H&P 360: Advancing the traditional history and physical to address chronic diseases and social determinants

November 2019

Kevin Heckman, MBA
Director, Product Development
Disclosures

• Kevin – no conflicts of interest
Objectives

• Reflect on the need to improve the traditional history and physical (H&P) to optimize person-centered care in the 21st century

• Describe the innovations in the H&P 360

• Summarize the preliminary results of a randomized controlled study of the H&P 360 in a standardized patient scenario

• Determine opportunities to incorporate the H&P 360 into daily patient care and medical education
Introducing: The H&P 360
We need a new H&P

The structure of the H&P was developed generations ago

Health in the 21st century is critically influenced by interaction of biomedical and nonbiomedical factors

Key pieces of information to consider when preventing and managing chronic disease are not collected in the traditional H&P
Objectives of the H&P 360 project

To utilize a **diverse group** to examine and **improve upon the traditional H&P processes** for **more holistic, collaborative, and effective patient care**

To iteratively develop and trial a more **equitable H&P instrument** that gathers a wider scope of **patient-centered and quality-focused information**

To model a collaborative process of developing **innovative solution** to current challenges within medical education
The traditional H&P

- Chief Complaint
- History Present Illness
- Past Medical History
- Family History
- Social History (tobacco, Etoh, drugs)
- Allergies / Medications
- Review of Systems
- Physical Examination
By including a few questions in each of a small set of systematically chosen domains in the standard, routine history…

physicians’ care of patients will improve.

- Mental health conditions
- Behavioral health (beyond alcohol, tobacco, and drugs)
- Biomedical conditions
- Social Support
- Environmental / Physical Resources
- Function
- Perception of health
- Goals and values
The trick in using domains…

Ask: In this domain, what TWO or THREE pieces of information are most relevant to this patient?

Key information differs based on patients’

- Risk factors (pre-test probability)
- Differential diagnosis
- Developing / implementing a plan

Clinical thinking, not just checklists
Timeline

- **May 2017**: First draft of H&P 360 developed
- **May 2018**: Pilot testing of first draft
- **Aug. 2018**: Revision of draft and addition of an instruction guide on how to use the tool
- **Jan - Feb 2019**: Multi-site randomized control trial with standardized patients across 4 medical schools
4 medical schools participated in the study

159 students in 3rd or 4th year of medical school enrolled

Medical students were randomly assigned to traditional H&P or the H&P 360 and were randomized to one of two cases.

All participants completed an Objective Structured Clinical Exam (OSCE) chronic disease (Type 2 Diabetes/Hypertension) case.

The standardized patient (SP) doubled as a trained observer and completed a grading rubric after each encounter.
Total average score by school and group
(max score 28)

H&P 360 Study Preliminary Results
H&P 360 Study Preliminary Results

Total average score by SP and group (max score 28)

- Traditional H&P
- H&P 360

Case 1 Male
Case 1 Female
Case 2 Male
Case 2 Female
Putting it all into practice
Putting it all into practice
H&I 360 Template

HPI

• Biomedical problems/concerns:

• Patient perception of health (This domain encompasses: patient understanding/insight of illness/health, patient self-assessed level of control, patient-identified strengths and barriers)

• Patient priorities & goals:

• Psychosocial problems/concerns (This domain encompasses: mood, thought patterns, diagnosed or undiagnosed psychiatric disorders, as well as pertinent social issues)

• Past Medical History: Health Maintenance (preventative care)
Social history

- **Behavioral** (This domain encompasses: health behaviors, medication management/adherence, nutritional behaviors, physical activity habits, personality disorders, substance use):

- **Relationships** (This domain encompasses: primary relationships, social support, caregiver availability, abuse/violence, community relationships):

- **Resources** (This domain encompasses: food security, housing stability, financial resources, transportation):

- **Functional status** (This domain encompasses: affect, social and occupational functioning, satisfaction with life, activities of daily living):
Assessment/Plan

Problem assessment (problems can include issues that are primarily biomedical or issues that are psychosocial)

- Trajectory of condition (this includes relevant history, current condition status, condition outlook)
- Shared assessment of level of control
- Shared goal
- Psychosocial influences (including patient strengths and barriers)

Plan

- Team actions – clinical teams and external teams
- Patient/family (eg, self-management)
- Therapy/monitoring
- Disposition/follow-up
Small group discussion

• What are the implications for your daily patient care and teaching?

• What are the best opportunities for change at your institution?”
Future steps

• Ongoing dissemination activities via H&P 360 Implementation Grants

• Continued improvements to address:
  • Integration into the clinical setting
  • Associated instructional and assessment tools
  • Interprofessional team use
Acknowledgements

- Dr. Brent Williams
- Dr. Kate Kirley
- Dr. Darwin Deen
- Dr. David Henderson*
- Dr. Eric Johnson*
- Dr. Lynn Kosowicz*
- Dr. Mrinalini Kulkarni-Date
- Dr. Ken Lazarus
- Dr. Stephany Sanchez*
- Dr. Valerie Terry*
- Dr. Ebony Whisenant
- Dr. Tonya Fancher
- Marjorie Westervelt
- Rupi Hayer
- Kevin Heckman
- Katie Pajak
- Una Charley
- Thad Anzur
- Tamara Bodnar
- David Krajecki
- Penny Slusher
- Stephanie Johnson
- Jennifer Klein
- Jayne Gretz
- Cory Krebsbach

*Study Co-Investigator
Questions?

Contact:
kevin.heckman@ama-assn.org
rupinder.hayer@ama-assn.org