Stony Brook University

Biomedical Informatics Grand Rounds

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Tele-Transitions of Care, Barriers and Opportunities to Telehealth Research and Implementation

Wednesday, November 13, 2019 3 pm—4 pm
Health Science Center L2-3B

Abstract:

Background: Poor transitions of care leads to increased health costs, utilization and poor outcomes. This talk will discuss the study which evaluated Telehealth feasibility in improving transitions of care, while also discussing the current academic and clinical operational challenges to Telehealth implementation. **Methods**: This is a 12-month randomized controlled trial, evaluating the use of telehealth (remote patient monitoring and video visits) versus standard transitions of care with primary outcomes of hospital readmissions and emergency department visits within 30 days, with secondary analysis of effects on access to care, medication management, adherence and patient engagement. **Results**: The study conducted between June 2017 and 2018, included a sample size of 105 patients. Compared with the standard of care, Telehealth patients were more likely to have medicine reconciliation ($p = 0.013$) and were 7 times more likely to adhere to medication than the control group ($p = 0.03$). Telehealth patients exhibited enthusiasm ($p = 0.0001$), and confidence that Telehealth could improve their healthcare ($p= 0.0001$). Telehealth showed no statistical significance on ED utilization ($p = 0.691$) nor for readmissions ($p = 0.31$). 100% of Telehealth patients found the intervention to be valuable, 98% if given the opportunity, reported they would continue using telehealth to manage their healthcare needs, and 94% reported that the remote patient monitoring technology was useful. **Conclusions**: Telehealth can improve transitions of care after hospital discharge improving patient engagement and adherence to medications. Although this study was unable to show the effect of Telehealth on reduced healthcare utilization, more research needs to be done in order to understand the true impact of Telehealth on preventing avoidable hospital readmission and ED visits.

Bio:

Dr. Noel is a board certified, preventive medicine physician. She serves as the Telehealth Director and Deputy CMIO of Stony Brook Medicine, whereby she provides leadership to all telehealth activities of the health system. Dr. Noel is also the Chief Quality Officer of the Patient Centered Medical Home (PCMH) for the Family Medicine Department, working on quality improvement and population health management, for NCQA designation. She practices occupational medicine part-time, and provides digital solutions for employee wellness programs. She is an appointee the New York State Department of Health Regulatory Modernization Initiative Telehealth Advisory Committee, and has won many service and innovation awards for healthcare. In academia, her research areas are in machine learning, risk models and remote patient monitoring. Dr. Noel has developed several educational curriculums, including a 40-hour Telehealth curriculum for the School of Medicine, as well as Interprofessional educational curriculums with the School of Health Technology and Management, Nursing, Dentistry and Social Work. Dr. Noel is a graduate of Duke, George Washington, and Johns Hopkins Universities. She is a proud graduate of the Stony Brook Preventive Medicine program, whereby now, she is working collaboratively, with the residency program leadership on development of a Telehealth Preventive Medicine service.

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