



Project Information?

[Back to Query Form](#)[Print Version](#)

1R18HS024208-01

[DESCRIPTION](#) [DETAILS](#) [RESULTS](#) [HISTORY](#) [SUBPROJECTS](#) [NEARBY PROJECTS](#) [BETA](#) [LINKS](#) [NEWS AND MORE](#)**Project Number:** 1R18HS024208-01**Title:** TRANSFORMING THE MEDICATION REGIMEN REVIEW PROCESS OF HIGH-RISK DRUGS USING A PATIENT-CENTERED TELEMEDICINE-BASED APPROACH TO PREVENT ADVERSE DRUG EVENTS IN THE NURSING HOME**Contact PI / Project Leader:** [KANE-GILL, SANDRA L](#)**Awardee Organization:** UNIVERSITY OF PITTSBURGH AT PITTSBURGH

Abstract Text:

DESCRIPTION (provided by applicant): In response to PA-14-002, we are proposing to conduct a cluster-RCT for a period of a year, to determine the impact of patient-centered telemedicine-based high-risk medication regimen reviews on adverse drug event (ADE) reduction in four nursing homes (NH). The National Action Plan for Adverse Drug Event Prevention identified, the nearly 16,000 NHs, as a clinical setting where adverse drug event (ADE) prevention strategies are lacking for high-risk drug classes including anticoagulants, antidiabetic agents, and opioids. The Office of Inspector General Report estimates that 37% of all harmful adverse events are related to drugs and two-thirds are preventable. A variety of approaches have been taken to minimize the occurrence of ADEs. Federal regulations require that residents' drug regimen should be free from unnecessary drugs (F-Tag 329) and a consultant pharmacist conduct a Medication Regimen Review (MRR) on each resident at least monthly (F-Tag 428). More frequent MRRs are required for residents with additional risk factors, such as receiving high-risk drug classes that place them at a higher chance of developing ADEs. Current ADE prevention strategies are failing to improve medication safety in NH residents because: 1) MRRs are almost always conducted retrospectively; 2) consultant pharmacists are usually not involved in MRR on admission to the NH, and 3) the MRR process is not patient-centered. We propose to address these medication safety gaps by first prospectively identifying NH residents who are either newly admitted with, or subsequently prescribed, a high-risk drug during their NH stay. We will introduce the use of telemedicine to improve timely access to consultant pharmacists who can provide patient-centered MRRs when a high-risk drug is prescribed. Telemedicine will also be used by the consultant pharmacist to directly interact with the resident and engage him/her in education to recognize and prevent ADEs associated with high-risk drugs. Telemedicine has been successfully employed by NHs, but its use is limited to a finite number of patient care issues and has not been used for medication safety. In this study, we will evaluate the effect of pharmacist-led MRRs using patient-centered telemedicine for residents receiving high-risk drugs commonly associated with ADEs. We will also evaluate the residents' satisfaction and healthcare professionals' perception of pharmacist performance with this enhanced consultant pharmacist service. This study will correct a faulty retrospective 30-day MRR and provide a model for more frequent MRR when residents are prescribed a high-risk drug during their stay to prevent ADE occurrence with the innovative use of patient-centered telemedicine technology. The product of this research will be a generalizable electronic medical record-agnostic MRR model including decision support rules, and structured communication tools to optimally execute the consultant pharmacist's role in ADE prevention in the NH.

Public Health Relevance Statement:

PUBLIC HEALTH RELEVANCE: In response to PA-14-002, we are proposing to conduct a cluster-RCT for a period of a year, to determine the impact of patient-centered telemedicine-based high-risk medication regimen reviews on adverse drug event reduction in four nursing homes. The National Action Plan for Adverse Drug Event Prevention identified, the nearly 16,000 NHs, as a clinical setting where adverse drug event prevention strategies are lacking for high-risk drug classes including anticoagulants, antidiabetic agents, and opioids. This study will correct a faulty retrospective 30-day medication regimen review process and provide a model for more frequent medication regimen reviews when residents are prescribed a high-risk drug during their stay to prevent ADE occurrence with the innovative use of patient-centered telemedicine technology.

Project Terms:

No Project Terms available.

Download Readers:

[About RePORT](#) | [FAQs](#) | [Glossary](#) | [Contact Us](#) | [Site Map](#) | [Data Access Policy](#) | [Accessibility Statement](#) | [Privacy Statement](#) | [Disclaimer](#) | [FOIA](#) | [Help Downloading Files](#)

The RePORTER database is available to all public users at <http://exporter.nih.gov/>. As the data are available for bulk download, the RePORTER system reserves the right to block IP addresses that fail to adhere to instructions in the system's robots.txt files or submit requests at a rate that negatively impacts service delivery to other users. RePORTER reserves the right to terminate any automated query to the RePORTER application that negatively affects service delivery to other users.

[Office of Extramural Research](#) | [National Institutes of Health](#) | [U.S. Department of Health and Human Services](#) | [USA.Gov - Government Made Easy](#) | [Grants.Gov](#)

Page Last Updated on September 16, 2016
This site is best viewed with Internet Explorer (8.0 or higher) or Mozilla Firefox (11.0 or higher).

NIH...Turning Discovery Into Health®