

Engaging High Utilizers: An Opportunity to Collaborate with Brown Emergency Medicine

Improving Health Care Outcomes

Reducing Health Care Costs

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1-5% of the patient population seen in the ED account for up to **18%** of all annual ED visits and **40%** of emergency healthcare costs





Substance use disorders



Mental and behavioral health comorbidities



Complex chronic medical conditions: COPD, diabetes, heart failure



Changing social needs: housing insecurity, food insecurity, legal issues, access to care

The background of the slide is a close-up, slightly angled view of several stacks of US one hundred dollar bills. The bills are fanned out, showing the portrait of Benjamin Franklin and the large number '100'. Some bills are held together by yellow rubber bands. The stacks are arranged in a way that creates a sense of depth and volume, with some bills in the foreground and others receding into the background. The lighting is bright, highlighting the texture of the paper and the intricate details of the currency.

High utilization

Frequent ED visits

Frequent hospital admissions

Disproportionate cost

Poor health outcomes

Increased risk overdose

Increased mortality

No standardized approach

- Provider dissatisfaction
- Poor patient outcomes
- Poor communication
- Overlapping services



Interdisciplinary team

Community Health Workers

Social Workers

Case Managers

Nurses

Physicians

Bridge



Project Overview



CHWs community based advocates for 20-30 high utilizers



Focus on increased adherence to outpt appointments, coordination with community resources



Track pre/post intervention health care encounters and costs as well as patient centered outcomes



Anticipate decreased ED utilization, decreased hospital admissions, decreased health care costs, improved outpatient visit compliance, improved health outcomes

Strengths

RIH DOH Community Health Worker Certification program

- Focused training, local expertise

Lifespan Community Health Institute

- Administrative and operational support

Brown Emergency Medicine

- Medical oversight and academic vision

May 1 2018-
April 30 2019

Patients with >6 visits to RIH and/or TMH ED

2,751
patients

28,383
encounters

Utilization Brackets

6-30 visits: 2669

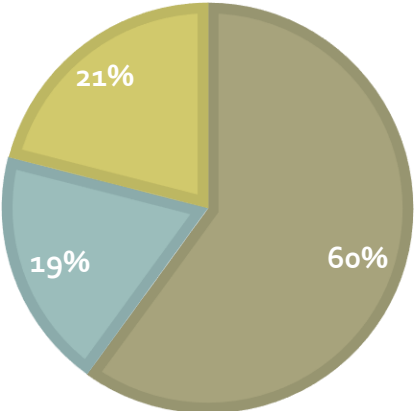
30-60 visits: 54

60+ visits: 26

Demographics

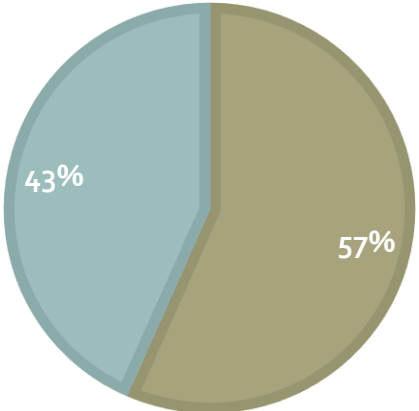
RACE

■ White ■ Black ■ Other



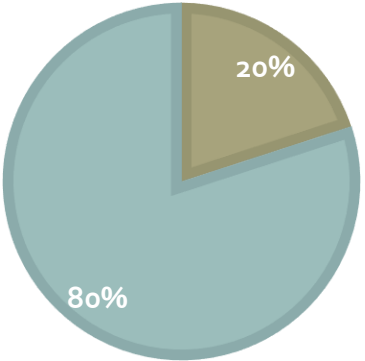
GENDER

■ Male ■ Female

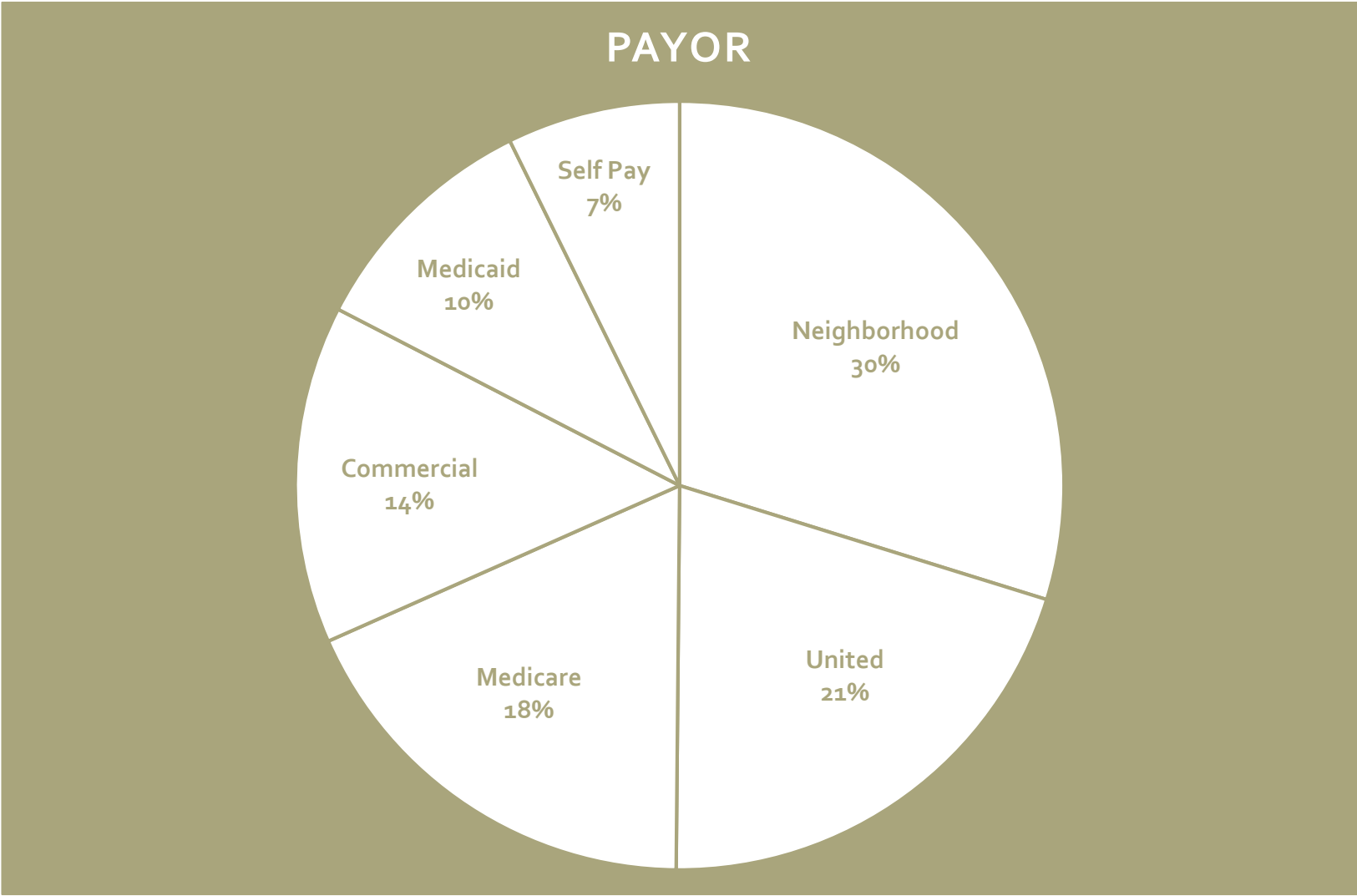


ETHNICITY

■ Hispanic ■ Non-Hispanic

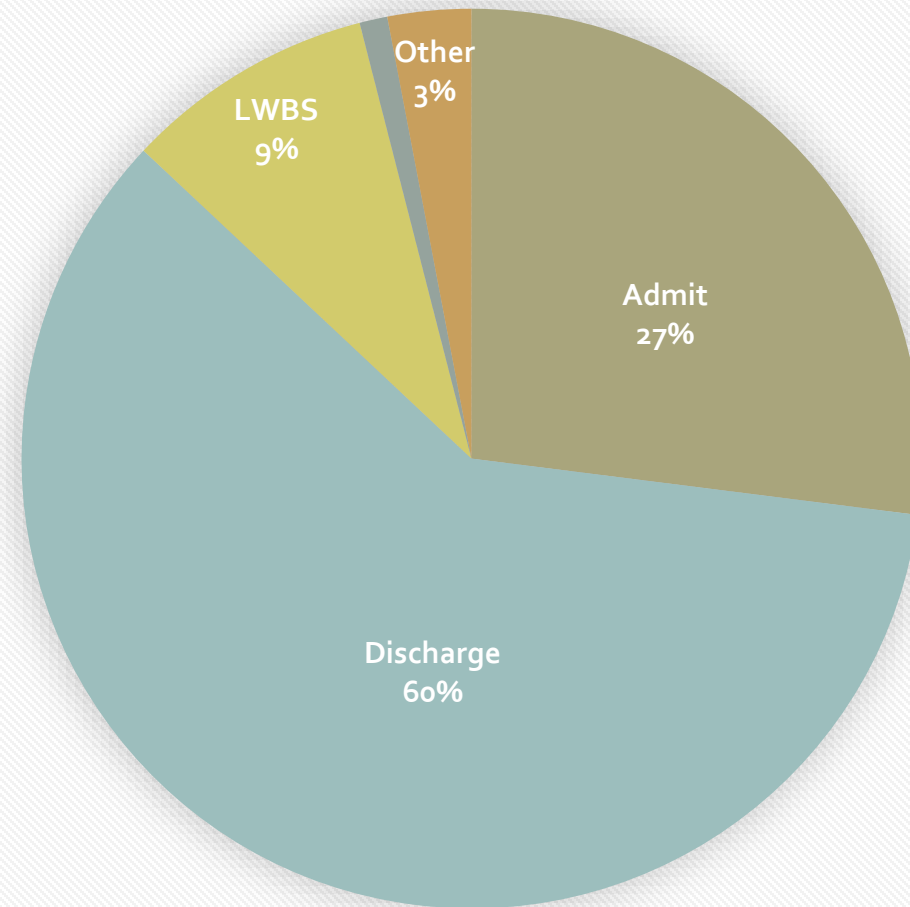


Payor Distribution



Patient Disposition

Disposition



■ Admit ■ Discharge ■ LWBS ■ AMA ■ Other

Project Overview



Data analysis/population health



CHWs direct patient advocacy and EHR support



Track pre/post intervention health care encounters and costs as well as patient centered outcomes



Anticipate decreased ED utilization, decreased hospital admissions, decreased health care costs, improved outpatient visit compliance, improved health outcomes

Data Analysis: Future State



Comorbid medical, mental health and substance use disorders



Social determinants of health



Evaluate practice variability within ED



Existing outpatient resources

CHW impact



Community based advocacy:
20-30 patients/CHW



EPIC care plan optimization:
100+ patients/CHW

Cost Analysis

Projected decrease in hospital admissions, ED encounters

Based on current data:

- 28,383 encounters
- 27% admission rate, 60% discharge
- 7,663 admissions annually from high utilizer population
- \$2164 avg daily cost hospital admission → **\$16.6 M annually**
- 17,000 discharge visits at \$500 → **\$8.5M annually**

- Decrease in HU admissions and ED visits by 5% would translate into **\$1.25M saved**

Program Costs



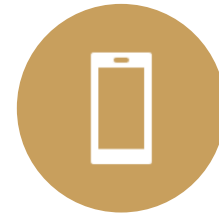
CHW salary and benefit: \$100,000



Physician oversight: \$80,000



Transportation: \$12,000



Phones: \$8,000

Opportunities



Full funding support: BEM willing to collaborate with payors or ACOs to focus on targeted patient population segment for POC



Partnership opportunity: partial financial support for initial 2 years of data collection



Data collaboration: identifying gaps



Improved communication: standardizing care



Better care. Lower costs.