

CAREKINESIS®

Case Study



THE EVERGREENS®
Where Community Lives®
A Continuing Care Retirement Community

Innovative PACE Medication Management and Pharmacogenomic Services:
Solutions for a Continuing Care Retirement Community Organization

The Partner

The Evergreens, a Continuing Care Retirement Community (CCRC), offers comprehensive medical services to 200+ residents. Many residents join the community immediately after retirement and enjoy freedom from the day-to-day chores that the Evergreens manages for them. The Evergreens contacted CareKinesis with the goal of offering a medication safety initiative for its residents.

The Challenge

Staying healthy allows Evergreens residents to maintain the quality of life they've always enjoyed. Therefore, access to effective medical treatment, resulting in minimal medication-related problems, is a significant benefit of living in a CCRC. Many residents have developed relationships with community-based specialists, regardless of whether their primary care provider (PCP) is community-based or practices onsite at the Evergreens Clinic. Several residents also use more than one pharmacy for their medication needs.

However, several challenges exist that impact the ability to identify and mitigate the risk for potential medication-related problems. Because medical records among these community-based PCPs, specialists, and pharmacies are not shared, it is a challenge to monitor drug-drug and multi-drug interactions. Thus, residents are at risk for potential adverse drug events (ADEs) and lack of medication efficacy.

Medication efficacy and the likelihood of ADEs can also be impacted by a person's DNA. A pharmacogenomic (PGx) panel of drug-metabolizing enzymes can reveal how a person will react to certain medications. PGx tests provide information about the genes responsible for eliminating the majority of medications from the body. These tests can be easily completed with a cheek swab. This personalized medication safety service can help make CCRC residents' medication regimens more precise and avoid the frustrations of trial-and-error prescribing, keeping them in the residential area of the CCRC for as long as possible.

The Details

First, medication reconciliations and Comprehensive Medication Reviews (CMRs) were completed. Certified pharmacy technicians performed a thorough medication reconciliation with each participating resident to verify which medication he/she was taking on a regular basis. Administration of vitamins, herbal supplements, and other over-the-counter products were also reviewed. The pharmacists completed a CMR for each participant to assess the risk of adverse effects, especially those due to underlying drug-drug interactions. These reviews were first discussed with the individual participant's PCP, then the pharmacist met with participants to review potential medication adjustments.

Next, PGx tests were administered, testing genes that determine response to medications. Each participant's PGx information was incorporated into the CMR, and additional recommendations were made to the PCP for monitoring and potential changes in therapy.

Finally, meetings between each resident and the pharmacist were held to discuss medication changes, PGx results, and plans for how this information could influence future medication decisions.



At a Glance

The Evergreens
309 Bridgeboro Rd
Moorestown, NJ
m.evergreens.org

Challenges

- Residents use more than one pharmacy and specialist, making it difficult to monitor multi-drug interactions
- PGx tests not offered

Solutions

- Medication reconciliations and CMRs
- PGx tests administered to participants
- Residents meet with the pharmacists to discuss recommendations to optimize their medication regimen using PGx data

Results

- Personalized medication regimen using PGx data to reduce trial-and-error prescribing
- Identified drug-drug and multi-drug interactions, including recommendations for alternative therapies
- Improved patient understanding of medication regimen

"Medication-related problems are the fourth leading cause of death in the United States. Offering a comprehensive personalized Medication Risk Mitigation® program helps residents of Continuing Care Residential Communities and other retired living programs live longer, healthier lives by avoiding preventable medication-related adverse drug events."

Calvin H. Knowlton, MDiv, PhD
CEO, Tabula Rasa HealthCare

Conclusion

All residents who completed PGx testing felt that it had an impact on their medication regimen. Several residents intended to share their newfound PGx information with their specialist providers. Of the residents who participated, 86% were found to have at least one drug-drug interaction, and some with multi-drug interactions. Recommendations for alternative therapies were made by a pharmacist board-certified in geriatrics, where appropriate. All of the participants felt the initiative greatly improved the safety of their medication regimen, and several participants intend to share their newfound PGx information with their specialist providers as to avoid future drug-drug and multi-drug interactions.

Overall, participant survey respondents reported that they would recommend this program to other participants and look forward to participating in future offerings.

To learn how a Comprehensive Medication Program with PGx can be beneficial to your program, call 888-9-PharmD or email info@carekinesis.com.

