

# **CHART** Awardee Profiles



# Introduction to the CHART Profiles



The CHART program invested approximately \$70 million in 30 community hospitals through two phases of funding between 2014 and 2018. Combined with hospital in-kind contributions, the total program investment exceeded \$85 million. During Phase 1 of the program, CHART hospitals initiated capability and capacity building, conducted improvement planning activities, and/or implemented rapid-cycle pilots. During Phase 2, CHART hospitals implemented innovative care models to integrate medical, behavioral health, and social services; shift care from the hospital to the community; prepare to participate in value-based care models; and leverage data and analytics to better serve their patients. The CHART Profiles provide overviews of each awardee's program and highlights awardees' successes and key transformation achievements.

# Guide to the Elements of the CHART Awardee Profiles



#### 1 Awardee Name

CHART awardee

#### 2 Map

CHART awardee location

#### **3 Total Investment**

Amounts shown reflect a combined total of all budgeted funding (HPC funding, in-kind contributions, hospital system contributions, and other funding sources as applicable) for CHART Phases 1 and 2. These amounts are based on the final HPC-approved budgets outlining projected expenses (e.g., salary, enabling technology, community partnerships, and other expenses). The total investment included in the profiles may not be equal to an awardee's reported final expenditure.

#### 4 Focus Area

Focus areas reflect the utilization reduction targets established by the awardees prior to the performance period and, in some cases, modified during the performance period.

#### **5 Target Population**

The target population section reflects the definitions awardees provided in the Implementation Plan and/or the Strategic Plan they submitted to the HPC toward the conclusion of the performance period.

#### 6 Program Funding

*Phase 1 HPC Investment:* Amounts shown reflect the maximum HPC funding awarded for Phase 1. In some cases, individual hospitals that received HPC funding in Phase 1 joined together to receive a "joint award" for Phase 2:

- Athol Memorial Hospital and Heywood Hospital participated in the Heywood-Athol Joint Award
- Lawrence Memorial Hospital and Melrose-Wakefield Hospitals participated in Hallmark Health System's Phase 2 Joint Award
- Charlton Hospital, St. Luke's Hospital, and Tobey Hospital participated in Southcoast Hospital Group's Phase 2 Joint Award
- Addison Gilbert Hospital, Beverly Hospital, Winchester Hospital, and Lowell General Hospital participated in the Lahey-Lowell Phase 2 Joint Award.

In addition, each of the four hospitals in the Lahey-Lowell Joint Award also received hospital-specific awards in Phase 2 (see separate profiles). Descriptions of Phase 1 activities for those four hospitals can be found in the individual profiles. *Phase 2 HPC Investment:* Amounts shown reflect the maximum HPC funding awarded for Phase 2, as indicated in the final HPC-approved budgets.

#### 7 Key Transformation Achievements

Key transformation achievements represent qualitative indicators of hospital improvement in the domains targeted by the CHART program: to deliver integrated care across medical, behavioral health, and social needs; to shift care from the hospital to the community; to prepare to succeed in value-based care models; and to use data and analytics to better serve patients.<sup>1</sup> Selected transformation achievements represent a sample of high-scoring impact domains. Cohort-wide transformation achievement results will be included in the forthcoming CHART Phase 2 Evaluation Report.

#### 8 Data Highlights

Awardees submitted regular program update documents to the HPC describing operational successes and challenges as well as patient and provider stories. The data highlights included in the profiles were compiled by the HPC from these program updates and other documents submitted by the awardees, including Implementation Plans, Strategic Plans, and final financial reports (reflecting reported actual expenditures).

#### 9 Provider Quotes

Provider quotes were selected from program update documents awardees submitted to the HPC, Strategic Plans submitted to the HPC, or from interviews with program staff conducted by the Boston University School of Public Health, which performed certain CHART Phase 2 evaluation activities under a contract with the HPC.

#### **10 Patient Stories**

Patient stories were selected from awardees' program update documents submitted to the HPC. The stories were shortened for clarity and to protect patient privacy. Patient story outcomes reflect patient status as of the date awardees submitted program update documents to the HPC.

#### <sup>1</sup> CHART Program Impact Brief

Please note that Baystate Mary Lane Hospital, Beth Israel Deaconess – Needham Hospital, and North Adams Regional Hospital were awarded a Phase 1 investment but did not participate in Phase 2, and are therefore not included in this compilation of profiles. Additionally, three awards which funded unique infrastructure projects in Phase 2 are not included in these profiles: Holyoke Medical Center and Harrington Memorial Hospital received capital awards to improve facilities to enhance behavioral health services, and the Baystate system (Baystate Franklin Medical Center, Baystate Noble Hospital, and Baystate Wing Hospital) received a joint award to expand its use of telemedicine. Since the infrastructure projects sought to improve general capacity at these hospitals, they have not been included in the profiles.



# **Addison Gilbert Hospital**



Total Investment \$1,853,368 Phase 1 HPC Investment: \$291,581 Phase 2 HPC Investment: \$1,269,057

**Phase 2 Focus Area:** Reducing inpatient readmissions and emergency department (ED) revisits

**Phase 2 Target Population:** Patients with high inpatient utilization, readmissions, or social complexity

**Phase 1 Capacity Building:** Addison Gilbert Hospital formed a multidisciplinary High-Risk Intervention Team (HRIT) consisting of a care manager, social worker, and pharmacist to improve follow-up, care coordination, and connection to services post-discharge.

**Phase 2 Care Model:** Addison Gilbert Hospital embedded its HRIT on inpatient floors and in the ED to develop care plans and provide integrated, coordinated care for eligible patients. The HRIT engaged patients to ensure appropriate care post-discharge. The HRIT also collaborated with local visiting nurse services and skilled nursing facilities (SNF) to improve continuity of care from the hospital to the community.

## **Key Transformation Achievements:**

- Developed and refined ability to conduct near-real-time target population identification
- Developed a risk stratification method to target patients in need of intensive services
- Enhanced relationships with community partners through embedded staff and/or other shared team model



## **Patient Story**

"This program adds value to the overall hospital experience for the patient because it adds an element of continuity to their care. This helps the patient feel like they have people they can turn to..." – Nurse Practitioner An older adult patient in assisted living with multiple chronic conditions was diagnosed with cancer.

agreed to enroll in the program.



The patient initially resisted help from the HRIT, but ultimately



The HRIT helped the patient and family find affordable housing, meals, and a phone, and arranged for the patient to receive care in a SNF after hospitalization.

The patient became more stable in the community and had fewer hospital visits.

#### About CHART



## **Anna Jaques Hospital**



Total Investment \$1,674,490 Phase 1 HPC Investment: \$333,500

Phase 2 HPC Investment: \$1,041,627

Phase 2 Focus Area: Reducing inpatient readmissions

**Phase 2 Target Populations:** Patients with high inpatient or emergency department (ED) utilization; patients at risk for high utilization

**Phase 1 Capacity Building:** Anna Jaques Hospital provided change management trainings for hospital leaders and staff to facilitate improvement projects, including implementation of a care management software tool, creation of a centralized database of care plans for use by ED staff, and enhanced communication between nursing homes and hospital staff.

**Phase 2 Care Model:** Anna Jaques Hospital deployed a multidisciplinary care team to support patients with complex medical conditions being treated in the ED or inpatient setting. The team developed care plans and linked patients to services before discharge, while a pharmacist provided medication education. Elder Services of the Merrimack Valley provided transitional coaching and followed patients in the community for up to 180 days post-discharge.

## **Key Transformation Achievements:**

- Developed and refined ability to conduct near-real-time target population identification
- Developed a risk stratification method to target patients in need of intensive services
- Developed new modes of communication with community partners



## **Patient Story**

"The case managers are a great resource for my team...[They] provide us with an understanding of the backstory on some of the most challenging patients and helped us to get on the same page in addressing their needs." – ED Physician An older adult patient on multiple medications was flagged for medication reconciliation during an inpatient stay.



A CHART pharmacist conducted medication reconciliation and identified that the patient's spouse was not always able to fill the prescriptions.



The pharmacist worked with the patient's care team and referred the patient to a pharmacy with home visiting services.

With the additional support, the patient and spouse were better able to manage the medications.

#### About CHART



# **Baystate Franklin Medical Center**



Total Investment \$2,510,762 Phase 1 HPC Investment: \$476,400 **Phase 2 HPC Investment:** \$1,569,000

**Phase 2 Focus Area:** Reducing inpatient readmissions and emergency department (ED) revisits

**Phase 2 Target Population:** Patients with high inpatient utilization or behavioral health-related ED utilization

**Phase 1 Capacity Building:** Baystate Franklin Medical Center connected three primary care practices and three skilled nursing facilities to the Pioneer Valley Information Exchange, a local patient health information system that allowed them to share patient data efficiently with each other and improve care.

**Phase 2 Care Model:** Baystate Franklin Medical Center's CHART Complex Care Team engaged with patients in the ED, on inpatient floors, in the outpatient setting, and/or at home. In the ED, the team screened patients for health-related social needs and gaps in access to primary care or behavioral health care. By addressing access issues and connecting patients to community-based support services, the team decreased acute utilization.

## **Key Transformation Achievements:**

- Instituted new staffing models or processes to integrate behavioral health and medical care
- Provided enhanced referrals to address health-related social needs
- Developed new modes of communication with community partners

13% reduction in ED revisits
67% of eligible patients agreed to participate in the program

## **Patient Story**

"[Our Community Health Worker] is able to lift the burden by being there when [patients] are anxious, finding services, providing transportation, as well as [providing] counseling on the go. He reinforced the mantra for our team, 'do for, do with, and cheer on.'"

-CHART Staff Member

A patient was experiencing housing instability and had a chronic condition that caused frequent hospital admissions for difficulty breathing.





The CHW identified that the patient was exposed to second-hand smoke in this environment, which was contributing to high ED utilization.



The CHW helped identify another affordable living arrangement that provided a healthier environment and a network of social supports for the patient.

#### About CHART



## **Baystate Noble Hospital**



Total Investment \$1,655,583 Phase 1 HPC Investment: \$344,665 **Phase 2 HPC Investment:** \$1,040,100

**Phase 2 Focus Area:** Reducing inpatient readmissions and emergency department (ED) revisits

**Phase 2 Target Population:** All patients discharged to a skilled nursing facility; all patients with high ED or inpatient utilization

**Phase 1 Capacity Building:** Baystate Noble Hospital adopted a universal scheduling system and central scheduling hub for all departments across the hospital to streamline the scheduling process, increase efficiency, decrease wait times, and improve patient experience.

**Phase 2 Care Model:** The Baystate Noble Hospital Complex Care Team (CCT) assessed eligible patients in the ED, and provided individualized care plans, medication optimization, and referrals to community-based services. In the inpatient setting, the CCT participated in multidisciplinary rounds, coordinated services (including palliative care), and facilitated warm handoffs to in-hospital services. To ensure that all patient needs were met, the CCT provided in-home follow-up within 48 hours, medication review and reconciliation, and care navigation post-discharge.

## **Key Transformation Achievements:**

- Developed and refined ability to conduct near-real-time target population identification
- Developed new modes of communication with community partners
- Enhanced relationships with community partners through embedded staff and/or other shared team model



### **Patient Story**

A patient with a substance use disorder and chronic conditions visited the ED every 4-6 weeks.



The CCT helped the patient contact their primary care provider and insurer to obtain preventive services every 3-4 weeks to manage the chronic condition and prevent flare ups.

The CCT also referred the patient to education services to avoid other risks.

"CHART is ... a program with endless potential for change and community growth. We are able to focus on the individual, getting to learn their story and journey, and then working with them to identify the resources and supports that can assist them now and in the future."

- CHART Mental Health Clinician

#### About CHART



## **Baystate Wing Hospital**



Total Investment \$2,050,527 Phase 1 HPC Investment: \$357,000 Phase 2 HPC Investment: \$877,600

Phase 2 Focus Area: Reducing inpatient readmissions

**Phase 2 Target Population:** Patients age 50+ with a life-limiting condition, complex social needs, and/or a behavioral health diagnosis

**Phase 1 Capacity Building:** Baystate Wing Hospital improved the effectiveness of its electronic health record (EHR) by training staff in quality measure reporting, upgrading to a compliant EHR system, and developing protocols to meet quality measures.

**Phase 2 Care Model:** The Baystate Wing Hospital CHART intervention included patient engagement during the inpatient stay, post-discharge planning, medication reconciliation, and follow-up home visits by a nurse and a social worker after discharge. This team provided medical and behavioral health assessments, referrals to health care and community services for ongoing support, and follow-up calls.

#### **Key Transformation Achievements:** reduction in readmissions Instituted new staffing models or processes to integrate behavioral health and medical care Provided enhanced referrals to address health-related of the target population received a social needs follow-up phone call within 48 hours of discharge · Developed a risk stratification method to target patients in need of intensive services **Patient Story** A patient with a chronic condition was enrolled in CHART post-discharge. The patient worked with the CHART team for 30 days, and "We can be much more responsive and was told to stay in touch for any ongoing needs. connect clients to services that they may not be aware of. It is great to feel like we can When experiencing shortness of breath, the patient called a address such a wide array of need." CHART team member who assessed the patient's symptoms and referred the patient to a primary care provider for treatment, - Social Worker thereby preventing an ED visit. As a result of the patient's experience in CHART, the patient now reaches out to the CHART team for help to avoid unnecessary hospital visits.

#### About CHART



## **Berkshire Medical Center**



Total Investment \$4,068,330 Phase 2 HPC Investment: \$3,000,000

**Phase 2 Focus Area:** Reducing inpatient readmissions and emergency department (ED) revisits

**Phase 2 Target Population:** All patients discharged to Northern Berkshire County zip codes

#### Phase 1 Capacity Building: Did not participate in Phase 1

**Phase 2 Care Model:** Berkshire Medical Center created a multidisciplinary team to develop and implement individual care plans to provide support for patients' medical, behavioral health, and social needs. The multidisciplinary team included a psychiatrist, a dietician, diabetes educators, social workers, advanced practice providers, and community health workers (CHWs), as well as providers treating tobacco and other substance use disorders. The care team created wellness plans for patients with severe persistent mental illness and used patient assistance funds to address patients' health-related social needs (HRSN), including clothing, transportation, and food.

#### **Key Transformation Achievements:** of patients with severe persistent mental illness stabilized after engaging with Developed or adopted new assessments to capture the program and document health-related social needs Instituted new staffing models or processes to integrate directed from patient assistance fund to support behavioral health and medical care \$30.000 HRSNs (e.g., transportation, food, temporary emergency housing, medication, clothing) · Developed new modes of communication with community partners **Patient Story** A patient with early-onset dementia and other chronic conditions was hospitalized and needed assistance accessing community resources upon discharge. "I have... learned how important it is to A CHW helped the patient apply for insurance and SNAP develop a trusting friendship with our benefits, and secured funding to pay for the patient's personal patients...Shame is a common locked door. care attendant. and behind it is often the inability to access The psychiatrist identified several behavioral health needs. basic needs that promote healthy lives." - Community Health Worker The team created a treatment plan that included therapy and behavioral health crisis stabilization until the patient's insurance approved coverage of treatment from a community mental health provider.

#### **About CHART**



# **Beth Israel Deaconess – Milton Hospital**



**Total Investment** \$2,509,231 Phase 1 HPC Investment: \$261,200 Phase 2 HPC Investment: \$2,000,000

**Phase 2 Focus Area:** Reducing emergency department (ED) boarding among patients with behavioral health needs

**Phase 2 Target Population:** ED patients with a length of stay over 8 hours who are referred to South Shore Mental Health for a behavioral health crisis evaluation

**Phase 1 Capacity Building:** Beth Israel Deaconess-Milton Hospital (BID-Milton) improved language access by translating hospital materials, and hiring a patient navigator to provide interpreter services for patients who spoke Vietnamese.

**Phase 2 Care Model:** The interdisciplinary BID-Milton Care Integration (CI) team provided ED patients with behavioral health needs with services including crisis evaluation, insurance verification and care transition management, medication management, music therapy, faith counseling, mental health interventions, peer services, and familial counseling and support. Upon discharge, the CI team developed care plans to expedite future treatment if patients returned to the ED, ensure greater patient and staff safety, and facilitate timely access to appropriate services.

### **Key Transformation Achievements:**

- Instituted new staffing models or processes to integrate behavioral health and medical care
- Provided enhanced referrals to address health-related social needs
- Enhanced relationships with community partners through embedded staff and/or other shared team model

"The program adds value because it normalizes practice for an otherwise non-medicalized population of patients within the emergency department. Consistent protocols...are used with all behavioral health patients to professionalize care. It increases safety for patients and staff and improves flow in the ED."

- Project Manager



reduction in length of stay for long-stay ED behavioral health patients

3.55

interactions between the patient and CHART staff on average for each behavioral health ED visit

### **Patient Story**



An adolescent patient had a long ED stay for behavioral health needs while awaiting an inpatient treatment bed. The patient had an incomplete medical history and had not followed treatment recommendations after past hospitalizations.



The CI team connected the patient to music therapy, counseling, a school advocate, and a neuro-psych evaluation.



The CI team also provided information to the patient's family about the patient's care needs and assistance identifying providers that accepted the patient's insurance.



Since being connected to services, the patient has not sought care in the ED again.

#### About CHART



# **Beth Israel Deaconess – Plymouth Hospital**



**Total Investment** \$5,799,847

Phase 1 HPC Investment: \$245,828

Phase 2 HPC **Investment:** \$3,700,000

Phase 2 Focus Area: Reducing inpatient readmissions and emergency department (ED) revisits

**Phase 2 Target Populations:** Patients dually eligible for Medicare and Medicaid; ED patients with a primary behavioral health diagnosis

Phase 1 Capacity Building: Beth Israel Deaconess-Plymouth Hospital (BID-Plymouth) created a team to manage high-risk patients with complex behavioral health and medical needs. The team focused on ongoing management to avoid unnecessary acute care.

Phase 2 Care Model: CHART Phase 2 investments supported two programs at BID-Plymouth. The Complex Patient Program screened and assessed patients for health and social needs, provided home visits, and connected patients to ongoing care. The Integrated Care Initiative supported patients with behavioral health needs in the ED, ensuring continuity of care in the community through co-located behavioral health and primary care.

## **Key Transformation Achievements:**

- Instituted new staffing models or processes to integrate behavioral health and medical care
- Incorporated CHART program components into strategies for value-based care participation
- · Embraced the use of community health workers and other emerging or expanded professional roles



unique patients served between January 2016 and December 2017

27% eligible patients

# reduction in 30-day returns for dually

### **Patient Story**

"[I]ntervention at the time of admission provides a strong opportunity for our patients to be open to making positive changes in their lives after they learn about the substance [use] and mental health resources available."

- Social Worker





The patient's electricity had been shut off and the patient needed assistance maintaining a clean home, making mortgage payments, and affording groceries.



The CHART team helped get the patient's electricity restored and helped the patient apply for a new heating system, SNAP benefits, license renewal, and furniture.

When the patient experienced symptoms again, the patient contacted the CHART case manager and accepted a home visit, potentially avoiding an ED visit.

#### About CHART



# **Beverly Hospital**



Total Investment \$2,896,655 Phase 1 HPC Investment: \$65,000

Phase 2 HPC Investment: \$2,500,000

**Phase 2 Focus Area:** Reducing inpatient readmissions and emergency department (ED) revisits

**Phase 2 Target Population:** Patients with high inpatient utilization, a history of readmissions, or social complexity

**Phase 1 Capacity Building:** Beverly Hospital engaged hospital staff to conduct a comprehensive analysis to better understand the drivers of unnecessary acute care utilization. The hospital analyzed the findings to develop a plan to address readmissions.

**Phase 2 Care Model:** Beverly Hospital created and deployed a High-Risk Intervention Team (HRIT) to identify eligible patients in the ED and inpatient settings, develop customized care plans, and provide integrated services including care coordination. The HRIT ensured appropriate follow-up care post-discharge. The HRIT also collaborated with local visiting nurse services and skilled nursing facilities (SNF) to improve continuity of care as patients transitioned from inpatient settings to the community.

## **Key Transformation Achievements:**

- Developed and refined ability to conduct near-real-time target population identification
- Developed new modes of communication with community partners
- Incorporated CHART program components into strategies for value-based care participation

 downward trend in inpatient readmissions and ED revisits

 9%

 reduction in readmissions from SNF from 2016 to 2017

### **Patient Story**

"Without CHART, socially... and medically [complex patients] would not have access to an entire team of medical professionals helping them manage their needs in the community."

- CHART Nurse

A patient with multiple chronic conditions and behavioral health concerns residing in a group home repeatedly presented to the ED.

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The HRIT identified that the patient had previously received a care and medication schedule that had effectively reduced anxiety and symptoms.

The HRIT met with the group home staff to suggest reinstating the more effective approach to providing the patient's medications that would help the patient feel more in control.

The patient was able stay at the group home without visiting the hospital.

#### About CHART



## **Emerson Hospital**



**Total Investment** \$2,206,635 Phase 1 HPC Investment: \$202,575

**Phase 2 HPC Investment:** \$1,200,000

**Phase 2 Focus Area:** Reducing inpatient readmissions and emergency department (ED) revisits

**Phase 2 Target Populations:** Patients with high inpatient utilization or at high risk of utilization; all patients recently discharged to post-acute care at high risk of readmission

**Phase 1 Capacity Building:** Emerson Hospital implemented the Emerson Portal to improve data sharing between community physicians and acute care providers at the hospital. This portal allowed for better data sharing and record keeping to improve care coordination.

**Phase 2 Care Model:** Emerson Hospital refined its internal processes and instituted a multidisciplinary team to provide inpatient care including patient rounding and post-discharge care. Care Dimensions, a home care and assisted living service provider and nursing facility, provided an on-site nurse who assisted with identifying patients who might be appropriate for palliative care or hospice.

## **Key Transformation Achievements:**

- Provided enhanced referrals to address health-related social needs
- Enhanced relationships with community partners through embedded staff and/or other shared team model
- Embraced the use of community health workers and other emerging or expanded professional roles

""...[W]e're not just discharging them, but we're going to support them once they get home, or wherever they go, and help them through this transition phase. It's making a big difference in their lives and helping to determine *their* goals of care and what *they* want."

- Director of Care Management



decrease in readmissions for all patients at high risk of readmission

**75%** 

of patients with high inpatient utilization had fewer hospitalizations in the 6 months after enrolling in CHART

## **Patient Story**



A patient with a history of falls and cognitive impairment presented to the ED.



When the patient returned home, a social worker completed a home visit and found the patient's living conditions unsafe.



The social worker asked a local senior support organization to perform a protective services evaluation.

When the evaluation confirmed that the patient's living situation was unsafe, the CHART staff coordinated a plan to help the patient move in with a relative.

#### About CHART



# Hallmark Health System Joint Award



Total Investment \$2,772,170 Phase 1 HPC Investment: \$749,360 Phase 2 HPC Investment: \$2,466,039

Phase 2 Focus Area: Reducing emergency department (ED) utilization

Phase 2 Target Population: Patients with high ED utilization

**Phase 1 Capacity Building:** Hallmark Health System, using hospital-specific awards, developed an intervention to ensure best practices in prescribing opioids, including clinician trainings and clinical practice guidelines for pain management of patients presenting with lower back pain in the ED or at an urgent care center.

**Phase 2 Care Model:** The Collaborative Outreach and Adaptive Care at Hallmark Health (COACHH) team coordinated care for patients by developing individualized care plans, meeting patients in their homes or communities, medication management and following up after a medical event and/or transition of care. Building trusting partnerships in the community was a key component of the COACHH program.

## **Key Transformation Achievements:**

- Developed and refined ability to conduct near-real-time target population identification
- Developed new modes of communication with community partners
- Spread CHART-driven improvements in care delivery throughout the hospital

reduction in ED utilization in the target population

\$15,000

30%

spent on transportation to send CHART team members into the community to support patients

## **Patient Story**



A patient with a substance use disorder lived far away from the Hallmark Health System hospitals.

"[The program] demonstrates that providing the right care, with the right team, in the right place can have a profound impact on quality of life and on the efficacy of the health care system."

- CHART Leadership

The COACHH team met the patient at their primary care provider's office and arranged referrals to housing, medication for addiction treatment, and therapy.



The patient has maintained recovery since beginning treatment and has shown improvements in health and quality of life.

#### About CHART



# Harrington Memorial Hospital



Total Investment \$2,884,564 Phase 1 HPC Investment: \$491,600

Phase 2 HPC Investment: \$2,100,000

Phase 2 Focus Area: Reducing emergency department (ED) revisits

**Phase 2 Target Population:** Adult patients with a primary or secondary behavioral health diagnosis who present in the ED

**Phase 1 Capacity Building:** Harrington Memorial Hospital facilitated health information exchange adoption (i.e., the Mass HIway) for affiliated physician groups and the hospital, with a particular emphasis on behavioral health providers. This enabled patient data sharing and more efficient communication across care settings.

**Phase 2 Care Model:** Harrington Memorial Hospital developed an integrated model of care for patients with a behavioral health diagnosis. Social workers and patient navigators supported patients through behavioral health screening, treatment, and referral services. Behavioral health clinicians provided evaluations, consultations, service coordination, and short-term treatment to primary care patients with behavioral health needs which improved access, time to intervention, and successful integration into treatment.

### **Key Transformation Achievements:**

- · Improved documentation of behavioral health needs
- Instituted new staffing models or processes to integrate behavioral health and medical care
- Provided enhanced referrals to address health-related social needs

42% decrease in revisits to the ED 2,800 patients enrolled by CHART staff over the 21 months of the program

## **Patient Story**

"Today's health care system can be so complex. It is essential to ensure that patients do not 'fall through the cracks' and receive the help that they deserve."

- CHART Patient Navigator

A patient with behavioral health conditions and a complex social history had been hospitalized several times.



The patient's living arrangement was stressful and unhealthy, and ultimately, the patient became homeless.



The CHART team quickly used patient assistance funds to provide temporary shelter, assisted the patient in obtaining food from local shelters and food pantries, and connected the patient with other community resources.

With the team's assistance, the patient was admitted to a recovery home.

#### About CHART



# HealthAlliance Hospital



Total Investment \$10,587,802 Phase 1 HPC Investment: \$410,000

Phase 2 HPC Investment: \$3,800,000

Phase 2 Focus Area: Reducing emergency department (ED) revisits

**Phase 2 Target Population:** Adult behavioral health patients at high risk of revisiting the ED

**Phase 1 Capacity Building:** To decrease unnecessary behavioral health visits and overall length of stay in the ED, HealthAlliance Hospital partnered with local community providers to develop a care coordination model led by an ED navigator for patients with serious mental illness.

**Phase 2 Care Model:** HealthAlliance Hospital developed a system for brief screening for behavioral health needs and intensive outreach and care coordination post-discharge. HealthAlliance Hospital partnered with Fitchburg Family Practice to implement weekly huddles to allow for better care coordination for shared patients. HealthAlliance Hospital enhanced its coordination efforts by adding community outreach and home visits when appropriate.

## **Key Transformation Achievements:**

- Developed or adopted new assessments to capture and document health-related social needs
- · Improved documentation of behavioral health needs
- Enhanced relationships with community partners through embedded staff and/or other shared team model

"[O]ne of the greatest values of the CHART

program is the fact that it provides advocates

for clients whose voices are often unheard or

ignored due to the stigma surrounding

mental health and substance [use]."

- Behavioral Health Care Manager

1,256patients enrolled in the program1,384referrals for substance use treatment, social supports, and/or temporary shelter or housing

### **Patient Story**



A patient with behavioral health conditions had more than 10 ED visits and several hospitalizations in six months.



At the time of enrollment, the patient was unemployed, experiencing homelessness, and without insurance, health care providers, transportation, or social supports.



The CHART team helped connect the patient to insurance and providers, and enrolled the patient in treatment for co-occurring disorders.

The patient achieved sobriety, obtained a new job, began to re-establish old personal relationships, and has not sought care in the ED since.

#### About CHART



# Heywood-Athol Joint Award



Total Investment \$3,268,965 Phase 1 HPC Investment: \$800,512 Phase 2 HPC Investment: \$2,900,000

Phase 2 Focus Area: Reducing emergency department (ED) revisits

Phase 2 Target Population: All patients with a behavioral health diagnosis

**Phase 1 Capacity Building:** Heywood and Athol Hospitals, funded through hospital-specific awards, each partnered closely with community organizations and public schools to improve care coordination. Athol Hospital also leveraged investment funds to transition to an electronic health record system in the ED.

**Phase 2 Care Model:** Heywood and Athol Hospitals deployed an ED-based complex care team to provide intensive case management, behavioral health navigation, and peer mentorship. Beyond the ED, the hospitals used CHART funding to promote tele-psychiatry, behavioral health and primary care integration, a community education campaign, and enhanced addiction treatment services. The hospitals also partnered with local schools to develop school-based case management and therapy services.

# **Key Transformation Achievements:**

- · Improved documentation of behavioral health needs
- Instituted new staffing models or processes to integrate behavioral health and medical care
- Enhanced relationships with community partners through embedded staff and/or other shared team model

**33%** reduction in ED revisits

**489** 

high-risk students and families served at four schools equipped with new school-based care coordinators addressing unmet behavioral health needs and access to services

# **Patient Story**

"As an ED nurse, I am not trained specifically in behavioral health and rely on the CHART staff to assist with complex behavioral health patients. Their experience in intervention, care plan development, assessment of needs, and de-escalation is invaluable in the ED setting."

- ED Nurse

A patient with behavioral health needs presented in the ED.





The CHART team reached out to the patient again postdischarge and found that the patient was experiencing challenges obtaining health insurance and getting a placement in a residential treatment center.



CHART staff helped to expedite the patient's MassHealth enrollment application and successfully placed the patient in a residential treatment program.

#### About CHART



## **Holyoke Medical Center**



**Total Investement** \$3,873,745

Phase 1 HPC **Investment:** \$500,000

Phase 2 HPC **Investment:** \$1,900,000

Phase 2 Focus Area: Reducing emergency department (ED) revisits

Phase 2 Target Population: All patients with behavioral health needs who present in the ED, particularly those with high ED utilization

Phase 1 Capacity Building: Holyoke Medical Center transitioned to an electronic health record system. The goal was to better transmit ED medical information to surrounding community providers to improve care coordination and avoid unnecessary ED utilization.

**Phase 2 Care Model:** Holyoke Medical Center deployed a behavioral health social work team in the ED to enhance care coordination, intervene to address complex social needs, and increase communication among providers. Patients who frequently used the ED were referred to a CHART team of community health workers, patient navigators trained in social work, psychiatric nurse practitioners, medical assistants, and a physician able to prescribe buprenorphine for patients with opioid use disorder.

## **Key Transformation Achievements:**

- Developed a risk stratification method to target patients in need of intensive services
- Developed new modes of communication with community partners
- · Spread CHART-driven improvements in care delivery throughout hospital

46% reduction in ED revisits care plans created during the life of **3.200**' the program

**Patient Story** 

- "Many times a patient comes to the emergency department because they are not well connected within their community, and sometimes needs help finding resources...Patients have been very receptive to this program and very appreciative when they are able to get the [resources] that they need."
  - Community Health Worker

- An older adult patient with more than 130 behavioral health ED visits in one year was admitted to an inpatient floor for a long stay.
- Initially, the patient rejected home visits post-discharge.



As the CHART team developed trust with the patient, the patient agreed to weekly visits from a community mental health worker.



#### About CHART



# Lahey-Lowell Joint Award



Total Investment \$6,459,463 Phase 2 HPC Investment: \$4,800,000

Phase 2 Focus Area: Reducing emergency department (ED) revisits

**Phase 2 Target Population:** Patients with high ED utilization or patients with moderate ED utilizers who also had a behavioral health diagnosis

#### Phase 1 Capacity Building: Did not participate in Phase 1

**Phase 2 Care Model:** Addison Gilbert Hospital, Beverly Hospital, Winchester Hospital, and Lowell General Hospital developed a model to identify patients in the ED who had a history of high or moderate ED utilization. The hospital-based team provided multidisciplinary care coordination (which included Lahey Health Behavioral Services), made referrals to community-based services for patients post-discharge, and connected patients to social services in the community.

## **Key Transformation Achievements:**

- Developed and refined ability to conduct near-real-time target population identification
- Developed a risk stratification method to target patients in need of intensive services
- Developed new modes of communication with community partners



# **Patient Story**



- Readmission Prevention Nurse

A patient with multiple behavioral health diagnoses presented to the ED more than 10 times in one year.



A community health worker (CHW) advocated for the patient to enroll in an intensive outpatient adult day program that could assist with activities of daily living and provide more structure.



The CHW also coordinated transportation, provided coaching for the patient and family to avoid ED visits, and helped the patient arrange to permanently move in with a family member.

The patient had fewer ED visits after engaging with the CHW.

#### About CHART



## Lawrence General Hospital



Total Investment \$1,997,310 Phase 1 HPC Investment: \$100,000 Phase 2 HPC Investment: \$1,482,654

Phase 2 Focus Area: Reducing inpatient readmissions

**Phase 2 Target Population:** Patients identified by a biopsychosocial risk assessment or with a recent readmission to the hospital

**Phase 1 Capacity Building:** Lawrence General Hospital aimed to improve cross-continuum care management by conducting an assessment of the root causes of readmissions, developing an outline of best practices to reduce high utilization of the emergency department (ED), assessing medication management in primary care practices, and assessing data tools.

**Phase 2 Care Model:** The Lawrence General Hospital CHART team coordinated a variety of community-based social support services, including assistance filling prescriptions, securing transportation, and accessing mental health counseling. Providers in the hospital and in the community collaborated to develop individualized patient care plans. Additionally, transition coaches from Elder Services of the Merrimack Valley provided follow-up services for 30 to 90 days post-discharge.

## **Key Transformation Achievements:**

- Established data-sharing agreements with external providers/partners
- Enhanced relationships with community partners through embedded staff and/or other shared team model
- Embraced the use of community health workers and other emerging or expanded professional roles

"Most hospitals are very reactive when it comes to dealing with their patients, but in this program they can become proactive." - Transition Coach



### **Patient Story**

An older adult patient visiting from another country became sick days after arriving and was brought to the ED with a possible infection.



the patient's home country to coordinate care.





#### About CHART



# Lowell General Hospital



Total Investment \$2,741,455 Phase 1 HPC Investment: \$497,900

Phase 2 HPC Investment: \$1,000,000

Phase 2 Focus Area: Reducing inpatient readmissions

Phase 2 Target Population: Patients with high inpatient utilization

**Phase 1 Capacity Building:** Lowell General Hospital implemented a direct messaging solution with a local community family medicine practice, as well as 65 electronic hubs in affiliated community practices, as part of a broad strategy to simplify and accelerate the exchange of health information and build the foundation for population health.

**Phase 2 Care Model:** Lowell General Hospital's CHART team leveraged partnerships in the community to improve care coordination, address social determinants of health, and screen for palliative care needs. Through the development of a care transitions program, the CHART team provided care transition coaching, comprehensive care planning by a multidisciplinary team, follow-up support post-discharge, and medication adherence services. The team followed patients for 90 days or more post-discharge.

# **Key Transformation Achievements:**

- Embraced the use of CHWs and other emerging or expanded professional roles
- Incorporated CHART program components into strategies for value-based care participation
- Developed new modes of communication with community partners

downward trend in readmissions 1,359 inpatient high utilizers enrolled in the program

## **Patient Story**

"As a nurse, the experience with CHART has been unique as it provided me the opportunity to assess how social factors influence a person's health care and self-management."

- Nurse Manager

A CHW conducted a home visit with an older adult patient with head and neck cancer.

The CHW identified that the patient did not have regular follow-up with community providers due to difficulty speaking and scheduling appointments by phone and identified the need for homemaking assistance.

The CHW assisted with communication to providers and advocated for an increase in homemaking hours.

The patient remained at home following the support from the CHART team.

#### About CHART



# UMass Memorial- Marlborough Hospital



Total Investment \$1,563,436 Phase 2 HPC Investment: \$1,200,000

Phase 2 Focus Area: Reducing inpatient readmissions

**Phase 2 Target Population:** Patients with high inpatient or emergency department (ED) utilization

#### Phase 1 Capacity Building: Did not participate in Phase 1

**Phase 2 Care Model:** The UMass Memorial-Marlborough Hospital CHART program was focused on providing intensive care management services for high utilizers and their families to help connect them to community-based services and avoid the need for acute care services. The program's social workers and mental health counselors conducted home visits and home safety assessments, made referrals to resources in the community, and served as liaisons between service providers and patients' families. The CHART team also provided dietary education, medication education, and substance use counseling.

## **Key Transformation Achievements:**

- Instituted new staffing models or processes to integrate behavioral health and medical care
- Provided enhanced referrals to address health-related social needs
- Developed new modes of communication with community partners



## **Patient Story**



- CHART Staff Member



A patient living in a skilled nursing facility due to a disability presented to the ED with suicidal ideation.



The team discovered that the patient had a previous connection to the Department of Mental Health (DMH) and reconnected the



patient to DMH services.

The patient received DMH support weekly, journaled, and maintained communication with the CHART social worker.



The patient did not visit the ED after engaging with the CHART team and re-establishing a connection to DMH support.

#### About CHART



## **Mercy Medical Center**



Total Investment \$1,870,321 Phase 1 HPC Investment: \$223,134

Phase 2 HPC Investment: \$1,300,000

Phase 2 Focus Area: Reducing emergency department (ED) revisits

**Phase 2 Target Population:** Patients whose behavioral health conditions prompted multiple ED visits

**Phase 1 Capacity Building:** Mercy Medical Center launched three training programs to enhance quality, safety, and overall improvement efforts among hospital leadership and management.

**Phase 2 Care Model:** Mercy Medical Center partnered with Behavioral Health Network (BHN), a community-based behavioral health provider, to support patients with behavioral health needs in the Mercy ED. A total of five BHN community health workers were embedded in the Mercy ED and in various community locations to provide facilitated referrals to community-based health and social services. ED nurses with behavioral health training provided medication reconciliation, de-escalation interventions, and care planning.

# **Key Transformation Achievements:**

- · Improved documentation of behavioral health needs
- Instituted new staffing models or processes to integrate behavioral health and medical care
- Enhanced relationships with community partners through embedded staff and/or other shared team model

28% reduction in ED length of stay for patients with a primary behavioral health diagnosis
 26% reduction in target population revisit rate

## **Patient Story**

"[T]he providers really, really appreciated the connection that was made as a result of the CHART program, and really felt like, for the first time...they as clinicians and providers had someone else to go to, to help...patients that had no support."

- Program Manager

A patient with behavioral health needs visited the ED frequently for medication refills and treatment for anxiety.



A CHART community health worker (CHW) referred the patient to appropriate community providers, including primary care and visiting nurse services.



The CHW also connected the patient to transportation, health insurance, a local bank, food stamps, Social Security benefits, and helped them obtain government-issued photo identification.

The CHW continued to check in with the patient to offer ongoing support.

#### About CHART



# **Milford Regional Medical Center**



Total Investment \$2,766,423 Phase 1 HPC Investment: \$499,810

Phase 2 HPC Investment: \$1,300,000

Phase 2 Focus Area: Reducing inpatient readmissions

Phase 2 Target Population: Patients with high inpatient utilization

**Phase 1 Capacity Building:** Milford Regional Medical Center formed a readmission reduction team to streamline care coordination through improvements like automated post-discharge phone calls to patients. The hospital also worked with external consultants to develop a care redesign plan and a health information exchange strategy.

**Phase 2 Care Model:** Milford Regional Medical Center assembled a pharmacist, social worker, registered nurse, and palliative care physician assistant to form a High-Risk Mobile Team (HRMT). The HRMT conducted emergency department assessments, identified alternatives to inpatient admissions, developed individualized care plans, and referred appropriate patients to palliative care consultations. The HRMT continued to follow patients post-discharge to ensure stability in their communities.

# **Key Transformation Achievements:**

- Developed new modes of communication with community partners
- Incorporated CHART program components into strategies for value-based care participation
- Embraced the use of community health workers and other emerging or expanded professional roles

"[Our team members] try to think 'out of the box' to help patients achieve a successful transition home without the need for re-hospitalization. The program allows care without the boundaries of typical home care programs. It has also linked the patient, hospital, and [primary care] offices to work collaboratively for the best outcome for the patient."

-Operational Investment Director



## **Patient Story**

An older adult patient was discharged from the hospital with a prescription for a medication, but was unable to fill the prescription because of a prior-authorization requirement and high co-pay. The patient was readmitted to the hospital two days later.



A pharmacist worked with the patient to obtain a voucher for a seven-day supply of the medication.



#### About CHART



# Signature Healthcare Brockton Hospital



Total Investment \$4,273,542 Phase 1 HPC Investment: \$432,237 Phase 2 HPC Investment: \$3,500,000

**Phase 2 Focus Area:** Reducing inpatient readmissions; reducing emergency department (ED) length of stay

**Phase 2 Target Populations:** Patients with or at risk for high ED or inpatient utilization; and patients with low acuity ED visits

**Phase 1 Capacity Building:** Signature Healthcare Brockton Hospital developed a five-year master plan for achieving high organizational reliability, and added a tool to its electronic health record system to measure and alert clinicians to declines in patients' health statuses.

**Phase 2 Care Model:** Signature Healthcare Brockton Hospital identified patients at high risk for readmission (prospectively and in real time) to receive services from a multidisciplinary Complex Care Team (CCT). The CCT provided cross-setting services in the ED, hospital, skilled nursing facilities, and at home that included care planning, case management, rescue planning, palliative care, and medication reconciliation.

# **Key Transformation Achievements:**

- Developed or adopted new assessments to capture and document health-related social needs
- Provided enhanced referrals to address health-related social needs
- Enhanced relationships with community partners through embedded staff and/or other shared team model

20% reduction in patient harm for all admissions and ED visits as measured by the patient harm composite scale

24%

reduction in readmission rates for enrolled patients during the program

### **Patient Story**

"[W]hen the team works together with patients, the treatment plans are stronger and can meet the complex social and psychological needs of the patients."

- Nurse Case Manager

A community health worker contacted a patient with chronic obstructive pulmonary disease post-discharge and conducted a follow-up home visit.

A pharmacist helped the patient obtain inhalers at a reduced cost, and the program provided cab transportation to pick up the prescription.

The team reconnected the patient's Life Line and after continued weekly visits, convinced the patient to start oxygen at home.

#### About CHART



# Southcoast Hospitals Group Joint Award



Total Investment \$1,195,925 Phase 1 HPC Investment: \$1,183,357

**Phase 2 HPC Investment:** \$7,500,000

**Phase 2 Focus Area:** Reducing inpatient readmissions and emergency department (ED) revisits

Phase 2 Target Population: Patients with high ED or inpatient utilization

**Phase 1 Capacity Building:** Southcoast Hospitals Group was funded by hospital-specific awards in CHART Phase 1. Three funded hospitals aimed to reduce the need for acute care, improve management of chronic diseases, and improve care management.

**Phase 2 Care Model:** Through an investment in St. Luke's Hospital, Charlton Memorial Hospital, and Tobey Hospital, Southcoast Hospitals Group staffed multidisciplinary care teams including a social worker, nurse case manager, community health workers, clinical pharmacist, community resource specialist, and a diabetes educator. The teams provided intensive medical and behavioral health services, linkages to outpatient treatment providers, palliative care, diabetes education, and assistance accessing social services support.

## **Key Transformation Achievements:**

- Developed new modes of communication with community partners
- Incorporated CHART program components into strategies for value-based care participation

"Because of work in their community.

we've seen some patients far less...

I can think of half-a-dozen ED patients

I don't see any more."

- Social Worker Team Leader

• Spread CHART-driven improvements in care delivery throughout the hospital

2,844 patients served by the program 30% reduction in readmissions for St. Luke's
Hospital's target population patients Deticent Storm

### **Patient Story**



A patient frequently visited the ED for intravenous pain medications, with more than 150 visits in three years.



The CHART team learned that the patient had stopped going to primary care appointments and was experiencing stress at home.



The team connected the patient with a new primary care provider, arranged counseling, and provided brief support and education. They also created an ED advisory care plan for when the patient returned to the ED.

The patient's number of ED visits decreased significantly.

#### About CHART



## Winchester Hospital



**Total Investment** \$3,301,246 Phase 1 HPC Investment: \$286,500

Phase 2 HPC Investment: \$1,000,000

Phase 2 Focus Area: Reducing inpatient readmissions

**Phase 2 Target Populations:** Patients with high inpatient utilization; all discharges to post-acute care

**Phase 1 Capacity Building:** Winchester Hospital created a care management team to coordinate care through medication reconciliation, increase family involvement in patient education, and discuss palliative care services with eligible patients. The hospital also implemented care management services in its emergency department (ED).

**Phase 2 Care Model:** Winchester Hospital's CHART program included two components: a nurse-led Complex Care Team (CCT) and cross-setting collaboration. The CCT responded in real time to patients in the ED and developed, managed, and shared individual care plans with an emphasis on medication optimization and reconciliation for their patient population. Cross-setting collaborations consisted of formal partnerships with skilled nursing facilities and other service providers in the community.

# **Key Transformation Achievements:**

- Developed and refined ability to conduct real-time target population identification
- Developed new modes of communication with community partners
- Spread CHART-driven improvements in care delivery throughout hospital

155 patients

45%

rate for the high-utilizer population

reduction in the average readmission

patients served by the CHART program each month

### **Patient Story**

"Inpatient nurses have the opportunity to collaborate with the CHART staff...to develop a better individualized plan of care for each patient to potentially prevent a readmission. The CHART nurses offer valuable insights into the needs of the patient so that a safe discharge back home can occur."

- CHART Staff Member

An older patient was discharged from a short-term rehabilitation facility, and the patient's spouse struggled to provide support at home.

The patient was admitted to the hospital as their condition worsened.



The patient had been connected to palliative care, but the patient's spouse did not want the patient to enroll in hospice or discontinue treatment.

The team worked with the patient, spouse, and rehabilitation staff to discuss end-of-life care, and ultimately helped them create a plan that included admitting the patient to hospice.

#### About CHART