

2016 Digital Health Challenge Powered by: the Colorado Health Foundation October 19th, 2016 / EXDO Event Center



DIGITAL HEALTH CHALLENGE FINALISTS

Over the course of the last three months these companies have participated in a process of vetting that consisted of 2 stages of elimination and 3 stages of evaluation and mentorship through the Valid Eval platform. They have presented in front of experts within the Health Care and Digital Health fields, received feedback, and incorporated it into the presentations you will see this evening. Tonight these finalists will vie for a portion of \$150,000 and a partnership with a host institution in which they will pilot their product.

Clinical Trial Site Solutions LLC

Patient feedback and post procedure early intervention are critical in reducing re-admission rates, improving patient satisfaction levels and helping drive care cost down. IDR (a texting acronym for "I Don't Remember") is a "patient- engagement" app that delivers patient reminders, provides patient education, and care plan instructions to help improve patient compliance. The pilot will demonstrate how IDR provides actionable feedback, decreases patient anxiety, reduces patient confusion through education, and allows patients to interact with their care team to improve compliance to their care plan. The ability of the care team to provide early intervention, if needed, will reduce re-admission rates, improve patient satisfaction level and drive down costs because patients will be more compliant. IDR will reduce the workload for non-critical issues for caregivers allowing them to focus on patients who need more care and assistance i.e. spend 90% of time on the 10% of patients that need it.

dBMEDx

Health care-associated infections (HAIs) are one of the most pressing issues in health care affecting approximately 1 out of every 25 patients in acute care hospitals. These infections cost the U.S. health care system billions of dollars each year and lead to the loss of tens of thousands of lives. Of all the various types of HAIs, Catheter Associated Urinary Tract Infections (CAUTI) are one of the most common types of infections, even though as many as 70% of CAUTIs are considered to be avoidable provided that recommended infection-prevention practices are implemented. One of those recommendations is the use of a bladder scanner to help reduce the total number of days that a catheter is placed in a patient. However, current bladder scanners on the market today are complex, expensive and utilize technology that was originally developed two decades ago and these factors can hinder their widespread use in the hospital thereby perpetuating this significant problem. This is the problem dBMEDx is addressing.

Matrix Analytics

Is it possible for lung cancer survival rates to be as high as breast, prostate, and colon cancer? At Matrix Analytics, we think so. We also believe pulmonary nodules, in addition to lung cancer screening patients, should be managed outside of expensive radiology software. Founded by an Interventional Pulmonologist, Matrix Analytics seeks to provide care coordination software to ease the burden of pulmonary nodule management. With over 1.5 million new nodules detected each year, and only 30% of those nodule patients receiving clinical guideline treatment, we think there is room for improvement. Matrix Analytics created LungDirect, a proprietary software suite, which utilizes advanced data mapping and an API infrastructure to extract data from hospital information systems to streamline care, as well as assist in the complex and burdensome data capture required for lung cancer screening reimbursement.

Medical Simulation Corporation

MSC partners with hospitals to resolve sepsis, the most costly, deadly and highest readmission-rate condition in hospitals today. MSC has helped our clients improve outcomes by: Reducing mortality by up to 72%; Reducing cost by up to 31%; Shortening average length of stay (ALOS) up to 3 days. Unlike other companies, MSC is the "last mile" solution, providing hands-on simulation training from Certified Healthcare Simulation Educators. MSC combines data analytics, process improvement, online courseware, and industry-leading simulation to drive improved outcomes. MSC has engaged over 130 hospitals in California as part of the Patient Safety First Program, helping those hospitals reduce mortality by 26% and reduce costs by \$65 million. In addition, we are launching our unique pediatric sepsis simulation program, with the goal of reducing mortality among the 100,000 children who experience sepsis each year.

Preventative Technology Solutions

Our business philosophy is to develop advanced and cutting edge technology solutions enabling clinicians to provide the best care for their patients. Healthcare for adolescents and young adults is improved by developing technology solutions enabling accurate and efficient clinical assessment by physicians to better inform prevention services. With this philosophy, our customers are at the focus of the company. Maximized physician/patient interaction and follow-up services support more satisfying health decisions and reduce costs of expensive treatments. The OPTIONS pilot employs mhealth sexual risk assessment and mobile e-learning preventative services including an evaluation using quadruple aim performance metrics. Standard measures track the incidence and prevalence of STIs such as Chlamydia and unintended pregnancy for adolescents and emerging adults. In addition to patient outcomes, the pilot evaluates how the technology improves the clinician experience by measuring physician's perceptions of quality for reproductive health counseling and patient satisfaction with the technology. Physicians are empowered by the technology to comply with new reproductive health care mandates. Our tailored approach engages patients with their primary care physicians building skills and awareness of preconception care promoting lifelong reproductive health and wellness.

Quantant Technology Inc.

EHR interoperability is still an unsolved problem for the healthcare industry in general, making it difficult, or time consuming and hence costly, for healthcare organizations to share information among themselves or with patients. With hundreds of EHR products on the market (e.g. Epic, AllScripts, etc.) with different technology architectures, service models and capabilities, systems cannot "talk" to each other, let alone exchange patient images in an efficient and secure fashion. Solutions like VNA and cloud-based storage are meant to address interoperability, but often lead to new problems like patient privacy protection and data transmission efficiency. No other solution matches Quantant's combination of a full-featured image viewer with embedded collaboration, instant sharing, and data security without the need for any downloads or plugins.

HealthONE

2016 Host Institutions The following is a list of Host Institutions recruited by Prime Health. A strong effort is made to ensure that every major component of the Healthcare System is involed including national-payors, healthcare delivery systems, providers, health information exchange components and safteynet institutions.

AllHealth Network

CDPHE

Arapahoe Douglas Mental Health Network provides a wide variety of mental health and substance abuse services, including individual, family, marital and group counseling, therapy, groups, psychiatry, emergency and residential treatment programs. As a private, nonprofit mental health provider for more than 55 years, we've been serving the children, teens, adults, seniors and families in our community — and beyond.

The Colorado Department of Public Health and Environment is one of 16 cabinet-level departments whose executive directors are appointed by the governor. Dr. Larry Wolk serves as executive director and chief medical officer. The department serves the people of Colorado by providing high-quality, cost-effective public health and environmental protection services that promote healthy people and healthy places. The department focuses on evidence-based best practices in the public health and environmental fields and plays a critical role in educating citizens so they can make informed choices. In addition to maintaining and enhancing our core programs, we continue to identify and respond to emerging issues that could affect Colorado's public and environmental health. The department pursues its mission through broad-based health and environmental protection programs and activities. These include population-based disease prevention strategies, control of disease outbreaks; provision of health statistics and vital records; health facilities licensure and certification; health and wellness promotion for both the general population and specific subpopulations such as children/ adolescents, women, workers and the aging; prevention and treatment of sexually transmitted infections and HIV; suicide and injury prevention; laboratory and radiation services; and emergency preparedness. The department's environmental responsibilities span a full array of activities including air and water quality protection and improvement, hazardous waste and solid waste management, pollution prevention and environmental leadership, and consumer protection.

Centura Health

Our Mission: We extend the healing ministry of Christ by caring for those who are ill and by nurturing the health of the people in our communities. Our Vision: Centura Health will fulfill a covenant of caring for our communities with excellence and integrity to become their partner for life. Centura Health has seven core values: Compassion, Respect, Integrity, Spirituality, Stewardship, Imagination, and Excellence. Here, ethics are always our guide Centura Health promotes a workplace and health care environment that values the uniqueness of ndividuals. We believe our patients, associates, providers, volunteers, vendors and other business sources should be valued, respected, understood, satisfied and encouraged. We facilitate ethical decision-making through: Education, Policy development, Individual case consultation, Interpretation and application of our sponsors' ethical and religious directives. Your health and wellness include body, mind and spirit. Our faith-based mission and the holistic-care approach afforded through our sponsors Adventist Health System and Catholic Health Initiatives includes spiritual health as an essential aspect of overall well-being.

Clinica Tepeyac Our Mission: To provide culturally competent health care and preventive health services for the med-

ically underserved. Our Vision: We envision a healthy community. The people we serve understand that health care is regular and ongoing. They are healthier and their children are healthier. There are fewer people in emergency rooms receiving routine care. As we can expand our reach and bring cultural competency into the community, we are able to help more people live healthy lives. Our Core Values: Dignity- Clínica Tepeyac respects the inherent dignity of each person. We are sensitive, inclusive and empowering in our relationships with others; Integrity- Clínica Tepeyac values authenticity and consistency. We are genuine, reliable and dependable in word and deed; Quality-

Clínica Tepeyac values excellence. We provide the best services possible on a regular basis. Our community is healthier because of Clínica Tepeyac. **CORHIO**

ity healthcare. Improving healthcare through enhanced use of information technology and data ex-

We help providers improve clinical decision-making, which enables Coloradans to have higher qual-

change is the heart of what we do. We manage one of the country's largest and most successful health information exchange (HIE) networks, provide advisory services that help healthcare professionals effectively use technology and improve care delivery, and supply health plans and accountable care organizations (ACOs) with valuable data that enhance analytics and population health programs. As an independent, nonprofit organization, we are dedicated to serving all of Colorado's healthcare stakeholders including physicians, hospitals, behavioral health, emergency medical services, public health, long-term care, laboratories, imaging centers, health plans, communities and patients. Denver Health Denver Health is a comprehensive, integrated organization providing level one care for all, regardless

of ability to pay. Twenty-five percent of all Denver residents, or approximately 150,000 individuals, re-

ceive their health care at Denver Health. One in three children in Denver is cared for by Denver Health

physicians as well. As Colorado's primary safety net institution, Denver Health has provided billions

of dollars in uncompensated care. Denver Health is an integrated, efficient, high-quality health care

system serving as a model for other safety net institutions across the nation. Doctors Care Our Mission: Doctors Care provides access to quality, affordable health care and services designed to reduce barriers to health for low-income people in need. Located in Littleton, Colorado, Doctors Care is a private nonprofit 501(c)3 organization dedicated to improving health access for low-income individuals in the South Metro Denver area. Through its integrated primary care clinic, network of

specialists and hospital services, and programs designed to address socioeconomic barriers to health

and well-being, thousands of individuals have access to quality, affordable primary and specialty care

HealthONE is the largest healthcare system in the metro Denver area with more than 10,000 employees. As part of the HealthONE family, The Medical Center of Aurora, North Suburban Medical Center, Presbyterian/St. Luke's Medical Center, Rocky Mountain Hospital for Children, Rose Medical Center, Sky Ridge Medical Center, Swedish Medical Center, and Spalding Rehabilitation Hospital work together to provide a higher level of care. In addition, our family of services includes six hospital free-standing emergency departments and numerous ambulatory surgery centers, occupational medicine clinics, physician practices, imaging centers, and AIRLIFE-DENVER, which provides critical care air and ground transportation across a 10-state region.

We are committed to delivering healthcare as it should be: patient-centered and for the good of all

HCA

people, no matter their circumstance. To achieve this, we must be active; we must be kind. We must work with integrity, share our skills and never stop learning. Exceptional health care is built on a foundation of inclusion, compassion and respect – for our patients and for each other. We will foster a culture of inclusion across all areas no matter a person's race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity or veteran status. Kaiser Permanente

the lives and health of Colorado residents for more than 45 years. We provide comprehensive health care services to 625,000 members through 29 medical offices and a network of affiliated hospitals and physicians. We invest the time, expertise, and resources of 7,000 Kaiser Permanente Colorado physicians and employees who are focused on making the lives of our members and communities healthier.

Kaiser Permanente is the state's largest nonprofit health care provider, proudly working to improve

NWCOHealth's mission is to improve quality of life for all Northwest Colorado residents by providing

Northwest Colorado Health

comprehensive health resources and creating an environment that supports community wellness. NWCOVNA creates community health and wellness through diverse programs that focus on disease prevention, care and management for individuals of all ages, income levels, cultures and health statuses. Established in 1964, NWCOVNA started out providing public health and home health care services. Over the past two decades, the agency has successfully added hospice, aging, and comprehensive primary care services. Salud Family Health Centers

Plan de Salud del Valle, Inc. (Salud Family Health Centers) was founded in 1970 in response to critical health needs of the migrant farmworker population in the Fort Lupton, Colorado area. Today,

forty-five years later, Salud has evolved into an extensive primary health care delivery system that provides integrated primary care services which reduce emergency use, improves the health of communities and provides access to quality, affordable health care services to populations in need. Salud is committed to providing a Medical Home to patients, where medical, dental and behavioral health services are coordinated and integrated to best respond to patient needs. Salud has a firm commitment to provide care to all people and does not turn patients away based on finances, insurance coverage or ability to pay. Salud promotes prevention and early intervention in all programs. Salud has strong partnerships with area hospitals, physician groups, mental health agencies and health departments to ensure a strong referral system and access to a variety of services for patients. Salud is accredited as a Patient Centered Medical Home, PCMH, by the National Committee for Quality Assurance (NCQA), an indicator of the level of integration among services (medical, behavioral and oral health services) and providers to improve the quality of patient care. Salud is also accredited by the Joint Commission, an indicator of our commitment to safety and compliance in all programs and services. MISSION: To provide a quality, integrated health care home to the communities we serve. Sisters of Charity of Leavenworth (SCL) Health

SCL Health is a faith-based, nonprofit healthcare organization that operates eight hospitals, four safety net clinics, one children's mental health center and more than 190 ambulatory service centers in

three states – Colorado, Kansas and Montana. The health system includes 15,000 full-time associates and more than 500 employed providers. Based in Denver, the \$2.4 billion health network is dedicated to improving the health of the communities and individuals it serves, especially those who are poor and vulnerable. In 2013, SCL Health contributed more than \$226 million in community benefit, including services for the poor, health screenings, educational programs, community donations and research. Uptown Primary Care

Uptown Primary Care is a general internal medicine and women's health practice supported by The

Colorado Health Foundation located on the campus of Presbyterian/St. Luke's Medical Center in up-

town Denver. Uptown Primary Care has been certified by the National Committee for Quality Assurance (NCQA) as a Level 3 Patient Centered Medical Home (PCMH) and for excellence in Heart/Stroke Care. The 6 attending physicians of Uptown Primary Care are faculty of the University of Colorado Health System and train 18 Internal Medicine residents in the Primary Care Track of the University of Colorado Internal Medicine Residency Program in the discipline of outpatient medicine. The patients of Uptown Primary Care have diverse ethnic and socioeconomic backgrounds, and the practice has a balanced payer mix of Medicare, Medicaid and Commercial Insurance. Uptown Primary Care uses an electronic health record (eClinicalWorks) for patient care, offers integrated behavioral, social work and care management services, and has pharmacists from the University of Colorado and Regis University on site for pharmacy management consults for patients. The goal of Uptown Primary Care is to provide evidence-based, cost-effective care for our patients that exceeds their service expectations and to train the next generation of primary care physicians in an inquisitive, learning lab environment to become leaders in the specialty of general internal medicine. Judges of the 2016 Digital Health Challenge

cess to determine the finalists. This year we've taken that one step further and have asked a few of our judges to take part in a live judging event during the Challenge.

Dr. Kenneth T. Bellian has spent his career in various clinical and administrative roles in healthcare over the last 18 years. He is dedicated to ensuring high quality, patient and family centered care delivered

Part of what makes this event a success is an extensive group of subject mattet experts recruited to help with evaluating applications and mentoring applicants throughout the selection pro-

Dr. Kenneth Bellian

in a cost effective and timely manner. He has a deep understanding of the complex challenges that exist in healthcare, the stakeholders who are vested in the problems, and the opportunities which avail themselves to deliver disruptive solutions. Along this journey, Dr. Bellian has viewed these problems from multiple vantage points: single specialty group practice, academic medicine, safety-net delivery

and support services through Doctors Care.

system, free-standing ambulatory care surgery center, Independent Physician Association (IPA) and the insurance industry. Outside of healthcare, he and his family are committed to supporting the community. He created a mobile rock climbing bus which offers outdoor education opportunities to students, regardless of socioeconomic status or community resources. Dr. Bellian holds a Bachelor's Degree in Economics from Duke University and a Masters of Business Administration with a certificate in Health Sector Management from the Fuqua School of Business at Duke University. He attended The University of Virginia where he obtained his Doctor of Medicine. He completed his internship and residency in Otolaryngology/Head and Neck Surgery at Case Western Reserve University/University Hospitals of Cleveland. Dr. David Brody Dr David Brody is a General Internist. He is a health care consultant, mentoring start-up health care technology companies and helping ACOs and healthcare systems develop and implement population

health management strategies. Prior to this, Dr Brody was the Medical Director of Denver Health's managed care plans and a Professor of Medicine at the CU School of Medicine. He has also been the Chief of General Internal Medicine and a Professor of Medicine at two medical schools in Philadelphia- Temple and Drexel. His research on Integrated Care and shared decision making has been funded by

the National Institute of Mental Health, The Robert Wood Johnson Foundation, The Aetna Foundation and the Colorado Health Foundation among others. In addition Dr Brody has received several distinguished awards including being named an American College of Physicians Teaching and Research Scholar and a Henry J Kaiser Family Foundation Scholar in General Internal Medicine. Kay Cowling Kay inspires and enables leaders and teams to achieve business objectives to reward themselves, the employees, customers and shareholders. Her work through Cowling Advisory Services is with CEOs, leadership teams and investors of companies from early stage to mature corporations within provider, digital healthcare, staffing, and professional service organizations. Specific areas of focus include; ex-

ecutive leadership development/coaching, business strategy and operational execution for scalable growth. Kay led a successful startup and succession plan to an exit, and has led 3 company turnarounds to positive transactions. She is a former Gubernatorial appointee to the Board of Workforce Florida, has been on numerous non-profit Boards, and is passionate about wellness and improving the process and quality of healthcare. Currently she is a Strategic Advisor for Prime Health, Valid Eval, Sondermind and RampUp in the Colorado Eco-System. Previous companies: US Nursing Corporation/Fastaff, One-

Call Care Management, ATS Health Services, & Accounting Principals (now part of Adecco). Ana English Ms. English, President and CEO for the Center for Improving Value in Health Care (CIVHC), holds an MBA, as well as degrees in Economics and Political Science and has more than 25 years of healthcare experience. Ms. English's healthcare career started with insurers Lincoln National and Foundation Health Systems (FHS) where she held various senior leadership positions in the areas of Analysis and Planning, Administration, and Operations. During the majority of the 2000's, she served as President and COO for Electronic Network Systems (ENS), an electronic health care services organization up through ENS' acquisition by Optum. With Optum she held SVP positions in EDI Solutions and Business Development and then served as Co-President & Solution are leader in the resolution of

large medical claims. Most recently, she was with the American Medical Association (AMA) and served as the head of the AMA's for profit subsidiary, AMAGINE and also headed up AMA's key accounts,

product sales and marketing for AMA's business products and services. Ms. English was one of the founders of the industry association committed to promote and advance electronic data exchange called Cooperative Exchange, and served as their board's President and Vice President. In addition, Ms. English currently sits on the board of the national organization Network for Regional Healthcare Improvement (NRHI). Jeff Helton Jeffrey R. Helton, PhD, CMA, CFE, FHFMA, is an Associate Professor of Health Care Management at MSU Denver teaching health economics and health informatics there. He jas developed a new certification program at MSU Denver in Health Data Science and has started a baccalaureate degree program in Health Care Information Systems as well. Jeff is also a lecturer in health economics in the University of Colorado at Denver School of Business and a lecturer in health care finance at George Washington University and an adjunct professor of health informatics at the University of Texas. He is a former hos-

pital and health insurance plan chief financial officer and brings over 25 years of diverse experience in the health care industry to his teaching. He is a certified management accountant, a certified fraud

examiner, and a fellow of the Healthcare Financial Management Association. His research focuses on the evaluation of technology impacts on operational efficiency in health care organizations. He has published several articles on the impact of EHR technology on labor efficiency in hospitals and recently coauthored the text "Healthcare Operations Management". Jeff earned a PhD in health care management at the University of Texas, where he studied health economics and health informatics. He received a master's in health administration from the University of Alabama at Birmingham and a BBA from Eastern Kentucky University. Ryan Kirkpatrick Ryan has 12 years of experience investing in growth-oriented healthcare companies in both the private and public markets. He has led investments and served a Director in several healthcare services, products, and IT focused businesses. Currently, Ryan is a Partner at the Colorado Impact Fund, a venture capital firm investing in Colorado based companies that have a positive community impact. One

of the Colorado Impact Fund's key investment focuses is companies that are improving community health. Prior to joining Colorado Impact Fund, Ryan was a principal at Ferrer Freeman & Company, a

leading healthcare private equity firm focused on growth capital investing in the lower middle market. Ryan began his career as a healthcare analyst at Melleos Capital Management, an asset management firm, where he covered the pharmaceutical, biotechnology and medical device industries. A Colorado native, Ryan holds a B.A. in molecular biology from Princeton University and an M.B.A. with a concentration in healthcare management from The Wharton School at the University of Pennsylvania.

Margaret McGuckin Rya Margaret McGuckin, co-founder of i3 Ignite, is an expert in creating and managing growth - whether it's scaling hyper-growth in an early stage company or getting a company back on the growth track quickly. Her passion is getting results in a way that's actionable and sustainable, which she's done successfully as a C-level exec in both Fortune 100 companies and startups. Margaret was responsible for developing and scaling all aspects, including revenue, of an innovative, ambulatory care, direct-to-consumer delivery model whose revenue grew from \$1M to \$135M in 4 years. She also led a corporate new products and ventures team at a Fortune 100 company that successfully executed a growth strategy to launch dozens of new products / services to both businesses and consumers. Many companies find it's hard to build the bridge between a growth strategy and successful execution. The strategy doesn't get implemented and targets don't get met. i3 Ignite, a strategic growth catalyst, focuses on helping companies ignite growth - in a way that rapidly and consistently gets the results they need.

#DigitalHealthChallenge



