

# Working with the super-utilizer population:

The experience and recommendations of five Pennsylvania programs

# AF4Q

Aligning Forces for Quality | Improving Health & Health Care in Communities Across South Central Pennsylvania



## The South Central Pennsylvania High-Utilizer Learning Collaborative

- Allentown (Neighborhood Health Centers of the Lehigh Valley)
- Delaware County (Crozer-Keystone Health System)
- Harrisburg (PinnacleHealth)
- Lancaster (Lancaster General Health)
- York/Adams/Lancaster Counties (WellSpan Health)

### Introduction:

These programs were inspired by the work of Dr. Jeffrey Brenner and the Camden Coalition of Healthcare Providers Collaborative's efforts in Camden, N.J.

Each entity works with patients who are frequent users of hospital services, both emergency department (ED) and inpatient. The Collaborative was created so that these super-utilizer (SU) programs could share best practices, patient data, and cost-saving strategies. Lessons learned from the SU programs could help to transform the health care delivery systems in their communities. The Highmark

Foundation funded the Collaborative beginning in April, 2013, with the following objectives:

- 1 To provide each regional health care provider with the tools to provide high quality, efficient care for high-utilizing patients.
- 2 To realize cost savings through the SU programs.
- 3 To serve as pilots for new payment mechanisms to support new care delivery models.

There is no single model for a SU program. These five programs vary in their structures and processes, which reflect differences in the communities they serve. However, each program focuses on serving the small percent of the population that represents a disproportionate share of health spending in their communities. The programs share common goals to reduce preventable utilization of expensive hospital services while improving the quality of care for their patients.

This report presents the opportunity for the groups to share their experiences with others who are interested in working with the SU population to ultimately transform the health care delivery system for all patients. The

EXPENDITURES PER CAPITA (2012):

# \$8,995

combined outcome data for four out of five programs from the Collaborative demonstrate the potential for significant cost savings that can result from better coordination of care, closing care gaps, and more effectively engaging patients in their own health.

### The current state:

The U.S. leads the world in health care expenditures per capita, with approximately \$8,995 in 2012. Health care in the U.S. consumes the largest share of GDP of all nations in the world.<sup>1</sup> Researchers have known for some time that the distribution of health care expenditures is skewed, with a small percent of the population consuming a disproportionately high share of resources.

### What are super-utilizer programs?

A SU program is a data-driven, high-intensity, community-based, patient-centered, inter-disciplinary team that engages SU patients to

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deliver high-quality, comprehensive care while simultaneously encouraging self-advocacy and personal accountability. The team assists patients as they navigate the health care delivery system but also fosters the development of personal autonomy in the health care arena. As with the Camden Coalition, the five SU programs of the Collaborative have demonstrated the potential of this approach to offer outstanding care, meaningful patient engagement, and significant cost reduction. The five programs in the Collaborative vary in terms of their structures and processes, but they share the common goal of working with SU patients to improve the quality of care they receive, their quality of life, and to reduce preventable utilization of expensive inpatient and ED services.

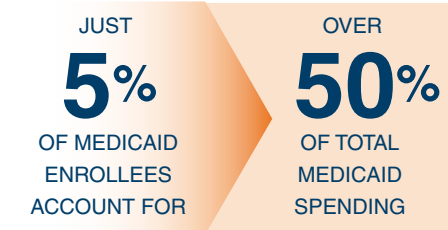
The composition of the SU team depends on the target population. SU programs have included a physician or advanced practice nurse, nursing, pharmacy, behavioral health, social worker, and a community health worker.

While programs may differ in structure, each aim to include the following elements: intensive teambased and relationship-centered care, outreach, coordination of care and services, community engagement, and have a foundation based on high quality, shared data.

#### Who are super-utilizer patients?

In general, SU patients are those who have frequent and preventable hospital admissions and/or ED visits. Each program has its own metric for defining a “super-utilizer,” e.g. at PinnacleHealth, a super-utilizer is defined as an adult with two or more inpatient admissions or six or more ED visits in a six-month period. The program at Crozer-Keystone Health System has focused primarily on patients with two or more inpatient admissions in six months.

In Camden, most of the patients who make high use of inpatient services are insured, often by Medicare and/or Medicaid; whereas those who utilize the ED frequently are more likely to be uninsured. The same is true for the patients served by the Collaborative’s programs. Most SU patients have multiple, chronic conditions, including one or more mental health or substance abuse diagnoses. Some are



homeless, and many experience social isolation in sub-standard housing. Some patients live in an environment of family and/or community violence. Others lack the disposable income to pay for medications or the co-pays that are required by payers, including Medicare.

SU patients encounter a fragmented non-system with poor coordination across providers including medical, behavioral, and social service providers.

#### What can be done?

A robust health care data stream is critical to SU programs. Timely, comprehensive and accurate utilization, claims, and cost-related data allow programs to 1) identify

potential SU patients and map their locations geographically; 2) design programs that meet the needs of the identified population, including team composition, care processes, and community partnerships; 3) develop program evaluation measures; and 4) plan for the impact of SU work on the health system sponsors such as workforce redeployment.

#### What is the impact of super-utilizer programs?

Potential benefits of SU programs include: improving the lives of patients; enhancing primary care; enhancing the effectiveness of specialty, behavioral health care, and social services; sustaining healthcare transformation; building community; and bending the cost curve.

To prepare for this report, the Collaborative planned to consolidate data from all five programs. However, problems

with data access and collection limited the data for this report to Crozer-Keystone Health System, Lancaster General Health, Neighborhood Health Centers of the Lehigh Valley, and WellSpan Health. As of December 31, 2014, these four programs had served 446 patients.

When comparing rates of utilization after leaving a program to utilization during the 18 months prior to enrollment, inpatient admissions dropped by 52 percent and ED visits decreased by 21 percent.

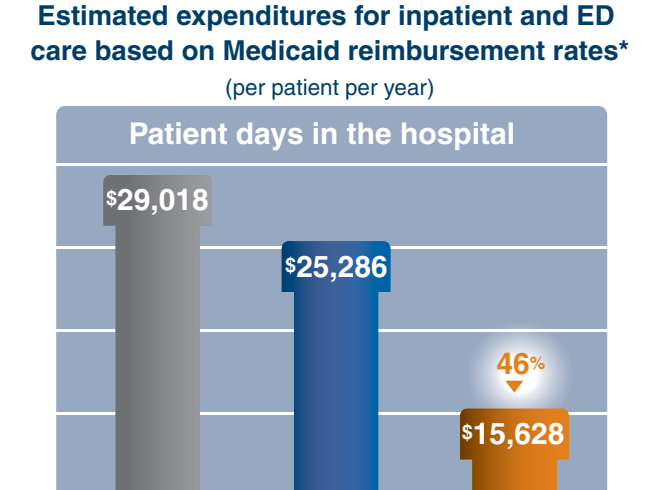
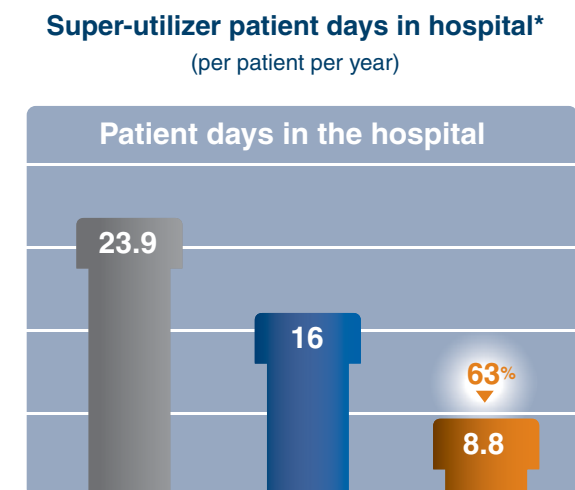
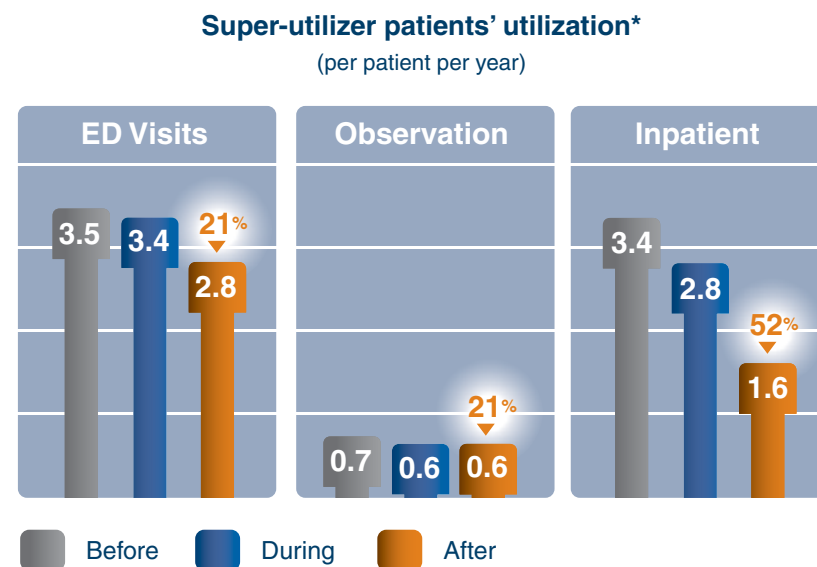
Assuming an average insurance payer expenditure (based on Medicaid rates) per hospital admission of \$7500<sup>2</sup> and \$1097<sup>3</sup> per ED visit, the programs demonstrated a potential 46 percent decrease in expenditures for inpatient and ED care comparing the time before enrollment to the time after leaving the programs.

#### Super-utilizer programs create value for systems and patients.

Based on average rates of decreased hospitalization, a hypothetical patient spending six months in a SU program and six months as an alumnus would be expected to spend 11.5 fewer days in the hospital during that year compared to the year before enrollment.

Assuming a cost to an insurance payer of \$7500 per inpatient admission and \$1097 per ED visit, 100 patients who spend six months in a SU program and six months as alumni would be expected to have a cumulative decrease in insurance payer expenditures of approximately \$850,000 during that year compared to the year prior.

SU programs create value for society by avoiding costly hospital utilization and value for patients and family members by reducing time spent in the hospital.<sup>4</sup>



\* After data includes only those patients who have left the program. Based on 446 patient from Crozer-Keystone, Lancaster General Health, Lehigh Valley and WellSpan Health as of December 31, 2014.

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# RECOMMENDATIONS

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**For the Commonwealth of Pennsylvania:** Provide state support for the development of health information exchanges that deliver real-time, all-payer data to programs on a daily basis, including utilization data from all hospitals. A crucial interim step would be to facilitate access for SU programs to Medicaid data including medical, behavioral, and substance abuse data from all sources at the state level.

**For public and private payers:** Use alternative payment mechanisms such as case management fees, per episode of care payments, and shared savings contracts for SU programs.

**For sponsoring or partnering health systems:** Provide access to real-time utilization data for SU patients and current and historical charge, payment and cost data for SU patients.

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To access the entire report, please visit: [www.aligning4healthpa.org/pdf/High\\_Utilizer\\_Report.pdf](http://www.aligning4healthpa.org/pdf/High_Utilizer_Report.pdf)

**About the Highmark Foundation:** The Highmark Foundation is a private, charitable organization of Highmark Inc. that supports initiative and programs aimed at improving community health. The Foundation's mission is to improve the health, well-being and quality of life for individuals who reside in the communities served by Highmark Inc. The Foundation strives to support evidence-based programs that impact multiple counties and work collaboratively to leverage additional funding to achieve replicable models. For more information visit [www.highmarkfoundation.org](http://www.highmarkfoundation.org)

**About Aligning Forces for Quality:** AF4Q SPCA is a regional healthcare improvement initiative that brings together those that give care, get care and pay for care to working collectively to achieve superior health outcomes. By implementing this multi-stakeholder approach, AF4Q SPCA serves as a change catalyst striving to accelerate the adoption of healthcare reform and transformation.

**About South Central Pennsylvania High Utilizer Collaborative:** Started in late 2012, this five founding member Collaborative inspired by the work of Dr. Jeffrey Brenner of the Camden Coalition strives to improve and share best practices in caring for frequent users of emergency and inpatient healthcare services. The Collaborative also serves to guide needed system and policy changes for these patients as the local, regional and national health care environment adopts new strategies in order to deliver high-quality, comprehensive care and support self-advocacy and personal accountability.

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Endnotes:

- (1) S. Cohen, N. Uheroi. "Differentials in the Concentration in the Level of Health Expenditures across Population Subgroups in the U.S, 2010" Statistical Brief # 421. AHRQ. August 2013.
- (2) Pfunter, A. et al. Cost for hospital stays in the United States, 2010: Statistical brief # 146. Agency for Healthcare Research and Quality. January 2013.
- (3) Pfunter, A. et al. Cost for hospital stays in the United States, 2010: Statistical brief # 146. Agency for Healthcare Research and Quality. January 2013.
- (4) Based on outcomes reported for 446 patients from Crozer-Keystone, Lancaster General Health, Lehigh Valley and WellSpan Health as of December 31, 2014.