



UNIVERSITY *of* MARYLAND
UPPER CHESAPEAKE HEALTH

Telehealth Program

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Problem

1 in **6** hospital admissions result in a readmission within 30 days of discharge¹

25% Medicare patients D/C'd from the acute care setting to a SNF were readmitted within 30 days²

20% of SNF readmissions considered avoidable, many occur within days of SNF admission³

¹Source: Medicare Payment Advisory Commission (U.S.) 2007

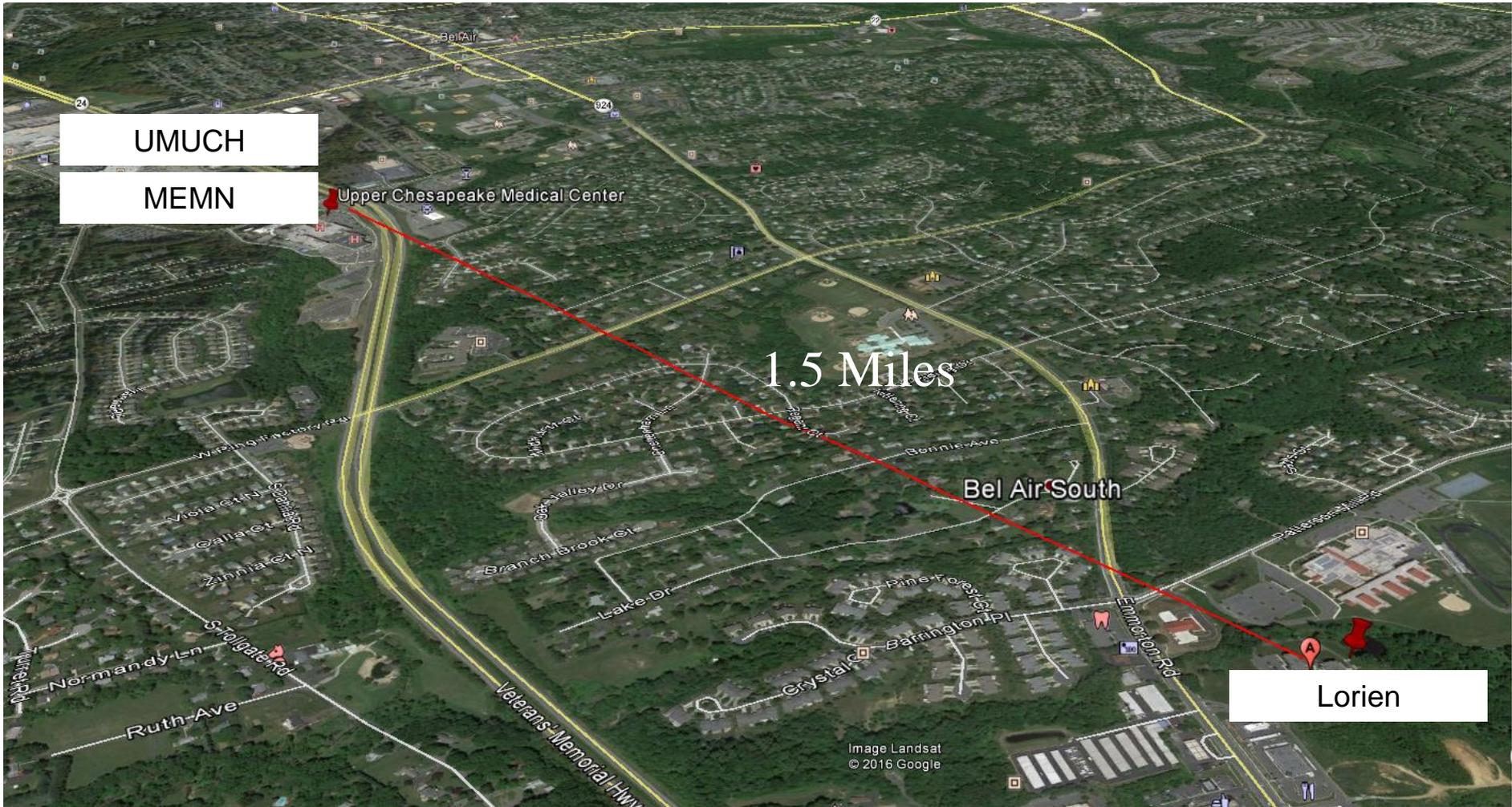
²Levinson, D. R. (2013). "Medicare Nursing Home Resident Hospitalization Rates Merit Additional Monitoring." Department of Health and Human Services Office of Inspector General.

³Ouslander, J. G., I. Naharci, et al. (2016). "Root Cause Analyses of Transfers of Skilled Nursing Facility Patients to Acute Hospitals: Lessons Learned for Reducing Unnecessary Hospitalizations." J Am Med Dir Assoc **17**(3): 256-262.

Telehealth GOAL

Reduce *avoidable* readmission from Skilled Nursing Facilities to Acute Care
Hospitals by **25%**

Telehealth Participants



Telehealth Participants



Telehealth Process

Detectable Change in Patient Condition



- Patient transported to Lorien Telehealth Exam Room
- Patient connected to Vital Sign monitoring equipment

General Description

Patient Connected to LifeBot



- LifeBot System transmits Vitals and collects narrative data viewable by ED provider
- Blood pressure, Pulse Ox, Heart Rate, EKG

General Description

Protocol Initiated for Point of Care Tests



- Managed by Citrano Labs
- Tests include Hematocrit, White Blood Cell, Urine Analysis
- Point of care results entered into LifeBot
- Results also helpful to patient's attending provider

General Description

Connection to ED Provider



- ED Provider Controls Multiple Cameras
- Reviews Vitals, Narrative, Labs
- Conducts Patient Interview and Assessment

Goal: Maintain treatment in the most appropriate location and reduce avoidable utilization

General Description

ED Provider Clinical Assessment



- Two-way Video Allows for Neurologic Testing, Establishing Baseline Function, Wound Checking
- Ultrasound Capabilities
- Stethoscope

General Description

ED Provider Renders Clinical Decision



- Patient Remains at Lorien on Current Treatment
- Patient Remains at Lorien on New Treatment Plan with IV Fluids and Medications the same as at UCMC
- Patient Transferred to Hospital

Impact on Quality

30-day Readmissions	34%
Hospital Admissions	15%
ED Transfers	19%

- Program resulted in 42 avoided trips to the UMUCH ED
- Patient and Provider satisfaction measured

Impact on Cost (Not Charges!)

UMUCH finance team estimates hospital expense savings of:

- \$128 for each ED visit avoided
- \$445 for each patient day avoided
(incremental reductions in imaging, labs, patient care staff hours)
- Projected Expense Avoidance of \$70,000

Pilot team estimates payer cost savings of ALS Transport of:

- \$650-\$750 per Ambulance Trip avoided
- Approximate payer savings of \$25,000

Plans Expansion

- Partnership is expanding to two remaining Harford County Lorient locations – Riverside and Havre de Grace
- UMUCH sharing the capital cost
- MEMN – UMUCH agreed to payment process that allows providers to prioritize “virtual patients” as equals to patients physically in the ED