Geriatric Emergency Department: RN screening and intervention to improve care for older adults at 10 legacy Aurora sites

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Background
- Older adults are a rapidly growing population that have unique & complex presentations in the ED. (Perry, 2018)
- In 2018, 14 Aurora EDs had 403,434 ED visits, of which 97,556 (24%) were ≥85
- The unique needs of older adults challenge traditional ED paradigms (Melady, 2018).
- About 21% are at risk for adverse health event in the following month. 10% return to the ED, 11% are hospitalized, 1.4% go to a SNF, and 2% die.
- ED nurses are challenged with deficits in training, screening & assessments tools, ED workflow, and resources to effectively and safely care for older adults (Wolf, 2019).
- The Geri ED is an interprofessional program that identifies high risk elderly patients and establishes a network of referrals and care throughout the system to enhance population health and create significant cost reductions by decreasing ED & hospital utilization.

Objective
- Population: ≥65 year old community dwelling, presenting to ED and discharged to home at Aurora Sheboygan Memorial Med Center.
- Intervention: ISAR screen by RN, referral to RN CM patient completed referral.
- Comparison: ≥65 year old, ISAR score ≥2 with completed RN CM referral compared to those who did not complete referral.
- Outcome: 72hrs ED & 30 day ED revisits.
- Time: Jan-June 2017

Approach
- Interprofessional team approach to continuous improvement (IHI model).
- Focus on workforce development: education, workflow, standardized practice.
- Leverage Technology: documentation and reporting infrastructure to support process and outcomes measurement.
- Achieve Geriatric ED Accreditation (1st national cohort, May 2018).

Synthesis of Evidence
- Older adults account for a disproportionate number of potentially avoidable patient hospital admissions from the ED at 46%. (Stranges, 2010)
- 2018 Older adults had an admission rate of 44% vs 25% for all adults (14 Aurora ED sites)
- Approximately one out of every 10 hospital admissions is potentially avoidable, and the majority (60%) of those admissions are for patients ≥65.
- Focus on patients seen in ED but discharged to home to change patient’s health trajectory.
- Population Health: Partner with Aurora ACO MSSP3

Practice Change
- RN screen all ≥65 patients in ED with ISAR tool.
- New EPIC documentation and data reporting.
- RN coordinates with Provider.
- RN CM coordinates post-ED services (PCP, Homecare, Community, Follow up calls, etc).
- Geri ED team reviews process and outcome to continue to continuously improve workflow.
- Discipline specific and team education (biannual Booster sessions).
- Development of new clinical protocols with system standardized approach.
- Measures: ED revisits, Patient Satisfaction, Hospital admission rates, Cost savings.
- Start January 2015, new sites 2016, 2017, 2019

Methodology
- Data from ASMMC ED for Jan-June 2017.
- Intervention patient group (n=149):
  - ≥65 years of age
  - ≥2 ISAR score
  - Completed a referral from the ED CM
- A matched Control group (n=149) was generated:
  - Matched ISAR score distribution, age, and gender.
  - Did not complete a referral.
- Outcome variables that were evaluated were:
  - Return to ED within 72 hours any site.
  - Return to ED within 30 days any site.

Results
- The ED patients at risk who had an ED Case Manager completed RN CM referral had fewer return ED visits within a 30 day time frame (30 vs 49 revisits, 20% vs 33% = 49% reduction or 13% absolute risk reduction in 30 day ED revisits).

Methodology (continued)

Outcomes
- Intervention group had 19 fewer ED visits within 30 days (30 vs 49).
- Resulting in $38,000 savings for 149 patients.
- Did not complete a referral.
- $76,000 annualized savings.
- The multi-component RN-MD-CM intervention and standardized system approach highlights the effect of collaboration on workflow and processes.
- Manifestation of cultural changes in RN & MD awareness, skills, & teamwork in identifying and treating vulnerable older adults.
- Manual tracking of intervention vs control group, require IT solutions to automate and increase productivity.
- Limitation include study at a single Geri ED site and patient bias in completing RM CM referrals.

Implications for Practice
- The Geri ED RN CM intervention results in a significant improvement for older adults and reduces cost to the system.
- Due to a standardized program between all 10 sites, potential cost savings could be much larger.
- Additional study to understand the effect on hospital admission rate.
- Vision to have Accredited Geri ED as standard of care in all 26 AAH EDs due to proven scalability and outcomes.
- Partnership with ACO and Population Health provides additional opportunities to coordinate care beyond ED into PCP, homecare, & community.
- Continuous improvement leading to development of new clinical protocols (Falls, Palliative Care, Delirium, Urinary Cath).

References

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Figure 1. Description of patient population during study period

Figure 2. Comparison of Intervention Group and Control group on ED revisit within 30 days.