COMMONWEALTH OF MASSACHUSETTS

HEALTH POLICY COMMISSION

Quality Improvement and Patient Protection Committee

December 9, 2015

Agenda

- **Approval of Minutes from the November 12, 2015 Meeting (VOTE)**
- Discussion of Program Design for the HPC's Pilot on Neonatal Abstinence Syndrome (VOTE)
- Discussion of Program Design for the HPC's Pilot on Paramedicine
- Schedule of Next Meeting (January 6, 2015)

Vote: Approving Minutes

Motion: That the Quality Improvement and Patient Protection Committee hereby approves the minutes of the Committee meeting held on November 12, 2015, as presented.

Agenda

- Approval of Minutes from the November 12, 2015 Meeting (VOTE)
- **Discussion of Program Design for the HPC's Pilot on Neonatal Abstinence Syndrome (VOTE)**
  - HPC pilot development
  - Expanding and enhancing Department of Public Health NAS initiative
  - Technical assistance & evaluation metrics (under development)
  - RFP development and next steps
- Discussion of Program Design for the HPC's Pilot on Paramedicine
- Schedule of Next Meeting (January 6, 2015)

Discussion Preview: Neonatal Abstinence Syndrome (NAS) Pilot Programs

Agenda Topic

Discussion and Vote of Program Design and RFP development for NAS Pilot Programs

Description

The legislature appropriated $500,000 for the HPC to conduct a pilot program to accelerate adoption of best practices around treatment of NAS. HPC is also proposing to contribute $3,000,000 from the Distressed Hospital Trust Fund to expand the reach of a DPH intervention that targets pregnancy and the first 6 months of the newborn's life. Staff will present a proposed RFP design based on program design considerations discussed with the Committee in November.

Key Questions for Discussion and Consideration

Is the procurement design appropriate?

Are there particular outcomes of interest for the Committee as the HPC prepares the RFP announcement?

What supports should the HPC offer to awardees (e.g. technical assistance)?

Decision Points

Vote requested. Commissioners will be asked to endorse the proposal for a pilot program to enhance care for patients with neonatal abstinence syndrome and provide feedback on updated program design and RFP development. Final NAS program and RFP design for NAS Pilot Programs will be presented at the December board meeting.

Agenda

- Approval of Minutes from the November 12, 2015 Meeting (VOTE)
- **Discussion of Program Design for the HPC's Pilot on Neonatal Abstinence Syndrome (VOTE)**
  - HPC pilot development
  - Expanding and enhancing Department of Public Health NAS initiative
  - Technical assistance & evaluation metrics (under development)
  - RFP development and next steps
- Discussion of Program Design for the HPC's Pilot on Paramedicine
- Schedule of Next Meeting (January 6, 2015)

Updates to proposed NAS investment strategy

Since the last QIPP meeting, HPC staff have refined project details, and propose the following updates to the pilot model

1. Two categories of funding:

   A. non-CHART-eligible hospitals with at least 60 NAS births/year OR >5x the national NAS average: inpatient quality improvement initiative - up to $250,000 per award; in-kind funding match will be a competitive factor

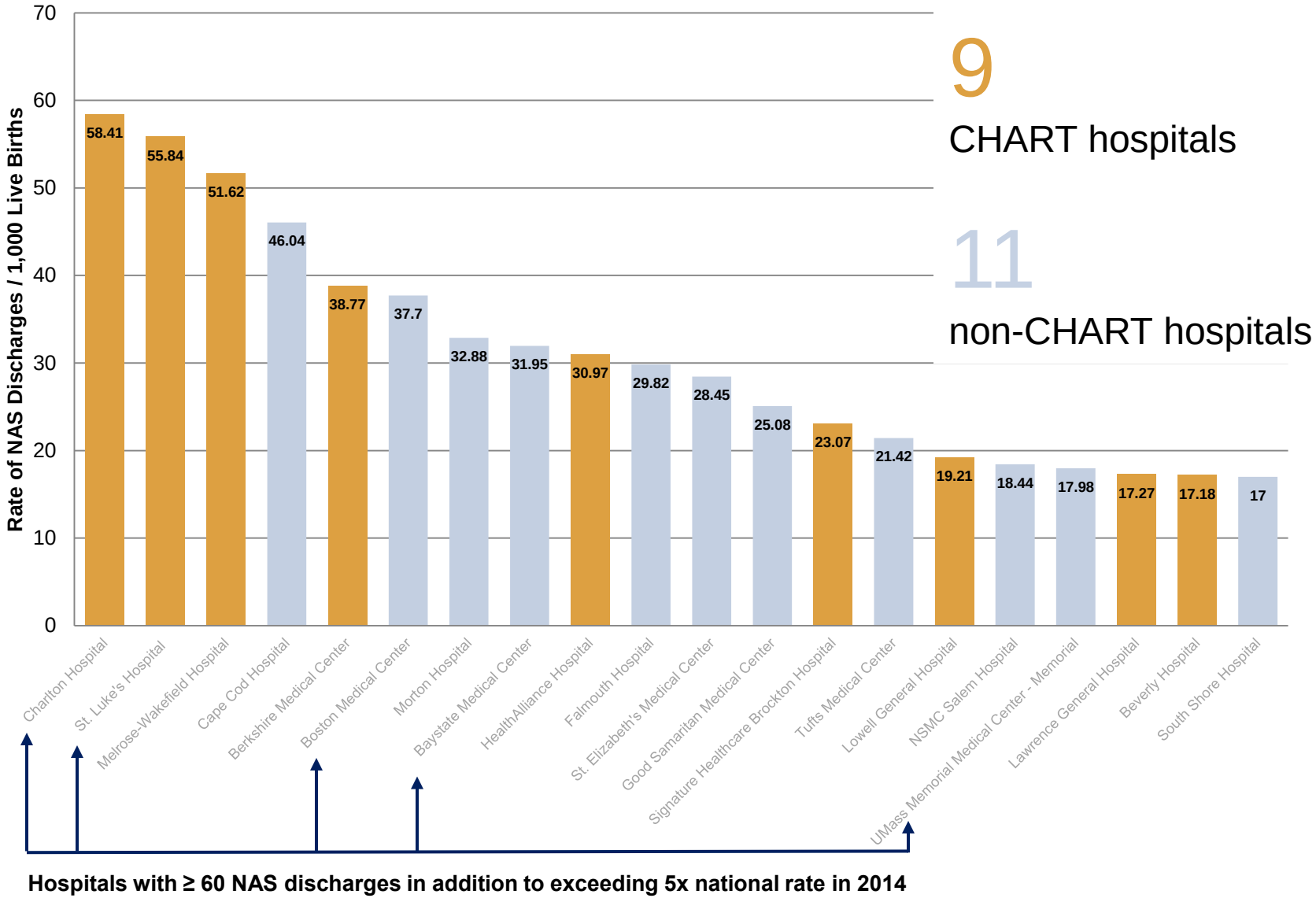
   B. CHART eligible hospitals with at least 60 NAS births/year OR >5x the national NAS average: inpatient quality improvement initiative and replication of DPH intervention (pregnancy & first 6 months of life) - up to $1,000,000 per award

2. Applicants in both categories can propose an evidence-based interventions and protocols that drives towards reduced TCOC; procurement will provide non-exhaustive list of examples

3. Technical assistance & evaluation to be coordinated with DPH

4. Dissemination of learnings to non-grantees via statewide learning collaboratives

MA hospitals with ≥ 5x national rate of NAS or ≥ 60 NAS discharges in 2014



National rate = 3.4 / 1,000 births

Category A: HPC NAS Reserve

Brief description: HPC will fund up to 2 non-CHART eligible birthing hospitals to develop and implement a “delivery to discharge” inpatient quality improvement initiative for NAS with the goal accelerating the adoption of best practices and reducing total cost of care.

HPC pilot funding to address inpatient quality improvement for NAS

What	• Spend **$500,000** before June 30, 2017
	• Funding for **fully integrated model of post-natal supports from delivery to discharge** for families with substance exposed newborns, including:
	  • obstetrics and gynecology
	  • pediatrics
	  • behavioral health
	  • social work
	  • early intervention providers
	  • social service providers to provide full family care
	Being defined as quality improvement initiative targeting delivery to discharge

Who	• HPC in collaboration with DPH and up to 2 **non-CHART eligible hospitals** with at least 60 NAS births per year OR >5x the national NAS average
	• Design informed by:
	  • **evidence-based practices** from successful programs implemented locally, nationally and internationally; and
	  • **in consultation with DPH & DCF**

Deliverables	• Fund **up to 2 regional sites** to be selected through competitive process, based on
	  • community need (volume of NAS; rate of NAS compared with national average)
	  • capacity to implement the integrated model (interest, prior experience with NAS innovations, and prior experience successfully implementing quality improvement initiatives), and
	• HPC report to the Joint Committee on Mental Health and Substance Abuse and the House and Senate Committees on Ways and Means on results including effectiveness, efficiency, and sustainability

HPC's proposed "delivery to discharge" quality improvement initiative will accelerate adoption of best practices and reduce total cost of care

Target Aim:

Reduce total cost of care (TCOC) for perinatal episode within 12 months

- Adopt standardized scoring for identifying & assessing severity of NAS
- Reduce use of pharmacologic intervention & clear clinical protocol for choice of pharmaceutical and tapering off of medication
- Increase use of breastfeeding, rooming-in
- Implement multidisciplinary daily rounds (addiction medicine, pediatrics/neonatology, social work)
- Develop step-down protocol for transition from NICU to lower intensity settings
- Train special care nursery & pediatrics nurses on non-complex NAS management
- Improve hospital-DCF, hospital-early intervention, & hospital-community (e.g., pediatrics, ob/gyn, family practice, social services) coordination protocols

Agenda

- Approval of Minutes from the November 12, 2015 Meeting (VOTE)
- **Discussion of Program Design for the HPC's Pilot on Neonatal Abstinence Syndrome (VOTE)**
  - HPC pilot development
  - Expanding and enhancing Department of Public Health NAS initiative
  - Technical assistance & evaluation metrics (under development)
  - RFP development and next steps
- Discussion of Program Design for the HPC's Pilot on Paramedicine
- Schedule of Next Meeting (January 6, 2015)

Category B: CHART Program NAS Investment

Brief description: HPC will fund up to 3 CHART eligible birthing hospitals to develop and implement a "delivery to discharge" inpatient quality improvement initiative for NAS and to expand reach of DPH's *Moms do Care* intervention by funding parallel interventions supporting adherence to treatment for addiction during pregnancy and for the first 6 months after delivery

HPC funding to combine inpatient quality improvement initiative with DPH's pre and postnatal intervention

What	• Spend **$3,000,000** before July 31, 2018
	• Increase the reach of DPH's *Moms do Care* intervention by aligning efforts to:
	  • further expand the capacity of medical and behavioral health service systems;
	  • engage and retain pregnant and post-partum women in MAT and other recovery support services; and
	  • incorporate HPC's "delivery to discharge" inpatient quality improvement initiative, thereby **developing a fully integrated model of supports to include pre-natal, delivery, discharge and 6-month post discharge intervention points.**

Who	• HPC in collaboration with DPH and up to 3 **CHART hospitals** with at least 60 NAS births per year OR >5x the national NAS average
	• Design informed by:
	  • **evidence-based practices** from successful programs implemented locally, nationally, and internationally; and
	  • **in consultation with DPH & DCF**

Deliverables	• Fund **up to 3 regional sites** to be selected through competitive process, based on
	  • community need (volume of NAS; rate of NAS compared with national average)
	  • capacity to implement the integrated model (prior experience with NAS innovations, and prior experience successfully implementing quality improvement initiatives), and
	  • Capacity to coordinate with outpatient providers and recruit and train peer moms

Aligning with DPH's SAMHSA grant allows for interventions to be applied across broader spectrum of continuum

Family Planning

- Integrated care (primary care, contraception, SUD treatment available in one setting)

Pre-natal

- Methadone / buprenorphine maintenance (vs. IV drug use)
- Wrap-around social services and coordinated multidisciplinary care

Post-natal

- Lower acuity of care (NICU → Special care nursery → pediatric floor)
- Rooming-in (mothers and babies together in the hospital)
- QI projects to decrease length of stay (staff training, breastfeeding)
- Wrap-around social services and coordinated multidisciplinary care

Childhood

- Wrap-around social services and coordinated multidisciplinary care (pediatrics, addiction medicine, ob/gyn, primary care, family practice)
- Early intervention

Aligning with DPH's SAMHSA grant allows for assessment of efficacy of pre-natal intervention

Family Planning

- Integrated care (primary care, contraception, SUD treatment available in one setting)

Pre-natal

- Methadone / buprenorphine maintenance (vs. IV drug use)
- Wrap-around social services and coordinated multidisciplinary care

Post-natal

- Lower acuity of care (NICU → Special care nursery → pediatric floor)
- Rooming-in (mothers and babies together in the hospital)
- QI projects to decrease length of stay (staff training, breastfeeding)
- Wrap-around social services and coordinated multidisciplinary care

Childhood

- Wrap-around social services and coordinated multidisciplinary care (pediatrics, addiction medicine, ob/gyn, primary care, family practice)
- Early intervention

Agenda

- Approval of Minutes from the November 12, 2015 Meeting (VOTE)
- **Discussion of Program Design for the HPC's Pilot on Neonatal Abstinence Syndrome (VOTE)**
  - HPC pilot development
  - Expanding and enhancing Department of Public Health NAS initiative
  - Technical assistance & evaluation metrics (under development)
  - RFP development and next steps
- Discussion of Program Design for the HPC's Pilot on Paramedicine
- Schedule of Next Meeting (January 6, 2015)

Approach to technical assistance

TA for Grantees (HPC & DPH)

- Support for protocol development (e.g., breastfeeding, rooming in, NAS severity scoring, step-down from NICU)
- Training on established protocols for all relevant clinical leadership & staff
- In person buprenorphine waiver trainings (rather than online)
- Training for addiction medicine providers on best practices around treatment during pregnancy (e.g., dosing adjustments)
- Training on trauma informed care for nurse care managers, peer moms, hospital staff, outpatient providers

Dissemination of learnings to all birthing hospitals

- Best practices identified throughout the grant funding period will also be disseminated to non-grantee hospitals via statewide conferences open to all birthing hospitals (e.g., NeoQIC forums)
- Grantees will be asked to present on protocol development and findings from implementation of quality improvement initiative midway through funding cycle and after cycle is complete
- HPC & DPH will host regional forums to bring together multispecialty providers (Ob/gyns, neonatologists, pediatricians, addiction medicine specialists, primary care providers, nurses (labor and delivery, pediatric, MAT settings), social workers, mothers in recovery)

Proposed $500,000 state appropriation and $3,000,000 CHART funds to be a allocated in full to awardees. TA and evaluation will be funded separately with HPC operating budget and trust funds.

Evaluation: inpatient quality improvement metrics (under development)

Quantitative

- Length of stay
- Pharmacologic treatment (proportion of infants, length of treatment, type & quantity of dose)
- Readmission rates for NAS w/in 30 days of discharge
- Cost per infant
- Site of care (NICU, SCN, regular nursery, pediatrics floor)
- Use of validated NAS severity scoring system; intercoder reliability
- Protocol for monitoring infant (cardiac monitor; oximetry)
- Breastfeeding (proportion of mothers provided with pumps; infants breastfeeding at any time during hospitalization, proportion of infants breastfeeding at discharge)
- Protocol for screening and/or testing mothers & infants (upon admission, birth, presenting with symptoms?)
- Proportion of rooming-in infants; nurse:patient ratio for rooming in
- Proportion of discharges resulting in DCF custody
- Proportion of new mothers who relapse w/in 30 days, 60 days
- Proportion of NAS infants discharged on pharmacologic treatment
- Proportion of NAS infants transferred before discharge
- Proportion of mothers able to stay in hospital post discharge while infant is still admitted

Qualitative

- 1-1 interviews with provider staff
- Focus groups to explore intervention time points and options
- Patient satisfaction, provider satisfaction
- Referral services offered / coordinated at discharge

Agenda

- Approval of Minutes from the November 12, 2015 Meeting (VOTE)
- **Discussion of Program Design for the HPC's Pilot on Neonatal Abstinence Syndrome (VOTE)**
  - HPC pilot development
  - Expanding and enhancing Department of Public Health NAS initiative
  - Technical assistance & evaluation metrics (under development)
  - RFP development and next steps
- Discussion of Program Design for the HPC's Pilot on Paramedicine
- Schedule of Next Meeting (January 6, 2015)

RFP development

	HPC NAS Reserve $500,000	CHART Funds to extend DPH program up to $3,000,000
Eligible Applicants	Any non-CHART birthing hospitals with: ▪ At least 60 NAS births per year, or ▪ > 5x NAS national average	Any CHART birthing hospitals with: ▪ At least 60 NAS births per year, or ▪ > 5x NAS national average
Proposed Award Cap	Up to $250,000	Up to $1,000,000
Matching funds	In-kind funding match will be a competitive selection factor	In-kind funding match will be a competitive selection factor
QI initiative	Applicants must describe quality improvement initiative that will reduce TCOC over 12 months	Applicants must describe quality improvement initiative that will reduce TCOC over 24 months
External collaboration	Describe plan to collaborate with outpatient providers (ob/gyn, primary care, pediatrics, addiction medicine) and procedure for creating first appointment prior to discharge	Applicants must describe plan to coordinate peer moms & identify outpatient providers for collaboration: • Ob/gyns who will participate in buprenorphine waiver trainings • Addiction medicine providers who will participate in training on treating women during pregnancy • PCPs & pediatricians
Data collection	Submit NAS discharge volume for June-Dec 2015 period Describe plan to track QI measures throughout intervention (e.g., NAS severity scoring, site of care, rooming-in & breastfeeding rates)	Submit NAS discharge volume for June-Dec 2015 period Describe plan to track QI measures throughout intervention (e.g., NAS severity scoring, site of care, rooming-in & breastfeeding rates)
Existing NAS protocols	Applicants with existing protocols will be more competitive if proposal includes plan to participate in peer-peer learning sessions as the trainer	Applicants with existing protocols will be more competitive if proposal includes plan to participate in peer-peer learning sessions as the trainer

Vote: endorse issuance of a request for proposals

Motion: That the Committee hereby endorses the proposal for a pilot program to accelerate adoption of best practices around treatment and prevention of neonatal abstinence syndrome, and recommends that the Commission authorize the Executive Director to issue a Request for Proposals (RFP) to solicit competitive proposals consistent with the framework described to the Committee, and pursuant to 958 CMR 5.04.

Agenda

- Approval of Minutes from the November 12, 2015 Meeting (VOTE)
- Discussion of Program Design for the HPC's Pilot on Neonatal Abstinence Syndrome (VOTE)
- **Discussion of Program Design for the HPC's Pilot on Paramedicine**
- Schedule of Next Meeting (January 6, 2015)

Discussion Preview: Quincy Community Paramedicine Pilot Program

Agenda Topic

Discussion of Program Design for Quincy Community Paramedicine Pilot

Description

In July, the legislature appropriated $500,000 for the HPC to conduct a pilot program in Greater Quincy to study the impact of using community paramedicine to enhance care for patients with behavioral health conditions, and in particular for EMS to provide care for appropriate patients at home in coordination with behavioral health care providers and to provide transport of appropriate, non-medically complex patients to a behavioral health site of care. Staff will present early program design considerations to the Committee.

Key Questions for Discussion and Consideration

How should the HPC consider care for different populations of behavioral health patients?

Are there particular outcomes of interest for the Committee as the HPC considers development of this pilot program?

Should the HPC encourage payer-provider collaboration in this pilot? If so, how strongly and through what mechanisms?

Decision Points

No votes proposed. Commissioners will be asked to provide feedback on overall program development. A final program design for the Quincy Paramedicine Pilot will be presented to the QIPP committee in January.

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** 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

Pilot language – line item 1599-2004

For a reserve to be administered by the health policy commission to develop a pilot program to implement a 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, and transport of appropriate, non-medically complex patients to a behavioral health site of care for most effective treatment rather than to an acute hospital emergency department; provided, that the commission shall implement this pilot to triage behavioral health patients in the greater Quincy area affected by the recent hospital closure; provided further, that in developing the program, the commission shall consider evidence-based practices from successful programs implemented locally, nationally, or internationally; provided further, that the commission shall report to the joint committee on mental health and substance abuse and the house and senate committees on ways and means not later than 12 months following completion of the pilot program on its results, including its effectiveness, efficiency, and sustainability; and provided further, that funds appropriated in this item shall not revert and shall be available for expenditure through June 30, 2017

Behavioral health need in Massachusetts is substantial

In 2014, frequent ED users* accounted for

33%

of emergency department visits

Behavioral health conditions were

2x

as prevalent among frequent ED users

as non-frequent ED users

On average, payers spend at least

1.3-3.1x more

on care for patients with BH conditions and

4.2-7x more

on those with comorbid BH and medical conditions

*Defined as patients with ≥5 ED visits in a year.

HPC 2015 Cost Trends Report
HPC July 2014 Cost Trends Supplement

Principles to approach development of BH-EMS pilot

HPC will provide overarching guidance in collaboration with DPH, DMH, and MassHealth/MBHP. Pilot organizations (community partners, area EDs, and EMS providers) will lead clinical design.

Overarching guidance on program framework and goals

Health Policy Commission

Regulatory & programmatic oversight

Clinical design

Community Providers

Area Emergency Departments

Emergency Medical Services Providers

Ongoing Roles of Collaborating Partners:

- Basic programmatic design
- Funding allocation
- Contractual oversight
- Evaluation

- Regulatory oversight
- Licensure/certification

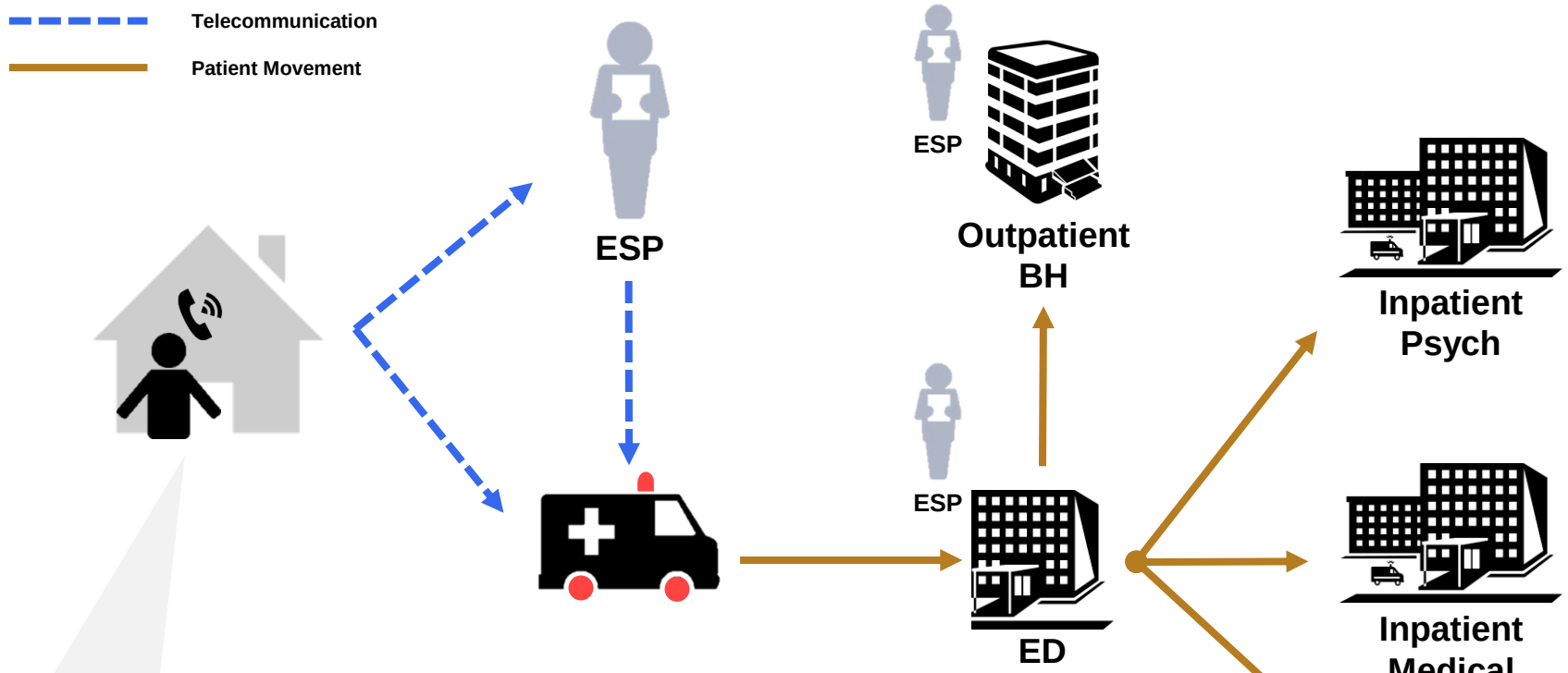
- Protocol development
- Ongoing coordination
- Sharing lessons learned to inform recommendations for sustainability

Investments will be deployed to develop a pilot program to implement a model of **field triage of behavioral health patients** under medical control by **specially-trained emergency medical services**…the commission shall implement this pilot to triage BH patients in the **greater Quincy area** affected by the recent hospital closure.

Innovation within current care delivery models

	Current	Future
Emergency Medical Services (EMS) *Acute medical care teams trained in basic and advanced life support techniques*	• Performs field-based **medical assessment** and **patient stabilization** • **Transports to ED**, provides medical care in transit • **Accessed via 911 system** that triages level of acuity and dispatches ambulance to scene	• **Convenes with community providers, such as ESP team, on-site or via telemedicine** for holistic in-depth medical and BH assessments, **medical clearance**, and **determination of patient disposition** • **Transports patient to alternative destination** as appropriate • Accessed via **911 system** or **direct "*X*11"** systems that can activate EMS and supporting provider systems
Emergency Service Providers (ESP) *Integrated community-based BH crisis teams available in 21 catchment areas across state*	• Provides **assessment, intervention, and stabilization services on-site** or **in ED** • Available to patients with **MH, SUD, and/or co-occurring conditions** • Can be **accessed 24/7 via 800 number** but **limited on-site service hours** in community setting (24/7 in EDs) • Non-transport services	• Provides **assessment, intervention, and stabilization services on-site** or **in ED** (continuation of current services) • Provides additional **assessment, intervention, and stabilization** services on-site as appropriate after activation by other field providers • Enhanced coordination with EMS, public safety, and other emergency responders • Transport services coordinated with EMS

Behavioral health crisis management: current state *(general example)*



Characteristics of frequent 911-callers and/or ED Users

- Substance Use Disorder
- Mental Illness
- Social Complexity
- Complex Chronic Conditions
- Elderly
- Socially Isolated
- Disabled

BH care in the ED results in increased boarding time and ED crowding:

- In 2012, **average length of stay** for patients with psychiatric illness in Boston-area EDs was **11-15 hours.***
- Although patients with primary BH conditions represent only **6% of ED volume** they account for **47% of patients who board****

*Weiss AP, et al. Patient- and practice-related determinants of emergency department length of stay for patients with psychiatric illness. Ann Emerg Med. 2012 Aug;60(2):162-71.e5.
**Center for Health Information and Analysis; Department of Public Health; HPC Analysis

Behavioral health ED volume and EMS transports to community hospitals in City of Quincy in 2014

60% of BH patients from City of Quincy go to **Quincy Medical Center**

Quincy Medical Center

1,826 Primary BH patients

81.1% BH EMS transports

81.1% of BH-related EMS transport volume in the City of Quincy are directed to **Quincy Medical Center**

3,029 Primary behavioral health patients in Quincy[1]

390 EMS transported IAED Alpha* calls[2]

*lowest acuity level

Beth Israel Deaconess Milton

81 Primary BH patients

2.5% BH EMS transports

South Shore Hospital

215 Primary BH patients

5.7% BH EMS transports

Carney Hospital

112 Primary BH patients

5.7% BH EMS transports

Source: Center for Health Information and Analysis Emergency Department Discharge Database, FY2014

[1] Quincy Zip Codes: 02169, 02170, and 02171

[2] Greater Quincy Zip Codes: 02186, 02021, 02188, 02189, 02190, 02191, 02368, 02184, 02121, 02122, 02124, 02125

Behavioral Health Diagnoses: All encounters in ED with Primary Diagnosis of ICD-9 291-316 excluding 305.1 (tobacco use) or is 357.5, 425.5, 535.30, 535.31, 571.0-571.3, E860.0, 968.5, E938.5, 969.6, E854.1, E939.6, 965.00-965.02, 965.09, E850.0, E935.0, 648.30-648.34, V654.

Environmental scan: identifying early leaders

METHODOLOGY

- **Literature review** to identify landscape of existing community paramedicine programs across the U.S. and Canada
- **Semi-structured interviews** with representatives from **nationally and internationally recognized programs** to understand model design, key characteristics, and operational considerations
- **Comparative analysis** of programs to identify key themes and best practices

Providers Surveyed

Environmental scan: overview of programs

Four Main Approaches

1 MOBILE HEALTH CARE PARAMEDICS

- In-home and telephone-based support to patients who frequently call 911 or who are at risk for preventable (re)-admissions
- Focus is on enhanced home health care
- Patients known to system (not 911-activated)

2 ALTERNATIVE DESTINATION TRANSPORT

- Paramedics responding to low-acuity 911 calls perform alternative transport to urgent care center, clinic, detoxification center, mental health hospital, or emergency department
- Advanced assessment and testing in field

3 FIELD INTERCEPT

- Primary 911 response team activates community paramedics in field who arrive on scene to facilitate assessment, field treatment, or triage
- Adjunct to existing first response
- Can be coupled with Alternative Destination Transport

4 NURSE-TRIAGE EMS RESPONSE

- RNs in 911 call center triage low-acuity calls to offer clinical guidance or find more appropriate resources than an ambulance response to ED

Key Characteristics

System Access
911-based vs. non-911 based

Patient Identification
Known patient roster vs. first encounter

Medical Clearance
Advanced field diagnostics vs. none

Medical Direction
Medical director online vs. offline

EMR Interface
Shared EMR access vs. none

Metrics
Key performance indicators

Barriers
Past and current challenges to model

Environmental scan results: highlighted interventions & outcomes

	Intervention	Outcome
Fort Worth, TX	**Mobile health care paramedic** model with in-depth medical assessment, customized care plan, and period visits/calls by paramedics. Also has **nurse helpline** arm	Reduced number of 911 calls by 67.9 percent; reduced number of ED visits by 58.1 percent; reduced ED charges and costs by $1.9 million
Manitoba, CAN	**Mobile health care paramedic** for common callers and common addresses in conjunction with **alternative destination transport**	Decreased EMS costs by $3.2M in 2 years with an estimated savings of $6M for hospitals
Raleigh, NC	**Field intercept** by community paramedics with non-ambulance **alternative destination transport**	Increased ED capacity by 16,352 hours or approximately 5,500 chest pain patients

Environmental scan results: highlighted interventions & outcomes *(continued)*

	Intervention	Outcome
San Diego, CA	**Mobile health care paramedic** with non-ambulance **alternative destination transport** component. Advanced surveillance system identifies common callers roster.	Estimated $700K in EMS savings over 18 months since program inception
Reno, NV	**Alternative transport destination** using medical director-approved protocols for in-field triage. Also has **nurse health line** and in-home **mobile health care paramedic** providers.	Transported 408 patients to alternative locations with only 15 patients (3.7%) requiring subsequent transfer to ED
Boston, MA	**Mobile health care paramedic** variation with paramedics as after-hours home care expander for low-acuity complaints and chronic conditions	Reported 190/317 (60%) likely ED aversions and no adverse events with high rates of patient satisfaction

Community paramedicine in Massachusetts

The Model

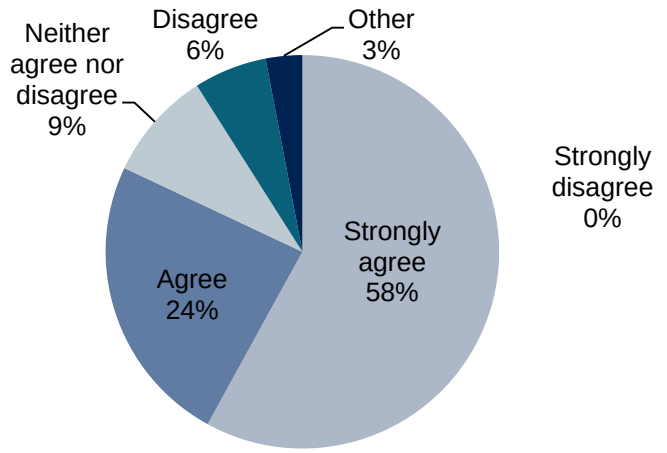
- Paramedics serve as after hours home-care expander
- Specially trained (300+ hours) paramedics provide in-home treatment for minor problems and injuries, as well as manage chronic conditions
- Field paramedic has EHR access, basic lab capabilities, etc.
- Patients known to system (not 911 activated); non-transport function
- Close coordination with on-call MD/NP

Patient Report

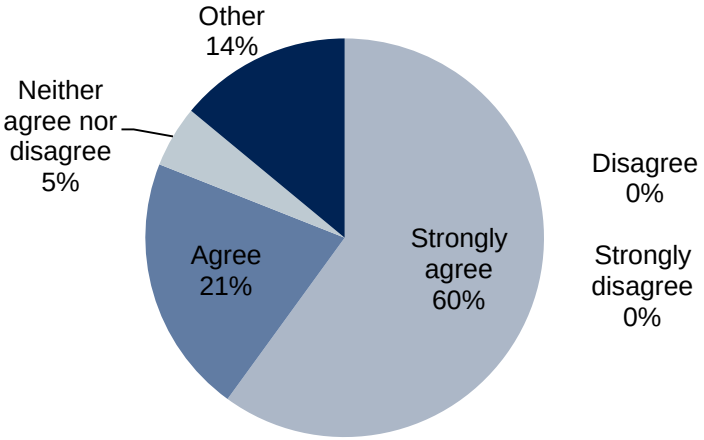
"I was shocked to see exactly how much the Paramedic could actually do in my home… Definitely saved me a trip to the ER."

Early Results

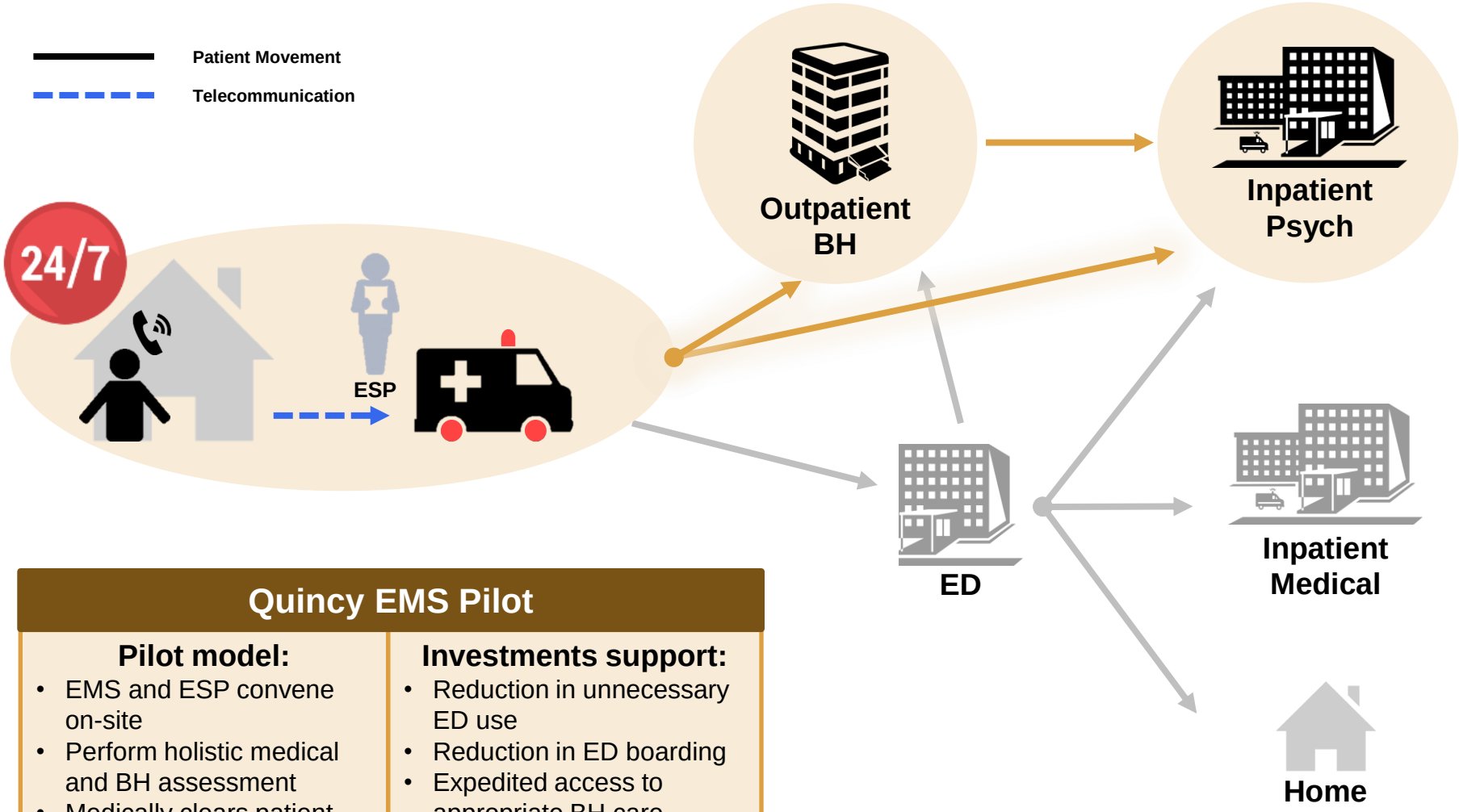
Because of the paramedic visit, I did not need to travel to an emergency department (N=155)



The paramedic visit was as good as a regular emergency department visit (N=148)



Behavioral health crisis management: potential future state *(general example)*



Quincy EMS Pilot

Pilot model:

- EMS and ESP convene on-site
- Perform holistic medical and BH assessment
- Medically clears patient
- Determine patient disposition

Investments support:

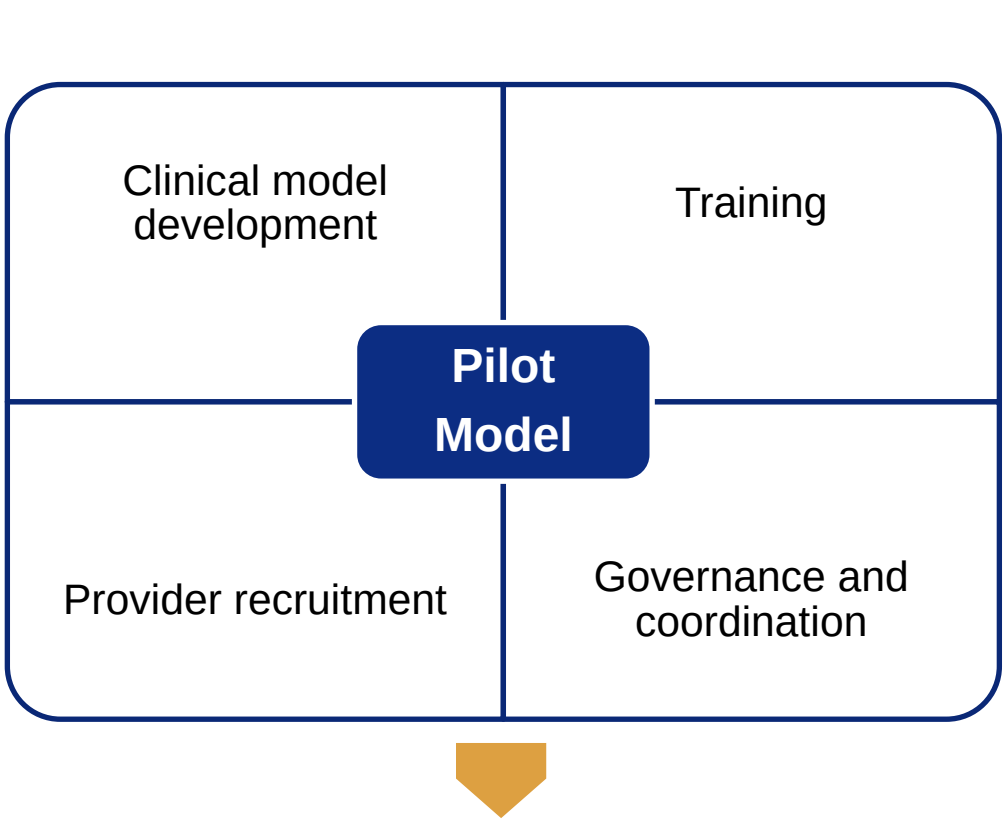
- Reduction in unnecessary ED use
- Reduction in ED boarding
- Expedited access to appropriate BH care

Drawing from early leaders

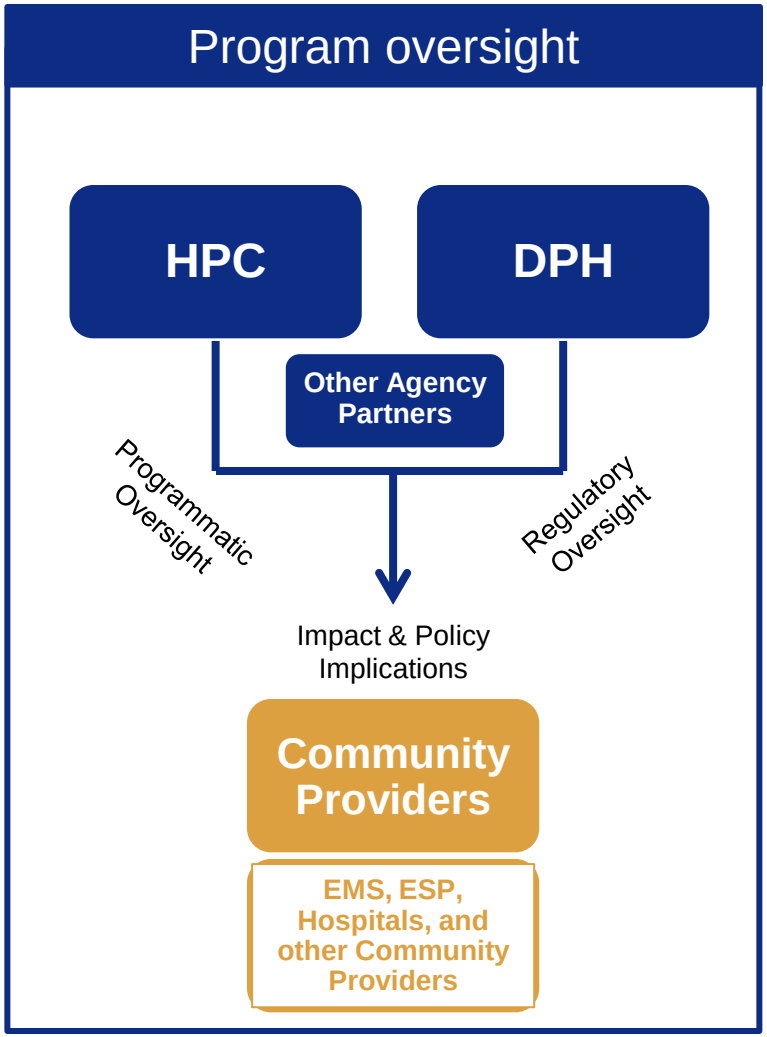
Key Implications for Massachusetts' Pilot

1. **Early engagement** of **key stakeholders**, including behavioral health providers, community health centers, EMS, hospitals, law enforcement, and local leadership, is **essential**.
2. **Community-based resources and capacity** for treating behavioral health care must be identified and supported.
3. Pilot investments must be evaluated for **cost and quality**; **patients' experience** of care will offer important lessons for the Commonwealth.
4. Ease of communication via **shared access to EMR** facilitates care coordination across partner organizations.
5. Future **reimbursement models** should be considered early and with input from key stakeholders.

Drawing from early leaders



Single organization should likely coordinate across all participants

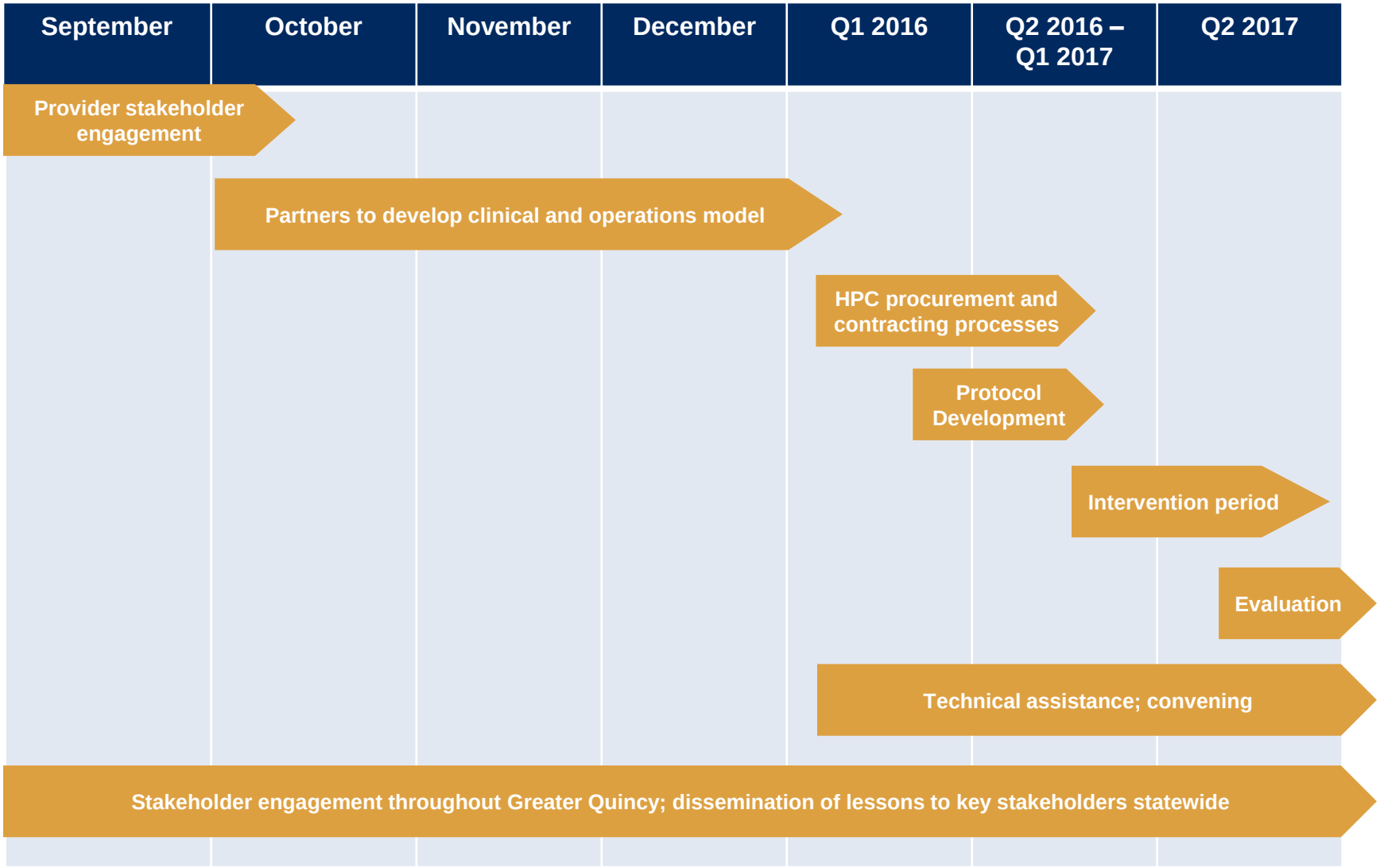


Early design decisions for HPC

Partnership selection and scope are critical early factors

1. Given the new model of care in this pilot, as well as the limited timeframe and budget consider limiting scope to **City of Quincy** and to **highest need patients**
2. Partners should be **engaged early and often**; development of the clinical model should be led by field clinicians with appropriate oversight and engagement of HPC and appropriate regulatory authorities (DPH OEMS)
3. Partners should include those who predominantly provide care to target population patients in the ***current* delivery system**, including:
   - The state's designated **Emergency Services Provider** (ESP) for Quincy
   - The City's designated **911 provider** and major ambulance service
   - **Area hospitals** that receive a substantial volume of patients with behavioral health conditions from Quincy
4. Other providers who patients in the target population should be engaged throughout development of the pilot
5. Design should support development of policy framework for Mobile Integrated Health and Community Paramedicine in the Commonwealth

Timeline / next steps



Agenda

- Approval of Minutes from the November 12, 2015 Meeting (VOTE)
- Discussion of Program Design for the HPC's Pilot on Neonatal Abstinence Syndrome (VOTE)
- Discussion of Program Design for the HPC's Pilot on Paramedicine
- **Schedule of Next Meeting (January 6, 2015)**

Contact Information

For more information about the Health Policy Commission:

Visit us: http://www.mass.gov/hpc

Follow us: @Mass_HPC

E-mail us: HPC-Info@state.ma.us