The CHART Investment Program

The Massachusetts Health Policy Commission (HPC) launched the Community Hospital Acceleration, Revitalization, and Transformation (CHART) program in 2014. The goal was to establish the foundation for sustainable care delivery transformation through innovative investments in the Commonwealth’s community hospitals. The program was funded through an assessment established in Massachusetts’ landmark health care cost containment law, Chapter 224 of the Acts of 2012.

Community hospitals are vital providers of care in their communities, often serving patients with a variety of medical, behavioral health, and social needs. This role gives them a unique opportunity to leverage investment support and make improvements that have the potential to both enhance patient care and reduce overall health care costs for the Commonwealth.

The CHART program invested approximately $70 million in 30 community hospitals through two phases of funding. Combined with hospital in-kind contributions, the total program investment exceeded $85 million. The funds enabled the hospitals to assess local needs, modify services, and expand relationships with medical, social, and behavioral health community organizations. The investment was critical in helping community hospitals transition into the new era of value-based care.

Phase 1: 2014, $10 million, 28 awards.
CHART hospitals engaged in business planning, capacity building, and program piloting to prepare for implementing their full CHART programs.

Phase 2: 2015-2018, $60 million, 24 awards.
CHART hospitals implemented innovative new care models requiring significant transformation in their delivery.

awardees met or made significant improvement toward their target aims, such as reducing hospital readmissions and/or emergency department revisits by at least 20%.
CHART hospitals applied innovative, whole-person care models to provide integrated care across medical, behavioral health, and social needs. These approaches aimed to support patients with complex needs not often addressed by the traditional medical model. Adopting these integrated care models spurred innovations in hospital staffing models, as well as new partnerships with other community providers and social services.

“The CHART program has produced a change in how care is approached by introducing a holistic, person-centered approach... They address the patient’s most pressing needs... Local organizations are now better connected.”

- CHART Hospital Staff

22 awardees worked to address CHART patients’ health-related social needs.

81% of hospitals instituted new staffing models or processes to integrate behavioral health and medical care.

“[My care team] helped me with medical information and resources... They worked with me and my nutritionist on my eating plan; they set me up with a great therapist; and maybe most importantly, they supported me, always checked in on me, held me accountable, but did not judge me when I slipped up.”

- CHART Patient

One Patient’s Story

Patient with multiple medical conditions had not seen a primary care provider in years.

A social worker and community health worker on the CHART team connected the patient with a primary care provider, a blindness advocate, and transportation to appointments.

Overwhelmed by the waiting room, the patient was referred to a private practice primary care provider within walking distance from his house. The patient loved the new office and the doctor.

The CHART social worker called the patient weekly to check in.

The patient’s diabetes stabilized, and he has not returned to the hospital.
The Power of Multidisciplinary Care Teams

CHART funding supported a range of activities at community hospitals including new technologies, community partnerships, and, in limited cases, capital investments. As highlighted in the graphic below, a majority of CHART funding was prioritized to hire personnel to support innovative hospital staffing models. Many of the staff hired for or dedicated to the CHART program were social workers and community health workers who supported the clinical team as critical bridges to services and resources for patients to meet their medical, behavioral health, and social needs.

“...needs and how to communicate better with each other.”

– CHART Hospital Staff
The new care models implemented by CHART hospitals were designed to help patients avoid having to use more costly acute care settings like the emergency department (ED). CHART hospitals helped patients find care in the appropriate setting by forming trusting relationships with them and their families, addressing the medical, behavioral health, and social needs that the patients prioritized, and coordinating existing and new services to support patients stability in the community. As shown below, this approach enabled CHART hospitals to reduce the number of ED visits, for example, among patients with behavioral health diagnoses and others considered to be high utilizers of health care services.

“[CHART staff] kept me out of the hospital. They have been making me busy, going to outings, day programs, and just having the support through the day.”

– CHART Patient

### GOAL 2: Shift Care From the Hospital to the Community

**Decreased Rate of Emergency Department Revisits**

![Graph showing decreased rate of ED revisits](image)

![Graph showing decreased rate of ED revisits for high utilizers](image)

- **GOAL 2:** Shift Care From the Hospital to the Community

- **30-Day ED Revisits: Any BH Diagnosis**

- **30-Day ED Revisits: High Utilizers**

- **~10,000 fewer ED visits at CHART hospitals than expected over the 24-month program.**

**Note:** This estimate covers all ED patients, not only those who were served by the CHART program. CHART funding is likely one of many factors contributing to a decline in ED visits at community hospitals.
Meeting the Goal: Hospital Success Stories

The majority of CHART hospitals leveraged their investments to make significant strides toward their targets for reducing unnecessary hospital use. Below are examples of two hospitals’ achievements – one that reduced the rate of readmissions and one that reduced ED visits from behavioral health (BH) patients.

### Reduced Readmission Rates

**Southcoast Hospitals Group**

- **30%** reduction in 30-day readmissions over the 24-month program for St. Luke’s Hospital target patients.

**Key Program Components**
- Staff a multidisciplinary care team
- Provide intensive medical and behavioral health services
- Link to outpatient treatment providers and help accessing social services

### Reduced ED Visits for BH Patients

**Beth Israel Deaconess - Plymouth**

- **28%** reduction in average ED visits per person over a 6-month period post-program enrollment.

**Key Program Components**
- Screening and follow-up by a social worker in primary care settings
- Crisis intervention and follow-up available in the ED seven days per week, including evenings
- Partnerships with community organizations providing prevention programming and medication for addiction treatment

### Total Community Partnership Funding

In order to support efforts to reduce unnecessary hospital use, CHART funding allowed hospitals to invest in community partners providing a broad range of services, including behavioral health services, primary care, and home health care and related services for older adults. The goal of these investments was to improve care transitions, enhance care coordination, and provide care for patients in their communities.

- **52%** Behavioral Health Services
  - Withdrawal management
  - Bridge programs
  - Outpatient behavioral health care
  - Residential treatment

- **25%** Elder Services/Palliative Care
  - Home health/VNA
  - Hospice

- **19%** Physician Groups
  - Primary care providers

- **4%** Miscellaneous
  - Police department
  - Patient advocacy
  - Pharmacy concierge services

“We have also been able to work with local group homes, social club houses, community support programs, back-to-work programs, welfare. As a result of CHART, we’re actually developing a system of care.”

- CHART Hospital Staff
GOAL 3: Prepare to Succeed in Value-Based Care Models

Hospitals have traditionally been paid on a “fee-for-service” basis that rewards providers for the volume of services performed. With the formation of accountable care organizations (ACOs), an important shift is occurring toward “value-based” models, in which providers are rewarded for delivering high-quality, lower-cost care and reducing the unnecessary use of costly services for a group of patients.

In Massachusetts, more and more health care providers and payers, including Medicaid and Medicare, are shifting to the value-based approach, making it critical for community hospitals to learn how to succeed in these models.

“I would say that...the CHART initiative...helped prepare us for value-based payments...setting the stage for ways in which we can break beyond the walls of the hospital to keep our community and our patients healthy, and give them coping mechanisms and strategies to keep them healthy.”

- CHART Hospital Leader

72% of hospitals said they had begun using CHART processes, programs, or clinical guidelines in other areas of the hospital.

76% of hospitals reported that CHART facilitated broader hospital culture changes that helped prepare them to participate in the new MassHealth ACO program.

One Hospital’s Path to Transformation Through CHART

- Established an interdisciplinary team that met regularly.
- Developed a streamlined system for sharing data.
- Standardized care protocols for behavioral health.
- Established warm hand-offs with co-located clinicians and community-based services.
- Increased staff knowledge and confidence for managing patients within a value-based system.

23 CHART hospitals now participate in an ACO.
Robust data and analytics can have an enormous, positive impact on improving patient care. CHART funding enabled community hospitals in Massachusetts to improve their ability to collect and use data to enhance patient care.

Some hospitals purchased electronic data tools that enabled them to more easily identify and track patient needs and monitor their progress in real time. This allowed their multi-disciplinary care teams to better coordinate and support patient care across clinical care settings.

The graph below indicates CHART funding for investments in data management systems and analytic capabilities. Over 50% of the enabling technology spending went directly toward acquiring advanced case management software and support services.

“[A]necdotally, we could say why patients were being readmitted. Through CHART, we now have that data to back it up. We can go to our community partners and say, ‘Okay, you seem to have a higher readmission rate,’ and work with them to identify why. We really have that data.”

- CHART Hospital Leader

**Enabling Technology Funding by Spending Category**

- **Equipment**: 27%
- **Case Management Software and Support Services**: 55%
- **Other Program Costs**: 11%
- **Analysis/Programming Personnel**: 2%
- **Consultants**: 2%

**24** awardees invested in a case management platform to track target population patients, measure services delivered by CHART team members, and generate reports.
By leveraging their CHART investments, more Massachusetts community hospitals are better equipped today to serve their patients and succeed in the new value-based health care environment. CHART hospitals have identified multiple methods for optimizing their ACO readiness and sustaining improvements achieved to date.

While there is still much more to be done to ensure the vitality of community hospitals, their achievements through CHART show their dedication and ability to innovate as they continue to provide high-quality, cost-effective health care to the Commonwealth’s residents.

About the Massachusetts Health Policy Commission

The Massachusetts Health Policy Commission (HPC), established in 2012, is an independent state agency charged with monitoring health care spending growth in Massachusetts and providing data-driven policy recommendations regarding health care delivery and payment system reform. The HPC’s mission is to advance a more transparent, accountable, and innovative health care system through independent policy leadership and innovative investment programs.

www.Mass.gov/hpc  @Mass_HPC
Hospitals eligible to receive CHART funds were non-profit, non-teaching community hospitals with relatively low prices.

**CHART Hospitals**

Addison Gilbert Hospital  
Anna Jaques Hospital  
Athol Memorial Hospital  
Baystate Franklin Medical Center  
Baystate Noble Hospital  
Baystate Wing Hospital  
Baystate Mary Lane Hospital*  
Berkshire Medical Center  
Beth Israel Deaconess Hospital - Needham  
Beth Israel Deaconess Hospital - Plymouth  
Beth Israel Deaconess Hospital - Milton  
Beverly Hospital  
Charlton Memorial Hospital  
Emerson Hospital  
Harrington Memorial Hospital

Heywood Hospital  
Holyoke Medical Center  
Lawrence General Hospital  
Lawrence Memorial Hospital  
Lowell General Hospital  
MelroseWakefield Hospital  
Mercy Medical Center  
Milford Regional Medical Center  
North Adams Regional Hospital*  
Signature Healthcare Brockton Hospital  
St. Luke’s Hospital  
Tobey Hospital  
UMass Memorial - HealthAlliance Hospital  
UMass Memorial - Marlborough Hospital  
Winchester Hospital

*Hospitals closed prior to program completion