Title: Launching an In Home alternative to Select Emergency Department Visits Across an Integrated Delivery and Finance System

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Background: UPMC is an Integrated Delivery and Finance System (IDFS) with an insurance and provider arm that work together to improve the lives of member-patients. UPMC Innovative Homecare Solutions (UIHS) was created to provide in-home solutions to UPMC patients who were covered by UPMC Insurance Services division. In response to the overcrowding of emergency departments and inpatient units across our system from COVID-19, UIHS developed a program: In Home Urgent Care Plus to serve patients with acute needs in their home and avoid ED and inpatient utilization.

Objective: To implement In Home Urgent Care Plus thus achieving the following objectives:

- Improve patient satisfaction through treatment in the home
- Decrease unnecessary emergency department (ED) visits and admission which will then
 - Increase capacity of emergency and inpatient beds in Allegheny County UPMC facilities
- Increase access for patients while maintaining or improving patient readmission rates
- Achieve a favorable financial impact within the IDFS

Planning/Research: To initiate this new treatment program, UIHS hired a medical director, hourly hospitalists, 9 FTEs of advanced care paramedics (assuming eventual 24/7 coverage), a medic manager, and a program director. The planning team included leadership across the entire IDFS including ED and hospitalist administration, compliance and regulatory, health information management, information technology, electronic medical record, marketing, and others. We partnered with specialty services and vendors to round out our offerings including pharmacy (for administered and leave behind medications), lab (for point of care and drop off labs), radiology, and durable medical equipment (for oxygen). Patient qualifications were established including UPMC Health Plan membership, 18 y/o or older, residence in Allegheny County, and a provider (advanced practice provider or physician) recommendation to visit the emergency department. Exclusion criteria were used including needing emergent care within 3 hours or complaints that could be managed in a clinic or urgent care setting. Extensive relationship management was needed to establish appropriate and informed referral sources across the health system including UPMC's largest primary care group of 900+ providers, our tele-provider call in line, Advanced Illness Care (UPMC's palliative care service), and Heart and Vascular Institute providers. Analysis of ED utilization and nurse telephone triage utilization was taken to establish hours of service for go live including 7 day a week coverage from 7a-11p.

Implementation Methods: A waterfall implementation method was utilized including a standard framework of requirements establishment, design, implementation, verification and testing, and maintenance. Implementation was delayed at several points for various factors, and our fully hired medic staff were put to work assisting in program implementation including workflow, documentation, and marketing development and training, as well as placing equipment and pharmacy orders. There was a soft launch on July 21st, 2021, and a full launch on September 1st, 2021. Our goal at launch was to see two patients a day, with scaling for increased volume in later months.

Results: In the 4 months since launch, the In Home Urgent Care Plus team has met all of our operational goals including:

Operational Successes:

- 135 patient referrals translating into 116 completed visits
- Median time to visit is 1:33
- Three new referral sources to go live since launch
- Planning for two additional referral sources

Outcome Metric Successes:

- 50% of patients received leave behind medications
- 50% of patients received point of care lab testing
- 92% patients stayed home after an In Home Urgent Care Plus visit

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