

COMMONWEALTH OF MASSACHUSETTS
HEALTH POLICY COMMISSION

CHART Phase 2:
Implementation Plan
Lahey-Lowell Joint Award

HPC approval date: December 31, 2015

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Version: 3



Introduction

This Implementation Plan details the scope and budget for the Joint Award in which Addison Gilbert Hospital, Beverly Hospital, Lowell General Hospital, and Winchester Hospital are the Participating Hospitals in Phase 2 of the Health Policy Commission's (HPC) Community Hospital Acceleration, Revitalization, and Transformation (CHART) Investment Program. Northeast Hospital Corporation (on behalf of Addison Gilbert Hospital and Beverly Hospital), Lowell General Hospital, and Winchester Hospital will each execute a Phase 2 Joint Award Contract with the HPC for implementation of the Joint Award. This single, common Implementation Plan is incorporated by reference into and is subject to the requirements of the Phase 2 Joint Award Contracts, including the Phase 2 Joint Award Terms & Conditions.

Many capitalized terms appearing in the Implementation Plan are defined in the Phase 2 Joint Award Terms & Conditions or the Phase 2 Request for Proposals (RFP). In addition to capitalized terms, the Implementation Plan may include other acronyms and/or abbreviations whose meaning is understood by the Participating Hospitals and the HPC in the context of the Implementation Plan. If there is disagreement concerning the meaning of a term, acronym, or abbreviation, the HPC's interpretation shall govern.



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Key personnel

| Name | Title | CHART Phase 2 Role |
|---------------------------|---|--|
| Barry Ginsberg | Administrative Director & Chief of Psychiatry, Lahey Health Behavioral Services | Clinical Investment Director, Addison Gilbert Hospital, Beverly Hospital, and Winchester Hospital |
| Cynthia Cafasso Donaldson | Vice President, Addison Gilbert Hospital | Operational Investment Director, Addison Gilbert Hospital and Beverly Hospital |
| Kevin Norton | CEO, Lahey Health Behavioral Services | Operational Investment Director, Addison Gilbert Hospital, Beverly Hospital, and Winchester Hospital |
| Peter Short, MD | Chief Medical Officer, Northeast Health | Clinical Investment Director, Addison Gilbert Hospital and Beverly Hospital |
| Jean Alden-St. Pierre | Program Manager | Project Manager, Addison Gilbert Hospital and Beverly Hospital |
| Cecelia Lynch | Vice President, Patient Care Services/Chief Nursing Officer | Clinical Investment Director, Lowell General Hospital |
| Amy Hoey | Executive Vice President & Chief Operating Officer | Operational Investment Director, Lowell General Hospital |
| Nicole Starrett | Project Manager | Project Manager, Lowell General Hospital |
| Rick Weiner, MD | Vice President, Medical Affairs | Clinical Investment Director, Winchester Hospital |
| Kathy Schuler | Vice President, Patient Care / Chief Nursing Officer | Operational Investment Director, Winchester Hospital |
| Jean Brown | Director, Emergency Services | Project Manager, Winchester Hospital |
| Nizelky Genao | Senior Project Manager, Lahey Health Behavioral Services | Project Manager, Joint Award |
| Connie Woodward | Interim Vice President, Finance | Financial Designee, Addison Gilbert Hospital and Beverly Hospital |
| Diane McCarthy | Financial Analyst | Financial Designee, Winchester Hospital |
| John Buscanera | Director, Financial Planning | Financial Designee, Lowell General Hospital |

Target Population

Definition

- Patients with a personal history of moderate or high utilization,* as identified by one or more of the following:
 - Moderate utilizers:
 - 8-13 visits to the Emergency Department (ED) within 12 Months, and
 - 1 BH diagnosis during one of the ED visits counted above
 - High utilizers:
 - 14 or more ED Visits within 12 months
 - All diagnoses

Quantification**

- Moderate utilizers: 706 patients with 6,746 visits in the past 12 months
- High utilizers: 248 patients with 4,420 visits in the past 12 months

| Community Hospital | | Moderate utilizers 8-13 ED Visits; 1 BH DX in FY 14 | High utilizers 14+ED Visits; All DX in FY 14 |
|-------------------------------------|---------------|--|---|
| Lowell | #Visits | 4,592 | 3,281 |
| | # of Patients | 479 | 194 |
| Beverly | #Visits | 870 | 577 |
| | # of Patient | 93 | 26 |
| Addison Gilbert | # Visits | 352 | 145 |
| | # of Patients | 38 | 7 |
| Winchester | # Visits | 932 | 417 |
| | # of Patients | 96 | 21 |
| Lahey # of Visits Totals | | 2,154 | 1,139 |
| Lowell # of Visits Totals | | 4,592 | 3,281 |
| Lahey # of Patients Totals | | 227 | 54 |
| Lowell General # of Patients Totals | | 479 | 194 |
| Overall # of Visits Totals | | 6,746 | 4,420 |
| Overall # of Patients Total | | 706 | 248 |

* Target population definition includes all payers and ages 18+; excluding OB (obstetrics), deaths and Acute Transfers. Includes ED visits resulting in an observation or inpatient stay.

** Inclusive of all sites, including Addison Gilbert Hospital, Beverly Hospital, Lowell General Hospital, and Winchester Hospital

Aim Statement

Primary Aim Statement

Reduce 30-day ED revisits by 20% for patients with moderate and high utilization of the ED by the end of the 24 month Measurement Period.

Secondary Aim Statement*

Reduce total acute care utilization (admissions, observation stays, and ED visits) by 15% for patients with moderate utilization and high utilization of the ED by the end of the 24 month Measurement Period.

*Your secondary aim statements are performance measures only and are not tied to Achievement Payment.

Baseline Performance – all sites

Abridged Implementation Plan – Not for budgeting or contracting purposes

| | VISIT TYPE | OCT 13† | NOV 13 | DEC 13 | JAN 14 | FEB 14 | MAR 14 | APR 14 | MAY 14 | JUN 14 | JUL 14 | AUG 14 | SEP 14 | AVG. |
|--------------------------------------|-------------------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| ALL ED VISITS* | 30-day Revisits | 1566 | 2146 | 2287 | 2325 | 2022 | 2404 | 2626 | 2451 | 2616 | 2652 | 2707 | 2429 | 2353 |
| | Visits | 13223 | 12088 | 12664 | 12879 | 11759 | 13155 | 13359 | 13622 | 13750 | 14245 | 13886 | 13064 | 13141 |
| | 30-day Revisit Rate (%) | 11.8% | 17.8% | 18.1% | 18.1% | 17.2% | 18.3% | 19.7% | 18.0% | 19.0% | 18.6% | 19.5% | 18.6% | 17.9% |
| TARGET POP 8-13 ED VISIT; 1 BH DX | 30-day Revisits | 207 | 316 | 332 | 350 | 326 | 324 | 393 | 311 | 387 | 351 | 386 | 320 | 334 |
| | Visits | 552 | 500 | 565 | 570 | 528 | 573 | 635 | 517 | 594 | 607 | 606 | 499 | 562 |
| | 30-day Revisit Rate (%) | 37.5% | 63.2% | 58.8% | 61.4% | 61.7% | 56.5% | 61.9% | 60.2% | 65.2% | 57.8% | 63.7% | 64.1% | 59.3% |
| TARGET POP 14+ ED Visits; Any DX | 30-day Revisits | 101 | 214 | 304 | 270 | 241 | 327 | 403 | 351 | 411 | 324 | 327 | 291 | 297 |
| | Visits | 313 | 295 | 359 | 336 | 304 | 392 | 463 | 414 | 457 | 374 | 380 | 333 | 368 |
| | 30-day Revisit Rate (%) | 32.3% | 72.5% | 84.7% | 80.4% | 79.3% | 83.4% | 87.0% | 84.8% | 89.9% | 86.6% | 86.1% | 87.4% | 79.5% |

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† ALL: Provide for Fiscal Year 2014, all-payer, all cause ED visits, 30-day revisits for adults >18. Exclude deaths, Obstetrics patients, Acute Transfers.

‡ Includes ED visits that resulting in an observation or inpatient stay.

** Target Pop: Provide for Fiscal Year 2014, all-payer, 8-13 ED visits; 1 BH Diagnosis during one of the ED visits counted in the FY 2014 data, 30-day revisits for adults > 18 and excludes deaths, Obstetrics patients and Acute Transfers; Includes ED visits resulting in an observation or inpatient stay.

*** Target: Provide for Fiscal Year 2014, all-payer, 14+ ED visits All Pts./All DX, 30-day revisits for adults > 18 and excludes deaths, Obstetrics patients and Acute Transfers; Includes ED visits resulting in an observation or inpatient stay.

† The October 2013 data appears low because data was pulled starting on October 1, 2013 and may not reflect full revisit data.

[See Appendix A Slide 43-47 for Hospital Specific Baseline Performance]

Estimated monthly impact

Abridged Implementation Plan – Not for budgeting or contracting purposes

| | Current Expected Served | Current Expected | New Expected Avoided Events | New Expected Events |
|---|--------------------------------------|--|---|--|
| Moderate utilizers 8-13 ED Visits 1 BH Dx in FY 2014 | 6,746 visits/12 months = 562 monthly | Average Readmission 59.3%*312 = 333 30-day revisits per month | 0.2*333 = 67 Avoided 30-day revisits per month | 333 - 67 = 266 30-day revisits per month |
| High utilizers 14+ ED Visits in FY 2014 | 4,420 visits/12 months = 368 monthly | Average Readmission 79.5%*368 = 293 30-day revisits per month | 0.2*293 = 59 avoided 30-day revisits per month | 293 - 59 = 234 30-day revisits per month |

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Driver Diagram

Contracting purposes

Abridged Impl

Reduce 30-day ED revisits by 20% for patients with moderate and high utilization*,** of the ED by the end of the 24 month Measurement Period

Identify and initiate enhanced care for moderate and high utilizers in the Emergency Department

Reliably identify patients upon presentation to the Emergency Department

Conduct enhanced assessments in the Emergency Department (TelePsych, NP, SW)

Improve quality of subsequent Emergency Department visits through use of individual care plans

Assess for whole-person needs and provide direct linkage to post-hospital clinical and community based services

Deliver enhanced service to patients immediately following Emergency Department presentation

Follow up by Community Health Worker <48 hours of visit

Develop individualized care plans, informed by interdisciplinary team

Reduce barriers to treatment and essential services (CCS, CSS, Detox, Urgent Psycho Pharm, Transport Meds)

Provide comprehensive care for medical, behavioral and social needs via interdisciplinary Complex Care team to enhance service delivery

Leverage Technologies to support clinical operations and continuously improve

Utilize technology to enable real time identification & tracking of patient in target population

Repository for individual care plans and means of communication among clinicians

Measurement and analytics to drive improvement and outcomes

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* Target population definition includes all payers and ages 18+; excluding OB (obstetrics), deaths and Acute Transfers. Includes ED visits resulting in an observation or inpatient stay.

** Inclusive of all sites, including Addison Gilbert Hospital, Beverly Hospital, Lowell General Hospital, and Winchester Hospital

Service model – Lahey (1 of 2)

Introduction to Lahey-Lowell Joint Award Clinical Model

For CHART Phase 2 Lahey-Lowell Joint Award, Lowell General Hospital, Winchester Hospital, Beverly Hospital, and Addison Gilbert Hospital, in partnership with Lahey Health Behavioral Services, will be employing a comprehensive set of services in order to reduce the revisit rate of those patients who present to the Emergency Department at each of the aforementioned hospitals each month. The Lahey-Lowell Joint program proposes to improve care for Behavioral Health (BH) patients seeking services in the 4 EDs by deploying 2 service models, described as Lahey Clinical Service Model and the Lowell General Clinical Service Model. Services will be initiated at the Emergency Departments as patients are identified.

Narrative description

Lahey Clinical Service Model – When the target patient (8 or more ED visits with one (1) Behavioral Health diagnosis; or 14 or more ED visits) presents to the Emergency Department (ED) at the 3 Lahey Community Hospitals an electronic alert is sent to the CHART Social Worker (SW) assigned to that hospital. The CHART SW will then review the record to familiarize themselves with history and presenting concerns, as well as assign a Community Health Worker (CHW) to follow the case.

While in the ED, the patient is triaged and evaluated by medical staff according to ED protocol. The following scenarios may result:

1. The patient could be medically cleared and discharged. Within 48 hours of discharge the CHW will establish contact with the patient at which point the CHW will discuss enrollment (meeting eligibility) and engagement in CHART (consent to participate in the services).
2. If the patient is assessed to have a medical condition warranting admission, then the CHART SW in coordination with the ED MD, if possible, may consult with the Attending and recommend an inpatient psych consult as the patient meets criteria as a frequent utilizer of the ED setting and flagged to have BH needs. While inpatient, the CHART SW will engage the patient to assess for root causes of frequent utilization and gain consent for community services when appropriate/medically stable. Upon discharge, the CHW establishes contact with the patient within 48 hours.
3. If the patient is medically cleared, but the ED MD concludes that the patient needs a behavioral health evaluation, then the Emergency Services Program (ESP) Clinician will conduct an evaluation and make initial recommendations to the ED MD, as per standard care processes.
 - a. For a subset of patients, the ESP Clinician can engage the TelePsych MD to augment their evaluation and determine need for Community Crisis Stabilization (CCS), Clinical Stabilization Service (CSS), inpatient psychiatric hospitalization, medication with an Urgent PsychoPharm follow up within 5 business days, and/or home with outpatient services. The TelePsych MD communicates recommendations to the ED MD, ESP Clinician and the immediate care plan is developed and reviewed with patient.
4. The universal pathway for all target population patients, whether they leave the ED or inpatient setting, is that the assigned CHART SW will follow the patient and engage the CHW within 48 hours of the patient's encounter in the ED to support the implementation of the care plan, which will include behavioral, medical, and social goals. The CHW will be responsible for ensuring that wrap around services are employed. The CHW will engage with the patient in a manner and frequency as determined by the SW.

Patients who enroll and agree to fully engage will be monitored for 6 months and will be re-evaluated for need of continued service every month. Monitoring includes updating the care plans and follow up by the CHW.

Service model – Lahey (2 of 2)

Narrative description

The following are service highlights of this model:

- a. Enrollment of eligible patients in program
- b. Support with immediate care plan, developed while in the ED, by SW and CHW (as needed Tele Psych MD)
- c. 2 SWs + 6 CHWs to assess whole person needs, address logistics, advocate, navigate, and maintain relationship with patients
- d. Assign CHW within 48 hours, who will provide contact in a manner and frequency determined by the SW
- e. Development of long term care plan, to address individual needs by multidisciplinary team
- f. Arrange follow-up appointments (Mental Health Referrals, Substance Abuse Referral, Coordination with Medical Provider, and established providers)
- g. SW spans 8/5 (1 SW will cover AGH|BH 5 days a week 40 hours a week; 1 SW will cover WH 5 days a week for 40 hours)
- h. CHW spans 16/5 (2 CHWs will cover at each of AGH and BH 5 days a week 40 hours a week each; 2 CHWs will cover WH 5 days a week for 40 hours each)
- i. Telepsych 24/7 (PRN)
- j. Urgent psycho pharm follow up (.75 FTE); this will cover 0.25 x 3 NPs at our Lahey clinics for urgent psycho pharm visits for Lahey CHART patients
- k. Community Crisis Stabilization (CCS) services, a short-term residential program for individuals in need of psychiatric stabilization
- l. Clinical Stabilization Service (CSS), a short-term residential post detoxification intensive treatment program for clients who need a transitional phase between detox and long term care

[See Appendix C for Diagram of Lahey Clinical Service Model]

Service model – Lowell (1 of 2)

Narrative description

Lowell General Hospital Clinical Service Model – Target patient (8 or more ED visits with one (1) Behavioral Health diagnosis; or 14 or more ED visits) presents to the ED. These criteria prompt an electronic alert to the ED-based RN Case Manager, who then reviews record to familiarize themselves with history and presenting concerns, assigns and alerts a ED-based CHART SW to follow the case.

The patient is triaged and evaluated by medical staff according to ED protocol. The following scenarios may result:

1. The patient could be medically cleared and discharged. Prior to discharge the CHART SW will engage the patient and within 48 hours of discharge the CHW will establish contact with the patient.
2. If the patient is assessed to have a medical condition warranting admission, then the CHART SW in coordination with the ED MD may consult with the Attending and recommend a Psych Consult as the patient is a frequent utilizer of the ED setting and has been flagged to have potential BH needs. While inpatient, the CHART SW will engage to assess for root causes of frequent utilization and gain consent for community services when appropriate/medically stable. The CHART will also assign a CHW. Upon discharge, the CHW establish contact with the patient within 48 hours.
3. If the patient is medically cleared, but its concluded that the patient needs a behavioral health evaluation, then the following scenarios could occur:
 - a. If the patient is either a danger to self or others, then a referral to the ESP Clinician will be ordered. The ESP Clinician, in collaboration with medical staff, can recommend the following dispositions: inpatient psychiatric care, detox, community crisis stabilization or home with outpatient services. Prior to discharge from the ED, the CHART SW will introduce themselves to the patient and inform them of the Joint CHART Program and the plan to collaborate with their respective inpatient care providers or if being discharged initiate a plan of care.
 - b. If the patient is assessed and symptoms do not warrant inpatient care, but their needs are considered to be psychiatric in origin, then a psychiatric evaluation will be ordered by medical staff and this will be done by the Psychiatric Nurse Practitioner. This evaluation will result in either:
 - Recommendation for a structured level of care (inpatient/ partial/ day program) requiring a referral to the ESP Clinician to facilitate transfer and brief meeting with CHART SW to initiate care plan.
 - Discharge to community and immediate introduction to CHART SW to initiate care plan.
4. All target population patients for CHART will be provided the following services by the ED-Based CHART SW
 - a. Enrollment in program
 - b. Support with immediate care plan support
 - c. Development of long term care plan to address individual needs
 - d. Assign CHW within 48 hours, who will provide contact in a manner and frequency determined by the SW
 - e. Arrange follow-up appointments (High Utilizer Clinic, Substance Abuse Referral, established providers)
5. For those patients that meet 14+ ED Visits a year eligibility definition, they will be managed by the High Utilizer Clinic (See next slide for more detail)

Service model – Lowell (2 of 2)

Narrative description

LGH Joint Award - High Utilizer Outpatient Clinic Summary – CHART SW refers patient to High Utilizer Clinic. Patient receives home visit and/or phone call from CHW within 48 hours of discharge. Within 72 hours of discharge, patient presents to the High Utilizer Clinic for a multi-disciplinary meeting held with Internal Medicine MD, Nurse Practitioner, RN Case Manager, CHART SW, and CHW. A long term individualized care plan is developed and agreed upon.

The CHART SW assesses social needs, makes necessary referrals, provides counseling and makes addiction treatment referrals. The Psych NP provides psychopharmacology follow-up as needed, connects patient to primary Psychiatrist and provides oversight of care plan. The CHW provides community outreach home visits and follow-ups up with service needs as identified on care plan as well as assisting with transportation needs. The frequency and length of CHW visits to be determined at team meeting. The Internal Medicine MD provides medical oversight for the patient. The RN Case Manager refers patient to additional consultative services as needed (e.g. palliative care and pharmacy), connects with established providers, and collaborates care with other involved community services such as VNA.

The High Utilizer Clinic will have the support of an Addiction Treatment Specialist Consultant (ATSC) via Dr. Do of HKD Treatment Options. Dr. Do will be available for biweekly 1 hour coordination meetings, communication time stipend, and urgent patient visits for select CHART uninsured patients.

Services provided by Dr. Do/HKD Treatment Options:

1. Prompt outpatient access for CHART patients to treatment services available at HKD Treatment Options (Community Partner) in Lowell, MA.
2. Report on number of CHART patients in HKD treatment program, and number of visits, to be able to document and report to the Health Policy Commission.
3. Communication and coordination of care with the LGH-based CHART team (includes Medical Director, Psychiatric Nurse Practitioner, RN Case Manager, Social Workers, and Community Health Workers) and CHART ED providers on an as-needed basis.
4. Biweekly 1 hour coordination meetings with LGH-based CHART team.

Services provided from LGH Joint CHART team:

1. Prompt outpatient access to psychiatry follow-up provided by Psych NP.
2. Assistance in care of high utilizer patients under the care of HKD Treatment Options by LGH Social Workers and Community Health Workers.
3. Communication and coordination of care with the HKD Treatment Options team.
4. Biweekly 1 hour coordination meetings with HKD Treatment Options.
5. MD Psychiatry oversight of full suite of medical, behavioral, and social services.

[See Appendix C for Diagram of the LGH Clinical Model]

Service worksheet

Abridged Implementation Plan – Not for budgeting or contracting purposes

Service Delivered

- Care transition coaching
- **X** Case finding
- **X** Behavioral health counseling
- **X** Engagement
- **X** Follow up
- **X** Transportation
- Meals
- Housing
- **X** In home supports
- Home safety evaluation
- **X** Logistical needs
- **X** Whole person needs assessment
- Medication review, reconciliation, & delivery
- Education
- **X** Advocacy
- **X** Navigating
- **X** Peer support
- **X** Crisis intervention
- **X** Detox
- **X** Motivational interviewing
- **X** Linkage to community services
- **X** Physician follow up
- Adult Day Health
- **X** Other: [Telepsychiatry](#)
- **X** Other: [Urgent Psychopharm](#)
- **X** Other: [Crisis Stabilization](#)
- **X** Other: [Detox](#)
- Other: _____

Personnel Type

- **X** Hospital-based nurse
- **X** Hospital-based social worker
- Hospital-based pharmacist
- **X** Hospital-based NP/APRN
- Hospital-based behavioral health worker
- Hospital based psychiatrist
- **X** Community-based NP
- **X** Community-based social worker
- Community-based pharmacist
- **X** Community-based behavioral health worker (Community Health Worker)
- **X** Community-based psychiatrist
- **X** Community-based advocate
- Community-based coach
- **X** Community-based peer
- Community agency
- **X** Physician (Internist MD & Telepsych MD)
- Palliative care
- EMS
- Skilled nursing facility
- Home health agency
- **X** Other: [Program Manager](#)

Service Availability

- **X** Mon. – Fri.
- **X** Weekends
- **X** 7days
- Holidays
- **X** Days (with on call)
- **X** Evenings
- **X** Nights
- **X** Off-Shift
- **X** Hours _____
- **X** 24 hour on call
- (Tele Psych MD)

Service mix

| Service | By Whom | How Often | For How Long |
|--|----------------------------|---|--------------------------------------|
| ED-based identification, contact | RN Case Worker (ED Based) | 1.0 FTE (Lowell) | Daily, in ED |
| ED-based social work assessment | CHART SW (ED Based) | 4.0 FTE (Lowell) | Daily, in ED |
| Community-based outreach | CHW | 12.0 FTE (6.0 FTE Lowell + 6.0 FTE Lahey) | 180 days (estimated) |
| Community social work | CHART SW (Community Based) | 2.0 FTE (Lahey) | Daily management |
| Addiction Medicine | MD | Contracted rate | Service and coordination |
| Internal Medicine/Medical Director LGH | MD | 0.2 FTE | Service and oversight |
| Internal Medicine Lahey | MD | Contracted rate | Service and oversight |
| Psych Nurse Practitioner | NP | 1.0 FTE (Lowell) | Direct care |
| Psych Nurse Practitioner | NP | Contracted rate (Lahey) | Urgent Psycho Pharm |
| Psych MD | MD | Contracted Rate | Service, coordination, and oversight |
| Administrative Assistant | Admin | 1.0 FTE (Lowell) | Complex care team |

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| | |
|--|---|
| # FTE/units of service hired | 21.2 FTEs |
| # FTE/units of service contracted | 1.0 FTE (Program Manager) + 0.1 Internal Medicine Lahey + 0.1 Addiction MD for Lowell + 0.5 Lahey Psych MD for Service and oversight of Lahey Patients + 0.05 Psych MD provided by Lahey Clinical Service oversight at LGH + 0.75 Lahey Psych NPs to provide Urgent Psycho Pharm support to Lahey patients |

List of service providers / community agencies

| Type of Service Provider | Community Agency Name | New or Existing Relationship |
|---|---|------------------------------|
| Food Pantry / Social Service Agency | The Open Door | Existing |
| Food Pantry / Social Service Agency | Beverly Bootstraps | Existing |
| Food Pantry / Social Service Agency | Haven From Hunger, Peabody | Existing |
| Homeless Shelter / Social Service Agency | Action, Inc., Gloucester | Existing |
| Homeless Shelter / Social Service Agency | River House, Beverly | Existing |
| ASAP | North Shore Elder Services | Existing |
| ASAP | Minuteman Senior Services | Existing |
| Community Service Provider | North Shore YMCA | Existing |
| Social Service / Temporary Shelter | The Grace Center, Gloucester | Existing |
| VNA | Visiting Nurses Association of Middlesex East | Existing |
| Geriatric Multidiscipline Health Provider | Lahey Health Senior Care | Existing |
| Adult Day Health | Spectrum Adult Day Health Program | Existing |
| ASAP | Seniorcare, Inc., Gloucester | Existing |
| Substance Use Disorder Coalition | Healthy Gloucester Collaborative | Existing |
| Substance Use Disorder Coalition | Healthy Peabody Collaborative | New |
| Substance Use Disorder Coalition | DanversCares | Existing |
| Community Health Center(s) | North Shore Community Health, Inc | Existing |
| ACO | Lahey Clinical Performance Network | Existing |
| Law Enforcement | Gloucester Police Department | Existing |
| Law Enforcement | Beverly Police Department | Existing |
| Law Enforcement | Danvers Police Department | Existing |

List of service providers / community agencies

| Type of Service Provider | Community Agency Name | New or Existing Relationship |
|--------------------------|------------------------------|------------------------------|
| Law Enforcement | Peabody Police Department | New |
| Law Enforcement | Woburn Police Department | New |
| EMS | Gloucester Fire Department | Existing |
| EMS | Peabody Fire Department | Existing |
| Public Health | Gloucester Health Department | Existing |
| Public Health | Beverly Health Department | Existing |
| Public Health | Peabody Health Department | Existing |
| Public Health | Danvers Health Department | Existing |
| Public Health | Ipswich Health Department | Existing |
| Food Access Organization | Mill City Grows, Lowell | Existing |
| Council on Aging | Gloucester Senior Center | Existing |
| Council on Aging | Danvers Senior Center | Existing |
| Council on Aging | Beverly Senior Center | Existing |
| Council on Aging | Peabody Senior Center | Existing |
| Council on Aging | Burlington Senior Center | Existing |
| Council on Aging | Billerica Senior Center | Existing |
| Council on Aging | Arlington Senior Center | Existing |
| Council on Aging | Woburn Senior Center | Existing |
| Council on Aging | Wilmington Senior Center | Existing |
| Council on Aging | Winchester Senior Center | Existing |
| Council on Aging | Medford Senior Center | Existing |

List of service providers / community agencies

| Type of Service Provider | Community Agency Name | New or Existing Relationship |
|-----------------------------------|--------------------------------------|------------------------------|
| ASAP | Mystic Valley Senior Services | Existing |
| DPH Mandated CHNA | Community Health Network Area 15 | Existing |
| DPH Mandated CHNA | Community Health Network Area 13/14 | Existing |
| Community Service Provider | Metro North YMCA | Existing |
| Community Service Provider | Burbank YMCA, Reading | Existing |
| Public Health | Tewksbury Health Department | Existing |
| Domestic Violence Agency | REACH | Existing |
| Food Bank | Merrimack Valley Food Bank | Existing |
| Social Service Provider | Burlington Youth and Family Services | Existing |
| Food Bank | People Helping Peabody, Burlington | Existing |
| Law Enforcement | Burlington Police Department | Existing |
| Council on Aging | Merrimac Senior Center | Existing |
| Community Service Provider | Billerica Boys and Girls Club | Existing |
| Shelter / Social Service Provider | Wellspring House, Gloucester | Existing |

List of service providers / community agencies – Addison Gilbert, Beverly

| Type of Service Provider | Community Agency Name | New or Existing Relationship |
|---|---|------------------------------|
| Shelters | Action Shelter, River St, Pine St Inn (Boston), River House Shelter (Beverly), Inn-Between (Beverly), Salem Mission, Crombie Street Shelter for Men & Women (Beverly), etc. | Existing + new |
| Meals | Meals on Wheels, Cape Ann Food Pantry/Open Door, Senior Center, Beverly Bootstraps, Beverly Church of the Nazarene (Beverly residents only), First Baptist Church Beverly, Food Source Hotline-Project Bread (pre-screening for food stamps, resources for other free/low cost foods), Haven from Hunger (Peabody), Salem Mission/Food pantry, St. Joseph Food Pantry (Salem), local Salvation Army resources | Existing + new |
| Legal/court system | Gloucester District Court (section 35) | Existing + New |
| Financial services, Insurance | AGH Financial Liaison, referral to GFHC financial counselors,-future insurance & financial community resources, Senior Care Options (Commonwealth Care Alliance), MA Health | Existing + New |
| VNA | VNACN, LHAH, Able VNA, TLC | Existing + New |
| Managed Care Organizations | ACO-Lahey PHO (RN CM, Clinical RPh), PACE (aka ESP) | Existing + New |
| Peer Support/Self-Help Groups | Alcoholics Anonymous (AA), Narcotics Anonymous (NA) | Existing + New |
| Department of Mental Health (DMH)-Case Management & Providers | Community Based Flexible Support (CBFS) Services & their contracted case management & providers Eliot, Vinfen, Children, Friends & Family (CFF) | Existing + New |
| Hospice | Kaplan, Care Dimensions | Existing + New |
| SNFs & LTC facilities | GLC, DenMar, Seacoast, Kindred, Blueberry Hill, Ledgewood, Brentwood, Pilgrim, Reservoir, Spaulding, Hunt, Essex Park, Kaplan Family Hospice House, | Existing + New |
| Diabetes Care-RN educator, dietician, endocrinologist | Lahey Outpatient Center; Lifestyle Management Institute | Existing + New |
| Behavioral Health | Lahey Health Behavioral Services, Bayridge, Leland, Danvers CAB, Discover Program | Existing + New |
| Elder Services | Senior Care/Protective Services | Existing + New |
| PCP's-new referrals | GFHC (Dr. Hollett, Dr. Kulscar, Christine Malagrida), Lahey Health Primary Care | Existing + New |

Abridged Implementation Plan – Not for budgeting or contracting purposes

Lahey-Lowell Joint Award – Version 3

List of service providers / community agencies – Addison Gilbert, Beverly

| Type of Service Provider | Community Agency Name | New or Existing Relationship |
|---|---|------------------------------|
| Specialists-referrals and follow-up | Endocrine, podiatry, GI, neurology, pain, pulmonology, infectious disease, cardiology, psychiatry, hemeatology/oncology, wound care | Existing + New |
| Care Coordination-Follow up care/care transitions providers | PCMH Clinic @ Lahey | New |
| Medication Management | Lahey Enhanced Care Service (aka Dovetail)-Clinical RPh | Existing + New |
| Coumadin clinic | Cape Ann Medical Center; connect with new coumadin clinic at AGH in future | Existing + New |

Abridged Implementation Plan – Not for budgeting or contracting purposes

Lahey-Lowell Joint Award – Version 3

List of service providers / community agencies – Lowell

| Type of Service Provider | Community Agency Name | New or Existing Relationship |
|---|--|------------------------------|
| Community Health Worker | PHO staff at Lowell General Hospital | New |
| Home health care | Circle Home (Lowell) | Existing |
| EMS/home safety inspections | Hospital EMS providers | Existing |
| Skilled Nursing | Preferred SNF Network | Existing |
| Medical services | PHO Physicians at Lowell General | Existing |
| Behavioral Health | Lahey Health Behavioral Services | Existing |
| Palliative Care | LGH inpatient | Existing |
| Palliative Care | LGH outpatient | New |
| Hospice | Circle Home, Merrimack Valley Hospice | Existing |
| Infusion Therapy | New England Life Care | Existing |
| Retail chain pharmacies | CVS, Walgreens, RiteAid, Target, Walmart, Stop & Shop, Shaw's Osco Pharmacy | Existing + new |
| Retail community pharmacies-pt education services, delivery & compliance services (blister packing) | Conley's, Medicine Shoppe (Beverly), Custom Medicine Pharmacenter (Beverly) | Existing + New |
| Pharmacies-other | VA pharmacy, Eaton's Pharmacy (PACE/ESP), PharmERICA (GLC), Omnicare (Ledgewood), out-patient hospital pharmacies-Lahey, Dana Farber, Custom Medicine Pharmacenter (Beverly-compounding services) | Existing + New |
| Transportation | Senior Care, Senior center (volunteer based), CATA, CATA dial-a-ride, MBTA's THE RIDE, Beverly COA, Gloucester COA, American Cancer Society (for patients with cancer), Mobility Links, Veteran's Transportation Services, local taxi services, etc. | Existing + New |

Abridged Implementation Plan – Not for budgeting or contracting purposes

Lahey-Lowell Joint Award – Version 3

List of service providers / community agencies – Winchester

| Type of Service Provider | Community Agency Name | New or Existing Relationship |
|----------------------------|---|------------------------------|
| Elder Services | Minuteman Elder Services | New |
| Skilled Nursing Facilities | Salter Healthcare; Wingate; Woodbriar; Wilmington Healthcare Center; Bear Hill; Glenn Ridge; Lifecare | Existing |
| LTAC | Kindred; Spaulding; Shaughnessy Kaplan | Existing |
| Home Health Care | Winchester Home Care; VNA Middlesex; Medford VNA | Existing |
| Hospice/Palliative Care | Care Dimensions | Existing |
| Behavioral Health | Lahey Health Behavioral Services | Existing |
| Community Pharmacy | Winchester Pharmacy | New |

Summary of services

Narrative description

The Lahey-Lowell Joint Investment program will reduce recurrent ED utilization by 20% for patients with a personal history of high ED utilization by identifying patients in real-time when they present to the emergency department. The ED encounter either serve as purely an opportunity to identify and connect a target population patient to immediate follow up and enhanced care planning services, or the care in the ED may be enhanced from standard care by delivering CHART-funded enhanced assessments (by psychiatrists, NPs, or SWs). Following the ED encounter, target population patients will be contacted within 48 hours. We intend to endeavor to establish a therapeutic relationship with individuals to facilitate effect whole-person assessments, comprehensive care plan development, successful connections to any and all medical behavioral and social services that are required, according to individual needs.

Prior to Presentation:

- Create registry for moderate and high needs patients

When patient presents to ED:

- Real-time identification of target population patients (8-13 ED visits with 1 BH DX past 12 mos. or high 14+ visits past 12 months)
- Notification automatically (pages/emails/notifies/populates) RN-Case Manager - SW-CHW, per clinical service model
- Notification connects ED clinician to individual care plan, if one exists
- After BH initial evaluation, telepsychiatry evaluation in ED as needed (Lahey Service Model specific)
- Crisis stabilization bed, detox bed, or urgent psycho pharm f/u, if indicated
- SW conducts initial assessment; patient directly linked to follow up
- CHW (moderate) or complex care team clinician (high) arranges to meet in E.D. or in community; patient directly linked to f/u
- Identify which patients have BH and medical services
- Identify which patients have social services / HCBS/ ASAP services in place
- Develop immediate (initial) care plans prior to discharge from acute setting by CHART SW

Following ED:

- Urgent psycho pharm follow up with NP <5 business days, if appropriate
- Will attempt to have CHW outreach contact <48h
- Followed by CHW in community, overarching treatment plan implemented, frequency of CHW and other team contact individualized based on care plan
- 14+ followed by High Utilizer Clinic in the community (Lowell General Service Model specific)
- Develop long term care plans Post ED with the coordination of existing programs and services already in place and identification of additional service for the patient

Service Duration:

- 8-13 + 1 BH DX patients 6 months with monthly reassessment
- 14+ patients anticipate 1 year with quarterly reassessment

Cohort-wide standard measures – Hospital utilization measures

Abridged Implementation Plan – Not for budgeting or contracting purposes

| Data elements | All | Target Population- (Moderate-needs patients) | Target Population (High-needs patients) |
|--|-----|---|--|
| 1. Total Discharges from Inpatient Status (“IN”) | x | x | x |
| 2. Total Discharges from Observation Status (“OBS”) | x | x | x |
| 3. SUM: Total Discharges from IN or OBS (“ANY BED”) | x | x | x |
| 4. Total Number of Unique Patients Discharged from “IN” | x | x | x |
| 5. Total Number of Unique Patients Discharged from “OBS” | x | x | x |
| 6. Total Number of Unique Patients Discharged from “ANY BED” | x | x | x |
| 7. Total number of 30-day Readmissions (“IN” to “IN”) | x | x | x |
| 8. Total number of 30-day Returns (“ANY BED” to “ANY BED”) | x | x | x |
| 9. Total number of 30-day Returns to ED from “ANY BED” | x | x | x |
| 10. Readmission rate ("IN readmissions" divided by "IN") | x | x | x |
| 11. Return rate (ANY 30-day Returns divided by “ANY BED”) | x | x | x |

Lahey-Lowell Joint Award – Version 3

Standard exclusions: <18, OB (DRG 765-782), discharged deceased or transfer to acute hospital

Note: Data elements that do not have a population selected are not required for measurement. Not all measures are required for all hospitals.

Report the measures marked with an X for each individual hospital as well as for the aggregate of the four hospitals.

Cohort-wide standard measures – ED utilization measures

Abridged Implementation Plan – Not for budgeting or contracting purposes

| Data Elements | All | Target Population (Moderate-needs patients) | Target Population (High-needs patients) |
|---|-----|---|---|
| 12. Total number of ED visits | x | x | x |
| 13. Total number of unique ED patients | x | x | x |
| 14. Total number of ED visits, primary BH diagnosis | x | x | x |
| 15. Total number of unique patients with primary BH diagnosis | x | x | x |
| 16. Total number of ED visits, any BH diagnosis | x | x | x |
| 17. Total number of unique patients with any BH diagnosis | x | x | x |
| 18. Total number of 30-day ED revisits (ED to ED) | x | x | x |
| 19. Total number of 30-day revisits (ED to ED), primary BH diagnosis | x | x | x |
| 20. Total number of 30-day revisits (ED to ED), any BH diagnosis | x | x | x |
| 21. ED revisit rate | x | x | x |
| 22. ED BH revisit rate (primary BH diagnosis only) | x | x | x |
| 23. ED BH revisit rate (any BH diagnosis) | x | x | x |
| 24a. Median ED LOS (time from arrival to departure, in minutes) | x | x | x |
| 24b. Min ED LOS (time from arrival to departure, in minutes) | x | x | x |
| 24c. Max ED LOS (time from arrival to departure, in minutes) | x | x | x |
| 25a. Median ED LOS (time from arrival to departure, in minutes), primary BH diagnosis | x | x | x |
| 25b. Min ED LOS (time from arrival to departure, in minutes), primary BH diagnosis | x | x | x |
| 25c. Max ED LOS (time from arrival to departure, in minutes), primary BH diagnosis | x | x | x |
| 26a. Median ED LOS for ED boarders per DPH boarder definition (patients with a primary behavioral health diagnosis who remain in the ED for 12 or more hours from ED arrival to ED departure) | x | x | x |
| 26b. Min ED LOS for ED boarders per DPH boarder definition (patients with a primary behavioral health diagnosis who remain in the ED for 12 or more hours from ED arrival to ED departure) | x | x | x |
| 26c. Max ED LOS for ED boarders per DPH boarder definition (patients with a primary behavioral health diagnosis who remain in the ED for 12 or more hours from ED arrival to ED departure) | x | x | x |

Standard exclusions: <18, OB (DRG 765-782), discharged deceased or transfer to acute hospital

Note: Data elements that do not have a population selected are not required for measurement. Not all measures are required for all hospitals.

Report the measures marked with an X for each individual hospital as well as for the aggregate of the four hospitals.

Cohort-wide standard measures – Service delivery measures

| Data elements | Target Population (Moderate-needs patients) | Target Population (High-needs patients) |
|--|---|---|
| 27. Total number of unique patients in the target population | x | x |
| 28. Number of acute encounters for target population patients | x | x |
| 29. For acute encounters in measure #28, number of these with any CHART service provided after discharge and within 48 hours | x | x |
| 30. Total number of contacts for the target population | x | x |
| 31. Average number of contacts per patient served | x | x |
| 32a. Min number of contacts for patients served | x | x |
| 32b. Max number of contacts for patients served | x | x |
| 33. Number of units of service provided by service modality (including, e.g., phone call, virtual interaction, face to face in office, face to face in home, etc.) | x | x |
| 34. Number of units of service provided, by service types (e.g., care coordination, medication optimization, clinical care, counseling, needs assessment, etc.) | x | x |
| 35. Number of units of service provided, by role type (NP, LICSW, Pharmacist, Community Health Worker, Peer) | x | x |
| 36. Average time (days, months) enrolled in CHART program per patient | x | x |
| 37. Range time (days, months) enrolled in CHART program per patient | x | x |
| 38. Proportion of target population patients with care plan | x | x |

Abridged Implementation Plan – Not for budgeting or contracting purposes

Lahey-Lowell Joint Award – Version 3

Standard exclusions: <18, OB (DRG 765-782), discharged deceased or transfer to acute hospital
Report the measures marked with an X for each individual hospital as well as for the aggregate of the four hospitals.

Cohort-wide standard measures – Payer mix

| Data elements | Medicare | Medicaid | Commercial |
|---|----------|----------|------------|
| 39-T1. Count of patients in the Target Population (Moderate-needs patients) | x | x | x |
| 39-T2. Count of patients in the Target Population (High-needs patients) | x | x | x |

Abridged Implementation Plan – Not for budgeting or contracting purposes

Lahey-Lowell Joint Award – Version 3

Standard exclusions: <18, OB (DRG 765-782), discharged deceased or transfer to acute hospital

Note: Data elements that do not have a population selected are not required for measurement. Not all measures are required for all hospitals.

Report the measures marked with an X for each individual hospital as well as for the aggregate of the four hospitals.

Program-specific measures – High utilizer

| Measure ID | Measure Description |
|------------|---|
| H001 | Number of TP patients identified for whom there is a full six months of time passed following CHART eligibility |
| H002 | Total IN discharges for 6 months before CHART eligibility |
| H003 | Total 30-day readmissions for 6 months before CHART eligibility |
| H004 | Total ED visits for 6 months before CHART eligibility |
| H005 | Total 30-day ED revisits for 6 months before CHART eligibility |
| H006 | Total IN discharges for 6 months starting on and inclusive of the date of CHART eligibility |
| H007 | Total 30-day readmissions for 6 months starting on and inclusive of the date of CHART eligibility |
| H008 | Total ED visits for 6 months starting on and inclusive of the date of CHART eligibility |
| H009 | Total 30-day ED revisits for 6 months starting on and inclusive of the date of CHART eligibility |
| H010 | Total months following CHART eligibility without exit event |
| H011 | Total OBS discharges for 6 months before CHART eligibility |
| H012 | Total OBS discharges for 6 months starting on and inclusive of the date of CHART eligibility |

Abridged Implementation Plan – Not for budgeting or contracting purposes

Lahey-Lowell Joint Award – Version 3

Standard exclusions: <18, OB (DRG 765-782), discharged deceased or transfer to acute hospital

Note: Data elements that do not have a population selected are not required for measurement. Not all measures are required for all hospitals.

Report the measures marked with an X for each individual hospital as well as for the aggregate of the four hospitals.

Program-specific measures

| Population | Measure | Numerator | Denominator | How will you collect this? |
|------------|---|---|---------------------|----------------------------|
| T1 | Calculate % of unique patients encountered in the ED with 8-13 ED visits with 1 BH Dx in the measurement period | Count of unique patients with an ED visit in the measurement period - target population 8-13 with 1 BH Dx (c013 T1) | c013 A | Loopback |
| T2 | Calculate % of 14+ patients encountered in ED in the measurement period | Count of unique patients with an ED visit in the measurement period - target population 14+ (c013 T2) | c013 A | Loopback |
| T1 | Calculate % of ED Visits by TP 8-13 ED visits with 1 BH Dx in the measurement period | Count of all ED visits for patients with 8-13 ED visits with 1 BH Dx with a discharge date in the measurement period -(c012 T1) | c012 A | Loopback |
| T2 | Calculate % of ED Visits by TP 14 + ED visits in the measurement period | Count of all ED visits for patients with 14+ ED visits with a discharge date in the measurement period -(c012 T1) | c012 A | Loopback |
| A | Calculate % of Tele Psych encounters in all target population ED Visit sin the measurement period | Count of Telepsych encounters in the measurement period (P003) | c012 T1+ c012 T2 | Loopback |
| T1 | Calculate % of Tele Psych encounters in 8-13 ED Visits with 1 BH Dx in the measurement period | Count of Tele Psych encounters in the measurement period (P003) | c012 T1 | Loopback |
| T2 | Calculate % of TelePsych encounters in all 14+ ED Visits in the measurement period | Count of Telepsych encounters in the measurement period (P003) | c012 T2 | Loopback |

Program-specific measures

| Population | Measure | Numerator | Denominator | How will you collect this? |
|------------|---|--|--------------------------|----------------------------|
| A | Total Number of all CCS referrals in the measurement period | Count of CCS Referral in the measurement period | N/A | Loopback |
| A | <i>Total Number of all CCS admissions in the measurement period</i> | <i>Count of CCS Admissions in the measurement period</i> | N/A | Loopback |
| A | Total Number of all CSS referrals in the measurement period | Count of CSS Referral in the measurement period | N/A | Loopback |
| A | <i>Total Number of all CSS admissions in the measurement period</i> | <i>Count of CSS Admissions in the measurement period</i> | N/A | Loopback |
| A | Total Number of referrals to Detox from ED in the measurement period | Count of referrals to Detox from ED in the measurement period | N/A | Loopback |
| A | <i>% of referrals to Detox from ED in the measurement period</i> | <i>Count of referrals to Detox from ED in the measurement period (P006)</i> | <i>c013 T1 + c013 T2</i> | Loopback |
| A | Total number of referrals to Inpatient Psych from ED in the measurement period | Count of referrals to Inpatient Psych from ED in the measurement period | N/A | Loopback |
| A | <i>% of referrals to Inpatient Psych from ED in the measurement period</i> | <i>Count of referrals to Inpatient Psych from ED in the measurement period (P007)</i> | <i>c013 T1 + c013 T2</i> | Loopback |
| A | Total number of patients referred to the NP for medication management in the measurement period | Count of patients referred to the NP for medication management in the measurement period | N/A | Loopback |
| A | <i>% of patients referred to the NP for medication management in the measurement period</i> | <i>Count of patients referred to the NP for medication management in the measurement period (P008)</i> | <i>c013 T1 + c013 T2</i> | Loopback |
| A | Total Number of patients referred to HKD Treatment Options in the measurement period (LGH Specific Measure) | Count of patients referred to HKD Treatment Options in the measurement period | N/A | Loopback |
| A | <i>% of patient referred to HKD Treatment Options in the measurement period</i> (LGH Specific Measure) | <i>Count of patients referred to HKD Treatment Options in the measurement period (P009)</i> | <i>c013 T1 + c013 T2</i> | Loopback |

Program-specific measures

Abridged Implementation Plan – Not for budgeting or contracting purposes

| Population | Measure | Numerator | Denominator | How will you collect this? |
|------------|--|---|----------------------|----------------------------|
| A | <i>% of patients contact by CHW within 48 Hours acute care discharge post ED encounter in the measurement period</i> | <i>Count of patients contacted within 48 hours post ED discharge or acute hospital care setting (P010)</i> | c012 T1 + c012 T2 | Loopback |
| A | <i># of patients who execute consent to participate Post ED discharge in CHART in the measurement period</i> | <i>Count of patients that execute consent to participate post ED discharge (final discharge from the acute care hospital setting to the next setting of care (detox, crisis stabilization, home, home with services, SNF, rehab, etc)) in the measurement period</i> | N/A | Loopback |
| A | <i>% of patients who execute consent to participate Post ED discharge in CHART in the measurement period</i> | <i>Count of patients that execute consent to participate post ED discharge (final discharge from the acute care hospital setting to the next setting of care (detox, crisis stabilization, home, home with services, SNF, rehab, etc)) in the measurement period (P011)</i> | c013 T1 + c013 T2 | Loopback |
| T1 | <i>% of 30 day ED Revisits by 8-13 patients w/1 BH DX in the measurement period</i> | c018 T1 | c013 T1 | Loopback |
| T2 | <i>% of 30 day ED Revisits by 14+ patients in the measurement period</i> | c018 T2 | c013 T2 | Loopback |
| A | <i>Total Number of visit by social worker to the patient in the ED in the measurement period</i> | <i>Count of visit by a SW in the ED in the measurement period</i> | N/A | Loopback |
| A | <i>% of visit by social worker to the patient in the ED in the measurement period</i> | <i>Count of visit by a SW in the ED in the measurement period (P013)</i> | c013 T1 + c013 T2 | Loopback |

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Program-specific measures

Abridged Implementation Plan – Not for budgeting or contracting purposes

| Population | Measure | Numerator | Denominator | How will you collect this? |
|------------|--|---|----------------------|----------------------------|
| T2 | Total number of discharges from LGH for High Utilizer patients counted in c028 T2 where an appointment within 72 hours to the LGH outpatient behavioral health office is scheduled (LGH Specific Measure) | Count of acute encounter discharges from LGH for High Utilizer patients counted in c028 T2 where an appointment within 72 hours to the LGH outpatient behavioral health office is scheduled | N/A | Loopback |
| T2 | <i>Percentage of discharges from LGH for High Utilizer patients counted in c028 T2 where an appointment within 72 hours to the LGH outpatient behavioral health office is scheduled</i> (LGH Specific Measure) | <i>Count of acute encounter discharges from LGH for High Utilizer patients counted in c028 T2 where an appointment within 72 hours to the LGH outpatient behavioral health office is scheduled (P014)</i> | c012 T1 + c012 T2 | Loopback |
| P | <i>Number of eligible patients who moved from MU to HU</i> | <i>Count of eligible target population patients who moved from MU to HU in the measurement period</i> | N/A | Loopback |
| P | <i>Number of served patients who moved from MU to HU</i> | <i>Count of target population patients who received CHART services in the measurement period and moved from MU to HU in the measurement period</i> | N/A | Loopback |

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Continuous improvement plan (1 of 2)

| | |
|--|---|
| <p>1. How will the team share data? Describe.</p> | <p>The LLJ CHART Project has established a Governance Structure* (made up of the LLJ CHART Steering Committee and other Hospital Leads) to oversee and manage the multi-site project. The LLJ CHART Performance Measure and Data Analytics workgroup, which is represented by a members of each of the 4 community hospitals will have access to the shared data. This workgroup will report to the Governance Board to share the data requested.</p> |
| <p>2. How frequently will you (PM, Investment Director) look at the data (e.g., weekly)? Describe.</p> | <p>Each hospital's Program Manager will review the data on a weekly basis, and if necessary on a daily basis, in their respective care management tool. Joint CHART Program Manager will share data (provided by each hospital's program manager) for the overall project with the Governance Structure monthly to ensure that all programmatic issues are addressed. Over time, we will transition to quarterly data reviews.</p> |
| <p>3. How often will your executive team (VPs, C-suite) review CHART project reporting (e.g., monthly)? Describe.</p> | <p>Initially, executive team members, who are also members of the Steering Committee and Governance Structure, will review data regularly with the hospital's program managers. Over time, we will transition to monthly data reviews.</p> |
| <p>4. How often will your front line CHART staff (SW, care team) review reporting (e.g., weekly)? Describe.</p> | <p>The frontline staff will have the capability to review designated reports in their respective care management tools. They will be required to review designated reports at a minimum on a weekly basis.</p> |
| <p>5. How often will your community partners review data (e.g., weekly, monthly)? Describe.</p> | <p>It will depend on the access level and the level of partners. If appropriate, monthly to reinforce collaboration and ongoing relationship building.</p> |
| <p>6. Which community partners will look at CHART data (specific providers and agencies)? Describe.</p> | <p>It will depend on the access level and the level of partnership.</p> |
| <p>7. Will the quality committee of your board review CHART reporting (e.g., quarterly)? Describe.</p> | <p>Yes, hospital specific quality boards or committees will review CHART reporting at a minimum quarterly. This is supported by each of the hospital's program managers.</p> |

*[Appendix B – Governance Structure]

Continuous improvement plan (2 of 2)

| | | |
|---|---|--------------------------------|
| <p>8. Who will collect measures and produce reporting for Cohort-wide and program specific measure (e.g., Data Analyst, PM, ID)? Describe.</p> | <p>Cohort-Wide</p> | <p>Program specific</p> |
| <p>9. What is your approximate level of effort to collect these metrics? Describe.</p> | <p>Cohort-Wide</p> | <p>Program specific</p> |
| <p>10. How will you ensure that you are able to collect both your program specific and the cohort-wide measures? Describe.</p> | <p>The LLJ Performance Measures and Data Analytics workgroup and ED Operations workgroup will be in communication with the Governance Structure via each hospital's Program Manager to ensure that program specific and cohort wide measures are properly collected. Each hospital's program manager also has a role in the Governance Structure.</p> | |
| <p>11. How will you know when to make a change in your service model or operational tactics? Describe.</p> | <p>The monthly updates to the Governance Structure will allow us to maintain a pulse on the performance of the clinical service models and overall project.</p> | |

Enabling Technologies plan

Abridged Implementation Plan – Not for budgeting or contracting purposes

| Key Functionalities | User | Vendor | Cost |
|--|-------------------------------------|---|-----------|
| <p>Reporting capability Reliable, monthly (or more frequent) measurement of outcomes (principally utilization metrics) for total hospital and for defined target population</p> <p>Admission-Discharge-Transfer Notifications Notification-based system to track target population utilization/ services across the continuum</p> <p>Cross-Setting, Multi-disciplinary Care Management To capture the services delivered by role and type (process measures) and to create day-to-day care management tool to assign role-based activities/patient hand-offs</p> <p>Individualized Care Plans Care plans that are accessible 24/7 to providers on a need-to know basis to facilitate quality care and optimize services</p> <p>Care Coordination Software (SaaS model) Automate and streamline patient qualification for CHART program in real time; manage and electronically obtain patient consent; automate registration of patient intake and track encounters; perform collaborative care plan development and activities; automate patient assignment to care coordination teams; allows cross-setting and multi-disciplinary team coordination; provide access to essential health record information for community partners through SaaS portal; automate alerts and reporting; patient outreach and follow-up activity; automate measurement of program results</p> | Lahey-Lowell Joint CHART team, LBHS | Loopback Analytics*, ** | \$370,000 |
| <p>Mobile technology</p> | Lahey-Lowell Joint CHART team | Hardware/software, including iPads and COWs | \$42,680 |
| <p>Telepsych technology Provide remote patient BH health care using Telehealth video technology/software</p> | Psych MD | Laptops | \$7,092 |

Lahey-Lowell Joint Award – Version 3

*Along with current ER systems: Beverly and AGH using EPIC, Winchester Hospital also using Meditech, and the Lowell General (Cerner\Athena).

**Loopback Analytics has provided high level web and onsite demonstration of their base patient intake, filtering and reporting functions. The full analytics reporting capability is included in their offering. Their workflow process needs to be developed between the Vendor and the grantee. As there was no existing "one size fits all" base product, each Loopback solution is tailored to the needs of each of the clients. However, they demonstrated that the capability exists, but considerable cost for customization. Also Loopback reporting is not available as a separate purchase.

Enabling Technologies plan – Q&A

How are you going to identify target population patients in real-time?

Every ED Medical Record system (EPIC, Meditech, Cerner, and Athena) will flag target population patients in real-time upon entering the ED and will send an alert to the appropriate team members to commence services.

How will you measure what services were delivered by what staff?

Care plan will delineate what services are provided by the designated community partner or staff member. The Lahey Hospitals will develop reports in the Loopback Analytics tool and Lowell General will develop reports in the Athena tool that will provide the ED disposition of the patient. In addition, the hospitals will develop a report in their respective tools that will track what services were provided by which staff member or community partner.

How will you measure outcome measures monthly?

The Lahey hospitals will use Loopback Analytics tools for this capability. Lowell General will use the Athena tool for this capability.

What tool/platform will you use to facilitate cross-setting and multi-disciplinary coordination of care?

The Joint CHART will use Loopback Analytics tools for this function at the 3 Lahey Hospitals. Lowell General will use Athena for their care management tool, but a feed will be provided to the Joint CHART tool of their demographic and service data for consolidated reporting.

Where will individual care plans reside, and what is the plan for making them available on a need-to-know basis 24/7 in the ED, hospital, and ambulatory settings?

The Joint CHART award will use Loopback Analytics tools for this function at the 3 Lahey Hospitals. Lowell General will use Athena for their care management tool.

Do you have a method for identifying what clinical services your target population accesses?

We have a clinical model design and process flow which delineated the clinical services that the target population can access [See Slide 59-61, Appendix D]. Each patient will have an immediate care upon discharged from their ED encounter. Subsequently, if the patient engages post their ED visit in CHART community-based/outreach services, a long term individual care plan is developed and customized to the patient's needs. It will be reevaluated as needed (daily, weekly, monthly or quarterly), depending on patient needs.

Other essential investments

| Other Investments | Cost |
|--|-----------|
| Lahey Health Behavioral Services - Telepsych | \$80,000 |
| Lahey Health Behavioral Services - Clinical Stabilization Services (CSS) | \$112,000 |
| Lahey Health Behavioral Services - Community Crisis Stabilization (CCS) | \$126,880 |
| Staff Training | \$58,000 |
| Patient Assistance Fund – Addison Gilbert Hospital | \$10,253 |
| Patient Assistance Fund – Beverly Hospital | \$18,253 |
| Patient Assistance Fund – Winchester Hospital | \$16,000 |
| Direct Patient Care Costs – Lowell General Hospital | \$20,000 |
| Lahey CHART Personnel Mileage | \$24,510 |

Key dates

| Key Milestone | Date |
|--|------------|
| Launch date (beginning of your 24 month Measurement Period) | 1/1/2016 |
| Post jobs | 10/23/2015 |
| New hires made | 12/14/2015 |
| Execute contracts with service delivery partners | 12/1/2015 |
| ED revisit reduction initiatives support 50% of planned patient capacity | 1/1/2016 |
| ED revisit reduction initiatives support 100% of planned patient capacity | 4/1/2016 |
| First test report of services, measures | 1/15/2016 |
| Enabling technology – testing initiated | 12/1/2015 |
| Enabling technology – User Acceptance Testing | 12/7/2015 |
| Enabling technology – Go Live | 12/14/2015 |
| Trainings completed, by 1 month of hire date; orientation training will be recurring as personnel are hired. | 1/16/2016 |
| First patient seen | 1/1/2016 |

Community partners/subcontractors

| Name | Business Address | Website | Contact Name | Contact Title | Contact Phone Number | Contact Email Address |
|---------------------------------------|--|---|-------------------------------|---|----------------------|--|
| LHBS – Program Manager | 250 Rosewood Drive, Suite 250 | http://www.nebhealth.org/ | Nizelky Genao, MSW, PMP, ITIL | Program Manager | 978-968-1724 | ngenao@nebhealth.org |
| Loopback Analytics | 14900 Landmark Blvd, Suite 240, Dallas, TX 75254 | http://www.loopbackanalytics.com | Bobby Barajas | VP, Sales & Marketing | 972-480-3304 | bbarajas@loopbackanalytics.com |
| LHBS – Telepsych | 250 Rosewood Drive, Suite 250 | http://www.nebhealth.org/ | Barry Ginsberg, M.D. | Medical Director, BayRidge Hospital Chief and Administrative Director, Department of Psychiatry Northeast Hospital Corporation Medical Director, Emergency Services, Lahey Health Behavioral Services | 972-968-1716 | bginsberg@nhs-healthlink.org |
| LHBS – Community Crisis Stabilization | 250 Rosewood Drive, Suite 250 | http://www.nebhealth.org/ | Jack Petras, LMHC | Vice President, Emergency Service and Community Support Programs | 978-968-1718 | jpetras@nebhealth.org |
| LHBS – Clinical Crisis Stabilization | 250 Rosewood Drive, Suite 250 | http://www.nebhealth.org/ | Hillary Jacobs, LICSW | Vice President, Addiction Services | 978-968-1718 | hjacobson@nebhealth.org |
| LHBS – All Sites Training | 250 Rosewood Drive, Suite 250 | http://www.nebhealth.org/ | Scune Carrington, LCSW | Project Manager | 978-968-1708 | scarrington@nebhealth.org |
| LHBS – Urgent Psycho Pharm | 250 Rosewood Drive, Suite 250 | http://www.nebhealth.org/ | Jeffrey C. Eisen, MD, MBA | Medical Director, Community Services | 978-968-1708 | jeisen@nebhealth.org |
| LHBS – Psych MD for AG B W | 250 Rosewood Drive, Suite 250 | http://www.nebhealth.org/ | Mary Anna Sullivan, MD | Chief Medical Officer | 978-968-1737 | mary.a.sullivan@lahey.org |
| HKD Treatment Options | 21 George Street 1st Floor, Lowell, MA 01852 | http://www.hkdtreatmentoptions.com/contact-us/lowell-office/ | Dr. Do | Addictions MD | 978-710-9877 | info@hkdreatmentoptions.com |
| LHBS – Internal MD for AG B W | 250 Rosewood Drive, Suite 250 | http://www.nebhealth.org/ | Mary Anna Sullivan, MD | Chief Medical Officer | 978-968-1737 | mary.a.sullivan@lahey.org |