OpenWide: Learning from Data in Dentistry

Wednesday, October 12, 2022
Hosted by Texas Center for Oral Healthcare Quality and Safety, UTHealth Houston School of Dentistry in Conjunction with ADA SmileCon 2022

Scientific Symposium Goals

- Introduce learning health systems to the practicing dental community
- Promote the culture of safety in dentistry
- Discuss topics of importance to new dentists (especially women and minorities)

Event Highlights

- Keynote by a nationally recognized speaker in Learning Health Systems
- Short Talks highlighting best practices relating to dental quality and safety
- Lively interactive discussions

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<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:00am - 9:00am</td>
<td>Check-In and Breakfast</td>
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<tr>
<td>9:00am - 9:30am</td>
<td>Welcome and Introductions</td>
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<td>John Valenza (UTHealth School of Dentistry) and Jiajie Zhang (UTHealth School of Biomedical Informatics)</td>
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<td>9:30am - 10:15am</td>
<td>Opening Keynote: Setting the Stage for a Learning Health System in Dentistry Charles P. Friedman (University of Michigan)</td>
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<td>10:15am - 12:00pm</td>
<td>Session 1: Discovery (data, metrics and infrastructure)</td>
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<td>Participants will explore and discuss best practices in the measurement of quality and safety, and the technology infrastructure needed.</td>
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<td><strong>Quality Measurement and BigMouth Dental Data Repository</strong>: Bunmi Tokede (UTHealth Houston)</td>
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<td><strong>Medication Prescribing in Dentistry</strong>: Katie Suda (Univ of Pittsburgh)</td>
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<td><strong>Dental Patient Safety Reporting System</strong> – Steve Geiermann (Dental Patient Safety Foundation)</td>
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<td><strong>Using AI/Machine Learning in Dentistry</strong> - Chris Balaban (Overjet)</td>
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<td>Panel Discussion</td>
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<td>12:00pm - 1:00pm</td>
<td>Lunch</td>
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| 1:00pm - 2:30pm | Session 2: Improvement Strategies | (design thinking, developing improvement strategies) Participants will explore and discuss how to use design thinking to turn knowledge into strategies for improving dental quality and safety.  
  - Design Thinking in the Open Wide Learning Lab: Jan Yeager (UCSF)  
  - Design and Development of the ADA Dental Experience and Research Exchange (DERE): Diptee Ojha  
  - Program and Evaluation Design for Oral Health Improvement - Eric Tranby (CareQuest)  
  Group/Table Exercise on Design Thinking |
| 2:30pm - 3:00pm | Break |                                                                                                  |
| 3:00pm - 4:15pm | Session 3: Implementation Approaches | (Implementing improvements into dental practice) Participants will explore and discuss how to implement and evaluate improvement strategies into dental practice.  
  - Implementing CDSS in a large integrated health system - Brad Rindal (HealthPartners)  
  - Implementing Preventative Dental Interventions in large group practice - Joanna Mullins and Ryan Brandon (Willamette Dental Group)  
  - Implementing Interventions in Small Practice Settings - lessons learned from the National Dental PBRN – Gregg Gilbert (UAB)  
  - The Science of LHS and dissemination of findings in dentistry - Tim Wright (UNC and JADA) |
| 4:15pm – 5:00pm | Reflections: Next steps to help move dentistry towards a LHS |  
  1. Ralph Cooley (UTHealth Houston)  
  2. Steve Geiermann (OSAP)  
  3. Paul Casamassimo - (Dental Quality Alliance)  
  4. Elsbeth Kalenderian (ACTA) |
| 5:00pm - 6:00pm | Reception hosted by UTHealth Houston School of Dentistry Texas Center for Oral Healthcare Quality and Safety |
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Speaker Bios

Charles P. Friedman, PhD (University of Michigan)

Dr. Friedman is the Chair of the Department of Learning Health Sciences and the Josiah Macy Jr. Professor of Medical Education at the University of Michigan Medical School, as well as a professor of information and of public health, and founder of the Master of Health Informatics program at the University of Michigan. Dr. Friedman served as Deputy National Coordinator and Chief Scientific Officer at the Office of the National Coordinator for Health IT (ONC) and explored the concept of Learning Health Systems in 2010, and his work promoted multiple IT innovations including SMART Health IT. Dr. Friedman holds a Bachelor’s and Master’s of Science in physics from the Massachusetts Institute of Technology, a Ph.D. in education from the University of North Carolina-Chapel Hill and has done post-graduate studies in medical information science at Stanford University.

Bunmi Tokede, BDS, MPH, DMSc (UTHealth Houston School of Dentistry)

Dr. Oluwabunmi (Bunmi) Tokede is an associate professor with a joint appointment between the Department of Diagnostic and Biomedical Sciences and Department of Orthodontics. He was recruited to the Texas Center for Oral Healthcare Quality and Safety at UTHealth Houston School of Dentistry in August 2021. Dr. Tokede’s research focuses on using informatics to improve quality of care and patient outcomes. He serves as a Co-Investigator in several NIH and AHRQ funded studies focused on using informatics approaches for assessing and improving Dental Patient Safety and Oral Healthcare Quality. Dr. Tokede is a member of the American Association of Orthodontics, American Dental Association, American Association for Dental Research, American Dental Education Association, American Association for the Advancement of Science, and the American Society for Nutrition.
Katie Suda, PharmD, MS (University of Pittsburgh)

Dr. Suda is Professor of Medicine at the University of Pittsburgh School of Medicine, Associate Director of the Center for Pharmaceutical Policy and Prescribing and a Research Health Scientist and Associate Director of Clinical Therapeutics at the Veteran Affairs (VA) Center for Health Equity Research and Promotion. She joined the University of Pittsburgh in 2019, following appointments at the University of Illinois at Chicago College of Pharmacy as an Associate Professor and Researcher. Dr. Suda’s area of research is pharmacoepidemiology, especially in the area of antimicrobials, and dual use of VA and non-VA health care. Currently, she is researching antibiotics and opioids in dental prescribing, including a focus on veteran use of multiple health care systems.

Steve Geiermann, DDS (Dental Patient Safety Foundation and OSAP)

Dr. Geiermann is a former U.S. Public Health Service Commissioned Officer who has worked within public health settings for the majority of his career seeking to provide greater access to oral health care for the underserved. Upon retirement from the USPHS, he chose to continue that advocacy under the umbrella of the American Dental Association, which seeks to advocate for both the public and the profession. He has worked as a dental director in the Indian Health Service and Federally Qualified Health Centers as well as being a HRSA regional dental consultant providing technical assistance and guidance to health centers in the Upper Midwest. He served on the Board of Directors of the National Network for Oral Health Access (NNOHA) and was an expert advisor for Safety Net Solutions seeking to improve the financial stability and productivity of health centers.
Christopher Balaban, DMD (Overjet)
Dr. Christopher Balaban is a practicing dentist in Boston, MA and serves as Clinical Director for Overjet – the industry leader in dental artificial intelligence. He holds a Master’s Degree in Biomedical Science, and graduated Summa Cum Laude from Boston University’s Goldman School of Dental Medicine, where he held a faculty position in the department of general dentistry at the rank of Clinical Instructor. His passion for both dentistry and technology came together to help Overjet grow into a company that is helping to shape the future of dentistry through Artificial Intelligence for the next generation of dentists.

Jan Yeager, MDes (University of California, San Francisco)
Ms. Yeager holds a BA in Anthropology from the University of Arizona, a BFA in Communications Design from Pratt Institute and a MDes in Human-Centered Design from the Institute of Design, Illinois Institute of Technology. She brings 20+ years of experience in design strategy, human-centered design methods, and design research to advance innovation within companies across a range of industries. She works within multidisciplinary teams to accelerate innovation across the UCSF care delivery system employing a combination of systems thinking, behavior change theory, and technical expertise in insight generation, human factors, visual modeling and prototyping.

Diptee Ojha, BDS, MBA, PhD (American Dental Association)
Diptee Ojha is a dentist, and a health services researcher, with experience in healthcare performance measurement landscape. Currently Dr. Ojha is the director of the Dental Quality Alliance and Clinical Data Registry at the American Dental Association. She oversees the DQA, the only comprehensive multi-stakeholder quality measure developer for improving oral healthcare. In this capacity, she oversees the DQA’s measure development, maintenance and implementation activities leveraging external stakeholder engagement and works closely with both federal and non-federal government agencies, non-profit and for-profit organizations and academic institutions. Dr. Ojha leads the ADA’s Dental Experience and Research Exchange (DERETM) (the Registry Initiative), designed to support initiatives on clinical practice guidelines, medical necessity rules and population health.
Dr. Ojha has authored and co-authored many peer reviewed journal articles and technical reports; and delivered presentations for a wide range of audience.

**Eric Tranby, PhD (CareQuest)**

Dr Eric P. Tranby serves as the director of analytics and data insights at CareQuest Institute for Oral Health. Dr. Tranby leads all data infrastructure, data analytics, and research initiatives. Along with his team, he conducts research on the relationship between oral health and overall health and the impact of innovative clinical care models on oral health disparities. He holds master’s and doctoral degrees in sociology from the University of Minnesota and brings nearly 20 years of experience in data analysis and management to his work. He has authored more than two dozen scientific papers and reports and his work has been cited more than 1,500 times.

**Brad Rindal, DDS (HealthPartners)**

Dr. Rindal serves as Regional Director, Midwest Region of the National Dental Practice-Based Research Network, Senior Investigator, Associate Dental Director for Research, and a practicing dentist who specializes in the management of Temporomandibular Disorders (TMD) and orofacial pain. His dual career endeavors in research and clinical practice have provided him a unique perspective on evidence-based care, while conducting research within real-world clinical settings. Dr. Rindal’s research interests include implementing current evidence into daily practice, pragmatic trials utilizing clinical decision support, practice-based research and utilization of HealthPartners’ integrated medical and dental databases to examine the relationship of oral health and other diseases.
Joanna Mullins, RDH, MHI (Willamette Dental Group)

Joanna Mullins, RDH, MHI, is Vice President of Operations at Willamette Dental Group, and is practicing dental hygienist within the company. She supports the Skourtes Institute by using her expertise in clinical practices, the electronic health record, and informatics to work as a bridge between data analytics and operations. Joanna’s experience of over 20 years as a dental hygienist, various leadership positions, and a master’s degree in Health Informatics.

Ryan Brandon, MS (Willamette Dental Group)

Mr. Brandon serves as a consultant for several grants focussed on oral healthcare quality and safety, as well as a consultant to Willamette Dental Group and is a member of the Skourtes Institute Scientific Advisory Committee. He serves as a Data Scientist, analyzing data to identify key trends and predict future performance and making recommendations that lead to actionable business strategy. His education in Mathematics and over 20 years’ experience as a software developer of a large Electronic Health Record provides an acumen in healthcare, statistics/mathematics, technology and electronic health records. Having led the development of reporting and system requirements for an EHR, axiUm, through the stringent Meaningful Use certification process and participated in the creation of new Clinical Quality Measures for the program.

Gregg Gilbert, DDS (University of Alabama at Birmingham)

Dr. Gilbert is Distinguished Professor at the University of Alabama at Birmingham, and is Chair of the Department of Clinical & Community Sciences at the UAB School of Dentistry. His research interests encompass oral health clinical, practice-based, oral epidemiology and dental behavioral sciences research. Dr Gregg is National Network Director for The National Dental PBRN (USA), which is funded by the National Institute of Dental and Craniofacial Research, an institute of the National Institutes of Health.
John Timothy Wright, DDS, MS, James Bawden Distinguished Professor, serves as the editor in chief of the Journal of the American Dental Association (JADA). Wright studied chemistry at West Virginia University (WVU), received his Doctor of Dental Surgery degree from the WVU School of Dentistry, and a Master of Science from the University of Alabama at Birmingham. He obtained board certification by the American Academy of Pediatric Dentistry in 1990. A three-time recipient of AADR’s prestigious Gies Award, Wright has also received the Distinguished Science Award presented by the International Association of Dental Research, has authored more than 200 peer-reviewed publications and has more than 25 years of NIH grant funding.

Ralph Cooley, DDS (UTHealth Houston School of Dentistry)

Dr. Cooley is the Associate Professor and Assistant Dean for Admissions and Student Services at UTH. He previously served 17 years as an attending dentist in the General Practice Residency program and the DDS undergraduate clinic. Dr. Cooley has served as the president of the Texas Academy of General Dentistry and served on the national Academy of General Dentistry Board of Trustees for six years, The American Dental Association’s Council on Dental Benefit Programs, and the ADA’s Code Revision Committee. He also serves on the Executive Committee of the Dental Quality Alliance, the Code Maintenance Committee, and the National Commission for Recognition of Dental Specialties and Certifying Boards. In 2009, Dr. Cooley was named Texas Dentist of the Year and was awarded the Texas Academy of General Dentistry Lifetime Service Award. Currently, he is a delegate to the Texas Dental Association House of Delegates, the AGD House, and the ADA House and is now a fellow of the Academy of General Dentistry, the American College of Dentists, and the international college of Dentists.
**Elsbeth Kalenderian, DDS, MPH, PhD (ACTA)**

Dr. Kalenderian is a Professor and the former Dean for the Academic Center for Dentistry (ACTA), the Dental School of the University of Amsterdam & Free University Amsterdam in the Netherlands, Clinical Professor Department of Preventive and Restorative Dental Sciences (PRDS), University of California, San Francisco (UCSF), Senior Lecturer at Harvard School of Dental Medicine (HSDM) and Extraordinary Professor at University of Pretoria School of Dentistry. She is also an oral and maxillofacial surgeon, a public health dentist, an academic healthcare executive and health services researcher. Dr. Kalenderian’s research is focused on patient safety and quality improvement. Together with Dr. Walji, their lab employs principles from oral health, medicine, psychology, health care economics and implementation science to promote evidence-based oral health care. Dr. Kalenderian studies focus on integrating clinical decision support (CDS), Audit and Feedback (A&F), Observations, Survey science, as well as shared decision making, driver diagrams, stepped-wedge study design for randomized clinical trials, the Systems Engineering Initiative for Patient Safety (SEIPS) framework, the IHI Model for Improvement, human-centered design processes and Plan-Do-Study-Act (PDSA) cycles to develop and iteratively test interventions.

**Paul Casamassimo DDS, MS (Dental Quality Alliance)**

Dr. Casamassimo is a board-certified pediatric dentist, Professor Emeritus at the Ohio State University and an attending dentist at Nationwide Children’s Hospital in Columbus, OH, where he has treated patients for thirty years and served as president of the medical staff. He is currently Chief Policy Officer at the American Academy of Pediatric Dentistry, as well as a former president and editor emeritus. With his expertise in working with patients with special needs, Casamassimo has authored over 400 publications on pediatric dentistry and his research interests include; oral health disparities for children, oral health care for persons with disabilities, policy issues related to the oral health care system for children in the U.S. Oral-systemic relationships, and the morbidity of pain related to early childhood caries. He also made an appearance at the 2018 American Association of Orthodontists (AAO) Winter Conference, where he made a presentation on Balancing Parental Expectations.