



Data Collection Regulation

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Regulation Overview: Current Context

- Health disparities on nearly every measure are persistent and longstanding
- National and state health care payment reform is value-driven
- Addressing health disparities is a national and local priority
- Growing demand for transparency



Regulation Overview: Key Requirements

- Requires all acute care hospitals and CHCs in Boston to collect demographic information on all inpatient, outpatient observation, ambulatory, and emergency department visits.
- Requires submission of demographic and clinical data to allow identification of healthcare disparities.
- Requires BPHC to convene hospitals and CHCs to develop quality improvement interventions to eliminate healthcare disparities.



Regulation Overview: Brief Implementation History

2006

- Regulation promulgation by Board of Health

2008

- Hospitals collect & submit encounter level demographic data

2013

- Planned clinical data submission via customized HL-7 C-CDA standard to BPHC
- Boston Health Equity Measure Set (BHEMS) using mostly HEDIS measures

2015

- Planned data submission via MU standard to 3rd party-hosted Quality Data System
- Revised BHEMS using CMS MU measures; SOGI added to required demographics

2016-18

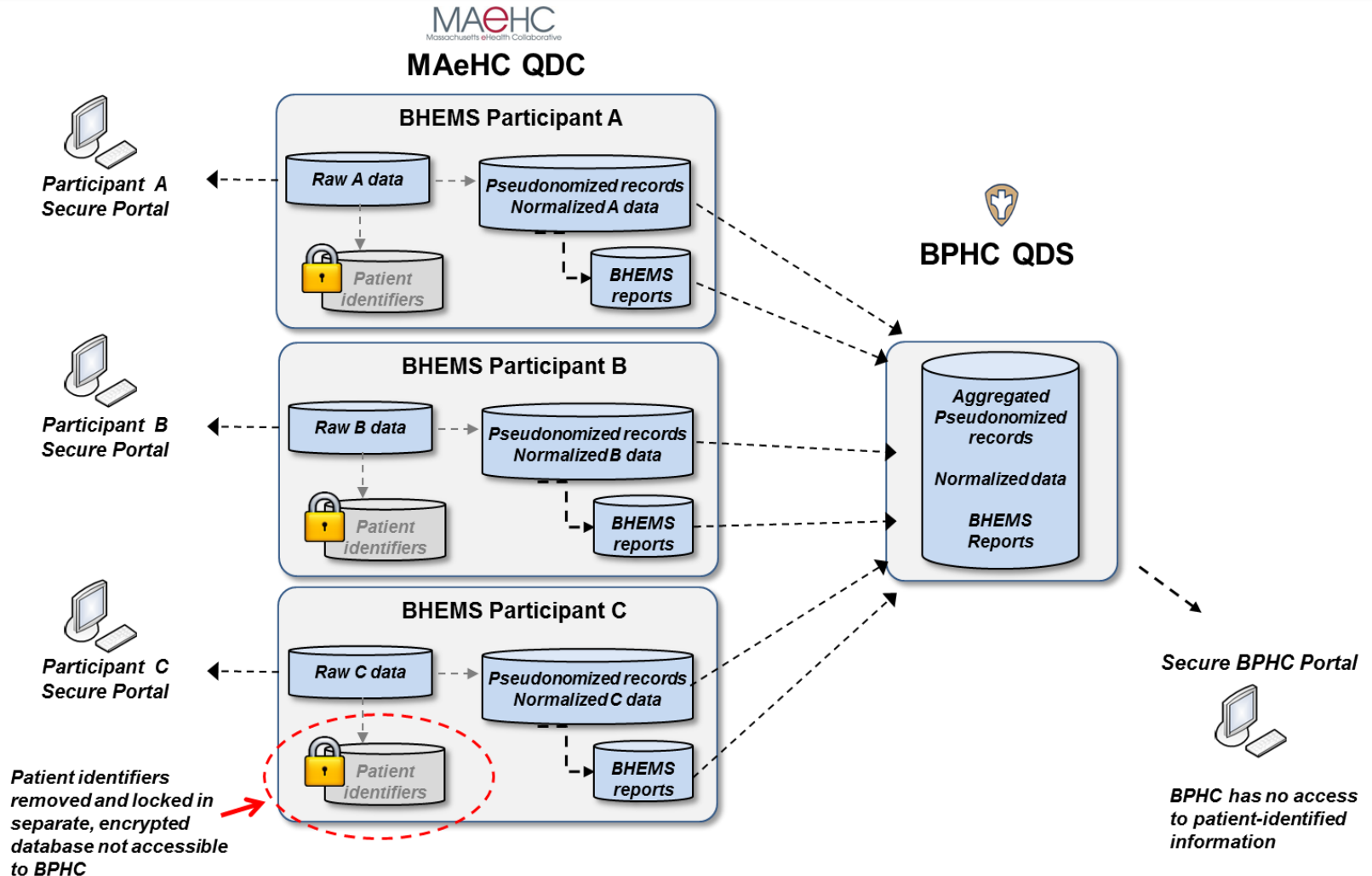
- Implementation with hospitals; revised BHEMS from original 19 to 7 “core measures”



Implementation: Quality Data System Design Principles

- Patient privacy
- Data security
- Feasibility
- Costs (initial and ongoing)
- Utility

Implementation: Data System Architecture





Implementation: Quality Data System Roles

BPHC

- BHEMS program requirements and policy definition
- Liaison with Board of Health
- Authorizing communications with hospitals
- QDS one-time set up

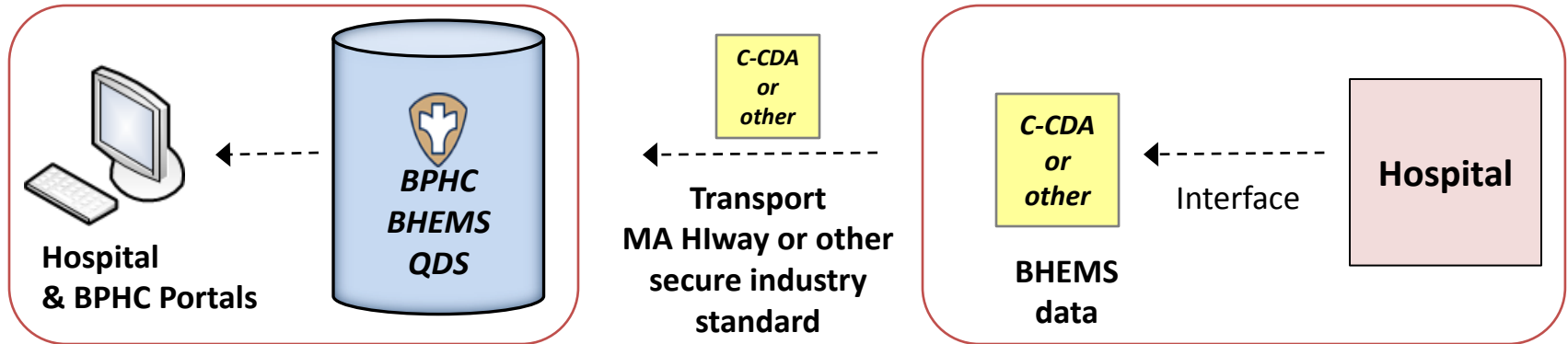
MAeHC

- BHEMS data collection and reporting operations
- BHEMS measure development, testing, and implementation
- Reporting (portal and data mart) development and maintenance for BPHC and hospitals
- Maintain technical infrastructure and security of information

Hospital

- Compliance with BHEMS reporting requirements
- Contracting with MAeHC and payment of annual subscription fees
- Adjustment of workflows as necessary to document data required for BHEMS measures
- Ensure that the measures accurately describe performance/quality

Implementation: Quality Data System Cost Components



BPHC Costs

- BHEMS QDS set up
- Measure set, dashboard, and data mart development
- Hospital specific readiness assessments
- Set-up of hospital portal accounts
- One-time cost to validate hospital C-CDA and establish connection

Hospital Costs

- Maintenance of interface from clinical system (if applicable)
- Data transport/export (if applicable)
- Ongoing annual cost of measure calculation, measure reporting to BPHC, and portal access (\$2000-\$9000/hospital/year)



Implementation: Quality Data System Remaining Costs

Product/Service	Description	Cost
System design and modification	Modification of QDS environment, presentation/reporting mechanisms	\$55,000
Data source readiness assessments	\$800-\$1000/source hospital	\$10,600
Project management	12 months-fixed rate	\$48,000
CCDA validation and source set-up	\$2000/hospital	\$22,000
QDS source connection	\$500/hospital	\$5,500
Hospital portal set-up	\$500/hospital	\$5,500
	BPHC Total One-time Cost	\$146,600
Hospital Annual Reporting Service	Ongoing consumption & processing of data feeds; regular report and data-mart generation; maintenance of data feeds; hosting and maintenance of QDC environment: \$2000-9000/hospital/year	\$2000- \$9000/hospital/year
	11 Hospital Total Annual Cost	\$85,000/year



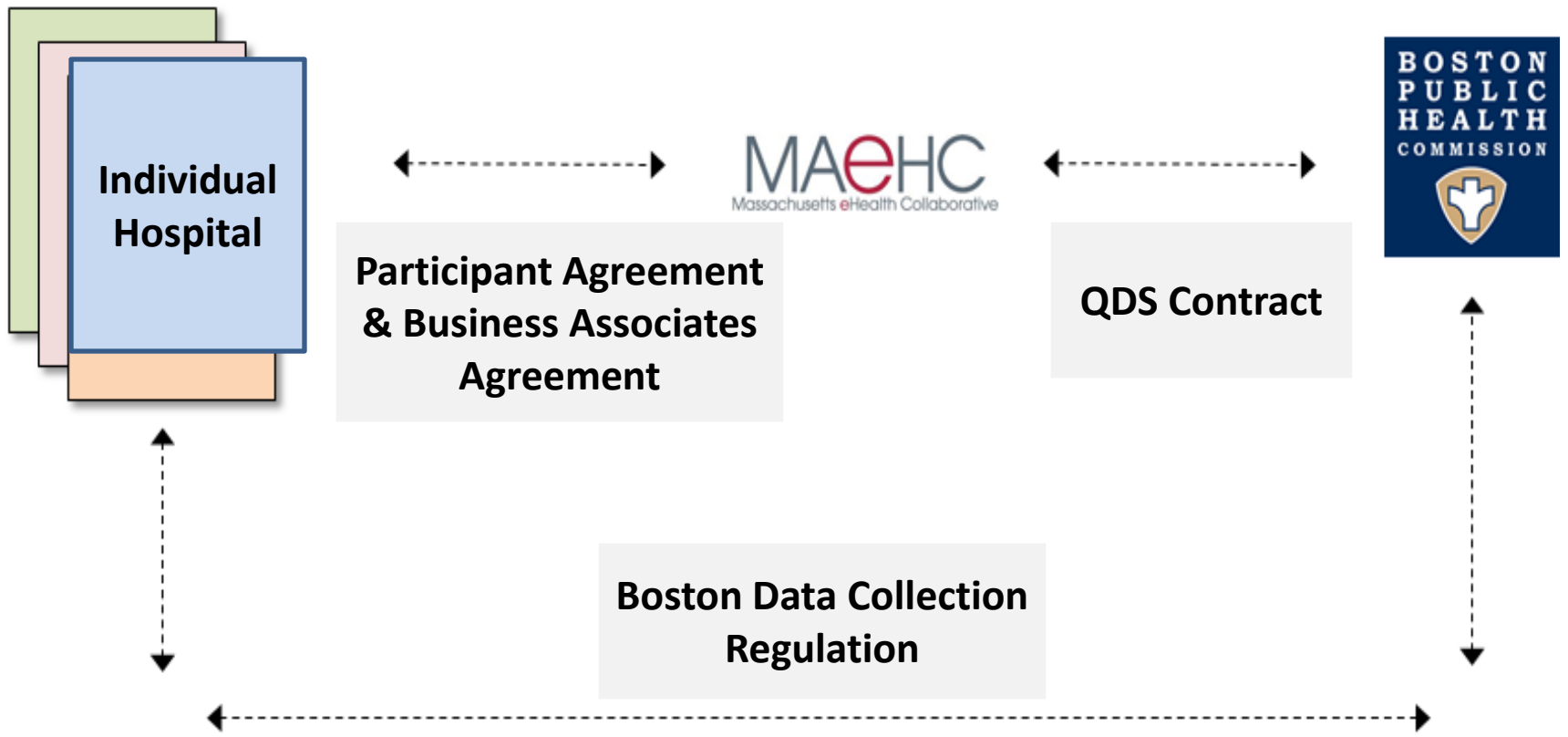
Implementation:

Core Boston Health Equity Measure Set

Measure Name/Description	CMS#	NQF#
Controlling High Blood Pressure	165	18
Weight Assessment and Physical Activity for Children and Adolescents	155	24
Preventive Care and Screening: Tobacco Use— Screening and Cessation Intervention	138	28
Diabetes: Hemoglobin A1c Poor Control	122	59
Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan	2	418
Thrombolytic Therapy: Acute ischemic stroke patients who arrive at this hospital within 2 hours of time last known well and for whom IV t-PA was initiated at this hospital within 3 hours of time last known well.	91v3	437
ED-3 Median time from ED arrival to ED departure for discharged ED patients: Median time from emergency department arrival to time of departure from the emergency room for patients discharged from the emergency department.	32v3	496



Implementation: Legal Architecture





Implementation: Proposed Timeline





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