BACKGROUND

**Medication Reconciliation** (Med Rec) is the practice of obtaining the most accurate list of medications for all patients at each transition of care, including admission, transfer & discharge. Transfer of this information to the next provider is necessary to reduce (preferably eliminate) medication-related problems (MRP’s). This is desirable practice as these errors have the potential to cause harm.

Med Rec is becoming standard of practice across in both US and Canada and is an accreditation requirement. Many institutions and outpatient facilities have successfully implemented Med Rec, but very little concerning the impact in the palliative setting. This study explored the impact of Med Rec in the hospice setting.

**Setting:** This pilot study was designed to determine the impact of Med Rec in a hospice setting in Maryland. The patients were still at home, in assisted living, nursing home, or rehab and had a variety of diagnoses (see Table 1).

**Population:** Most common non-malignant dx was failure to thrive, debility or dementia. Lung cancer was the prevalent malignant diagnosis.

Hospice patients are a unique and high-risk population who use multiple meds and who experience physiologic, pharmacodynamic and pharmacokinetic changes as their disease progresses.

METHODOLOGY

Data was collected in Jan 2007 from two hospice programs, providing multidisciplinary services. Pharmacy services include provision of continuous medication review, pharmaceutical information and evaluation for cost-effectiveness.

Two hospices involved in the study had 190 and 87 patients respectively.

Inclusion criteria:

Newly admitted hospice patient, over 18 yrs, who (or caregivers) spoke English and were cognitively intact. Mon-Fri the pharmacist checked the admission list, discussed eligibility with nurse manager and consent was obtained.

Eligible patients (or caregivers) were interviewed by the pharmacist and a complete medication history obtained. All medications included (Rx, OTC, CAM’s).

All allergy info was collected. The pharmacist was blinded to the admission orders to reduce bias.

Medication errors were defined as:
Errors of omission (EOM): meds inadvertently omitted
Errors of commission (included meds patient did not take)
Incomplete/inaccurate (wrong dose, route, frequency)
Inconsistent allergy info
Meds started between admission & time of Med Rec, were not included.

RESULTS
58 patients enrolled: (32 from A and 26 from B)
Patient characteristics and results between the hospices were not homogeneous.
504 errors were identified (does not state our of how many) however calculates as 1044 orders and nearly 50% are discrepancies.

Error of omission Rx meds = 39% (analgesics, anti-emetics, anti-spasmodics, anxiolytics, laxatives & oxygen.
Error of omission non-Rx meds 35% (wound care items & laxatives) Dietary supplements, herbals, and vitamins were not omitted as often as expected.

The majority of discrepancies originated from admission orders, not the pharmacist obtained med list.
Every patient has at least one discrepancy
Average = 8.7 discrepancies/patient (was no different between subgroups) but more were discovered an the group living at home than those in facilities.

The discrepancies were scrutinized for potential drug interactions.
135 interactions were identified from the admission orders which rose to 190 with the pharmacist derived med list.

DISCUSSION
Nearly 50% of the med orders were deemed as discrepancies, creating a large potential for harm. These findings are consistent with other centers. Pharmacists usually find more inconsistencies, identified more non-Rx medications, communicated more with other pharmacists (community) and updated allergy info more quickly. 22% deemed to cause harm in hospital and 59% if allowed to continue upon discharge.
The authors emphasized that it was not the purpose of the study to determine which profession was more adept at Med Rec

LIMITATIONS
Patient recall bias, care giver recall bias are limitations.
Statistics did not include new meds at admission or if discrepancies corrected in that interim were counted.
Patients were enrolled by convinience and may not be representative of the population.
Methodology was clear but was not sure why the authors discriminated between the two hospices.
Not conducted as an RCT: Med Rec vs institutional standard of care.

**STRENGTHS**
Study showed similar results to what has been reported thus far. It was a pilot study designed to demonstrate a need for Med rec which was achieved. The authors concluded their current practice of documentation taking is inadequate and the second medication history, though not foolproof, was significantly more robust.

**RELEVANCE TO PALLIATIVE CARE**
It was stated that literature regarding Med Rec in the palliative setting was scarce. This was a palliative population with similar high risk features as our own. What has become abundantly clear, however, is a need for assessment of the impact of Med Rec in the palliative care setting which gives us the opportunity to report our Med Rec implementation experience in the literature.