Massachusetts System of Care:
Evolution of Community Paramedicine

Disclosures

- President and Chairman of the Board of Directors, MA-DPH-OEMS-Region IV
- Board of Directors, Massachusetts Ambulance Association
- Commissioner, MA State 9-1-1 (000) Commission
- Member, MA Advisory Council on Mobile Integrated Healthcare
- PhD candidate, Suffolk University, Boston; Industry-Organization Psychology

Overview of Massachusetts

- 7th Smallest State
  - 20,202 km² LA
    - 27,336 km² TA
- 14th most populous
  - 6.7M in population
- 3rd most densely populated
  - 332 people/km²

Source: US Census Bureau

Overview of Massachusetts

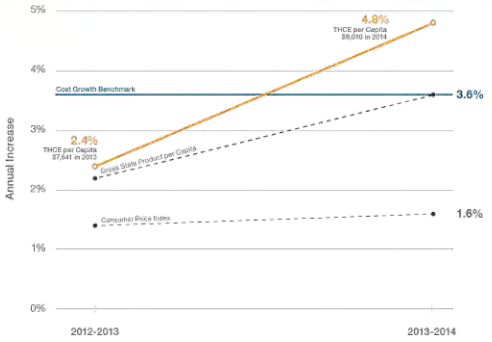
- Median income $66k USD (~$90k AUD)
- 11% Poverty Rate
- 65% between 18 and 65 y/o
- 15% Foreign Born
- 21% Speak Other Primary Language
- 351 Municipal Corporations
- Diversity in EMS
  - Public, private, third service
- 61 Acute Care hospitals
  - 8-ACS Designated Level I Trauma Centers (AMC)

Source: US Census Bureau, MA Center for Health Information Analysis

Setting the Stage: Finding the Gaps

Finding the Gap: THCE Growth

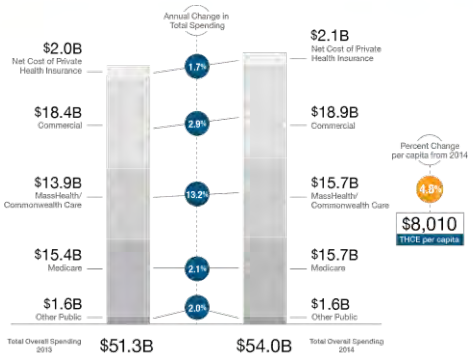
Total Health Care Expenditures per capita grew by 4.8%, above the health care cost growth benchmark for 2014



Source: CHIA and other public sources. Inflation data from the Bureau of Labor Statistics: Consumer Price Index 12-month Percent Change. Gross State Product data from U.S. Bureau of Economic Analysis: GDP by State in Current Dollars.

Finding the Gap: THCE Growth

Health Care Expenditures per Massachusetts resident were $8,010 in 2014— an annual increase of 4.8%



Source: CHIA (payer-reported data) and other public sources. See technical appendix.
Notes: Percent changes are calculated based on full expenditure values. Please see databook for detailed information.

Finding the Gap: Readmissions

Potentially Avoidable Hospitalizations per 100,000 Residents, by Condition, 2013-2014

Compared to the nation, MA averaged more potentially preventable hospitalizations for congestive heart failure and asthma in younger adults

Source: CHIA Hospital Discharge Database.
Notes: All payers, age ranges vary by measures. The denominator is all Massachusetts residents for each measure.

Finding the Gap: Utilization

Among Emergency Department (ED) visits in the past 12 months

38.7%
Of recent ED visits were for a non-emergency condition

60.3%
Of recent emergency room visits were unable to get an appointment at a doctor's office or clinic as soon as needed

76.1%
Of recent emergency room visits was for care after normal operating hours at the doctor's office or clinic

ED utilization in MA is higher than US

Note: A non-emergency condition is one that the respondent thought could have been treated by a regular doctor if one had been available.
Source: 2014 Massachusetts Health Insurance Survey

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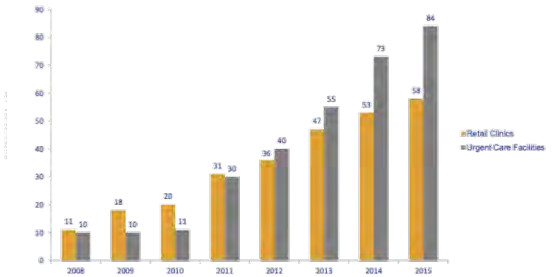
Finding the Gap: Urgent Care

HPC Selected Findings:
The number of retail clinics and urgent care centers has surged over the last 8 years in Massachusetts.



Retail clinics, located in retail stores, are typically staffed by nurse practitioners and treat a limited range of health conditions, such as minor infections and injuries. Annual data from CVS.
Urgent care centers typically are freestanding physicians' offices with extended hours, on-site x-ray machines and laboratory testing, and an expanded treatment range, including care for fractures and lacerations. Annual data from NPI Registry.

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Finding the Gap: VBP/APM

Standardization of APMs	• **Many varying quality measures** increase administrative burden, but allow for tailoring to providers' improvement needs and specific populations served. • **Hard to hold their own providers accountable if attribution methodologies vary** across contracts • **Hard to coordinate between providers under very different financial incentives and budget models** (both FFS and various APMs), making it difficult to achieve care delivery transformation intended by each APM contract
Effectiveness of APMs	• Reports of performance on quality measures are not timely or standardized for easy comparison and thus, not actionable • Challenge of operating in two worlds of FFS and APMs • Financial data not timely at all and providers experience volatility in data as claims run out occurs - making it hard to manage • Challenge of engaging hospitals, specialists and post-acute providers, specifically
Interest in MassHealth and PPO APMs	• Nearly all providers noted eagerness to participate in an APM offered by MassHealth • Concern about risk adjustment methodology not accounting for challenges of MassHealth population and social needs. • Larger providers also noted interest in PPO payment reform, although stated concerns about validity and variety of attribution methodologies and distribution of surplus to self-insured accounts. • Challenge of care management without a PCP

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What the Payers Say…

1. Provider price … iver in the Massachusetts market.
3. Health care is …
9. There is grow … gher prices, rather than savings from integrati…
10. Despite its inc … nts faces significant challenges, an … roduce cost savings.

MAHP
MASSACHUSETTS ASSOCIATION of HEALTH PLANS

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Setting the Stage…

- Inc. Healthcare Costs
  - **Consumers**
  - **Businesses**
  - **Government**
- Transformative Payment Reform
  - **ACOs, ICOs, APM, VBP**
- Alternative Care Centers
  - **UCC, Retail Clinics**
- Population Health Management
  - **Readmissions, reduce admissions, align with medical home**

Setting the Stage…

So…
Where's the fit?

Finding the Fit: MA Introduces MIH

MA MIH: Timeline for Implementation

Year	Event
2006	MA Passes Healthcare Reform
2010	PPACA Passed
2012	Pioneer ACOs and other similar groups are enabled by ACA
2012	MA Healthcare Reform 2.0 - CHIA and HPC
2013	Fed. Funding for State Medicaid Expansion for Preventative Care
2013	ACA Requires states to pay PCP at least what MCR pays for similar services
2013	DPH Receives Mounting Pressure from MAA and MBEMSC regarding implementation of CP
2013	MAA Sponsors a Roundtable Discussion on CP/MIH Moderated and Directed by M. Zavadsky
2013	MA-DPH-OEMS attempts to explore MIH under existing legislation
2014	First Projects presented to MA-DPH-OEMS for approval
2014	MA-DPH-OEMS Dissolves CP Committee; "Committee does not have authority to approve any programs"
2014	MA-DPH-OEMS Places a Moratorium on all new CP/MIH SPW
2014	MA-DPH-OEMS permits two programs to move forward under a SPW that is valid for 1 year
2015	Leadership change at Health Ministry throughout Key Departments
2015	MAA Sponsored Legislation Passes Creating MIH
2015	MIH Advisory Panel inaugural meeting (November 2015)
2015	MIH Regulation Deadline (31 December 2015)
2016	MA Regulations effective (01 January 2016)

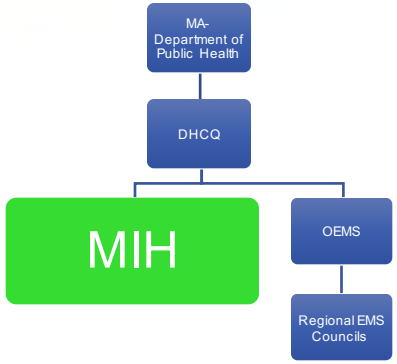
MA Mobile Integrated Healthcare

Defined in MA legislation as,

- **"Mobile integrated health care" or "MIH", a health care program approved by the department that utilizes mobile resources to deliver care and services to patients in an out-of-hospital environment in coordination with health care facilities or other health care providers; provided, that the medical care and services include, but are not limited to, community paramedic provider services, chronic disease management, behavioral health, preventative care, post-discharge follow-up visits, or transport or referral to facilities other than hospital emergency departments."**

Source: MGLc 111O § 1

Structure of DPH



Current Programs in MA

- There are three programs in MA
  - **Two operational programs (SPW)**
    - EasCare Ambulance Service
      - ICO, partially grant funded via HPC
    - Cataldo Ambulance Service
      - ACO, fully grant funded
  - **One Roll-out**
    - Legislatively funded Pilot
    - Alternative Destination for Behavioral Health

Alternative Care Pathway: BH

Innovative health care pilot in Greater Quincy to treat patients with mental health or substance use disorders

$500,000 → **EMS, BH Providers, CHCs, and Hospitals in Greater Quincy**

SUMMARY OF STATUTE

- HPC and partners are to implement model of **field triage of behavioral health patients** under medical control by specially-trained **emergency medical services** providers
  - Care for appropriate patients at **home** by such providers in coordination with behavioral health care providers,
  - **Transport** of appropriate, non-medically complex patients to a behavioral health site of care
- Pilot in the greater **Quincy** area affected by the recent hospital closure
- Pilot to be evaluated on its effectiveness, efficiency, and sustainability by HPC

OBJECTIVES

1. Test currently **non-reimbursed payment** for innovative model of field triage, direct care by emergency medical services (EMS), and emergency department bypass for complex behavioral health patients
2. Reduce **emergency department boarding** and hospital crowding to increase access and decrease cost
3. Enhancing the **quality** of and **outcomes** from behavioral health services
4. Ensure model has **safeguards** to ensure patients with **medical emergencies** are not bypassing emergency departments

Source: Health Policy Commission, 2015

Alternative Care Pathway: BH

Program development considerations

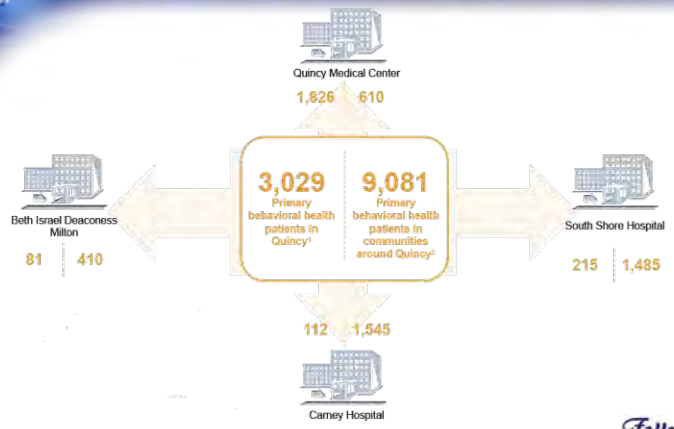
Legislation provides guidance on program framework and goals, but enables the HPC to specify use of funds

1. The purpose of this project is to **best match behavioral health** patients with the most **appropriate level of care.**
2. Effective **partnership and collaboration** of all key stakeholders (behavioral health, community health centers, EMS, hospitals, and local leadership) will be **essential.**
3. Funding will be focused on **supporting collaboration** and covering costs of **non-reimbursed services**
4. Investments must be evaluated for **cost and quality; patient's experience** of care and models for **multi-sector partnership** will offer important lessons for the Commonwealth

Investments will expedite access to appropriate behavioral health care, reduce ED utilization, reduce ED boarding, and decrease costs

Source: Health Policy Commission, 2015

Alternative Care Pathway: BH

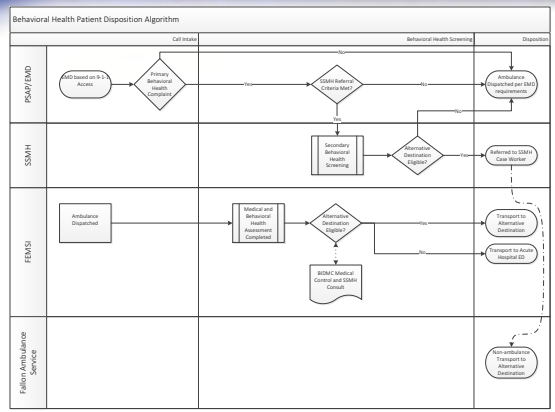


Source: Health Policy Commission, 2015

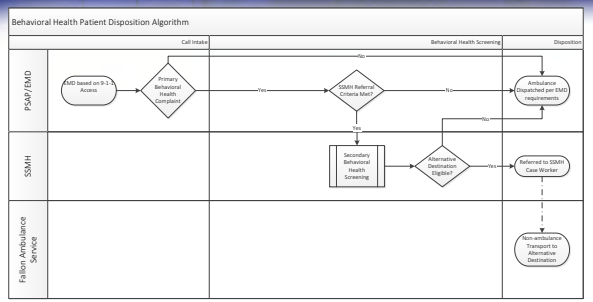
Project Overview

- Cohort = Primary Behavioral Health patients for patients residing in community that are ≥ 18 y/o
- Partnering with BIDH-M, BIDMC and SSMH
- Realign Care Based on *Point of Call* and *Point of Care* pathways.

Pathways

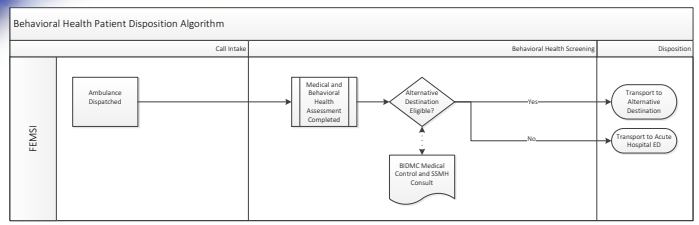


Pathway 1



Call Screening: When a person presents with a behavioral health complaint, they must meet the MPDS Card 25 Psychiatric/ Abnormal Behavior / Suicide Attempt Card. Only when the patient meets the "Alpha" non-emergent criteria can the person be transferred directly to SSMH crisis call triage line.

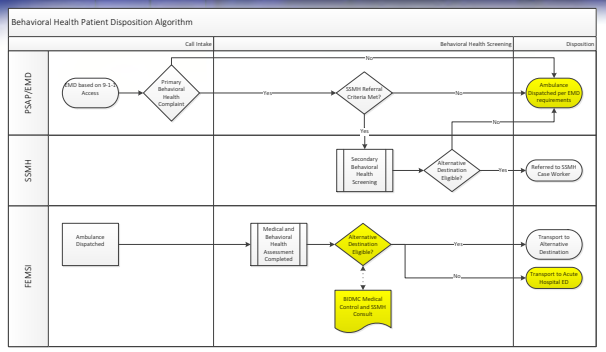
Pathway 2



On-Scene Screening: Dispatch allocates the appropriate resource to the patient's location; identifies primary BH concern and the patient has no acute medical or traumatic conditions, telephonic transfer to SSMH.

A three-way decision between patient, SSMH and OLMC determines the patient's disposition and/or destination.

Pathway 3

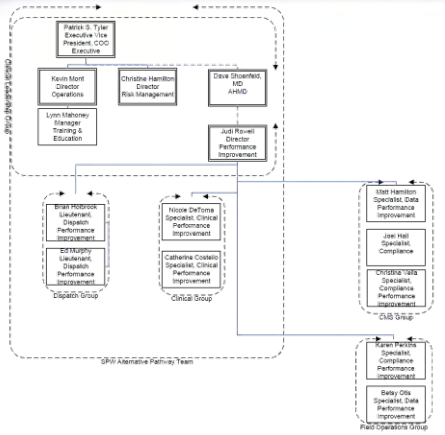


Routine Care: If a patient is not appropriate for any of the above interventions, Routine Care will apply (transport to ED receiving facility).

Quality Metrics

Measure	Numerator	Denominator	Data Source(s)
Fallon EMS BH triage to alternate treatment site by treatment site location type	# of EMS BH triages	Total # of BH calls to 911 within Quincy	Total count from Fallon and SSMH
EMS + SSMH 911 patient phone call co-managements	# of phone call co-managements	Total # of calls to 911 Within Quincy	Total count from Fallon and SSMH
# of ED visits vs. # BH calls	# of ED visits (new and readmissions)	Total # of ED visits + # of BH calls	Total count: Fallon, Meditech/Dashboard and count from SSMH
# of patients reverted back to 911 after BH referral (time frames will be specified)	#of patients requiring EMS Response after referral to BH	Total # of BH calls to 911 within Quincy	Total count from Fallon and SSMH

QA/QI Structure



Comparable Projects

1. MedStar EMS, Fort Worth, TX
2. Winnipeg EMS, Winnipeg Alberta, Canada
3. Wake County EMS Raleigh, NC
4. Regional Emergency Medical Services Authority, Reno, NV

Summary

- The purpose of this project is to best match behavioral health patients with the most appropriate level of care.
- The goal of this project is to promote placement in appropriate community based behavioral health services. Inherent in this project will be a reduction in the number of ED behavioral health visits. The collective expertise within this partnership will contribute to an increase in access to appropriate behavioral health care whereby engendering a reduction in ED utilization, ED boarding hours, and delays in access to needed healthcare.

Questions/Suggestions

- Empirical Concerns
- Critical Modifications
- Program Enhancements

Citations

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MPDS – Card 25 - Top

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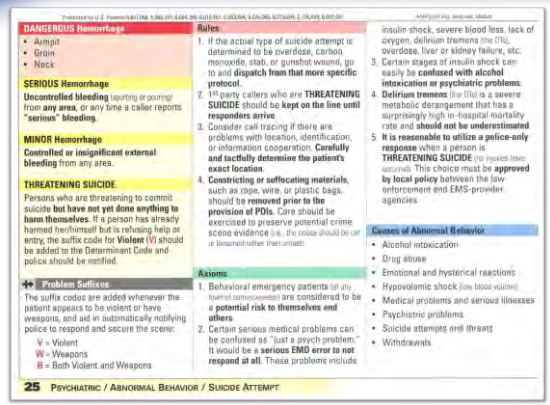
MPDS – Card 25 - Bottom



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