EXECUTIVE SUMMARY

INDEX OF ACRONYMS

ABIM	American Board of Internal Medicine
ACA	Affordable Care Act
ACG	Adjusted Clinical Groups
ACO	Accountable Care Organization
AGO	Attorney General's Office
AMC	Academic Medical Center
APCD	All-Payer Claims Database
APRN	Advanced Practice Registered Nurse
BIDCO	Beth Israel Deaconess Care Organization
BMC	Boston Medical Center
CHF	Congestive Heart Failure
CHIA	Center for Health Information and Analysis
CHW	Community Health Worker
CMIPA	Central Massachusetts Independent Physician Association
CMS	Centers for Medicare and Medicaid Services
COPD	Chronic Obstructive Pulmonary Disease
CPT	Current Procedural Terminology
CT	Computed Tomography
DRG	Diagnosis-Related Groups
ED	Emergency Department
EEG	Electorencephalogram
EKG	Electrocardiogram
FFS	Fee-For-Service
FPL	Federal Poverty Level
HCCI	Health Care Cost Institute
HMO	Health Maintenance Organization
HOPD	Hospital Outpatient Department
HPC	Health Policy Commission
ICD	International Classification of Diseases
IVC	Inferior Vena Cava
LVC	Low Value Care
MCO	Managed Care Organization
PBM	Pharmacy Benefit Manager
PCC	Primary Care Clinician Plan
PCP	Primary Care Provider
PFT	Pulmonary Function Test
PMPY	Per Member Per Year
POS	Point Of Service
THCE	Total Health Care Expenditures
TME	Total Medical Expenditures
UTI	Urinary Tract Infection

EXECUTIVE SUMMARY

The Massachusetts Health Policy Commission (HPC), established in 2012, is charged with monitoring health care spending growth in Massachusetts and providing data-driven policy recommendations regarding health care delivery and payment system reform. Consistent with this mandate, the HPC's annual cost trends report presents an overview of trends in health care spending and delivery in Massachusetts, describes in-depth analyses of utilization of care, spending by provider organization, and prices of care in Massachusetts, and makes policy recommendations for strategies to increase the quality and efficiency of care in the Commonwealth.

This executive summary presents a concise overview of the findings and recommendations detailed in this sixth annual report.

KEY FINDINGS

TRENDS IN SPENDING

- In 2017, Total Health Care Expenditures (THCE) in Massachusetts grew 1.6 percent per capita, considerably lower than the 3.6 percent health care cost growth benchmark set by the HPC. The average annual rate of growth in THCE in Massachusetts from 2012 to 2017 was 3.2 percent, below the state's benchmark.
  - The Massachusetts growth rate of 1.6 percent in 2017 was below the national growth rate of 3.1 percent, continuing a consecutive eight year trend of spending growth below the U.S. rate.
  - Growth in commercial health care spending was also below the national rate for the fifth consecutive year. Cumulatively between 2012 and 2017, this lower growth rate amounts to commercial spending that was $5.5 billion lower over this time period than would have been the case if growth rates matched the national average.
- Per enrollee spending grew slower than the benchmark rate for all population segments: 2.5 percent among commercial enrollees, 3.5 percent among full coverage MassHealth enrollees in the MCO and PCC programs (mostly due to greater health risk), and 1.0 percent among Original Medicare enrollees.
- Prescription drug and hospital outpatient department spending continued to be the highest growth areas in 2017, at 4.1 percent and 4.9 percent respectively, although increases for both were slightly below rates the previous year.
- The average total premium for employer-based coverage in Massachusetts remains one of the highest in the country, with an average family paying over $21,000 per year for coverage in 2017 (including employer contributions) and single enrollees paying $7,000, which are the fourth and seventh highest in the U.S., respectively. These figures do not include out-of-pocket spending such as copayments and deductible spending, which grew 5.9 percent in 2017 for commercially-insured enrollees.
  - Employer-sponsored insurance premiums in Massachusetts increased sharply for those employed by small companies (6.9 percent); these premiums are now the second highest in the U.S. The number of people obtaining coverage through small employers continued to decline (3.6 percent) in 2017.
  - In contrast, premiums for health insurance plans chosen by the enrollees at the Massachusetts Health Connector, which are available to individuals and small employers, were the second lowest in the U.S. in 2017 and 23 percent below premiums in the fully-insured employer market.
- Individuals with employer-based insurance whose incomes were between 139 percent and 299 percent of the federal poverty level spent approximately one-third of their total income on health care in 2017, including premium spending, out-of-pocket spending, and taxes to fund state and federal health care programs.

UTILIZATION OF CARE

Overall trends

- The overall rate of hospitalization among Massachusetts residents was unchanged between 2014 and

2017, though the rate dropped 8 percent among the commercially-insured.

- The rate of hospital readmissions within 30 days among all Massachusetts residents increased in 2017. Readmissions among Medicare enrollees increased in 2017 in Massachusetts, but declined in the rest of the U.S.
- The share of patients discharged from the hospital to institutional post-acute care dropped from 18.9 percent in 2016 to 18.0 percent in 2017.
- The share of hospital admissions for community-appropriate conditions occurring at community (non-teaching) hospitals increased slightly from 57.8 percent in 2016 to 57.9 percent in 2017.

Hospital admissions from the emergency department

- There is considerable variation among hospitals in the likelihood that a patient's emergency department (ED) visit results in an inpatient admission. Controlling for patient characteristics including diagnosis, rates of admission from the ED ranged from 18 percent to 30 percent among the 25 Massachusetts hospitals with the highest ED volume.
- Hospitals with high rates of admissions from the ED for certain conditions tended to have high rates for other conditions as well, controlling for patient health status and other characteristics. For example, hospitals with high admission rates for congestive heart failure also tend to have high admission rates for pneumonia (r=0.84, indicating a strong positive relationship between the two admission rates).
- Patients discharged from the ED at hospitals with lower admission rates did not generally experience higher rates of revisits to the ED than those discharged from hospitals with higher admission rates.

Low value care

- Over a two-year time period, the HPC found that 20.5 percent of a sample of commercial patients received at least one of 19 low value care screenings, tests, and services identified by the Choosing Wisely Campaign as unnecessary and wasteful.
- Spending on these low value procedures totaled $80 million, with more than $12 million paid out-of-pocket by patients, a conservative figure that does not include spending for additional follow-up tests and procedures as well as indirect costs, such as lost work time.
- The HPC found that the provision of these low value services varied as much as two-fold by provider organization. Attributing results based on the affiliation of patients' primary care providers (PCPs), the HPC identified the lowest rates of low value services among patients with providers at Atrius Health, and the highest rates among patients with providers at Lahey Health.

TOTAL SPENDING AND PRICES OF CARE

Patient spending by provider organization

- Total health care spending per patient varies substantially by provider system. Based on the affiliation of a patient's PCP, annual spending per commercially-insured patient ranged from $5,393 per year (for patients with PCPs in the Boston Medical Center Health System) to $7,668 per year (for patients with PCPs in the Partners HealthCare system), a 30 percent difference in 2017. These differences grew between 2015 and 2017.
- Spending differences persisted even when analyzing groups of patients with similar demographics and health status, such as patients with diabetes and no other chronic conditions.
    - Spending for patients with diabetes with PCPs in physician-led organizations was 19 percent lower than spending for similar patients with PCPs in hospital-based organizations anchored by an academic medical center (AMC), such as Partners HealthCare or Beth Israel Deaconess Care Organization (BIDCO).
    - The difference in spending was particularly stark in the area of outpatient services, such as labs, tests, and minor surgeries, where average spending at the AMC-anchored organizations was over 70 percent higher than spending at physician-led organizations. These services are typically performed in hospital outpatient departments in the higher-spending organizations, often involving additional facility fees.

- In addition to differences in utilization, the HPC also found price differences between AMC-anchored and physician-led organizations. For example, patients with diabetes had similar utilization of HbA1c lab tests, but prices per test averaged 38 percent higher in AMC-anchored organizations.

- Despite the differences in spending, relevant quality indicators were no different across the organization types.

Prices of care

- Commercial insurers in Massachusetts pay higher prices to providers than Medicare pays for the same services. For hospital inpatient care, average prices among the three largest Massachusetts insurers were 57 percent higher than Medicare prices for similar patients ($15,913 versus $10,117, respectively). Commercial insurers also paid considerably more for typical outpatient services, including brain MRIs, ED visits, and physician office visits.
- Commercial prices also varied nearly twice as much as Medicare prices. Commercial insurers paid the highest-priced hospital 2.7 times more per discharge than the lowest-priced hospital, whereas Medicare paid the highest-priced hospitals approximately 1.5 times more per discharge than the lowest-priced hospitals. Price differences between commercial insurers and Medicare also varied by condition. For example, median hospitals' average commercial prices for inpatient care were 54 percent higher than Medicare prices for hip or knee replacements and 76 percent higher for septicemia.
- Commercial prices for many services have grown significantly in recent years. Controlling for changes in patient and provider mix, commercial prices per inpatient discharge increased 5.2 percent between 2014 and 2016. This trend resulted in continued growth in inpatient hospital spending despite a 6.6 percent decline in the number of commercial inpatient stays over this period.

RECOMMENDATIONS

In order to continue progress in achieving the Commonwealth's goal of better health, better care, and lower costs, the HPC recommends action within the following primary policy priorities: 1) Strengthening market functioning and transparency, and 2) Promoting an efficient, high-quality health care delivery system. These recommendations are summarized below (see **Chapter 7** for the full set of recommendations).

STRENGTHENING MARKET FUNCTION AND TRANSPARENCY

1. **Administrative complexity:** The Commonwealth should take action to identify and address areas of administrative complexity that add costs to the health care system without improving the value or accessibility of care. Specific areas of focus should include complexity in payment arrangements, insurance billing and coding, risk adjustment, quality measurement reporting, provider credentialing, and use of electronic health records.

2. **Pharmaceutical spending:** The Commonwealth should take action to reduce drug spending growth. Specific areas of focus should include authorizing the Executive Office of Health and Human Services to establish a process that allows for a rigorous review of certain high-cost drugs, increasing the ability of MassHealth to negotiate directly with drug manufacturers for additional supplemental rebates and outcomes-based contracts, increasing public transparency and public oversight for pharmaceutical manufacturers, medical device companies, and pharmacy benefit managers, addressing price variation in drugs provided under enrollees' medical benefits, and encouraging providers and payers to use treatment protocols and electronic health record prescribing alerts to maximize value for patients.

3. **Out-of-network billing:** The Commonwealth should take action to enhance out-of-network (OON) protections for consumers. Specific actions should include requiring advance patient notification of a potential OON provider, establishing consumer billing protections in emergency and "surprise" billing scenarios, and setting a reasonable and fair reimbursement for OON services established through a statutory or regulatory process.

4. **Provider price variation:** Policymakers should advance specific, data-driven interventions to address the pressing issue of continued provider price variation in the coming year.

5. **Site-based and provider-based billing reform:** Policymakers and payers should act to limit both newly-licensed and existing sites that can bill as hospital outpatient departments and implement site-neutral payments for select services for similar patients. Additionally, all outpatient sites that charge hospital fees should be required to conspicuously and clearly disclose this fact to patients, prior to delivering care.

6. **Demand-side incentives:** The Commonwealth should encourage payers and employers to enhance strategies that empower consumers to make high-value choices. Employers, particularly those with fewer than 50 employees, should seek to offer their employees a choice of plans, and should strongly consider purchasing health insurance through the Massachusetts Health Connector. Employers and payers should also offer financial incentives (e.g., reduced premiums, lower deductibles) for employees who choose primary care providers affiliated with high-quality, efficient provider groups.

PROMOTING AN EFFICIENT, HIGH-QUALITY HEALTH CARE DELIVERY SYSTEM

7. **Unnecessary utilization:** The Commonwealth should focus on reducing unnecessary utilization and increasing the provision of coordinated care in high-value, low-cost settings. Payers and providers should reduce the use of avoidable high-cost care, such as avoidable ED visits, behavioral health-related ED visits, readmissions, use of teaching hospitals and academic medical centers for community-appropriate inpatient care, and institutional post-acute care by ensuring access to high-value, low-cost settings, and shifting care, as appropriate, to these settings. Further, the employer community should continue to collaborate with health plans, providers, and other stakeholders to continuously engage their employees and families and encourage them to seek high-quality, high-value care at appropriate settings in the community.

8. **Social determinants of health:** The Commonwealth should take steps to address the social determinants of health that impact health care access, outcomes, and cost. Specific areas of focus should include flexible funding to address health-related social needs, inclusion of social determinants in payment policies and performance measurement, continued evaluation of innovative interventions to build the evidence base, and collaboration between health systems, community-based organizations, and local municipalities.

9. **Health care workforce:** The Commonwealth should support advancements in the health care workforce that promote top-of-license practice and new care team models. Policymakers should review and amend scope of practice laws that are restrictive and not evidence-based, including for Advanced Practice Registered Nurses (APRNs), certify a new level of dental practitioner to increase access to oral health care, particularly for low income and underserved populations, and continue to support new health care roles designed to meet the unique needs of the communities and patient populations they serve, such as community health workers (CHWs), patient navigators, peer support specialists, and recovery coaches.

10. **Scaling innovations in integrated care:** The Commonwealth should continue to invest in testing, evaluating, and scaling innovative care delivery models to integrate medical, behavioral, and social care and enhance access for underserved populations. Specific areas of investment should include telehealth and mobile integrated health.

11. **Alternative payment methods:** The Commonwealth should continue to promote the increased adoption of alternative payment methods (APMs) and improvements in APM effectiveness. Specific areas of focus should include movement to two-sided risk payment models (including global payment) for Medicare and commercial members, following the lead of the MassHealth Accountable Care Organization (ACO) program. Also, as part of a strategy to reduce spending, payers should develop plans to lessen the unwarranted disparities in global budgets paid to different providers by establishing stricter targets for spending growth for highly paid providers, moving away from historical spending as the basis of global budgets, and using bundled payments for certain care episodes where evidence has shown effectiveness.