Intervention in brief

High risk:	A super-utilizer clinic is a multidisciplinary clinic dedicated to comprehensive chronic condition and primary care management of high-risk patients who are frequent users of emergency department and inpatient care. The goal is to provide comprehensive clinical and psychosocial support to improve health outcomes and reduce utilization.
Strength of evidence	Intervention has only recently been studied with evidence based only on individual case studies. However, individual case studies consistently result in reduced utilization and costs for enrolled patients
Impact	 Decreased cost: 23-41.5% decrease in total costs Decreased utilization (wide range): 70.4% increase to 54% decrease in hospitalization; 25-38% decrease in ED use Improved quality, clinical outcomes: 1.1 percentage point reduction in one-year mortality; 0.6 reduced HbA1c; 16% increased share of patients with diabetes with blood pressure ≤140/90 and ≤160/100; 33% increased diabetic retinal exam completion, 6% increased colorectal care screening; insignificant change in screenings for breast cancer, cervical cancer, and diabetic foot exams Increased access: 36 percentage point increased referrals to psychiatric care Improved stakeholder satisfaction: Not demonstrated
How to succeed	 To build a sustainable super-utilizer clinic program: Determine whether the program owns or supplements patients' primary care Co-locate the unit with an emergency department to facilitate effective transfers Consider prominent patient needs when composing the care team (e.g., behavioral health specialist, community health worker, pharmacist) for patient-centered, multidisciplinary care Keep care team's panel sizes small, often not exceeding 200 patients Select clear patient identification and exclusion criteria to offer services to high-risk, high-cost patients interested in additional support Manage patients with the ultimate goal of graduation to self-management, but recognize that some patients may require services indefinitely Supplement offerings by partnering with community-based organizations to fulfill pressing social needs (e.g., housing instability, transportation services) Secure sustainable funding sources and track downstream cost savings to scale program over time

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Demonstrated impact

Literature review summary

Title: The Impact of Tailored Intervention Services on Charges and Mortality for Adult Super-Utilizers
Publication: Healthcare
Date: 2018
Type: Case study
Study population: 1,457 patients (53.3% male, 46.6% Medicaid, 35.7% experiencing homeless) at Denver Health receiving care at the intensive outpatient clinic and/or at least one new clinical intervention
Major findings: Compared with a historical control group, services in a dedicated intensive outpatient clinic:
Reduced cost avoidance (26 million total; 41.5%) including reduced inpatient (\$15.5 million), intensive-care unit

- (\$4.7 million), and surgery (\$6.9 million) charges
- Increased admissions (79.4%)
- Reduced one-year mortality (12.6% vs. 11.5%)

Source: Full article here.

Title: How We Promoted Sustainable Super-Utilizer Care through Teamwork and Taking Time to Listen **Publication**: New England Journal and Medicine Catalyst

Date: 2017

Type: Case study

Study population: 186 super-utilizers enrolled in the clinic over the course of two years. 93% had a mental health diagnosis, 66% had a substance use disorder, and 40% were uninsured.

Major findings: After six months, UF Health's Care One Clinic resulted in:

- Reduced hospitalizations (25%)
- Reduced inpatient hospital days (23%)
- Reduced ED visits (23%)

Source: Full article here.

Title: Rethinking Care for Emergency Department Super Utilizers in a Value-Based World Publication: ECG Management Consultants Date: 2016 Type: Case study

Type: Case study

Study population: Patients identified using a county-wide data system with an average of 2.5 visits with the Ambulatory Intensive Care Unit per month.

Major findings: The unit is co-located with the ED and provides primary care, behavioral health and social services, medication management, and care management. Hennepin County Medical Center's ambulatory intensive care program resulted in:

2

- Decreased costs: 23%
- Decreased hospitalization: 25%
- Decreased ED use: 38%

Source: Full article here.

Title: Implementation Science Workshop: A Novel Multidisciplinary Primary Care Program to Improve Care and Outcomes for Super-Utilizers

Publication: Journal for General Internal Medicine

Date: 2016

Type: Case study

Study population: 171 patients were on average 63 years old, female (63%), black (49%) or Hispanic (46%), and dual eligible (45%) with 7 comorbidities

Major findings: Mount Sinai Hospital's PACT Clinic, co-located at the primary care practice, resulted in:

- Reduced 30-day readmission rates
- Decreased hospitalization rates (54%)
- Decreased ED utilization (25%)

Source: Full article here.

Title: Improvement in Quality Metrics by the UPMC Enhanced Care Program: A Novel Super-Utilizer Program **Publication**: Population Health Management

Date: 2018

Type: Case study

Study population: 144 patients (≥2 inpatient admissions and/or 6 ED visits over the past year) enrolled in the Enhanced Care Program (ECP) at the University of Pittsburgh General Internal Medicine clinic **Major findings:** Services from the ECP team (including PCPs, nurse care manager, a social worker, and an administrate assistant.), including a care management, a walk-in clinic, home visits, 24/7 telephonic support,

medication delivery, and psychiatric referrals, resulted in:

- Reduced HbA1c (7.7 vs. 8.3)
- Increased diabetic retinal exam completion (33%)
- Increased share of patients with diabetes with blood pressure ≤140/90 and ≤160/100 (16%)
- Increased colorectal cancer screening (6%)
- Increased referrals to psychiatric care (36 percentage points)
- 19% of patients using opioids were weaned off
- Insignificant change in breast cancer screening, cervical cancer screening, and diabetic foot exams **Source:** Full article <u>here</u>.

Appendix

- Durfee J, et al., "The Impact of Tailored Intervention Services on Charges and Mortality for Adult Super-Utilizers," *Healthcare*, 6, no. 4 (2018), <u>https://www.sciencedirect.com/science/article/pii/S221307641730057X</u>
- "Strategic Blueprint: Advancing a Super-Utilizer Program," Population Health Advisor, Advisory Board, <u>https://www.advisory.com/research/population-health-advisor/white-papers/2016/strategic-blueprint-advancing-a-super-utilizer-program</u>.
- Henkel A, et al., "Rethinking Care for Emergency Department Super Utilizers in a Value-Based World," *ECG Management Consultants*, <u>http://www.ecgmc.com/thought-leadership/articles/rethinking-care-for-emergency-department-super-utilizers-in-a-value-based-world</u>.
- Lynch C, et al., "Implementation Science Workshop: A Novel Multidisciplinary Primary Care Program to Improve Care and Outcomes for Super-Utilizers," *Journal for General Internal Medicine*, 31, no. 7 (2016): 797-802, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4907941/.
- Borde D, et al., "How We Promoted Sustainable Super-Utilizer Care through Teamwork and Taking Time to Listen," *NEJM Catalyst*, <u>http://catalyst.nejm.org/superutilizer-care-teamwork-barriers-to-care/</u>.
- Bryk J, et al., "Improvement in Quality Metrics by the UPMC Enhanced Care Program: A Novel Super-Utilizer Program," *Population Health Management*, 21, no. 3 (2018), <u>https://www.ncbi.nlm.nih.gov/pubmed/28945512</u>...