Overview of the Center for Health Information and Analysis (CHIA) for the Massachusetts Health Policy Forum

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CHIA’s Mission and Role

- CHIA’s mission is to measure the Massachusetts healthcare system to support better public policy and program oversight, and to provide information about the state’s healthcare system to patients, providers, health plans, researchers, and others.

- CHIA was created in 2012, along with the Health Policy Commission, as part of an ambitious focus on healthcare cost control.

- CHIA combined the legacy activities of a predecessor agency, the Division of Health Care Finance and Policy, along with a wide range of new authorities and mandates.

- CHIA has extensive authority to compel the submission of data from Massachusetts healthcare stakeholders, including health plans, hospitals, medical groups, community health centers, nursing homes, and others.
CHIA’s Mission and Role

- CHIA uses this authority to create and curate nearly a dozen major data assets, more than any other state health data organization.
- CHIA releases dozens of publications, reports, interactive dashboards, and extensive databooks documenting key features of the Massachusetts healthcare system.
- CHIA also functions as a center of excellence for data and analytics in MA state government, providing other agencies with:
  - Custom data extracts,
  - Ad hoc analyses, and
  - Support for advanced data operations.
CHIA’s Key State Government Stakeholders
CHIA’s Major Data Assets

CHIA receives more than 25,000 submissions per year from roughly 1,000 data submitters. CHIA’s major data assets include:

- **Hospital Discharge Database**: patient-level information on every acute hospital discharge in the state.

- **Emergency Department Database**: patient-level information on every acute hospital ED visit in the state.

- **Observation Stay Database**: patient-level information on every acute hospital observation stay in the state.

- **Psychiatric Hospital Discharge Database**: patient-level information on every private behavioral health hospital discharge in the state.

- **All-Payer Claims Database**: a massive repository of claims data providing granular information on encounters and prices.
CHIA’s Major Data Assets (continued)

- **Payer expenditure reports**: Annual submissions of aggregate spending and cost data broken out by product, service category, ZIP code, market segment, cost sharing, and more.

- **Provider financial reports**: CHIA collects financial and cost information from hospitals, nursing homes, community health centers, and other types of providers.

- **Statewide surveys of employers and households**: Large surveys provide rich information about individuals, households, and employers. A healthcare workforce survey is in the works.

- **Registered Provider Organizations**: CHIA and the HPC jointly collect information from medical groups on their financial condition and their clinical and contractual affiliations.
CHIA’s Major Analytic Activities

While not mutually exclusive, the following categories capture CHIA’s core capabilities and core thematic focus areas:

1. Healthcare spending and utilization
2. Provider finances and rate setting
3. Insurance coverage and healthcare affordability
4. Health equity and social determinants of health
5. Behavioral health
6. Provider and payer quality
7. Price variation and price transparency
CHIA’s data and analyses are central to most of the major health policy issues facing the Commonwealth, including:

- Healthcare Cost Control
- Health Equity and Social Determinants of Health
- Provider Price Variation
- Consumer Price Transparency
- Provider Consolidation and Market Oversight
- Insurance Coverage, Access to Care, and Affordability
- Prescription Drug Costs
- Quality Measurement and Reporting
- Opioid Crisis
- COVID-19 Response
- Payment Reform
Healthcare Cost Control – Measuring THCE

Components of Total Health Care Expenditures, 2019-2020

- $1.8B Other Public
- $2.5B NCPHI
- $15.8B MassHealth
- $19.1B Medicare
- $23.8B Commercial

Total Overall Spending 2019: $63.0B
Total Overall Spending 2020: $62.6B

$1.9B Other Public
$3.3B NCPHI
$16.3B MassHealth
$18.5B Medicare
$22.7B Commercial

$8,912 THCE per capita

-2.4% Per capita trend 2019-2020

Total Health Care Expenditures per capita decreased by 2.4% from 2019 to 2020, driven by decreases in commercial and Medicare spending.
Understanding the Drivers of Healthcare Costs

Change in Total Health Care Expenditures by Service Category, 2019-2020

Decrees in hospital outpatient and physician spending were the largest drivers of the decline in THCE between 2019 and 2020.
Tracking Hospital Utilization During COVID-19

Total Acute Care Hospital Inpatient Discharges, October 2018 to September 2021

During peak periods of COVID-19 cases, inpatient discharge volume declined due to a decrease in the number of adult, non-obstetric discharges.
Tracking Hospital Finances During COVID-19

HFY 2020 Median Total Margin by Hospital Cohort, with and without COVID-19 Relief Funds

- Statewide Hospital Median 2.6%
- Academic Medical Center: 4.2%
- Teaching Hospital: 1.4%
- Community Hospital: -2.9%
- Community-High Public Payer: -6.0%
- Total Margin without COVID-19 Relief Funds: -5.3%

All hospital cohorts would have experienced negative median total margins without COVID-19 relief funds.
HDHP enrollment continued to grow steadily across nearly all market sectors, despite overall enrollment declines, with the fastest growth among large group employers.
Insurance Coverage by Race/Ethnicity/Income

Always Insured for Past 12 Months, for Family Income by Race/Ethnicity

- **<139% FPL**
  - White, non-Hispanic: 91.7%
  - Black, non-Hispanic: 78.8%
  - Other/Multiple Races, non-Hispanic: 86.5%
  - Hispanic: 75.0%

- **139% to <300% FPL**
  - White, non-Hispanic: 91.9%
  - Black, non-Hispanic: 84.2%
  - Other/Multiple Races, non-Hispanic: 83.1%
  - Hispanic: 81.2%

- **≥300% FPL**
  - White, non-Hispanic: 97.0%
  - Black, non-Hispanic: 96.7%
  - Other/Multiple Races, non-Hispanic: 94.6%
  - Hispanic: 91.3%
Price Variation — A “Wide Field” View

Provider Price Variation Across 300 Procedures

Provider Type
- Acupuncturist
- Advanced Practice Midwife
- Agency Providers
- Ambulance
- Assistant, Podiatric
- Behavioral Analyst
- Case Manager/Care Coordinator
- Chiropractor
- Chronic Disease Hospital
- Clinic/Center
- Clinical Medical Laboratory
- Clinical Neuropsychologist
- Clinical Nurse Specialist
- Community Health Worker
- Contractor
- Counselor
- Dentist
- Developmental Therapist
- Emergency Medical Technician, Basic
- Emergency Medical Technician, Paramedic
- General Acute Care Hospital
- Hospital: Psychiatric Unit
- Hospital: Rehabilitation Unit
- Legal Medicine
- Licensed Practical Nurse
- Long Term Care Hospital
- Marriage & Family Therapist
- Massage Therapist
- Medical Genetics, Ph.D. Medical Genetics
- Midwife
- Naturopath
- Nurse Anesthetist, Certified Registered
- Nurse Practitioner
CHIA is Hiring!

If you are interested in working at CHIA, please take a look at our job postings:

http://www.chiamass.gov/join-our-team/

Thanks!