

Silver Star Medication Review Process: Influencing Practice in the Blood and Marrow Transplant Unit

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★ Introduction

The Adult Blood and Marrow Transplant (ABMT) program at Duke University Medical Center in Durham, NC performs around 300 blood and marrow transplants yearly. The ABMT patient population age 65 and older is around 25%. Pre-transplant therapies and post-transplant complications commonly cause nausea and vomiting requiring aggressive symptom management with medications classified as high risk by the Beers Criteria, e.g. diphenhydramine, lorazepam, and prochlorperazine. The Silver Star medication review process (SSMRP) was initiated by a GRN as a strategy to raise awareness of potential medication related issues in older ABMT patients.

★ Method

A team representing nursing, pharmacy, and leadership integrated the SSMRP in the ABMT unit. Steps include:

1. Star is placed on room assignment board and outside the room of patients 65 and older.
2. Patients & families receive written information regarding the purpose of the silver star.
3. At change of shift safety rounds oncoming nurses are notified of silver star patients.
4. At bedside handoff nurses review medications, with emphasis on PRN medications.
5. At daily multidisciplinary rounds, care nurse reviews medications with ABMT team to consider alternatives/dose adjustments.

★ Results

Records of patients age 65 or older were reviewed over a four month period at three time points: pre-rollout, 6 months, and 18 months post rollout. The following medication ordering patterns emerged:

1. *Lorazepam*: use of 0.5 mg as a percentage of all orders increased from 30% pre-rollout to 36% at 6 months and 52% at 18 months post rollout.
2. *Prochlorperazine*: use of 5 mg increased from 3% pre-rollout to 19% at 6 months and 35% at 18 months post rollout.
3. *Diphenhydramine*: no change

★ Discussion

The SSMRP has had a positive impact on prescribing practices within the ABMT unit. The use of lower doses of two of three monitored high risk medications (lorazepam and prochlorperazine) has steadily increased over 18 months.

★ Lessons learned and next steps

1. Dedicated, seasoned champion makes all the difference.
2. Interdisciplinary buy-in is crucial.
3. Drift occurs and requires ongoing upkeep.
4. In the coming months, patient outcomes (delirium episodes, length of stay) will be evaluated.
5. The SSMRP will be adapted for rollout in the day hospital; many patients are seen strictly as outpatients.