Learning objectives to guide enhancement of chronic disease curricula in undergraduate medical education

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Introduction

- Chronic disease is one of the leading causes of death and disability in the United States.1
- Physicians need to be better trained to address chronic disease at various stages of illness in a collaborative and cost-effective manner.2
- Medical education programs would benefit from a systematic approach to developing chronic disease prevention and management (CDPM) curricula to holistically address gaps in medical education related to health systems science and improving patient and population care.

Methods

As part of the AMA’s Education Consortium3, CDPM interest group was convened to determine methods to enhance CDPM curricula in undergraduate medical education (UME)

After identifying current gaps in CDPM curricula, the next goal was to create a list of competencies and learning objectives for teaching CDPM in UME

- Wagner’s Chronic Care Model (CCM) was selected as a conceptual framework

A literature review was conducted to identify existing competencies and learning objectives (LO) associated with teaching health professionals CDPM.

- IG members came to consensus on topics that need to be included within a UME curriculum and drafted a preliminary framework of competencies and LOs

LOs were refined through a multi-step process by the IG

- 39 learning objectives were included in a modified-Delphi process
- Using a survey, medical education and CDPM experts (n = 32) were asked to identify 20 LOs thought to be most important for medical students to accomplish by graduation.

This survey narrowed the list of LOs to 21, which were the basis for discussion during a subsequent in-person meeting with the IG members resulting in 11 LOs being prioritized.

Results

Eleven UME level appropriate LOs were identified within the 6 domains mapped to the Wagner’s CCM.

1. Elicit and articulate patient identified barriers to and strategies for health promoting behaviors.
2. Demonstrate communication strategies (i.e., motivational interviewing) to activate patients for self-care management.
3. Utilize appropriate tools (i.e., expanded social history, chronic disease history and physical) to obtain patient-centered values, goals, and socio-behavioral-economic factors that influence chronic disease screening, prevention, and management decisions.
4. Utilize evidence-based clinical practice guidelines or tools (e.g., rubrics, calculators, risk screeners) to obtain patient-centric and population-based risk assessment screening.
5. Apply the information gathered to co-create a comprehensive chronic disease management plan with the patient.
7. Utilize electronic health record tools to identify population level burden, disparities, trends, and outcomes in chronic disease screening, prevention, and management.
8. Recognize community resource availability for chronic disease screening, prevention, and management.
9. Describe the function of interprofessional teams and health care systems in chronic disease care delivery to include care coordination and transitions of care.
10. Describe the role of health care finance systems in promoting (or limiting) chronic disease care delivery.
11. Identify local and national public policies and practices that affect chronic disease incidence, management, and access to care.

Discussion

- These 11 LOs contextualize CDPM education within Wagner’s CCM and health systems science and step away from the disease-specific approach
- Medical schools can use the identified CDPM learning objectives to improve their CDPM curricula and better prepare all medical students for 21st century practice
- These LOs are not just applicable for medical students but all providers as the importance and relevance of LOs in CDPM extends across the continuum of interdisciplinary education and practice
- Additional work is in-progress to identify specific implementation strategies and assessment tools for each LO
- This includes refining the History and Physical assessment tool by incorporating LOs 1, 2 and 5
- Program evaluation of curricula is needed to identify best practices and additional gaps in teaching CDPM

References