Identifying Post-Acute Medication Discrepancies in Community Dwelling Older Adults: A New Tool.

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## **ABSTRACT**

**Background:** Despite a national focus on the problem of medication safety, few studies have examined the frequency, causes, and factors contributing to discrepancies between the medications prescribed in acute care settings and what elderly patients (age  $\geq$ 65 years) actually take after their discharge.

**Objective:** The aims of this study were to develop a new instrument, the Medication Discrepancy Tool (MDT), for use by multiple practitioners across the continuum of care and to assess the MDT's reliability among nurses, pharmacists, and physicians, all of whom play a part in the formulation and administration of medication regimens for patients in transition.

**Methods:** The study was conducted in a vertically integrated health care system and at a geriatric clinic in an academic health center. We applied the MDT to a series of 20 clinical vignettes based on actual cases involving older patients discharged from a community hospital to home. The interrater reliability of the MDT was assessed by asking clinicians (2 home health care nurses, 2 doctoral-trained geriatric pharmacists, and 2 physicians) to use this tool to rate the clinical vignettes. Reliability comparisons were then made within and across clinical disciplines. Intrarater reliability was also determined.

**Results:** Across all 3 clinical disciplines, the mean interrater reliability ( $\kappa$ ) for the 20 vignettes was 0.56 (15% low agreement, 80% good agreement, and 5% excellent agreement). Within disciplines, the  $\kappa$  statistic was as follows: nurses, 0.68; pharmacists, 0.50; and physicians, 0.64. Intrarater reliability ranged from 0.58 to 0.69.

**Conclusions**: By capturing transition-related medication discrepancies, the MDT fills an important gap in national efforts to promote patient safety. MDT items are actionable at both the patient and system level, suggesting that this tool could be used to foster continuous quality improvement efforts.