Massachusetts General Hospital
Founding Member, Mass General Brigham

Geriatric Practice Leadership Institute (GPLI) Final Project

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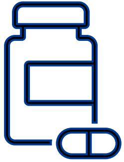
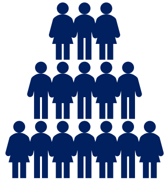
HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

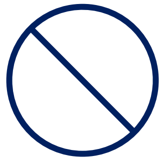
Problem & Evidence



- Problem: Polypharmacy in Geriatric Patients

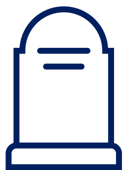


- 14% of US population are older adults; older adults consume
- ~ 30% of prescription medications &
- ~ 50% of OTC medications



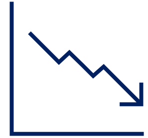
- 26-59% of older adults are non-adherent w/ medications

- 33-59% of drug-related admissions result from non-adherence
- Hospitalization rate for ADEs in older adults = 7x higher than adults < 65 y/o
- 10-30% of admissions for older adults are medication related

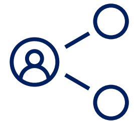


- 7,000 + deaths per year from ADEs

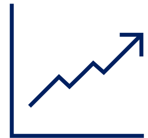
Goals & Objectives



- To reduce polypharmacy for patients within MGH Geriatric Medicine by incorporating VIONE Model into medication review during visits



- To implement 4 Ms framework into medication review – shared decision-making strategy to identify what matters most in relation to polypharmacy



- To increase compliance and patient/provider satisfaction

- To reduce medication burden and errors

Plan – Do – Study – Act: Cycle One

CYCLE ONE	• To help reduce polypharmacy for patients within MGH Geriatric Medicine
PLAN/AIM	• To create a standardized approach for our clinicians to review and deprescribe medications that are potentially harmful or no longer required in partnership with patients/caregivers. • We decided to trial VIONE deprescribing tool as it incorporated provider and patient shared decision making and understanding medications based on how vital they are vs important for QOL vs optional vs not indicated.
PREDICT	• Patient/caregiver engagement and empowerment, counseling and better understanding regarding their medications, reduce medication burden, reduce risk of geriatric syndromes/drug interactions, reduce financial costs, optimize 4 M's. • **Measures used for assessing prediction:** create a deprescribing list on Microsoft Teams, enter patient information, total # of medications de-prescribed.
DO	• MDs and NPs to schedule 60 minute visits for patients on 15 or more medications for a dedicated visit to complete medication review using VIONE tool
STUDY	• Quite challenging for providers to do on patients with extensive medication lists: time consuming, patient vs provider perspective sometimes differed on different medications, not all were open to med review, virtual visits were challenging to complete VIONE tool.
ACT	• VIONE tool to be used on patients based on provider discretion

Plan – Do – Study – Act: Cycle Two

CYCLE TWO	• To help reduce polypharmacy for patients within MGH Geriatric Medicine
PLAN/AIM	• To continue to use VIONE deprescribing tool with patients whom the clinician identified as taking many high-risk medications or if patient expressed desire to reduce their medication burden • **Who will do it:** MDs and NPs to complete during any visit type such as annual wellness, post-hospitalization visits or follow up visits. Administrative team to be informed ahead of the visit to remind patients to bring in medication bottles to the visit.
PREDICT	• Patients will have a better understanding of their medications and understand why they are prescribed particular medications. Medication list will be updated for accuracy. Inappropriate medications will be discontinued. Each medication patient is on has an indication. • **Measures used for assessing prediction:** providers will enter data into a deprescribing list on Microsoft Teams (enter patient information, total # of medications de-prescribed) and patient will complete a brief survey after performing medication reconciliation to capture their feedback regarding the experience.
DO	• Patient/caregiver forgot to bring their medication bottles; patient brought three different medication lists which didn't match with the list in EMR. Patient brought in their pill box but didn't know what medications were in there. Some patients found it helpful to do a thorough med review. Time consuming. Limited patient/caregiver understanding of the purpose of the med review.
STUDY	• Our observation is that there is a bigger medication problem than we had originally anticipated. We had started off trying to reduce the total # of medications but we are observing that EPIC med list is not always accurate with what the patient is actually taking at home.
ACT	• Pt is to receive a copy of their medication list prior to the visit and will be asked to review their medications, identify what is important (ex: vital, QOL, optional, not indicated) from their perspective. The list will then be reviewed with the provider during the visit.

Plan – Do – Study – Act: Cycle Three

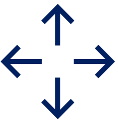
CYCLE TWO	• To help reduce polypharmacy for patients within MGH Geriatric Medicine
PLAN/AIM	• To continue to use VIONE deprescribing tool with patients whom the clinician identified as taking many high-risk medications or if the patient expressed desire to reduce their medication burden.
PREDICT	• Patient/caregiver would have reviewed the medication list ahead of the visit and thought about medication indication and how important they are for them.
DO	• Instructions and a copy of current medication list from the EMR were handed out to the patients in the waiting room before their visit. • **Measures used for assessing prediction:** providers will enter data into a deprescribing list on Microsoft Teams (enter patient information, total # of medications de-prescribed) and patient will complete a brief survey after performing medication reconciliation to capture their feedback regarding the experience.
STUDY	• Patients did not understand or felt overwhelmed after reading the instructions as to the purpose of the medication review and what they were supposed to do. Patients did not fully understand the benefit.
ACT	• Eliminate the medication handout ahead of the visit. Challenges included patient understanding of the purpose, limited time in the waiting room, sometimes patients were running late. • Continue to use VIONE tool when appropriate.

Lessons Learned

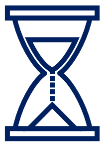
- Patients and providers have different opinions on what medications are most important for their care. (ex: provider feels furosemide is most important in a patient with CHF; however, patient wants to skip this due to frequent urination. Patient may find their bowel meds most important for quality of life).

- Sometimes there is reluctance from patients or families about deprescribing meds. Change is hard! Not always accepted or well received.

- There is a time and a place when a full medication review is appropriate, and this was often trumped by medical needs.



- Patients are not always transparent on meds they are taking; often excluding OTC supplements. Alternatively, are not aware as to what meds they take or why!

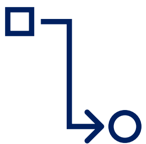


- The pressures of busy schedules/time constraints of clinic time affected our ability to perform VIONE visits.

Next Steps

- Increase the number of patients we complete VIONE on, gather more data (both qualitative and quantitative) to better inform process improvement opportunities

- Socialize VIONE and uptrain additional providers on model to increase access to patients. We hope to scale the VIONE model. Increased socialization of the VIONE model will hopefully lead to less reluctance from patients/caregivers and less concern surrounding deprescribing.



- Create a user-friendly process for providers to complete VIONE in a timely manner to make it easier for providers to complete medication reviews during routine appointments

References

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