Medication Reduction Policy in Two Long Term Care Facilities

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Background

In the United States, long term care patients are very vulnerable to complications related to medication use.

- 56% of ED visits were with residents taking >9 medications daily, of that 50% were preventable ED visits. (1)
- 40% of long term care patients have at least one inappropriate medication (10,8).
- 20% of hospital readmissions are related to medication problems (9).
- Adverse drug reactions (ADR) are the 5th leading cause of death in older adults.
- ADR are 5% of health care expenditures or $37.6 Billion to $50.0 Billion annually (7).
- 760,000 adverse drug events occur in long term care facilities annually (13).

The majority of medications used were meant to be short term and inappropriate medications.

Purpose

A Medication Reduction Policy was created based on the work by Dr. Haque at Michigan State University. The ARMOR tool assists in the systematic assessment of a resident’s medication regimen. The goal is not just to reduce the overall number of medications but to minimize redundancy, duplication, and inappropriate medications. (4, 6, 10, 13, 14)

Methods

Medication Reduction Policy meetings are set up every other week. Patients charts are reviewed using the ARMOR tool adapted to have decisions documented directly on the tool. Participants include nurse manager, Geriatric Clinical Nurse Specialist, and pharmacist. Physician and social worker assist when available.

- Average medications per patient 11.6
- Long Term Care (LTC) <9 medications 20.8%, >9 medications 79.2%
- Rehabilitation (Rehab) <9 medications 46%, >9 medications 54%
- Average cost per patient $6900 per month
- Average medications per patient 11.4
- LTC <9 medications 29.3%, >9 medications 70.6%
- Rehabilitation <9 medications 46%, >9 medications 54%
- Average cost per patient $5000 per month

Impact on functional status

- Drug-drug interactions.
- Drug-disease interactions.
- Drug-to-disease interactions.
- Drug-body interactions (pharmacodynamics).
- Drug-to-disease interactions (pharmacokinetics).
- Patient compliance.
- Clinical status (clinical exam by physician for compensation of pre-existing diseases).
- Families that are reluctant to stop medications, change treatment regimes.

Future work

The pilot will continue and will be monitored for success quarterly. Staffing and funding for this work continues to be a challenge.

- Medication Reduction Policy successfully implemented in 2011
- Create schedule in the institution to not overwhelm staff
- Average number of medications per resident decreased from current numbers
- Falls per resident decreased from current numbers
- Emergency Department transfers and hospital admissions decreased
- Cost of medications per resident decreased
- Extend policy to skilled nursing patients and short term rehab
- Improved patient and family satisfaction

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References