GNSForum
2019

GNS Precision Medicine Forum:
How AI is Driving Precision Medicine

Over 100 attendees representing leading biopharma, health plans and data providers joined us for our 2nd Annual Precision Medicine Industry Forum on June 14th in Cambridge. And while there was a mix of attendees from across the healthcare space, the conversations converged on the idea that we are at an inflection point in healthcare. We are poised to better understand biology and disease, recognize patient heterogeneity, and leverage data and AI to move the needle towards making precision medicine a reality.

"We are here because of our conviction that we can be much better at matching drugs and interventions to the right patient at the right time to greatly improve health outcomes and sometimes even cure disease while simultaneously lowering the cost of care," said Colin Hill, Chairman, CEO and Co-founder of GNS Healthcare. "I believe we are not only entering an age of personalized medicine, but one of personalized healthcare. We now have the ability and the opportunity to make a real impact in both health outcomes and costs by leveraging voluminous data, powerful AI and machine learning technology and computer processing capability."

Through panel discussions, interactive presentations, and audience participation, attendees heard from industry leaders as they discussed the use of real-world evidence (RWE), how value is being defined by payers, PBMs and pharma, the current challenges of the healthcare delivery system, how biomarkers are being used in drug development and commercialization and more.

Keynote speaker, 23rd Commissioner of the FDA, **Scott Gottlieb,** MD, shared his thoughts on the modernization of the FDA, how the FDA is on the cusp of a culture change because the review process now includes modeling and simulation and how RWE is going to continue to gain acceptance. He also talked about the role of electronic health record data and why it's a significant part of the modern review process.

Featured speakers included: **Steffan Ho**, MD, PhD, VP and Head Translational Oncology, Pfizer Global Product Development; **Ira Klein**, MD, MBA, FACP, Senior Director of Health Care Quality Strategy, Strategic Customer Group, J&J; **Brian Sweet**, BS Pharm, MBA, Executive Director, Oncology, US Medical, Health Economics & Outcomes Research, Bristol-Myers Squibb; **Alan Lotvin**, MD, EVP Transformation, CVS Health; **Tina Brown-Stevenson**, SVP, Healthcare Analytics and Decision Support UnitedHealthcare Networks; **Gregory C. Simon**, JD, President, Biden Cancer Initiative; **Peter Bergethon**, MD, VP and Head of Quantitative Medicine and Clinical Technologies (QMCT), Biogen; **Chris Wright**, MD, MMSC, PhD, Chief Medical Officer, Cyclerion Therapeutics; **Jiri Aubrecht**, PharmD, PhD, Scientific Director of Translational Medicine, Takeda; **Shahram Ebadollahi**, PhD, MBA, Global Head, Data Science and AI, Novartis; **Iya Khalill**, PhD, Chief Commercial Officer and Co-Founder, GNS Healthcare; **Colin Hill**, MS, CEO, Co-Founder, GNS Healthcare.

Conference Highlights

- **Real-world evidence will be increasingly used for regulatory approval and research.** The FDA recently released a framework for the use of RWE in supporting drug approvals or label expansion. Dr. Gottlieb talked about how we are on the precipice of a cultural shift wherein real-world data and modeling will become more widely accepted. Steffan Ho shared Pfizer's work in using RWE to expand breast cancer drug Ibrance's label. Speakers discussed their efforts in using RWE and agreed that the time is now to expand its use.

- **It takes an ecosystem to generate value for patients and reduce costs.** There was a spirited debate on how value is defined across the heatlhcare ecosystem. Speakers shared their definitions of value and shared that the collaboration between healthcare stakeholders needs to start earlier in order to bring precision medicine to the forefront and remove the barriers created by misaligned incentives.

- **Organizing principles of healthcare need a readjustment.** Our system of meeting patient needs are not always built on a foundation of actual unmet need. Shaky organizing principles are a cause of our increasingly difficult pricing and access problem. As we move from a system of chronic disease economics to one with rapidly proliferating curative solutions, the partnerships between pharma, payors, providers and patients are a must.

- **Real world data is not real time data.** The lack of timely data delivery is a major impediment to progress for companies across the board. Both the quality and magnitude of available data need to be priorities for stakeholders across the healthcare system if we are aiming to find answers to our most pressing biological questions.

- **Healthcare is an industry ripe for digital disruption but the data matters.** The convergence of AI, precision medicine and data are producing results that are starting to transform the treatment of various diseases, and yet this is only the beginning. A complete transformation of the healthcare system and how care is delivered will go beyond the current paradigm of trial and error medicine to one of precision and targeted therapy based on the individual patient.

- **Challenging the status quo**. As we progress towards making precision medicine the new standard of care, the need for breaking down silos around data and technology becomes more imperative. Patients do not have easy, efficient access to their own health records, putting the onus on then to follow up on things like test results. Greg Simon extended a challenge to the audience to provide patients with their own health information, end copays for cancer treatment, develop true partnerships between the insurance industry and pharma while developing new and affordable cancer treatments.

- **Moving from personalized medicine to personalized healthcare.** We now have the ability and the opportunity to make a real impact in both health outcomes and costs by leveraging voluminous data, powerful AI and machine learning technology and computer processing capability at a time when our industry desperately needs it and society and patients demand it. We are seeing more and more collaborations and partnerships among healthcare stakeholders – biopharma, payers, providers and patient groups – to recognize and deliver care based on the uniqueness of each patient's specific characteristics and biology.

We are grateful to both speakers and attendees who shared their views and aspirations for meeting the next frontier of personalized healthcare, and the lessons they learned along the way. We will begin planning our 2020 Forum in Q3, if you have any feedback or are interested in speaking please contact us at gnsforum@gnshealthcare.com.

About GNS Healthcare

GNS Healthcare solves healthcare's matching problem for leading health plans, biopharma companies, and health systems. We transform massive and diverse data streams to precisely match therapeutics, procedures, and care management interventions to individuals, improving health outcomes and saving billions of dollars. Our causal learning and simulation platform, REFS, accelerates the discovery of what works for whom and why. To request a customized demo on our platform click here.