apply)
   a. Knowledge test
   b. Interactive computer based modules (i.e. SIMPLE)
   c. Standardized patient encounters
   d. Direct observation form
   e. Reflective exercise
   f. Component of clinical evaluation
   g. None
   h. Other________________________________________________________

9. If you do not have a formal curriculum on high value cost conscious care during the internal medicine clerkship, how important is it to add a curriculum.
   a. Very important

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b. Somewhat important

c. Neutral

d. Somewhat unimportant

e. Very unimportant

f. Not applicable (we have curriculum already)

10. Please select 3 subtopics related to HVCC that are most stage-appropriate for the students on your clerkship:

a. Healthcare costs and payment models  
b. Statistical concepts relevant to HVCC  
c. Balancing benefits with harms and costs  
d. High value medication prescribing  
e. Barriers to cost-conscious care  
f. Cost-effectiveness analysis  
g. Screening  
h. Overuse and misuse of diagnostic tests  
i. Comparative effectiveness evidence  
j. Other________________________

11. If high value cost conscious care was added to the curriculum, please rank the following methods (with 1 be most desirable and 7 being least desirable)

a. Problem based learning  
b. Interactive computer based modules (i.e. SIMPLE)  
c. Lecture  
d. Standardized patient encounters  
e. Small group discussions  
f. Structured reflection on clinical experiences  
g. Other________________________________________________________

h. Not applicable-I already described what methods we currently use

12. Rank the top 3 barriers you face in teaching high value cost conscious care.

a. Financial support  
b. Dedicated time in the curriculum  
c. Faculty time to teach  
d. Administrative support (i.e. for scheduling, etc)  
e. Lack of curricular materials  
g. Lack of student interest  
h. Other________________________________________________________

5. References (if applicable):