Carl J. Shapiro Institute for Education and Research Millennium Conference Impact 2001-2015

The purpose of the Millennium Conference series is to assemble educational stakeholders and leaders to discuss a topic of pressing importance in medical education, in the hopes of advancing a national agenda for that area. Institutional teams, rather than individuals, are chosen to participate through a selective application process.

In all, 37 medical schools from the US and Canada have participated in the nine conferences convened since 2001.

Millennium Conference 2001 and 2002: The Clinical Education of Medical Students

The proceedings were disseminated as a special report released by the Association of American Medical Colleges (1).

Millennium Conference 2003: The Continuum of Clinical Training in Undergraduate and Graduate Medical Education

Millennium Conference 2005: Medical Simulation - Theory and Practice

The proceedings were published in Simulation in Healthcare (2).

An accompanying editorial (3) stated, "[They] are to be congratulated for providing such a clear concise account of a meeting that has helped both to give us a snapshot of where medical simulation thinks it is in the early years of the 21st century and also to set and clarify an agenda not only for the medical simulation community, but for the whole healthcare simulation community. The success of simulation in healthcare will be determined by how successfully we respond to those challenges."

Millennium Conference 2007: A Collaborative Approach to Educational Research

The proceedings were published in *Teaching and Learning in Medicine* (4).

The keynote, given by Larry Gruppen, was published in *Teaching and Learning in Medicine* (5).

The work of a task force on longitudinal databases for medical education research was published in *Academic Medicine* (6).

The work of a task force on research priorities was published in *Academic Medicine* (7).

The work of a task force on the IRB process in medical education research was published in *Academic Medicine* (8).

Millennium Conference 2009: Patient Safety – Implications for Teaching in the 21st Century

The proceedings were published in Teaching and Learning in Medicine (9).

Millennium Conference 2011: Critical Thinking

The proceedings were published in *Teaching and Learning in Medicine* (10).

• The work of a task force on developing milestones in critical thinking was published in *Academic Medicine* (11). A letter of intent submitted to the Stemmler Fund was selected to go on to full proposal for the second time. Meanwhile, the task force has been invited to collaborate with the National Board of Medical Examiners to create a critical thinking assessment for the health professions. The task force submitted two

grant proposals to the NBME for the Stemmler Fund; both were asked to submit full proposals but were unfortunately rejected.

- The work of a task force on strategies to teach critical thinking was published in *Medical Education*. This study represented the characterization of 44 interviews of faculty at 9 institutions (12). This paper was identified at the Clerkship Directors of Internal Medicine as one of the top medical education articles of 2016 and was one of the top 5 downloaded articles in *Medical Education* in 2016.
- A second manuscript on faculty development strategies to teaching critical thinking has been submitted for consideration of publication.

Millennium Conference 2013: Teaching Value-Added Care

The proceedings were published in *Teaching and Learning in Medicine* (13).

One task force tackled the issue of the bedside teaching of high value care principles, using SOAP-V, a framework to include "Value" as part of SOAP presentations on inpatient rounds. This work resulted in a multi-institutional randomized controlled trial to teach medical students about high value care. The study took place at Penn State, Case Western Reserve University, and Harvard Medical School and concluded in June 2015.

- It won the 2015 Teaching Value and Choosing Wisely Challenge sponsored by the ABIM Foundation and Costs of Care (14). As part of the award, Eileen Moser presented the project at the ACP 2015 conference.
- An abstract submitted to the NEGEA 2015 conference was accepted for oral presentation. The presentation went on to win an award for Best Short Communication, UME Clerkship.
- The task force published an article describing this work for the Journal of Hospital Medicine for their Choosing Wisely series (15). The group gave a webinar for the Teaching Value in Health Care Learning Network supported by the ABIM Foundation and Costs of Care in 2015.
- In 2016, the task force received an ABIM Foundation grant to translate SOAP-V to the outpatient setting for internal medicine residents.
- SOAP-V was presented as a workshop at the AAIM Skills conference in October 2016 and at an AAIM HVC pre-course in March 2017 as well.
- A paper describing the quantitative and qualitative results of the multi-institutional study was published in *American Journal of Medicine* (16).
- SOAP-V has been incorporated into the curriculum at 11 medical schools.

The work of a task force to propose a framework for communication skills completed 5 case scenarios to exemplify value conversations, using the input of patient advocates, and a manuscript is in draft. Daisy Smith from the ACP developed a communication guide based on this work and piloted it at the Waxman Center at the ACP 2015 conference in three HVC cases, as part of a randomized controlled trial of physicians, supported in part by the ABIM Foundation.

Millennium Conference 2015: Transforming the Post-Clerkship Curriculum

The work of two task forces is currently in progress. The first focuses on investigating the views of students, faculty, and residents on the drivers of student choices in the post-clerkship curriculum. The second task force is focusing on and developing frameworks and tools for student assessments in the post-clerkship curriculum.

Millennium Conference 2017: From Student to Doctor: Aligning UME and GME Teaching to Ensure Success

The proceedings of this conference is in its final draft and will be submitted for publication soon.

There are two hardworking task forces comprised of educators from across the country who are working to improve alignment of UME and GME. The first task force is completing a national study using a modified Delphi to determine which aspects of Social Determinants of Health should be taught in UME (medical school) and which should be taught in GME (Residency and fellowship). The other task force is in the process of completing a multi-institutional randomized trial of explicit verses implicit clinical modeling to determine what learners "actually learn" from each type of modelling.

Bibliography

- 1. The Clinical Education of Medical Students: Report on Millennium Conferences I & II, Association of American Medical Colleges. Special report 2002.
- 2. Huang G, Gordon J, Schwartzstein R. Millennium Conference 2005 on Medical Simulation: a summary report. Simul Healthc 2007 Summer; 2(2):88-95.
- 3. Glavin RJ. Simulation: an agenda for the 21st century. Simul Healthc 2007 Summer; 2(2):83-5.
- 4. Huang G, Newman L, Anderson M, Schwartzstein R. Conference proceedings and consensus statements of the Millennium Conference 2007: a collaborative approach to educational research. Teach Learn Med 2010; 22:50-55.
- 5. Gruppen LD. Improving medical education research. Teach Learn Med. 2007 Fall; 19(4): 331-5.
- 6. Cook DA, Andriole DA, Durning SJ, Roberts NK, Triola MM. Longitudinal research databases in medical education: facilitating the study of educational outcomes over time and across institutions. Acad Med. 2010 Aug; 85(8):1340-6.
- 7. Fincher RE, White CB, Huang G, Schwartzstein R. Toward hypothesis-driven medical education research: task force report from the 2007 Millennium Conference on educational research. Acad Med 2010;85:821–828.
- 8. Johansson AC, Durning SJ, Gruppen LD, Olson ME, Schwartzstein RM, Higgins PA. Medical education research and the institutional review board: Re-examining the process. Acad Med 2011 Jul; 86(7):809-17.
- 9. Huang G, Newman L, Tess A, Schwartzstein R. Teaching patient safety: conference proceedings and consensus statements of the Millennium Conference 2009. Teach Learn Med 2011 Apr; 23(2):172-8.
- 10. Huang G, Newman L, Schwartzstein R. Critical Thinking in Health Professions Education: Summary and Consensus Statements of the Millennium Conference 2011. Teach Learn Med 2014; 26(1), 95–102.
- 11. Papp K, Huang G, Lauzon Clabo L, Delva D, Fisher M, Konopasek L, Schwartzstein R, Gusic M. Milestones of critical thinking: a developmental model for medicine and nursing. Acad Med 2014 May; 89(5):715-720.
- 12. Huang GC, Lindell D, Jaffe LE, Sullivan AM. A multi-site study of strategies to teach critical thinking: 'why do you think that?'. Med Educ. 2016 Feb; 50(2): 236-49.
- 13. Huang GC, Tibbles CD, Newman LR, Schwartzstein RM. Consensus of the Millennium Conference on Teaching High Value Care. Teach Learn Med. 2016 Jan-Mar; 28(1):97-104.
- 14. Winners Named in Teaching Value and Choosing Wisely Challenge. ABIM Foundation. Available at: http://www.abimfoundation.org/News/ABIM-Foundation-News/2015/Winners-of-Teaching-Value-Choosing-Wisely-Challenge.aspx
- 15. Moser E, Huang GC, Packer C, Glod S, Fazio S. SOAP-V: Introducing a method to empower medical students to be change agents in bending the cost curve. J Hosp Med. 2015 Sep 28.
- 16. Moser EM, Fazio SB, Packer CD, Glod SA, Smith CD, Alguire PC, Huang GC. SOAP to SOAP-V: A New Paradigm for Teaching Students High Value Care. Am J Med. 2017 Nov;130(11):1331-1336.