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Title: “Creating a Smart and Connected Health System”

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Abstract: Science is changing rapidly and new transdisciplinary approaches are resulting in advances across scientific domains. Due to developments in computing and engineering, nested with a changing policy environment, medicine and public health are also at the cusp of a transformation that will accelerate discovery, improve health outcomes, decrease costs, and address the complexity of challenging health problems. To realize these advances requires partnerships between the scientific and health domains. Research communities are developing breakthrough ideas in a variety of diverse areas relevant to health, such as sensor networks, informatics, machine learning and datamining, decision support systems, modeling of behavioral and cognitive processes, as well as system and process harmonization. Solutions that effectively influence health must satisfy a multitude of constraints creating challenges and opportunities that individual disciplines cannot address alone. Biomedical- and health informatics and engineering are poised to contribute to these changes by bring sophisticated techniques to partnerships in the biomedical realm. This talk will cover some advances being made and a vision for future. This talk explores the challenges in developing a smart health research ecosystem and highlights opportunities and promising new areas of research.