Enhancing Chronic Disease Prevention and Management in the Undergraduate Medical Education Curriculum

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Agenda

- ACE Consortium Overview (5 mins)
- Developing the CDPM Learning Objectives (10 mins)
- Small Group Discussion (30 mins)
- Our Learning Experiences (20 mins)
- Q&A (25 mins)
MORE THAN $12.5 MILLION TO 32 MEDICAL SCHOOLS

TODAY, THESE FUNDS SUPPORT 19,000 MEDICAL STUDENTS

WHO WILL ONE DAY PROVIDE CARE FOR MORE THAN 33 MILLION PATIENTS ANNUALLY

18% OF ALL OSTEOPATHIC & ALLOPATHIC STUDENTS ATTEND CONSORTIUM SCHOOLS
Session Objectives

Upon completion of this session, participants should be able to:

1. Identify at least five chronic disease and prevention management (CDPM) learning objectives that can be used to guide enhancement of chronic disease curricula in undergraduate medical education.

2. Describe innovative approaches that have been used to integrate chronic disease prevention and management (CDPM) learning objectives into the curriculum at other institutions.

3. Formulate one strategy for integrating chronic disease prevention and management (CDPM) learning objectives into the curriculum at their home institution.
Development Process

June 2016
- AMA hosted a meeting for a subset of ACE consortium members interested in chronic disease education
- The Chronic Disease Prevention and Management (CDPM) interest group was formed

Dec 2016
- A literature search was completed to identify current gaps in CDPM curricula
- Wagner’s Chronic Care Model (CCM) was selected as a conceptual framework
- A preliminary framework of competencies and LOs were drafted

May 2017
- LOs were refined through a modified Delphi process followed by a survey
- A subsequent in-person meeting narrowed the list of LOs from 21 to 11
Wagner’s Chronic Care Model (CCM)

- CCM is an organizational approach to caring for people with chronic disease in a primary care setting

- CCM identifies essential elements of a health care system that encourage high-quality chronic disease care
  1. The community
  2. The health system
  3. Self-management support
  4. Delivery system design
  5. Decision support
  6. Clinical information systems.
Results

Patient self-care management

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.

Decision support

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.

Clinical information system


7. Utilize electronic health record tools to identify population level burden, disparities, trends, and outcomes in chronic disease screening, prevention, and management.

Community resources

8. Recognize community resource availability for chronic disease screening, prevention, and management.

Delivery systems & teams

9. Describe the function of interprofessional teams and health care systems in chronic disease care delivery to include care coordination and transitions of care.

Health system practice & improvement

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

Rupinder Hayer, MPH1, Michael Delhity2, Kate Kirley, MD, MS1, Eric Johnson, MD1, Jill Huber, MD1, LuAnn Wilkerson, EdD1, American Medical Association Accelerating Change In Medical Education Chronic Disease Prevention and Management Interest Group

1American Medical Association (AMA), 2University of North Dakota School of Medicine and Health Sciences, 3Mayo Clinic School of Medicine, 4Dell Medical School

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 Consortium,3 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.

- 99 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.

- Patient management
- Decision support
- Clinical information system
- Community resources
- Delivery systems & teams
- Health system practice & improvement

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, 3 and 5.
- Program evaluation of curricula is needed to identify best practices and additional gaps in teaching CDPM.

References


For more information contact Rupinder.Hayer@ama-assn.org
Small Group Discussions
Discussion Questions

1. How do the CDPM LOs resonate with your UME experience?

2. How would you incorporate the CDPM LOs within your institution’s curriculum?

3. What barriers may you encounter when trying to incorporate the LO? How might these be addressed?
Our Experiences
H&P 360

• The traditional H&P was developed generations ago when diagnosis and management of acute illnesses were the primary focus of medicine

• Limited focus on chronic diseases and the social determinants of health

• To address these gaps, the AMA’s CDPM Interest Group developed the H&P 360
  • Encourages collecting and addressing biopsychosocial data which are key pieces of information to consider when preventing and managing chronic disease
In a user-centered and iterative development process that included students and medical educators, the University of Michigan & the AMA created the first draft of the H&P 360 in May 2017.

Pilot tested the first draft at University of North Dakota, Eastern Virginia Medical School, Dell Medical School and University of Connecticut in May 2018.

Revised the initial draft based on feedback designed a formal research study to test the tool among medical students in Sep. 2018.

Began conducting the research study at 4 different schools in Jan. 2019.
Pilot Testing Learnings

Dell Medical School

MAY 2018 Pilot Testing

n = 50
A total of 50 second year students were instructed to use the H&P 360 draft in their clinical skills class

Feedback:
Overall response was positive
Students wanted more time and training
The H&P 360 Study

- The H&P 360 is currently undergoing formal testing at:
  - University of Michigan
  - University of North Dakota
  - University of Connecticut
  - University of California-Davis

- Medical students at each of these sites will use both the traditional H&P and the H&P 360 with standardized patients

- Both quantitative and qualitative interpretive measures will help document the validity and the effectiveness of the H&P 360 toward meeting the learning objectives of the pilot
## Connecting the H&P 360 with the CDPM LOs

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Green Family Foundation Neighborhood Health Education
Learning Program (NeighborhoodHELP)

Longitudinal Service-Learning Program

- DEVELOPS & UTILIZES Interprofessional Teams
- VISIT Underserved Households
- TO PROVIDE Household-Centered Care
- BY ADDRESSING the Social Determinants of Health (SDOH)
- TO IMPROVE Population Health
- TRAIN Socially Accountable Health Care Professionals
Application of Concepts

- Patient-care Self Management
  - Health Education
  - Motivational Interviewing

- Decision Support
  - Ongoing Assessment of SDOH
  - Primary Care Liaison

- Clinical Information Systems
  - Centricity
  - Portal

- Community Resources
  - Neighborhood HELP Network
  - Social Work

- Delivery Systems & Teams
  - Interdisciplinary Teams
  - Communication

- Health System Practice and Improvement
  - Advocacy
  - Medical Legal Partnership
References


2. Poster was presented at the 2017 ABMS conference on September 25 in Chicago, IL. It was also presented at the 2018 AAMC annual conference which will be held November 2-6 in Austin, TX. (see slide 5).