



Summer Institute in Nursing Informatics 2019
Poster Presentation

Identifying the Top Coordination Challenges and Opportunities in Achieving Value-Based Home Care: A Literature Review to Inform IT Adoption Initiatives

Mohammad Ishtiaque Rahman, BSC; Dari AlHuwait, PhD, Aswini Baskaran, MSC; Kevin Dainel, BSC; and Gunes Koru, PhD

Introduction: Care coordination is crucial for home health agencies (HHAs) as participating in value-based purchasing (VBP) model of the Centers for Medicare and Medicaid Services becomes mandatory by 2022. Through better care coordination, HHAs can provide cost-effective and quality services, remaining viable businesses under the reimbursed rules. To be effective and efficient, the organizational initiatives of HHAs to achieve care coordination can substantially benefit from an analysis and synthesis of the findings reported in the prior studies. Accordingly, this study (i) determined the pressing challenges and opportunities in better coordination of home care services, (ii) identified directions for leveraging information technology (IT) to respond to those challenges and opportunities, and (iii) derived recommendations for the IT-based initiatives of HHAs for improving care coordination. **Methods:** Literature review was adopted as it provides an opportunity to analyze and synthesize findings from a number of studies. PRISMA guidelines were used since they provide a systematic approach. Keywords were developed using the standard definition of coordination by AHRQ which included collaboration, communication, competency, discharge process, and home care. The publications relevant to U.S. based home care was identified by searching Pubmed, SAGE and IEEE databases and 7,423 articles were identified for screening. After examining the titles and abstracts, 30 papers were shortlisted for in-depth study and subsequent qualitative synthesis. **Results:** Top challenges are power imbalance in communication, e.g., home care clinicians sometimes lack confidence in communicating with physicians when clarifications and corrections are needed; lack of priority and attention from physicians and hospitals sharing data and/or information with HHAs, e.g., sharing patient history and medication data too late or not at all; alarm fatigue, e.g., receiving too many requests at once to respond properly; and perceiving visiting clinicians as guests e.g., caregivers not perceiving clinicians as serious medical personnel to share information. Despite the challenges, there are also opportunities: Physicians, although busy, are willing to communicate, e.g., if they are contacted in person, physicians are sharing information though not always using the electronic medium; most clinicians enjoy and would like to continue working in community settings which arguably contributes to a reduction in staff overturn and associated coordination problems; Community resources are available to home care clinicians and their caregivers to aid coordination, e.g., list of shared durable medical equipment available. The directions to leverage IT include: using online training to improve communication and coordination skills, development of a centralized portal for retrieving patient information easily on time without creating alarm fatigue, and social networks to allow caregivers and patients to find information resources. **Discussion/Conclusion:** This literature review revealed that the care coordination issues in home care include but go beyond implementing the IT infrastructure to enable data exchange. There are various directions to leverage IT from training to enabling access to community resources. To maximize the return on investment on IT, future studies can further investigate the nature of home care coordination problems and how to leverage IT to address those problems.