Technology-Enabled Innovations for Improving Children's Health

May 5, 2009

Expert Panel Summary

Fourteen experts from a diverse group of disciplines gathered at The California Endowment's Center for Healthy Communities to discuss the use of information and communications technology (ICT) to reduce health disparities, particularly among low-income and other underserved children in California. Expert panelists debated forecasts, developed by The Health Technology Center and The Children's Partnership, that focus on how changes in the Population Experience, Service, Settings and Facilities, Regulations and Standards, Information and Communications Technology, Business Models, and Workforce will influence technology development, adoption, and dissemination. With over 40 forecasts derived from extensive research that included approximately 115 interviews, a selected few forecasts were chosen for the panel discussion. In the discussion, a number of major themes and cross cutting issues emerged that are influential in shaping an understanding of current and future technology, adoption, and dissemination.

To start the day's discussion, each participant was asked "What one thing will have the greatest impact on transforming children's health in the next ten years?" Responses included:

- Prioritizing children's issues in health policy
- Focusing on early childhood development and prevention
- Incorporating a broader set of determinants of health, including a renewed focus on the impact of the environment on health
- Broadening strategies to include population health promotion and wellness
- Promoting alternative sites of care
- Realization of the virtual medical home
- Ensuring access to health coverage and services while simplifying the enrollment process
- Providing incentives for individual positive behavior change
- Guaranteeing information transparency and data driven decisions

Major discussion themes from the panel:

One major theme discussed at the panel is that **technology is not a standalone solution and should serve to augment the human service role**. Some panelists expressed concern that the relationship between a provider and children and their families would cease to exist as technology use grows. Panelists believed that technology should be used to enhance medical relationships and support the provider/patient interaction, by personalizing the individual experience based on each child and family's learning, behavior patterns, and path along the illness journey. One example given by a panelist was the use of a mobile device by diabetes patients and their families to transmit their medical information to their physician to assist with treatment. However, running contrary to this ideal, panelists expected to continue to see more direct-to-consumer products bypassing healthcare providers.

The second major theme from the discussion is **the need for payment reform so that service delivery, care models, and financial incentives are aligned**. Panelists felt that reimbursement should be outcome rather than procedure-based, and focus on behavior change interventions and support services. One panelist further described a view that payment reform should

emphasize a consumer-focused vision with consumer choice in a medical home. A promising payment strategy mentioned by many panelists was pay-for-performance. Panelists thought that payment reform should also take a population-based health management approach, promote care for the whole child (by increasing the focus on early childhood and behavioral health), and that reimbursement changes will accelerate the usage of beneficial information communication technologies. One panelist mentioned a caveat in this discussion: while payment reform is important, it might not be enough to change health outcomes and health status. Thus, reform needs to work in conjunction with other strategies, such as expanding access to healthcare and services for underserved populations.

The third major theme is the **distinction between individual and population level data, data sharing, and privacy concerns**. The panelists agreed that the exchange of individual health data needs to follow privacy guidelines, but appropriate exchange requires that the guidelines have a certain amount of flexibility and that data systems attain a much higher level of interoperability. Patients who see a number of different providers, such as special needs children and families, need to have access to their records and have the ability to transfer information between services. On the other hand, panelists agreed that population level data needs to be shared and publicly available. Their recommendation was that public policy and industry should create policies that encourage these behaviors. For example, one panelist mentioned that Medicaid providers and community health centers have incredible population data (e.g. diagnoses, patterns of care, outcomes), which could and should be used for the public benefit. For both individual and population data, bureaucracy and politics (rather than consumers of the technology) often stifle data sharing.

The fourth major theme is **the shifting of care and service from higher cost, higher skill level caregivers and venues to lower cost, lower skill level caregivers and venues**. This shift allows for inclusion and empowerment of different skill levels and personnel that may reside outside the traditional medical model. For example, some panelists commented that pediatricians are not the only appropriate provider for well-child care and that other caregivers may be better able to provide appropriate social, developmental, or preventive care. Panelists felt that downshifting would lead to a rise in licensed (nurse practitioners and physician assistants) and unlicensed professionals (community health workers and health aids) providing well-child care. Technology can also enable downshifting of care to individuals and families through personal health records and mobile devices for chronic disease and wellness.

Other themes and conclusions:

Another major cross cutting topic during the panel was the current state of behavioral health, at it remains the missing link to a fully integrated children's health services model. For example, one panelist said that poor reimbursement policies make it difficult for mental health providers to treat underserved youth, who already experience the greatest access challenges. Mental health services are also distributed among multiple health, social services, and community providers, resulting in a fragmented system. Another cross cutting topic was the value of using school based health care and other community-based services for children and youth. Many successful school based health centers are aligning themselves with a community health center to assist with billing, staffing and technology, and provision of mental health services for adolescents.

In conclusion, a variety of important themes and cross cutting issues were discussed during the expert panel on how technology can be used to improve children's health and healthcare. Based on the outputs from this meeting and previous research, Health Technology Center and The Children's Partnership have finalized the forecasts delineating future developments in seven key areas, identified a number of key trends, and developed a technology wallchart that graphically depicts the forecasts on a ten-year timeline and provides the environmental context and drivers and barriers for technology adoption and diffusion affecting the future of children's health. Additionally, the study has illuminated a number of key policy implications and leverage points for future work in this very important area which have been extracted into an Executive Brief. As Claudia Williams of the Markle Foundation said in her closing remarks, "Policies need to move us toward our goals, and we need to be clear about those goals. I hope we can help public policymakers stay true and thoughtful and maintain feet on the ground, and all of this moves in the right direction, and sees improving children's health rather than technology as an end goal."

List of panelists:

- Dion Aroner, *Partner, Aroner, Jewel and Ellis Partners & Former CA Assemblywoman*
- David Bergman, MD, *Associate Professor, Stanford University School of Medicine*
- Alex Briscoe, MFT-I, DPS, *Deputy Director, Alameda Health Care Services Agency*
- Gregory J. Downing, DO, PhD, *Project Director, Personalized Health Care Initiative at U.S. Department of Health and Human Services*
- Amy Fine, MPH , *Health Policy/Program Consultant*
- Joan Ford, *Vice President of Strategic Initiatives, Starlight Starbright Children's Foundation*
- Neal Kaufman, MD, MPH, *Co-Founder, the UCLA Center for Healthier Children, Families, and Communities, Commissioner, First 5 LA & CEO, DPS Health*
- John Kim, *Co-Director, The Advancement Project LA & Director, Healthy City Project & Commissioner, LA City Board of Neighborhood Commissioners*
- Teddy Milder, PNP, PHN, *Director of Evaluation and Technology, First 5 Alameda County*
- Susan Pharo, MD, *Regional Department Chairman, Pediatrics (Kaiser Colorado)*
- Sandra Shewry, MPH, MSW, *President and CEO, California Center for Connected Health & former Director, California Department of Health Services*
- Herrmann Spetzler, MA, *CEO, Open Door Community Health Centers*
- Bobbie Wilbur, *Director of Application Solutions, The Center to Promote HealthCare Access and One-e-App*
- Claudia Williams, *Director of Health Policy and Public Affairs, Markle Foundation*

To access additional background, forecast, and policy materials produced for this project, please go to www.childrenspartnership.org/HITInnovationForChildren