Using a Delphi Survey to Establish Learning Objectives in Chronic Disease Management for Medical Students

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Disclosures

Michael Dekhtyar
- Salaried employee of the AMA
Chronic conditions affect millions of Americans

Rand Review, July 2017
Successful interventions

- Included multiple elements of chronic care
- Assessed higher-level learner outcomes
- Changed health care delivery systems

Future activities

- Most studies lacked a theoretical framework
- Multi-institution studies
- Link to patient outcomes

Health Systems Science – “the principles, methods, and practice of improving quality, outcomes, and costs of health care delivery for patients and populations within systems of medical care”
To develop a set of learning objectives in chronic disease prevention and management (CDPM) for undergraduate medical education that:

1. Goes beyond the teaching of the pathophysiology and treatment of specific chronic diseases,

2. Provides a health system science framework,

3. Involves a systematic consensus process among CDPM experts and curriculum leaders.
Methods

Convening an expert panel

Preliminary steps

Surveying the literature

Conducting the Delphi Process
Methods: A Consortium as Sample

- Venue for communication, benchmarking, and collaboration
- Annual and thematic
  - Chronic disease prevention, leadership, coaching
- Interest groups
  - Health systems science
  - Social determinants of health
  - Master adaptive learner
  - **Chronic disease prevention and management (CDPM)**
  - Leadership
  - Student wellness
Consortium Members
Convening an Expert Panel

Invitational CDPM meeting in June 2016

• To consider the chronic disease burden in the US and implications for medical student education
• To share best practices in teaching CDPM,
• To identify current curricular gaps, barriers, and needs
• Explore achievable goals and action steps

Meeting Outcomes

• Formation of a CDPM interest group with regular calls
• Priority need is for learning objectives for CDPM
• Choice of Wagner’s Chronic Care model to guide learning objective identification
Wagner’s Chronic Care Model

The Chronic Care Model

Community
Resources and Policies

Health Systems
Organization of Health Care

Self-
Management
Support

Delivery
System
Design

Decision
Support

Clinical
Information
Systems

Informed,
Activated
Patient

Productive
Interactions

Prepared,
Proactive
Practice Team

Improved Outcomes

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Surveying the literature

• Conducting a review of the literature on needed CDPM knowledge, skills, or attitudes
  • Inclusion: identification of competencies or learning objectives for CDPM in students, residents, or practitioners
  • Exclusion: disease-specific rather than systems oriented

• Mapping results to Wagner’s Chronic Care model
  • 45 articles
  • 451 competency statements
Round 1:
- Participants: 7 interest group members with expertise in CDPM and/or curriculum development representing 6 medical schools and 3 AMA staff
- Format: in-person meeting, Dec 2016
- Task: Review 451 objectives from the lit review to select most relevant for medical students related to 6 WCC competencies
- Outcome: 83 initial objectives reduced to 39 in subsequent phone discussion.

Round 2:
- Participants: 32 CDPM experts and curriculum leaders
- Format: Online survey using snowball sampling of colleagues with CDPM expertise or curriculum leadership roles, spring 2017
- Task: Select 20 from the list of 39 that would help guide development of a CDPM curriculum for medical students
- Outcome: 21 objectives

Round 3:
- Participants: 35 Interest group members representing 14 schools
- Format: in-person thematic meeting, May 2017, with discussion, voting, reporting, and discussion until consensus
- Task: Consider relevance, importance, and feasibility, appropriate for medical student level, key objectives not addressed in other curricular areas
- Outcome: 11 final objectives
Results:

Patient self care and management
• Elicit patient-identified barriers
• Use motivational interviewing to activate patient engagement

Decision support
• Use an expanded social history
• Identify chronic care practice guidelines
• Apply data gathered for shared decision making with the patient
Results:

Clinical Information Systems
• Use EHR to appropriately document chronic care
• Use the EHR for population level actions

Community resources and engagement
• Identify community resources for chronic care support

Delivery systems and teams
• Describe the function of interprofessional teams in CDPM

Health system practice and improvement
• Identify the role of financial systems in influencing access
• Understand policies that affect chronic disease care
Discussion: Shift from acute to chronic conditions

The 11 objectives represent the curriculum needed to prepare students to care for the increased incidence and prevalence of chronic diseases.

• Current curriculum may focus more on acute than chronic disease in both the classroom and clinical settings.
• Current curriculum may focus on understanding individual chronic diseases with little if any attention to the multi-faceted system needed to help patients prevent and manage complex chronic conditions.
Discussion: Student engagement

“Value-added Roles”

- Patient Navigators
- Care Transition Facilitators
- Safety and Patient-Care Analysts
- Quality Improvement Team Extenders
- Population Health Managers
- Patient-Care Technicians
- Medical Scribes
Limitations and Next Steps

• Delphi included chronic disease faculty members and medical educators from only Consortium member schools.
• Important chronic disease topics related to physician wellness were not included but have the potential to worsen well-being among providers.
• A national survey of medical school curriculum deans could be conducted to determine the balance of acute and chronic care and the individual vs system approach.