

# DSRIP – Medicaid Accelerated eXchange (MAX) Series Program

# Final Report

Improving Care for Super Utilizers

New York State Department of Health in collaboration with Dr. Amy Boutwell, Emmeline Kunst, Josh Sorin, Adin Shniffer, Jessica Logozzo, Dr. Douglas Woodhouse

January 2017



# Foreword from the New York State Department of Health

In Year 2 of our Delivery System Reform Incentive Payment (DSRIP) Program efforts, we continue to work diligently towards our goal of better health, better care, and lower costs for New York State's Medicaid enrollees. Together, we have made important strides towards our goal to improve the lives of over seven million Medicaid members.

Over the past 12 months, we have put an important focus on leading change at the front-line of patient care – where DSRIP becomes reality. The Department of Health has been proud to offer the opportunity for Performing Provider Systems (PPS) to participate in the Medicaid Accelerated eXchange (MAX) Series Program. The MAX Series Program has put front-line clinicians in a position to lead change. By enabling change at a grass-roots level, PPSs have been able to generate impressive results – including:

- 1. **Measurable increases in screening rates and connections to services** (as these relate to integrating behavioral health and primary care services)
- 2. Capacity building in process improvement
- 3. Development of meaningful collaborations among partners, both inside and outside of provider sites.

The MAX Series focus on the relatively small proportion of patients who account for a disproportionate amount of utilization and cost ('super utilizers') brings a tremendous opportunity to move the dial on DSRIP measures and provide better care for those who need it most. This is aligned with the DSRIP goals of transforming the health care system and reducing avoidable hospital use by 25% in five years' time.

This report highlights the work of 13 Action Teams who participated in the first year of the MAX Series Program focused on improving care for these super utilizers. Collectively, these 13 teams were comprised of over 130 clinicians, administrators and community providers. These individuals dedicated their time over an intensive tenmonth period to identify their highest utilizers, develop innovative solutions to providing better care for these individuals and rapidly implement, test and measure these improvements – all with the focus to improve care for patients.

It is my hope that these examples of innovative, rapid-cycle continuous improvement and the lessons learned from the front lines of DSRIP inspire you to accelerate change towards improving care for your highest utilizers.

To the 13 Action Teams who participated in the MAX Series Program focused on improving care for super utilizers, **thank you for your dedication to this important work**. Your work is meaningful and has a profound impact on changing the trajectory of human lives.

Sincerely,

Jason Helgerson, New York Director of Medicaid



# **Table of Contents**

Foreword from the New York State Department of Health2
Acknowledgment
Introduction9The MAX Methodology9Applying the MAX Method to Improve Care for Super Utilizers10Structure of this Report11
Key Insights12Insight 1: Define and Quantify the Target Population12Insight 2: Form an Inter-disciplinary, Cross-Continuum Action Team14Insight 3: Identify Super Utilizers17Insight 4: Assess Super Utilizer Needs18Insight 5: Manage: Do Something Different19Insight 6: Follow up to Ensure Stability21Insight 7: Measure to Drive Implementation and Results222
MAX in Practice: Inpatient High Utilizer Program
MAX in Practice: ED High Utilizer Program
MAX in Practice: Improving Care for Patients with Chronic Pain
Summary
Appendix: Workshop Evaluation Questionnaire and Results



# Acknowledgment

The success of the first year of the Medicaid Accelerated eXchange (MAX) Series Program would not have been possible without the leadership and dedication of the 13 Action Teams who participated in this intensive effort. The good will, teamwork, perseverance, optimism, and creativity demonstrated by each one of the Action Teams is what brought this work to life – in theory and in practice.

Although this report will primarily focus on the patient-facing ways in which care processes and practices changed, we would be remiss if we did not acknowledge the improvement that occurred by bringing interdisciplinary, cross-departmental, and cross-continuum clinical, behavioral, and social service providers together – often for the first time – to work collaboratively. The diversity of perspectives and expertise, coupled with dedicated time to work on a specific challenge in a structured format, allowed locally-relevant solutions to emerge, be tested, and implemented in an incredibly compressed period of time.

To that end, we congratulate and thank the following Action Team participants for being pioneers in the MAX Series Program on Improving Care for Super Utilizers:

### **Topic 3 Action Teams**

#### Bronx Lebanon Hospital Center (Bronx, NY)

- Arelis Delgado, Care Manager, Healthfirst
- David Ferris, Internal Medicine Physician, Bronx Lebanon Hospital Center
- Dennis Maquiling, Executive Director at Bronx Health Access, Bronx Lebanon Hospital Center PPS
- Isaac Dapkins, Medical Director, Bronx Lebanon Hospital Center
- John Coffey, ED Chairman, Bronx Lebanon Hospital Center
- Kathleen Craig, Senior Project Manager, Bronx Lebanon Hospital Center
- Marcos Mauro, Network Manager, Healthfirst
- Maribel Montanez, Inpatient Care Coordinator, Bronx Lebanon Hospital Center
- John Betts, Social Worker, BronxWorks
- Meghan Fogarty, Department Director Supportive Housing and Health Policy, BronxWorks
- Natalie Cruz, Care Transitions Manager, Bronx Lebanon Hospital Center
- Nicole Miller, Director Mobile Crisis, Bronx Lebanon Hospital Center
- Victor Demarco, CFO, Bronx Lebanon Hospital Center
- Vicente Liz Defillo, Director Psychosomatic Medicine and Primary Care Psychiatry, Bronx Lebanon Hospital Center

### Champlain Valley Physicians Hospital (Plattsburg, NY)

- Robert Dickie, Director Management & Process Improvement, Champlain Valley Physicians Hospital
- Brenda Stiles, Director of Medical Home Care Management & Quality, Champlain Valley Physicians Hospital
- Chris Arnold, Crisis Care Manager, Behavioral Health Services North
- Daniel Anhalt, ED Physician, Champlain Valley Physicians Hospital
- Gail Bjelko, ED Nurse, Champlain Valley Physicians Hospital
- Ken Thayer, ED Nursing Director, Champlain Valley Physicians Hospital
- Luanne Poland, Care Management Coordinator, Champlain Valley Physicians Hospital
- Sherry Deyo-Pugh, Nurse, Champlain Valley Physicians Hospital
- Tom Caracciola, Supervisor Housing and Substance Abuse Program, Champlain Valley Family Center

### Erie County Medical Center (Buffalo, NY)

- Angela Palmer, Vice President Community Services, Evergreen Health Services
- Annie Deaver, Project Manager, Millennium Collaborative Care PPS
- Anthony Billittier, Chief Medical Officer, Chief ED Physician, Millennium Collaborative Care PPS
- Cassandra Davis, Assistant Vice President of Ambulatory Services, Erie County Medical Center
- Christine Au, Social Worker, Erie County Medical Center
- Janet Stoeckl, Clinical Director, Millennium Care Collaborative
- John Fudyma, Associate Medical Director, Erie County Medical Center



- Julie Sousis, Practice Coordinator, Erie County Medical Center
- LaTonya Diggs, DSRIP Project Specialist, Millennium Care Collaborative
- Lenora Bellavia, Executive Assistant Administration Ambulatory Care, Erie County Medical Center
- Ray Ganoe, Executive Vice President, Evergreen Health Services
- Sheila Kennedy, Senior Case Worker, Erie County Medical Center
- Theresa Makson, Nurse Case Manager, Erie County Medical Center
- Therese Aquilina, Nurse Unit Manager Ambulatory Care, Erie County Medical Center

#### Saint Joseph's Medical Center (Yonkers, NY)

- Christine Moore, Director of Utilization Management, Saint Joseph's Medical Center
- Frances Casola, Senior Vice President of Operations, Saint Joseph's Medical Center
- James Neuendorf, Medical Director, Saint Joseph's Medical Center
- Lee Leak, ED Director, Saint Joseph's Medical Center
- Leonard Malter, Director Social Work, Saint Joseph's Medical Center
- Lisa Hanrahan, Vice President Quality/Risk, Saint Joseph's Medical Center
- Lorraine Barnett, Social Worker Case Management, Saint Joseph's Medical Center
- Rodika Coloka-Kump, Inpatient Coordinator, Faculty Attending, New York Medical College at Saint Joseph's Family Medicine Residency Program
- Saurabh Kaushik, Associate Director Psychiatry, Saint Joseph's Medical Center
- Terry Gadson, Director of Care Coordination, Saint Joseph's Health Home
- Tita Aguilar-Niere, Associate Vice President of Nursing, Saint Joseph's Medical Center

#### St. Luke's Cornwall Hospital (Newburgh, NY)

- Glynis Cowart, IT Analyst, St. Luke's Cornwall Hospital
- Jesse Sarubbi, Vice President Distribution Coordination & Practice Transformation, St. Luke's Cornwall Hospital
- Kathy Sheehan, ED Director, St. Luke's Cornwall Hospital
- Margaret Allers, Vice President Transformation, St. Luke's Cornwall Hospital
- Maureen Monahan, Nurse Care Transitions, St. Luke's Cornwall Hospital
- Nancy Duziak, Care Manager, Horizon Medical Group
- Scot Hill, ED Chairman, St. Luke's Cornwall Hospital
- Susan Cannella, Manager Case Management, St. Luke's Cornwall Hospital
- Trish Tuber, Care Manager, Access Supports for Living
- Antonia Barba, Program Manager, Montefiore Hudson Valley Collaborative

#### Little Falls Hospital (Little Falls, NY)

- Donna Anderson, Sr. Director, Care Coordination, Bassett Medical Center
- Heather Dora, Social Worker, Little Falls Hospital
- Heidi Camardello, Chief Nursing Officer, Little Falls Hospital
- Jean Guiney, ED Nurse, Little Falls Hospital
- Jennifer Main, Manager, Herkimer Health Center
- Karen Elderkin, Manager, Health Center Operations, Bassett Medical Center
- Mark Winther, ED Medical Director, Little Falls Hospital
- Michael Ogden, CEO, Action Team Executive Sponsor, Little Falls Hospital
- Tina Willis, Nurse Care Manager, Little Falls Hospital
- Tom Manion, PPS Network Director, Basset Health Network

#### Southside Hospital (Bay Shore, NY)

- Benson Yeh, ED Chairperson, Southside Hospital
- Debbie Macchio, Case Manager, Southside Hospital
- Debby Quail, Director Case Management, Southside Hospital
- Diane Hatzidakis, Coordinator, Clinical Care, Southside Hospital
- Dina Johnson, Inpatient Social Worker, Southside Hospital
- Donna Maisano, Manager Social Work, Southside Hospital
- James O'Hara, Senior Administrative Director, Southside Hospital
- Jay Enden, Medical Director, Southside Hospital
- Jessica Marques, Family Care Manager, Family Service League
- Karin Schlereth, Patient and Family Health/SBIRT Coach, Northwell Health
- Max Khalilullah, Project Manager, Northwell Health
- Mayur Rali, Associate Director Family Medicine Residency Program, Southside Hospital



Samar Raza, Director Hospitalist Program, Southside Hospital

#### **Topic 1 Action Teams**

#### Ellenville Regional Hospital (Ellenville, NY)

- Ann Marie Guntlow, Chief Nursing Officer, Ellenville Regional Hospital
- Ashima Butler, Vice President of Quality, Compliance & Medical Staff Management, Ellenville Regional Hospital
- Bryan Lopez, Patient Navigator, Institute for Family Health
- Gene Epstein, ED Nurse, Ellenville Regional Hospital
- Harman Sidhu, Program Manager, WMC Health PPS
- Idaly Hidalgo, ED Medical Director, Ellenville Regional Hospital
- Kristina Ursitti, Family Medicine Physician, Institute for Family Health
- Maria Gonzalez, ED Manager, Ellenville Regional Hospital
- Mark Josefski, Family Medicine Physician, Institute for Family Health
- Maya Hambright. Family Medicine Physician, Ellenville Family Health Center
- Melissa Martinez, Program Director, Institute for Family Health
- Michael Berg, Case Manager, Family of Woodstock
- Steven Kelley, President and Chief Executive Officer, Ellenville Regional Hospital
- Virna Little, Senior Vice President, Psychosocial Services and Community Affairs, Institute for Family Health

#### Brookhaven Memorial Hospital (Patchogue, NY)

- Elfriede Weiss-Paquette, Social Worker, Coordinator Collaborative Care
- Gerald Garland, Social Worker, Northwell Health Home
- Imrana Ahmed, Primary Care Physician, Brookhaven Memorial Hospital
- Jessical Philius, Care Manager COPD, Brookhaven Memorial Hospital
- Jody Felice, Home Care Nurse, Brookhaven Memorial Hospital
- Joe Lamantia, Chief Operations Officer Population Health, Brookhaven Memorial Hospital
- Julie Vinod, Assistant Director of Nursing, Brookhaven Memorial Hospital
- Karen Shaughness, Senior Director Ambulatory Services Brookhaven Memorial Hospital
- Keisha Wisdom, Vice President and Chief Nursing Officer, Brookhaven Memorial Hospital
- Linda Efferen, Medical Director, Suffolk Care Collaborative
- Monica Schlie, ED Social Worker, Brookhaven Memorial Hospital
- Nejat Zeyneloglu, Vice President and Chief Quality Medical Officer, Brookhaven Memorial Hospital
- Sam Beeklers, Clinical Coordinator, Brookhaven Memorial Hospital
- Stanley John, Director Respiratory Services, Brookhaven Memorial Hospital
- Susan Henerson, Stroke Program Coordinator, Brookhaven Memorial Hospital
- Tameca Squire, Clinical Instructor, Brookhaven Memorial Hospital

#### Interfaith Medical Center

- Kishor Malavade, Medical Director, Maimonides Medical Center
- Joseph McArdle, Health Home Team Manager, Catholic Charities
- Jennifer Flanz, Clinical Coordinator, Interfaith Medical Center
- Sajitha Sutton, Administrative Director, Interfaith Medical Center
- David Rood Ojalvo, Program Manager, Catholic Charities Housing
- Edna Scott, ED Nurse, Interfaith Medical Center
- Martin Sussman, Vice President Residential Services, Catholic Charities Housing
- Desiree Arduin, Vice President Medicaid Redesign Initiatives, Catholic Charities
- Ivan Rosales, Outreach Specialist, Catholic Charities
- John Ingentio, Care Manager, Maimonides Medical Center
- Ajodeji Jolayemi, ED Physician, Interfaith Medical Center
- Trudy- Ann Gayle, Clinical Psychologist, Interfaith Medical Center

#### Richmond University Health Center (Staten Island, NY)

- Beth Schwartz, Mobile Outreach Team Manager, Richmond University Health Center
- · Elizabeth Wolff, Senior Vice President Care Transformation, Quality and IT, Richmond University Health Center
- Emily Kinzel, Referral Coordination, Richmond University Health Center
- Jennifer McGovern, Behavioral Health Nursing and Inpatient, Richmond University Health Center
- Joseph Conte, Executive Director, Staten Island PPS



- Lionel Hunte, Mental Health Clinic Manager, Richmond University Health Center
- Michael Matthews, Director Outpatient Behavioral Health Services, Richmond University Health Center
- Michelle Davis, Associate Vice President Health Care Coordination, Community Health Action Staten Island
- Monsoor Khan, ED Department Chair, Richmond University Health Center
- Paula Caputo, Business Development & Ambulatory Care Administrative Director, Richmond University Health Center
- Robert Nelli, Data Analyst, Richmond University Health Center
- Suzy Bibawy, Medical Director, Richmond University Health Center
- Tara Ferraioli, Social Worker, Richmond University Health Center
- · Wendy Wullbrandt, Outpatient Evaluation and Referral Service Manager, Richmond University Health Center

#### St. Barnabas Hospital (Bronx, NY)

- Dan Murphy, ED Chairman, St. Barnabas Hospital
- Danielle Minelli-Pagnotta, Assistant Commissioner Street Homelessness, New York Department of Homeless Services
- Eric Applebaum, Associate Medical Director, St. Barnabas Hospital
- Irene Borgem, Vice President Ambulatory Services, St. Barnabas Hospital
- Irene Kauffman, Executive Director, Bronx Partners for Healthy Communities
- John Samuels, Medical Director HIV Services, St. Barnabas Hospital
- Juliana Steen, Clinical Projects Manager, St. Barnabas Hospital
- Lizica Troneci, Department of Psychiatry Chair, St.Barnabas Hospital
- Megan Fogarty, Department Director Supportive Housing and Health Policy, BronxWorks
- Meredith Stanford, Project Manager, Bronx Partners for Healthy Communities
- Pat Belair, Senior Vice President Ambulatory Services, St. Barnabas Hospital
- Theresa Barona, Clinical Director, St. Barnabas Hospital
- John Betts, Program Coordinator, BronxWorks
- Dina Wong, Associate Vice President Health Information Management and Bed/Case Management, Staten Island University Hospital

#### Staten Island University Health Center (Staten Island, NY)

- Ester Cox, Senior Program Manager, Staten Island University Hospital
- Ines Vucentic, Social Worker Manager, Staten Island University Hospital
- Joanne Pietro, Senior Director, Department of Psychiatry and Behavioral Science, Staten Island University Hospital
- Jordan Glaser, Medical Director Infectious Disease, Staten Island University Hospital
- Kristen Mouton, Senior Director DSRIP, Staten Island University Hospital
- Lizbeth Natoli, Quality Manager, Staten Island University Hospital
- Mary Shannon, Nurse, Staten Island University Hospital
- Nicole Berwald, Associate ED Chair, Staten Island University Hospital
- Robert Hodson, Peer, Staten Island University Hospital
- Sal Volpe, Chief Medical Officer, Staten Island University Hospital
- Veronica Volpe, Assistant Director Case Management, Staten Island University Hospital
- Dmitry Pikman, Care Management, Staten Island University Hospital
- Taryn Lyon, Director Health Home, Community Health Action Staten Island



# About the MAX Series Program Team

The MAX Series Program was designed and facilitated by a team of individuals with experience in healthcare, medicine, process improvement, systems engineering, change management, and program management.

The KPMG MAX Series Program Team delivered the program on behalf of the Department of Health, and included:

**Amy Boutwell, MD, MPP**, practicing physician and expert in strategies to improve care for high utilizers. Dr. Boutwell provided content expertise and team-specific advisement. Dr. Boutwell advises state- and national-level efforts to reduce readmissions, and co-led a five year Agency for Healthcare Research and Quality (AHRQ) funded initiative to develop strategies specifically optimized for the Medicaid population. Dr. Boutwell is the President of Collaborative Healthcare Strategies based in Lexington, Massachusetts.

**Douglas Woodhouse, MD, BScEng,** practicing physician and system engineer. Dr. Woodhouse informed the design of the MAX Series Program and provided expertise in process improvement methodology. Dr. Woodhouse has expertise in LEAN, Theory of Constraints, Statistical Process Control and Change Management and has worked with over 100 healthcare teams throughout Europe and North America to improve clinical processes. Dr. Woodhouse is the Executive Director and Owner of Apix Performance based in Alberta, Canada.

**Eveline van Beek**, Managing Director at KPMG, served as the Engagement Director and Program Advisor. Eveline informed the design of the MAX Series Program and advised on process improvement methodology.

**Emmeline Kunst**, Director at KPMG, served as the Program Director focused on the program design and development. Emmeline led the design of the MAX Series Program and advised on ongoing program strategy.

**Jessica Logozzo, MBA,** Manager at KPMG, served as the Program Lead and Director of the MAX Series Program. Jessica led the program development and implementation and oversaw the programs focused on Improving Care for Super Utilizers, as well as the Integration of Behavioral Health and Primary Care.

Adin Shniffer, MBA, Manager at KPMG, served as the Topic Lead for the first group of six teams in the Improving Care for Super Utilizer series. Adin was also integrally involved in the initial program design and development.

**Joshua Sorin**, Manager at KPMG, served as the Topic Lead for the second group of seven teams in the Improving Care for Super Utilizer series. Josh was also integrally involved in the ongoing program development.

**Kara Kitts**, Manager at KPMG, served as the Topic Lead for the group of ten Action teams in the Integration of Behavioral Health and Primary Care series. Kara was also a facilitator within the Improving Care for Super Utilizer series.

**Ami Patel,** Senior Associate at KPMG, served as a Topic Analyst for the 13 Action teams in the Improving Care for Super Utilizer series.

Jake Keteyian, Senior Associate at KPMG, served as a Topic Analyst for the 13 Action teams in the Improving Care for Super Utilizer series.



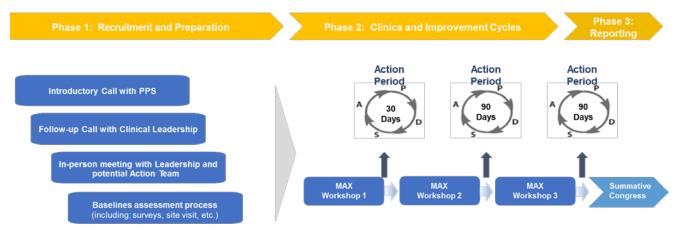
# Introduction

# The MAX Methodology

The MAX Series Program is a structured program of facilitated support offered to interdisciplinary, cross-setting teams to accelerate delivery system redesign and process improvement aimed at achieving DSRIP goals of reducing avoidable hospital admissions and emergency department use by 25% over five years. Through the offering of a series focused on improving care for super utilizers, it supports the goal of transforming the system by determining drivers of utilization and redirecting patient care to an appropriate community setting with hospitals used primarily for emergent and tertiary level of services.

The 2015-2016 MAX Series Program engaged 13 Action Teams who were committed to working on improving care for super utilizers. Each participating site was supported in bringing together an "Action Team" comprised of front-line clinicians, as well as leaders, administrators, analysts and key community partners who were central to the work of improving care for super utilizers. These Action Teams attended three facilitated in-person workshops, and were supported through three action periods during which time Action Teams tested and implemented prioritized process improvement plans developed during each workshop.

The MAX Series Program supported and accelerated change by creating structure and driving continuous improvement through off-site workshops, active facilitation, weekly coaching, content expertise, performance measurement, periodic virtual shared learning via online collaborative platforms and webinars. Each Action Team received one site visit during the recruitment and preparation phase and one on-site working session during one of the three Action Periods (Plan-Do-Study-Act (PDSA) cycles). The MAX Series Program was delivered over a 10-month period, according to the following sequence:



# Phase 1: Recruitment and Preparation:

• **Recruitment and Preparation,** prior to launch of the Workshops, that included a site visit and survey to understand baseline processes and readiness for change

# Phase 2: Clinics and Improvement Cycles:

- **Workshops:** Each workshop focused on a different topic and resulted in the development of three Action Plans
  - Workshop 1 focused on quick wins
  - Workshop 2 focused on detailed process redesign
  - Workshop 3 focused on detailed process redesign and a Continuous Improvement Plan to sustain process improvement work



• **Action Periods:** Action periods followed each workshop and focused on the implementation of the Action Plans and was supported by weekly coaching calls

Phase 3: Reporting:

• Final Webinar: Included team to team sharing of results, lessons learned and next steps

The MAX Series Program is structured with a foundation based in process engineering, LEAN, root cause analysis, the Theory of Constraints, and Change Management. The approach for developing processes related to improving care for super utilizers was examined using four main categories:

- 1. Patient Identification
- 2. Planning
- 3. Management
- 4. Follow-up

In 2015-2016, the MAX Series Program was also implemented for a group of 10 Action teams focused on integrating behavioral health and primary care services. A report on lessons learned and successes from that program is available in a separate document as well.

# Applying the MAX Method to Improving Care for Super Utilizers

MAX Action Teams made progress toward improving care for super utilizers in a few short months. Each team started at the same point, with limited to no prior work in this area. The teams learned about a new patient population, how to better understand and meet their needs, and formed an interdisciplinary, cross-setting Action Team. They rapidly developed capabilities in data analysis, measurement systems, and identification and notification systems, and collaborated to develop new care processes and pathways.

MAX Action Teams accomplished all of this work by participating fully in the structure provided by the MAX Series Program, as described in the previous section.

As a testament to the "accelerator" impact of the MAX Series on the effort of these 13 teams to improve care for super utilizers, the following was achieved:

- ✓ 13 of 13 Action Teams defined a specific, measurable super utilizer target population.
- ✓ 13 of 13 Action Teams meaningfully engaged an interdisciplinary, cross-setting Action Team.
- ✓ 13 of 13 Action Teams identified super utilizers when they presented to the acute care setting.
- ✓ 13 of 13 Action Teams engaged super utilizers when they were in the acute care setting.
- ✓ **13 of 13 Action Teams** assessed the "drivers of utilization," taking a **whole-person approach.**
- ✓ 13 of 13 Action Teams managed the care of super utilizers "differently".
- ✓ 7 Action Teams developed and used care plans to improve care for super utilizers.
- ✓ 11 Action Teams followed up to ensure effective linkage to supportive resources.

Prior to involvement in the program, the Action Teams had limited infrastructure or practices in place to manage care for super utilizers. The fact that 13 teams were able to make substantial changes across different domains of work within the span of 10 months is a remarkable achievement.



# Structure of this Report

The next section of this report details seven key insights from the work of the 13 MAX Action Teams in improving care for super utilizers:

- 1. Define and quantify the target population
- 2. Form an interdisciplinary, cross-continuum Action Team
- 3. Identify super utilizers
- 4. Assess super utilizer needs
- 5. Manage: do something different
- 6. Follow up to ensure stability
- 7. Measure to drive implementation and results

The subsequent section provides further detail on three concrete programs ("MAX in Practice") and the report concludes with a summary of five key lessons learned.



# **Key Insights**

# Insight 1: Define and Quantify the Target Population

One of the first steps to improving care for super utilizers is to establish clarity about the population intended to be served. It is helpful to consider:

- What are the objectives? Why?
- Which patients should be the focus of the efforts? Why?
- How many patients will this effort impact? What is the potential value in terms of lives improved, costs avoided, and efficiencies gained from this effort?

Each of these considerations will be discussed in the sections below.

# Articulate the aim: emergency department utilization or inpatient utilization

When defining the super utilizer population, it is helpful to consider what the objectives of the super utilizer work should be for patients and for the organization. *Is the focus on addressing avoidable emergency department (ED) use? Readmissions? Has a group of patients who would benefit from a new model of care been identified? Are there providers, administrative champions, or community or payer partners ready and willing to engage in changing care?* 

It is helpful to consider the differences between subgroups of super utilizers. "Super utilizer" is a general term for a patient who presents to the hospital setting with high frequency. Some patients present frequently to the ED but are rarely admitted: these patients would be referred to as frequent users of the ED. Another group of super utilizers are those who are frequently admitted to the hospital when they do present: these patients would be referred to as frequents are super utilizers of both the ED and inpatient settings.

It is important to articulate the purpose – or aim – of the effort to improve care for super utilizers because that will guide the definition and quantification of the super utilizer subgroup at the participating hospital, and will also guide the development of the internal and community-based stakeholders who will be engaged in the effort. One super utilizer group or another may be prioritized based on the pressing clinical, operational and/or market-based reasons: both groups of patients need to have their recurrent utilization patterns examined and better addressed, but teams may find it more practical to start with one group or another.

# Define super utilizers as patients who have had "x" visits in "y" months

Super utilizers are defined as a subgroup of patients who are in the acute care setting frequently. For clarity, "super utilizer" is synonymous with "high utilizer." Super utilizers are not necessarily the same as "high cost" patients: recurrent hospitalizations are one driver of cost for high cost patient groups. For the sake of defining, quantifying, understanding, improving, and measuring a program targeted at super utilizers, it is recommended to focus on the utilization component of the patient population.

Use a threshold that represents utilization significantly above average. Consider the following:



- The Agency for Healthcare Research and Quality (AHRQ) identified four or more hospitalizations in a 12month period as two standard deviations above the mean number of hospitalizations in both the Medicare and Medicaid populations<sup>1</sup>.
- The Massachusetts Center for Healthcare Information and Analysis (CHIA) analyzed all-payer adult nonobstetric discharges to quantify the high utilizer population: they report that 7% of hospitalized patients utilized 25% of all admissions of 59% of all readmissions<sup>2</sup>.
- In Medicaid specifically, AHRQ found that 85% of all super utilizers in Medicaid are above the age of 21, suggesting that although it is important to improve care for pediatric super utilizers, the preponderance of Medicaid super utilizers are adults<sup>3</sup>.
- In Medicaid specifically, patients who were hospitalized four or more times in a 12-month period had an all cause 30-day readmission rate of 52% (AHRQ)<sup>4</sup>.
- For all payers, patients who were hospitalized four or more times in a 12-month period had an all cause 30day readmission rate of 36% (CHIA)<sup>2</sup>.

The threshold definition of super utilizer will naturally be a different level of utilization for the inpatient setting than for the ED setting. Based on analysis, field experience, and consideration of the volume of patients and encounters, MAX teams used a variety of definitions of super utilizer populations. In general, MAX teams observed the following:

- Consider using a payer agnostic definition
- Consider using a diagnosis agnostic definition
- Consider using four hospitalizations in past 12 months for inpatient super utilizer
- Consider using 10 ED visits in the past 12 months for ED super utilizer
- Smaller facilities might use a lower threshold (such as three admissions or eight ED visits)

# Quantify the expected volume of super utilizers' presentations on a daily basis

Improving care for super utilizers requires identifying super utilizers when they present to the acute care setting and "doing something different," other than usual care. For that reason, Action Teams needed to have an estimate of how many super utilizers they could expect to encounter on a daily basis, so they could develop response systems and test new workflows and service delivery models accordingly. In addition, quantifying the target population based on the super utilizer threshold definition allowed the Action Team to consider whether one threshold was better to use than another (e.g. three or four hospitalizations or 10 or 20 ED visits).

In order to quantify the expected volume of super utilizers, Action Teams analyzed their hospital's administrative (encounter) data to identify the number of patients who met their super utilizer definition over the past year. The results of this analysis yielded a simple result of "x" patients who collectively experienced "y" number of ED visits and/or "z" admissions. This quantification can be used to specify the following:

- How many individuals met super utilizer criteria last year?
- How many ED visits did this population have last year?
- How many inpatient admissions did this population have last year?

<sup>&</sup>lt;sup>1</sup> <u>https://www.hcup-us.ahrq.gov/reports/statbriefs/sb190-Hospital-Stays-Super-Utilizers-Payer-2012.pdf</u>

<sup>&</sup>lt;sup>2</sup> http://www.chiamass.gov/assets/docs/r/pubs/15/CHIA-Readmissions-Report-June-2015.pdf

<sup>&</sup>lt;sup>3</sup> <u>https://www.hcup-us.ahrq.gov/reports/statbriefs/sb184-Hospital-Stays-Medicaid-Super-Utilizers-2012.pdf</u>

<sup>&</sup>lt;sup>4</sup> <u>https://www.hcup-us.ahrq.gov/reports/statbriefs/sb184-Hospital-Stays-Medicaid-Super-Utilizers-2012.pdf</u>



• How many super utilizer encounters can we expect to occur on a daily basis? (Note: take the number of ED visits or inpatient admissions and divide by 365).

# **MAX IN ACTION: Defining the cohort**

- A MAX Action Team decided between using three or four admissions in a 12 month period as their definition of an inpatient super utilizer.
- The team pulled the data and found that the number of patients returned at the three admission threshold was nearly three times the number of patients returned at the four admission threshold.
- They noted that it is not only important to consider the number of people, but to also consider the volume of presentations.
- Looking at the volume of admissions for the super utilizer population, they observed that the threshold of **3** would yield **4** encounters a day, while the threshold of **4** would yield **2** encounters a day.
- They defined their target population as all adults with 4 or more hospitalizations in the past 12 months. This threshold yielded 144 people who collectively accounted for **680** admissions.
- Operationally, they encountered **2** super utilizers on a daily basis.

# Insight 2: Form an Inter-disciplinary, Cross-Continuum Action Team

Once the super utilizer target population has been identified, the next step is to recruit the necessary individuals to get the work done – the Action Team. The Action Team should be comprised of individuals who can directly enact change or are necessary to facilitate change and mobilize resources. Importantly, Action Team members are not limited to hospital-based staff; community providers and agencies are necessary members of these teams.

# Action team composition drives action and accountability

In the MAX Series Program, the composition of the Action Team is of critical importance to the set of tests and changes the team will be able to make. The MAX Program facilitators only allow action plans to be developed if an Action Team member can be directly accountable for ensuring the implementation of the action plan. This is a critical change management technique that is effective in keeping Action Teams focused on what changes they are able to make themselves.

MAX Action Teams were often comprised of the following members:

- Administrative champion (VP, SVP or Chief)
- Clinical champion (ED physician, ED Nursing Director, Hospital Medicine, etc.)
- Program Manager (Day to Day lead)
- Data Analyst
- Director and/or staff from case management
- Director and/or staff from social work
- Director and/or staff from care transitions
- Director and/or staff from health home
- Practice manager or care manager from primary care
- Practice manager or care manager from behavioral health clinic



# **5** lessons learned about effective Action Teams

Many improvement initiatives involve engaging teams, committees, or task forces. The MAX Series Program engaged "Action Teams" specifically to include administrative and clinical champions and staff in identifying and implementing change that would be feasible, actionable, and relevant to each team's unique abilities. Below are 5 key lessons learned about the composition of effective MAX Action Teams:

# 1. A data analyst / Information Technology member is essential!

Improving care for super utilizers requires the ability to identify (Information Technology, IT) and quantify (data analyst) the target population, and to track and trend the impact of working with super utilizers in a registry. Although the skill sets are different, this number one insight about the essential role of an analyst/IT member is reflective of the essential capabilities to identify, flag, quantify and trend the super utilizer population.

# 2. An ED team member is always necessary

Whether working on ED high utilizers, inpatient high utilizers, or both, the emergency department is the front door of the hospital. Oftentimes, process steps to improve care for super utilizers include flagging the super utilizer when he/she registers in the ED, and responding to and engaging with that person in order to facilitate a new and different set of responses. MAX teams engaged a variety of ED staff members, including Chiefs, Nursing Directors, ED case managers, and ED social workers.

# 3. Identify and engage a day-to-day lead

A program manager is essential to support the continuous improvement work, operational meetings, case conferencing, and myriad tasks that need to be implemented to keep the work of the Action Teams moving through each action period. The day to day lead is ideally a program manager or an administrator with responsibility for DSRIP or delivery system transformation efforts.

### 4. Include a social worker

Improving care for super utilizers requires understanding the "driver of utilization:" the non-medical reason that this particular person is presenting to the ED or acute care setting so frequently. Among others, social workers have the professional skill set to effectively and readily engage with super utilizers, assess needs, and identify services and supports that could address drivers of utilization and identified needs.

# 5. Include the most likely "receivers" in the community

MAX Action Teams included providers or agencies in the community that shared the care of a specific subgroup of super utilizers. Although there are likely many potential community partners to engage, consider engaging one to three community partners at the beginning so the team can really understand what they have to offer, how to best collaborate with each other, and how to work together over time in pursuit of durable and impactful changes for the neediest of patients.

# MAX IN ACTION: Action team examples from the field

Examples of Action team members include:

## From the ED:

• **Chief of Emergency Medicine**: Conveys high-level involvement in improving care for super utilizers. Validates at the highest clinical level the changes the teams are testing and implementing as representative of improving care and adhering to high standards of excellence in patient care. Depending on the target



population and the changes being implemented, the need for a high level of engagement of the Chief of the ED may evolve over time.

- **Nursing Director of the Emergency Department:** Essential for facilitating the ability to test and change processes in the ED. Also essential for identifying ways to incorporate tests and changes into workflow. Essential for communicating clinical or operational changes to nursing staff.
- **ED Social Worker:** Often the clinician first asked to "do something different". The ED social worker is important to include on the Action Team to add the perspective on clinical relevance, feasibility, volume, workflow and detailed feedback from tests of change.

## **From Administration:**

- Administrative Champion: Often a VP, SVP, or chief officer, the involvement of the administrative champion
  is essential to convey organizational commitment and mobilization of the human and other resources of the
  organization in support of the efforts to improve care for super utilizers. The Administrative Champion may
  or may not participate regularly in Action Team meetings or workshops, but is updated on the work of the
  team and is close enough to be able to make decisions about facilitating team requests.
- Day to Day Leader: The day to day leader is critical to a high performing Action Team. The day to day leader ensures the team is implementing, testing, analyzing, and reflecting on tests of change to support continuous improvement. The day to day leader needs to be able to mobilize ad hoc requests of the Action Team on a short turnaround basis such as data analytic requests, IT flags, meetings with key internal and external stakeholders, etc.
- Analyst/IT: Perhaps the biggest insight from the 2015-2016 Action Teams is the recognition that all Action Teams need an analyst/IT resource. Improving care for super utilizers requires the ability to define, analyze, and quantify the target population, establish administrative-triggered flags and notifications, and establish a registry and measurement and reporting system. MAX teams found that including the analyst at the workshops was often very helpful.

### From the Floors:

- **Chief of Hospital Medicine:** The Chief of Hospital Medicine is an essential member of an inpatient super utilizer team. As with the Chief of the ED, participation of the Chief of Hospital Medicine conveys a willingness to consider alternative plans of care and approaches for frequently admitted inpatients.
- Director of Case Management and/or the Director of Care Transitions: The Director of Case Management brings essential clinical and operational insights to current state of how patients are assessed for posthospital needs and how those needs are currently addressed. This Director provides valuable insight and operational permissions to modify how patients are identified, prioritized, and assessed for "drivers of utilization," and how "something different" can be done in response to those drivers. The Director of Care Transitions often is managing a set of transitional care processes, including post-hospital follow up, and can identify how those existing processes can be applied and/or adapted to improving care for super utilizers.
- Social Workers, Transitional Care Workers: These are the front-line clinicians who will be asked to "do
  something different": engage with super utilizers in an effective, helpful, relationship-based manner; identify
  the drivers of utilization; and work to support and/or effectively link patients to services and support after
  discharge. Front-line staff are essential on the Action Team as they have operational and clinical insights to
  generate ideas for tests of change, and need to be willing to engage in those tests of change.

### From the Community:



- Health Home Manager and/or Care Coordinator: In New York, Medicaid super utilizers are often eligible for care coordination through the Health Home program. MAX teams learned that there are numerous complexities in navigating the Health Home program, such that it was invaluable to have a Health Home partner on the Action Team. Health Home partners are able to explain eligibility, outreach, and enrollment processes; identify opportunities to collaborate with other health homes; and identify opportunities to collocate outreach or enrollment specialists in the acute care setting to facilitate engagement.
- **Patient Centered Medical Home (PCMH) Practice Manager:** The PCMH practice manager and/or care manager can provide the operational details of what the primary care practice knows (or does not know) when a patient is a super utilizer, and identify opportunities for real time communication, collaboration, complex care planning, and practice-based care management.
- Medicaid Health Plan Care Management Manager and/or Care Manager: One MAX team very successfully
  engaged a Medicaid Managed Care Organization as an Action Team member. The Manager of Care
  Management for the plan was able to provide additional analytics, describe what the plan offered for care
  management, and mobilize on-site care management to initiate in-person engagement with super utilizers.
  The care manager was able to bring a detailed description of day to day work flow processes including insights
  and feedback regarding the newly tested care pathways. In addition, the front line care manager was able to
  describe in detail the "drivers of utilization" among the super utilizer population, and the types of services
  and supports her team was able to mobilize to address those needs.
- **Targeted Providers, Community or Social Service Agencies:** MAX teams would often identify a targeted provider or agency that they knew shared in the care of their super utilizer population. Examples include: HIV clinic, behavioral health clinic, housing, transportation, and schools.

# **Insight 3: Identify Super Utilizers**

The first step in improving care for super utilizers is to know that a patient is a super utilizer. Many clinicians at the hospital know a handful of super utilizers, but it is essential to bring visibility to the full group of patients who present to the facility every day and meet the threshold of utilization over the past year.

# Create a flag or system to identify the super utilizer in real-time

All MAX Action Teams identified that they needed a method to identify super utilizers when they presented to the acute care setting. Teams developed a variety of short term and medium-term solutions to identify super utilizers in real time, including:

- Create a flag to identify any patient who meets super utilization criteria. This is the goal that all MAX teams worked toward. Although some teams believed that creating a flag was technically impossible at the beginning of their work, all 2015-2016 teams were ultimately able to create a flag to identify super utilizers upon presentation in real-time. Much like a flag for isolation precautions or other patient care alerts or notifications, a super utilizer flag can use existing functionalities on the ED tracker board or electronic medical record. Future Action Teams should place a request for a super utilizer flag as soon as super utilization criteria are established, as this can take a few weeks to a few months to achieve in any given organization. This again emphasizes the critical role of the data analyst as part of the Action Team.
- **Run a daily report of all patients who meet super utilization criteria**. This is a reasonable temporary solution to an automated flag, and is helpful to the Action Team while the request to create a flag is pending. This report is built from the same data sources as daily census, length of stay, and readmission reports, and can indicate how many people in the past 24 hours presented to the hospital who met super utilizer criteria. This information can be used to engage with patients who are still in-house, and/or to conduct follow up with those who have been discharged.



# Notify the response team when the super utilizer presents

When a super utilizer presents to the acute care setting, "something different" needs to be done. Use the flag to create a notification to those who should be aware of and/or respond to the super utilizer. As MAX Action Teams have done, this may include:

- **Send an automated email to the Action Team.** It is helpful for the whole Action Team to be aware of all super utilizers who present on a daily basis.
- Send a targeted email to clinicians or coordinators to respond. In addition to the Action Team, specific clinicians or agencies involved in the care of the super utilizer may also be notified when the person presents.
- **Ensure the Action Team and clinicians know what action to take.** As one MAX participant said, "there's no point in having a flag if no one knows what to do about it."

# Identify today's super utilizers; do not work off of last year's list

One of the key lessons learned by the 2015-2016 MAX Action Teams is about the variability of the population of patients who are super utilizers at the hospital from year to year. Out of convenience, many 2015-2016 MAX Action Teams identified a cohort of specific individuals who met super utilizer criteria in the year prior to the launch of the MAX Series Program. These teams learned that very few of "last year's" super utilizers remained super utilizers during their testing and implementation action periods.

- **Consider super utilization as a condition** and look for all patients presenting with "super utilization"; improving care for patients with any given condition requires us to identify the presence of the condition when they present to our care.
- **Establish a "dynamic flag"** to identify patients who meet utilization criteria based on a rolling one year historical period.
- **Don't worry about the limitations** of hospital-specific information: many teams are limited to a view of utilization at their own setting, or within their own hospital system. This is a common limitation and should not be a reason to delay initiating work. If anything, the restriction of identifying super utilizers from one's own data is that some percentage of the super utilizers identified have even more encounters at other facilities. MAX teams identify super utilizers and measure results based on the available hospital-specific data.

# Insight 4: Assess Super Utilizer Needs

# View recurrent utilization as a symptom of unmet needs

Too often, patients who are frequent users of the acute care setting have been labeled as "complex", "difficult", or "non-adherent". In the MAX Series Program, Action Teams were encouraged to view recurrent utilization as a symptom of unmet needs or otherwise ineffective approaches to meeting patient needs. Rather than point to the "problems" of the patient, Action Teams first considered whether there were opportunities to better identify and address the symptom of recurrent utilization, using the following considerations:

- Are we looking at the big picture the patient in context, the patient over time?
- Are we accepting responsibility for addressing psycho-social needs?
- Are we perpetuating a recurrent pattern of utilization by repeating the same evaluation and the same plan, time and time again?



# Identify the "driver of utilization"

One of the most notable breakthrough concepts of the 2015-2016 MAX Series Program was the recommendation that Action Teams systematically pursue the "driver of utilization" for super utilizers. This is driven by the following insights:

- **The "driver of utilization" is not the primary diagnosis**, it is not the chief complaint, and it is not the complex medical history. It is the human, individual reason that this person, with all his/her complexities and social needs, comes to the hospital so frequently, while another person who is similar does not frequent the hospital.
- **The driver of utilization cannot be identified through chart review,** it is necessary to talk to the patient, the family/caregivers, and/or community clinical or service providers.
- Listen for and identify all of the "drivers" of utilization, often there is more than one reason why the patient is preferentially using the acute care setting, and using it so frequently. MAX Action Teams sought to identify a multiplicity of factors that were driving frequent utilization: these multiple factors formed the foundation for interdisciplinary and cross-setting care planning and solution development.

# Use a combination of skills and tools to systematically identify "drivers"

MAX Action Teams tested a variety of strategies to identify the "drivers of utilization." Lessons learned about operationalizing this new task include:

- Use motivational interviewing skills and/or ask "why" five times. Several Action Teams arranged for a social worker or transitional care nurse to engage the patient and identify the drivers of utilization. Once these professionals tested the concept of identifying the driver(s) of utilization, they were able to identify that the relevant skill they were using was either motivational interviewing or the "five why's" technique to identify root causes.
- Develop a "drivers of utilization" screening tool. Other Action Teams developed, tested and implemented a
  standardized "drivers of utilization" screening tool. These tools prompted any staff person licensed clinician
  or not to systematically query about needs in a variety of medical, behavioral health, and social domains
  as a means of identifying drivers of utilization.
- **Do not over-medicalize "drivers of utilization**". Whether Action Teams used skills or tools to support the development of this new competency, they found that the preponderance of drivers of utilization are non-medical at the core, even if the individual has numerous medical conditions.

# Insight 5: Manage: Do Something Different

A foundational concept for MAX Action Teams was the charge to "do something different" to change the care for super utilizers. It is common to find that super utilizers have been exposed to the same plan and the same recommendations, time and time again. Often this leads providers to label patients as "non-compliant" with the plan of care that they have developed. In the MAX Series Program, Action Teams were encouraged to reverse that perspective and consider the need to change the plan to better address the driver(s) of utilization.

# Engage the patient, on-site, now

Hospital-based teams dedicated to improving care for super utilizers have a distinct operational advantage to leverage: the patient comes to us, frequently. This presents an opportunity to engage with the patients, when they present, every time they present.



- Use the encounter in the acute care setting as an opportunity to build a helpful, trusting relationship. Unfortunately, it is all too common to observe that super utilizers experience negative or un-helpful encounters from the acute care setting. An insight of staff who successfully engage super utilizers is to prioritize identifying and responding to the patient's needs.
- *Identify a way to be helpful in the immediate short term.* Navigators note that an effective engagement strategy is to be helpful by providing a service to meet an immediate or short term need. Meeting an immediate need can be an important signal to the super utilizer that the new care team intends to focus on patient needs rather than a medicalized agenda.
- **Try, try again.** An expected challenge of working with super utilizers is that there will be a group of patients who are relatively resistant to engagement. This is a component of what has caused them to develop the condition of frequent utilization of the acute care system. Action teams celebrated breakthroughs when persistent and repeated attempts at patient engagement ultimately resulted in successful initiation of a more productive encounter.

# Create "new pathways" to effectively mobilize support

As they came to better understand the drivers of utilization among their super utilizer populations, Action Teams noted that there were distinct subgroups of super utilizers. Although the needs of these subgroups may have been met in the past by the heroic efforts of individual providers, it became clear that individual problem solving over and over again was both time-consuming for staff and ultimately unreliable as a system property. Thus, teams tested whether they could work on developing "new referral pathways" so that they could "make doing the right thing the easy thing" for staff.

- *Identify a subgroup of super utilizers with a common driver of utilization*. Action Teams noted some super utilizer subgroups included: patients from certain living environments, such as group homes or assisted living facilities; patients with certain needs such as housing or food; and patients lacking clinical services such as intensive care management or behavioral health treatment.
- Identify the provider or agency that has the ability to address the driver of utilization. Hospital-based teams may perceive the community has a lack of resources among providers or community agencies to address the drivers of utilization among this patient population. The first step is to identify the providers or agencies that have the skills to address the drivers of utilization. Action Teams were universally delighted to discover partners who were willing and able to respond to super utilizer needs.
- **Develop "referral pathways" to "make doing the right thing the easy thing" for staff**. Quantify the number of patients per day, per week, who would need linkage to the certain provider or agency. It is usually much less than one might imagine. Once quantified, the Action Team can develop a specific process: referral criteria, referral communications, coordination and handoff processes to make effectively linking patients to these new services as easy as it is to link to any other known clinical service.

# Provide care management support until definitive linkage occurs

This was one of the most challenging aspects of improving care for super utilizers for Action Teams. A small number of Action Teams were able to mobilize the human resources to provide intensive, flexible, iterative contacts with patients in the days to weeks following discharge from the acute care setting.

• **Provide flexible, iterative, high-frequency contact.** Frequently, super utilizers seek connection and other elements of the therapeutic clinical encounter as one of the drivers of utilization. Super utilizer care teams need to develop a mechanism to provide high-frequency contact. This contact does not necessarily need to be provided by a licensed clinician.



- **Provide reassurance, coaching, and behavioral modification coaching.** Recognizing that a component of super utilization may be a result of years of learned behavior to rely on utilizing the acute care setting to meet certain needs, super utilizer care teams need to have staff capable of identifying and addressing care seeking triggers and patterns, and coaching super utilizers to re-train responses to perceived urgent care seeking needs.
- **Provide "whole-person" care management and care coordination.** Super utilizers often have clinical, behavioral health, and social needs. The care management provided by super utilizer care teams is best done by the "right" person who is characterized by "doing it all" without boundaries in his or her approach to complex care management. Action Teams identified individuals who demonstrated exceptional skill in care management. These individuals ranged widely in professional background, and ranged from a care coordinator of a health home, a home care nurse, a behavioral health clinician, and a social worker. The key feature that emerged was "boundary-less-ness" and tenacity.

# Insight 6: Follow up to Ensure Stability

Improving care for super utilizers is an effort that spans well beyond the point of discharge, often extending over months. The ultimate objective of efforts to improve care for super utilizers is to help a patient and a population move from a place of instability – manifested by high acute care utilization – to a place of greater stability – manifested by lower acute care utilization.

Once Action Teams identified and engaged super utilizers and initiated efforts to "do something different" to address super utilizers' drivers of utilization, Action Teams were challenged to develop new processes, services, and/or partnerships to ensure that the "drivers of utilization" that were previously unrecognized and unaddressed were better addressed and managed.

This was a new challenge with the patient for Action Teams: ensuring that management continues beyond the point of discharge. Effectively following up to ensure stability, represents a new competency for many hospitalbased teams. Action Teams needed to develop strategies to either deliver services directly until stability was achieved, or develop a forum for case conferencing to collaborate with others on jointly managed efforts to achieve stability, or follow up on services and supports that were delegated to accountable care management entities.

### Directly manage until "stability" has been achieved

- Some Action Teams directly managed super utilizers via intensive care management in the weeks to months following identification and engagement of a super utilizer.
- Mobilizing an internal team to directly manage super utilizers over time allowed the team to effectively and repeatedly engage with the target population when they presented to the acute care setting, and leverage the insights from those direct engagements to address the driver(s) of utilization.
- One Action Team mobilized a navigator from the on-campus health center who could meet the super utilizer in the emergency department and continue engagement via phone and home visits over a period of weeks to months, ensuring connections to social and clinical services were achieved.
- Another Action Team mobilized a nurse from the hospital's home care agency and a behavioral health clinician from an on-site medical home to directly support super utilizers until stability was achieved, defined as not returning to the acute care setting for 45 days.



# Indirectly manage to ensure "something different" is being done

- Several Action Teams developed processes for better coordinating and collaborating in the more intensive management of super utilizers with providers and agencies in the community.
- Cross-setting Action Teams successfully linked super utilizers to existing resources in the community.
- One Action Team worked to identify a care manager for each of their super utilizers: they were able to identify this "quarterback" for over 80% of their super utilizers. The identification of a quarterback allowed the Action Team to bring the patient's high utilization to the attention of the quarterback, share insights regarding the "driver(s) of utilization" and collaborate to better address those drivers.
- Another Action Team collaborated with a housing services agency to develop a creative and effective modification to the existing outreach work of the agency. The outreach team offered to expand their outreach to include the emergency department waiting room, which is where a handful of individuals seeking temporary overnight shelter could be found every night.

# Use care plans

- An essential tool in the effort to improve care for super utilizers is the "care plan." Care plans are well known tools for care managers, but often this tool was new to the Action Team.
- Action Teams developed processes for developing care plans, often in collaboration with community providers and agencies.
- Care plans form the basis for case conferencing, and interdisciplinary and inter-organizational problem solving.
- Several Action Teams developed care plans for a majority of their super utilizers: one Action Team developed care plans for 70 of their 80 high utilizers within a six month time frame.
- For more information, see Chapter 6 in AHRQ's publication, *Designing and Delivering Whole-Person Transitional Care: The Hospital Guide to Reducing Medicaid Readmissions* for a description of the type of care plans found most useful to teams and an example care plan template<sup>5</sup>.

# Insight 7: Measure to Drive Implementation and Results

MAX Action Teams embraced the importance of measurement as an essential tool to guide testing and implementation, as well as detect the signal of improvement in care.

# Measures to drive improvement

The MAX Series Program team consistently encouraged Action Teams to track and reflect on the following measures of identification, engagement, and service delivery:

- *Measures of volume:* Action Teams were asked to track the number of super utilizers who presented on a weekly basis.
- **Measures of engagement and assessment:** Action Teams were asked to track the number of super utilizers who were seen and assessed for "drivers of utilization" while they were on-site.
- **Measures of service delivery:** Action Teams were asked to track the number of super utilizers for whom "something different" was done. This could include anything that was non-standard, such as developing a care plan, engaging in an interdisciplinary and cross-setting case conference on behalf of the patient,

<sup>&</sup>lt;sup>5</sup> <u>http://www.ahrq.gov/professionals/systems/hospital/medicaidreadmitguide/index.html</u>



following up with patients in the days and weeks following discharge, providing support and linkage to community resources, etc.

## Measures to describe changes

The MAX Series Program team helped Action Teams establish measurement of capabilities and processes as they changed over time, at baseline and after each of the three action periods. This was done through the following steps:

- **Describe the current state at the beginning of the effort.** Action Teams documented the current care delivery process for super utilizers.
- **Periodically update the process map after each action period.** Periodically revisiting the process map facilitated increasingly detailed discussions about opportunities to improve current state, even as current state evolved and improved.
- **Celebrate!** The MAX Series Program emphasized the importance of celebrating achieving milestones, and encouraged Action Teams to celebrate the achievement of making changes as a team. Too often, healthcare improvement teams do not take the time to celebrate achievement perhaps because it seems there is always more improvement to do. Celebrating is an important acknowledgment of the innumerable ways in which the Action Team is innovating, testing and implementing changes that are resulting in meaningful improvements in patient care, professional workflow, and quality.

### Measures to demonstrate impact

MAX Action Teams measured the change in utilization for the super utilizer cohorts, collected patient stories to articulate the impact on human lives, and captured staff and partner feedback regarding the workflow processes that were being tested and implemented.

- **Quantitative:** In the 2015-2016 MAX Series Program, Action Teams measured the decrease in utilization for super utilizers in the three months before the MAX Series Program started, compared to the three months after they were first seen and engaged in the new care processes that were being tested and implemented.
- **Qualitative patient stories:** Improving care for super utilizers requires understanding who the super utilizers are, what their drivers of utilization were, how these drivers were addressed, and the partnerships, problem solving and specific actions that were taken in order to successfully bring patients from an unstable state of high utilization to a stable state of lower, more appropriate utilization. This work is best told through patient stories. At the conclusion of each action period, Action Teams reported out to each other, sharing a patient story. This accelerated a deeper understanding of this patient population among the Action Teams.
- **Qualitative staff feedback:** The MAX Series Program team emphasized that the changes Action Teams put in place must ultimately save time, rework, frustration, or energy. The changes must not add work to busy clinicians' lives, but rather create a more efficient process or a more satisfying professional experience. Many members of Action Teams repeatedly stated the improvements that were made created professional satisfaction. In addition, Action Team members universally found satisfaction in being part of meaningful inter-departmental and cross-setting collaboration.

The next section of this report provides three examples of "MAX in Practice" – highlighting the work of three Action Teams and how they demonstrate the insights discussed above in a very practical way.



# MAX in Practice: Inpatient High Utilizer Program

# Southside Hospital

# "This [program] is helping us break down silos and work together in new ways to meet patient needs"

Southside Hospital defined super utilizers as patients with four or more admissions in a 12-month period. This definition yielded a target population of **144 patients** who collectively accounted for **891 ED visits and 680 inpatient admissions** (from January 2015 – December 2015)



The Action Team was comprised of the following members:

- Senior Administrative Director, Southside Hospital
- Director Hospitalist Program, Southside Hospital
- Medical Director, Southside Hospital
- Social Work Manager, Southside Hospital
- Inpatient Social Worker, Southside Hospital
- Director Case Management, Southside Hospital
- Outpatient Medicine Clinician, Family Health Program
- Social Worker Services, Family Service League
- Resource Coordinator, Patient and Family Health/SBIRT Coach, Northwell Health
- Project Manager, Northwell Health

At baseline, the Southside Hospital Action Team stated they had no specific processes in place to identify, assess, manage, or follow up with Super Utilizers.

In the first Action Period, the Southside Hospital Team implemented the following three Action Plans:

- 1. Create a flag to identify super utilizers
- 2. Develop a tool to assess the "driver of utilization"
- 3. Pilot a response system to a super utilizer presentation

In the second Action Period, the Team implemented the following three Action Plans:

- 4. Implement daily huddles to discuss super utilizers and develop a plan of care
- 5. Mobilize a point person to coordinate follow up for super utilizers
- 6. Link super utilizers consistently to the partnering social service agency

In the third Action Period, the Team implemented the following three Action Plans:

- 7. Develop a job description for a Resource Coordinator
- 8. Build community resource relationships



9. Articulate a business case for ongoing resources to support the super utilizer care team

At the end of three Action Periods, Southside Hospital's process map included the following:

PATIENT IDENTIFICATION	PLANNING	MANAGEMENT	FOLLOW UP
<ul> <li>Flag in EMR</li> <li>HIE alert</li> </ul>	<ul> <li>Assess social and behavioral health needs based on 8 P's</li> <li>Engage patient in "different way"</li> <li>Care Team real time huddle for care planning</li> </ul>	<ul> <li>Upload care plan on Sharepoint to communicate updates</li> <li>Care Management team provides follow up and and support post- discharge</li> </ul>	<ul> <li>Definitively connect patients to critical social services and support in the community</li> <li>Case conference to continually improve strategies for persistent super users</li> </ul>

# Results: March 2016 - November 2016

Note: O	Hospital Utilization (Mar. '16 – Nov. '16) Note: Only includes patients with an Index visit and at least 90 days of post-index visit data (n = 36)						
	<b>Before</b> 90 Day Pre-Index Visit	<b>After</b> 90 Day Post-Index Visit	%Δ	Avg.	Med.		
*ED Visits	s 19	8	- 58%	- 93%	- 100%		
*IP Admissi	<b>62</b>	25	- 60%	-60%	- 100%		
	81	33	- 59%	- 52%	- 94%		
Total	:	*Calculations are based on self-re	eported da	ta from Act	ion Team		

Note: The index visit is defined as the visit in which the patient was first engaged differently as a result of program process changes. In order to perform a comparative analysis of patient utilization before and after they were engaged during an index visit, only those patients who had 90 days of pre and post index visit data were included in the results.

# Key lessons learned include:

- **Establishing huddles with a clinician** helps shift Case Management responsibility from determining clinical service needs to focusing on psycho-social needs.
- **Bringing together different representatives from the continuum of care** has created a holistic approach for meeting the needs of super utilizers unlike before.
- Due to the short program timeframe, the results calculated represent a small sample size. As the team continues to collect data and target new patients, the sample size will increase to strengthen the statistical significance of the data.



# MAX in Practice: ED High Utilizer Program

# Champlain Valley Physicians Hospital

# *"If it wasn't for you coming into my home and making me feel normal, I would have never started this journey." – Super Utilizer*

Champlain Valley Physicians Hospital (CVPH) defined Super Utilizers as patients with 10 or more ED visits in a 12-month period. This definition yielded a target population of **91 patients** who collectively accounted for **1,245 ED visits** and **243 inpatient admissions** (from January 2015 – December 2015).



The Action Team was comprised of the following members:

- Director of Medical Home Care Management & Quality, CVPH
- Director of Management & Process Improvement, CVPH
- ED Nursing Director, CVPH
- ED Lead Physician, CVPH
- Information Management Data Analyst, CVPH
- Crisis Care Manager, Behavioral Health Services North (BHSN)
- Supervisor, Housing and Substance Abuse Program, Champlain Valley Family Center

At baseline, the CVPH Action Team stated they had no specific processes in place to identify, assess, manage, or follow-up with Super Utilizers.

In Action Period 1 (30 days), the CVPH Action Team implemented the following three Action Plans:

- 1. Comprehensive Care Plan Development (for clinical, social, and behavioral health services)
- 2. Regular Stakeholder Case Review
- 3. ED Workflow Patient Consent Standard

In Action Period 2 (90 days), the CVPH Action Team implemented the following three Action Plans:

- 4. Long Term Plan for Community Patient Management
- 5. Process for Short-term Intense Follow-Up
- 6. Detailed Stakeholder and Care Team Workflow and Communication Strategy

In Action Period 3 (90 days), the CVPH Action Team implemented the following three Action Plans:

- 7. Develop Peer Navigator Role to Assist with Definitive Linkage to Community Services
- 8. Develop a Streamlined Needs Assessment



9. Develop Cohort Maintenance Plan and Graduation Criteria

At the end of three Action Periods, the CVPH Action Team's process map included the following:

PATIENT IDENTIFICATION	PLANNING	MANAGEMENT	FOLLOW UP
<ul> <li>Super Utilizer flag in EMR</li> <li>Real time alert to hospital and community care team</li> </ul>	<ul> <li>Needs assessment to identify underlying social and behavioral needs</li> <li>ED resources mobilized for initial patient engagement</li> </ul>	<ul> <li>Care management engages with patients post-discharge</li> <li>Community resource Social Worker/Care Manager helps connect patient to services</li> </ul>	<ul> <li>Definitively connect patients to critical social services</li> <li>Bi-weekly interdisciplinary meetings</li> </ul>

# Results: March 2016 – November 2016

Note:	Hospital Utilization <i>(Mar. '16 – Nov. '16)</i> Note: Only includes patients with an Index visit and at least 90 days of post-index visit data (n = 19)						
	<b>Before</b> 90 Day Pre-Index Visit	<b>After</b> 90 Day Post-Index Visit	<b>%</b> Δ	Avg.	Med.		
*ED Visit	s 149	39	- 74%	- 68%	- 75%		
الله IP Admissi*	<b>21</b>	5	- <b>76</b> %	- 74%	- 100%		
	170	44	- 74%	- 74%	- 75%		
Total		*Calculations are based on self	-reported o	lata from A	ction Team		

Note: The index visit is defined as the visit in which the patient was first engaged differently as a result of program process changes. In order to perform a comparative analysis of patient utilization before and after they were engaged during an index visit, only those patients who had 90 days of pre and post index visit data were included in the results.

# Key lessons learned included:

- Leveraging community resources is critical for connecting Super Utilizers to social and behavioral health resources.
- There is **no single solution** for the Super Utilizer population; need to take an individualized approach and build a trusting relationship with the patient.
- Data provides insights for further process improvement opportunities.
- Due to the short program timeframe, the results calculated represent a small sample size. As the team continues to collect data and target new patients, the sample size will increase to strengthen the statistical significance of the data.



# MAX in Practice: Improving Care for Patients with Chronic Pain

Ellenville Regional Hospital and the Institute for Family Health

"Now, though, we can divert these patients into primary care where they will see a primary care physician who will adjust their medications and refer them to a pain management track if necessary, and into an addiction care track if that's necessary, and there's a psychological and psycho-social track too. The end result is to help people get the services they really need." – CEO Ellenville Hospital

Ellenville Regional Hospital and the Institute for Family Health defined their Super Utilizer population based on the pressing opiate crisis in their community. The Super Utilizers criterion developed was for patients who presented to the ED for the management of chronic pain 5 or more times in a 12-month period. This definition yielded a target population of **64 patients** who collectively accounted for **418 ED visits**.



The Action Team was comprised of the following members:

- Vice President, Quality, Compliance & Medical Staff Services, Ellenville Regional Hospital
- ED & Emergency Medical Services Coordinator, Ellenville Regional Hospital
- Chief Nursing Officer, Ellenville Regional Hospital
- Senior Vice President, Psychosocial Services and Community Affairs, Institute for Family Health
- Program Director, Institute for Family Health
- Patient Navigator, Institute for Family Health
- Primary Care Physician, Ellenville Family Health Center

At baseline, the Ellenville Action Team stated they had no specific processes in place to respond to patient requests for opiates in the ED.

In Action Period 1, the Ellenville Team implemented the following three Action Plans:

- 1. Provider Education Regarding Narcotics Prescriptions
- 2. Standardizing a Cohesive Approach to Narcotics Prescriptions in ED
- 3. Instituting Care Navigation in the ED

In Action Period 2, the Ellenville Team implemented the following three Action Plans:

- 4. Open Access Plan for Dedicated PCP Appointment
- 5. Developing a Comprehensive Patient Profile for each Super Utilizer Patient
- 6. Institute for Family Health Workflow

In the Action Period 3, the Ellenville Team implemented the following three Action Plans:

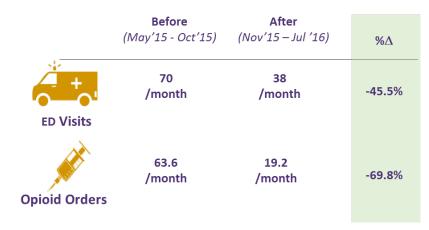


- 7. Refresh and Expand Cohort for a Dynamic Super Utilizer List
- 8. Link Patients to Mental Health Services
- 9. Patient Navigator Outreach to Reduce Social Anxiety

At the end of the three Action Periods, Ellenville's process map included the following:



Results: May 2015 – July 2016



Note: Results are presented differently than in previous examples due to different methodology used between Topics 1 and 3.

# Key lessons learned include:

- Establishing standardized practice guidelines through the Chronic Pain Policy and gaining the support of medical staff, leadership, and community providers through education helped sustain the effort.
- Instituting 24/7 Care Navigation services for a "warm hand-off" was pivotal for assisting this population with their medical, social and behavioral needs.



# **Summary**

# Five Lessons Learned About Improving Care for Super Utilizers

The Action Teams who participated in the MAX Series Program on Improving Care for Super Utilizers represent a diverse set of hospitals from a wide range of communities from across the State of New York. Despite this heterogeneity, the intensive work to improve care for super utilizers using quality improvement and system engineering principles resulted in a remarkably consistent set of necessary capabilities and feasible actions.

- 1. Improving care for super utilizers requires we know who to focus on.
  - Be clear and specific about the definition of the super utilizer target population.
  - Immediately start to work on a mechanism to identify the super utilizer upon presentation.
  - Use historical data analysis to estimate how many super utilizer presentations per day can be expected to occur.
- 2. Improving care for super utilizers requires we view frequent utilization as a symptom of an unaddressed or unmet need.
  - Understand super utilizers often have a combination of medical, behavioral health, and social needs.
  - Diagnose the "driver of utilization", which is a clinical, encounter-based assessment.
  - Identify what needs the patient is seeking to have met in the acute care setting: do not over-medicalize the "driver of utilization."
- 3. Improving care for super utilizers requires us to "do something different."
  - Engage: use motivational interviewing, person-in-context orientation.
  - Be helpful: address patients' needs, patients' priorities.
  - Do not medicalize the agenda: intensive care management may be largely behavioral and social.
- 4. Improving care for super utilizers requires we successfully engage with and intensively serve patients after they leave the hospital setting.
  - Immediately follow up: navigators walk patients from ED to clinic; ensure accurate contact information; engage via phone, text, and in-person after the visit.
  - Be available, be flexible, be responsive as a navigator, advocate, social worker, coach, and/or care manager.
  - Expect that management is iterative and will occur over time.

# 5. Improving care for super utilizers requires we actively collaborate with community providers and agencies.

- Engage interdisciplinary, cross setting teams.
- Develop complex care plans and set up case conferences.
- Form new referral pathways to make linking super utilizers to existing services more effective and efficient.



# **Appendix: Workshop Evaluation Questionnaire and Results**

Questionnaire

# DSRIP – MAX Series Program – Improving Care for Super Utilizers

Workshop 1 Evaluation

Thank you for participating in the MAX Series Program – Workshop 1. Please complete the following evaluation and **hand in to your Facilitator before you leave the session**.

1. Please provide name of your Action Team:						
2. Please rate the ove	erall value of the Wo	orkshop				
□ 1 – Poor	🛛 2 – Fair	3 – Neutral	□ 4 – Good	□ 5 – Excellent		
Comments:						
3. Please rate the effe	ectiveness of the pre	esenters during the Worl	kshop			
Workshop Facilitat	tor					
□ 1 – Poor	🛛 2 – Fair	3 – Neutral	□ 4 – Good	□ 5 – Excellent		
Topic Expert and P	Presenter					
🛛 1 – Poor	🛛 2 – Fair	3 – Neutral	□ 4 – Good	□ 5 – Excellent		
Comments:						

4. Please rate the effectiveness of your MORNING FACILITATOR (check appropriate facilitator as per your Action Team)							
□ Facilitator 1		Facilitator 3	🗆 Facili	itator 5			
□ Facilitator 2		Facilitator 4	🗆 Facili	itator 6			
🛛 1 – Poor	🛛 2 – Fair	🛛 3 – Neutral	🛛 4 – Good	5 – Excellent			
Comments:							



5. Please rate the effectiveness of your AFTERNOON FACILITATOR (check appropriate facilitator as per your Action Team)									
	Facilitator 1				Facilitator 3			Facilitator 5	
	Facilitator 2				Facilitator 4			Facilitator 6	
	1 – Poor		2 – Fair		□ 3 – Neutral		4 – Good		5 – Excellent
Comme	nts:								

6. Please rate your overall assessment of the following						
Confidence in your abi	ility to <b>change th</b>	ie way you work				
□ 1 – Very Low	□ 2 – Low	3 – Neutral	🛛 4 – High	🛛 5 – Very High		
Confidence that you ca equipment or facilities		er quality care to your pation	ents without additior	nal resources (staff,		
□ 1 – Very Low	□ 2 – Low	🛛 3 – Neutral	🛛 4 – High	🛛 5 – Very High		
Confidence that you ca	an care for <b>more</b>	e patients without addition	al resources (staff, ed	quipment or facilities)		
1 – Very Low	□ 2 – Low	3 – Neutral	🛛 4 – High	🛛 5 – Very High		
Comments:						

7. What did you find most valuable about the Workshop? In other words, <u>what do you want to see more of in</u> <u>the next Workshop</u> ?
Comments:
8. What did you find least valuable about the Workshop? In other words, what needs to change for the next

8. What did you find least valuable about the Workshop? In other words, <u>what needs to change for the next</u> <u>Workshop</u>?

Comments:

9. Would you recommend this pro	ram to a colleague?
□ Yes	□ No

**10. Other comments or suggestions** 



# Workshop Evaluation Results: Topics 1 and 3

	Metrics	Topic 1 Managing Care for Super Utilizers	Topic 3 Managing Care for Super Utilizers
	Average Overall Rating	4.7	4.8
Workshop 1	% Recommend program to a colleague	98%	100%
	Average Facilitator Score	4.4	4.8
	Average Overall Rating	4.8	4.8
Workshop 2AB	% Recommend program to a colleague	98%	100%
	Average Facilitator Score	4.8	4.8
	Average Overall Rating	4.9	4.8
Workshop 3AB	% Recommend program to a colleague	100%	100%
	Average Facilitator Score	4.8	4.8
Av	verage Overall Rating	4.8	4.8
Top 3 noted areas of value		<ul> <li>Structure</li> <li>Networking and collaboration with other teams</li> <li>Facilitation</li> </ul>	<ul> <li>Structure, organization and timeliness</li> <li>Networking and collaboration with other Action Teams</li> <li>Topic expertise</li> </ul>
Top 3 noted areas for improvement		<ul> <li>Length of Workshops</li> <li>Location (travel time)</li> <li>Too much to do in too little time</li> </ul>	<ul> <li>Length of Workshops</li> <li>Location (travel time)</li> <li>Set up (tables)</li> </ul>