COMMONWEALTH OF MASSACHUSETTS
HEALTH POLICY COMMISSION

TECHNICAL APPENDIX B2
HOSPITAL OUTPATIENT DEPARTMENT SPENDING

ADDENDUM TO 2017 COST TRENDS REPORT

Table of Contents

1 Summary

This section describes the Health Policy Commission's (HPC) approach to the analyses contained in **Chapter 3: "Hospital Outpatient Department Spending"** of the 2017 Cost Trends Report.

1.1 Data

We used the Massachusetts All Payer Claims Database (APCD) for calendar years 2013-2015 for the analysis. Our sample included data from the three major commercial payers, Blue Cross Blue Shield, Harvard Pilgrim Health Plan, and Tufts Health Plan. Expenditures do not capture payments outside the claims system. Spending includes insurer and enrollee payments for covered medical services. This dataset was used for all analyses, unless otherwise noted.

Services were assigned to a setting of care—either hospital outpatient department, non-hospital or other—based on the file type, site of service, and procedure code modifiers present on each claim line. The following claims were assigned to the hospital outpatient department category:

- If one or both claim lines were submitted on a facility claim by an outpatient hospital
- If one or both claim lines were submitted on a professional claim with a site of service equal to '22' (hospital outpatient) or '23' (emergency room)

The remaining procedures were assigned to the non-hospital category if they met any of the following criteria:

- One or both claim lines were submitted on a facility claim by a freestanding outpatient facility
- One or both claim lines were submitted on a professional claim with the procedure modifier 'SG' (ambulatory surgical center)
- One or both claim lines were submitted on a professional claim with the site of service equal to '11' (office), '20' (urgent care), '17' (walk-in retail clinic), '24' (ambulatory surgical center), '49' (independent clinic), '50' (FQHC), '71' (public health clinic), '72' (rural health clinic), or '81' (independent lab).

Procedures that did not meet any of the criteria above were categorized as "all other and unknown settings" and not included in the analysis.

2 Components of hospital outpatient department spending

2.2 Definitions

This analysis identifies total spending on hospital outpatient services by category of service, as well as each category's contribution to total hospital outpatient spending growth between 2013 and 2015. Out of state facilities and in-state non-acute outpatient facilities (such as ambulatory surgical centers) are excluded. Spending includes all spending billed on a facility claim. Procedure codes were mapped to service categories based on methodology from the Health Care Cost Institute.

2.3 Analysis

Although claims data from 2013 contained some exclusions that artificially deflated total spending amounts for that year, we deemed relative spending amounts within hospital outpatient categories to be valid. For the purposes of this analysis , to facilitate comparison across years, we adjusted the 2013 totals using trends in overall hospital outpatient spending based on total medical expenditure data reported by CHIA from 2013-2015.

3 Shifts between inpatient and outpatient settings

Analysis

This analysis identifies changes in setting of care between 2011 and 2015 for procedures that can be performed either in hospital inpatient or hospital outpatient settings. The five major cross-over procedures were identified as the highest-volume procedures billed by surgeons in 2013 where at least 10 percent of the surgeries occurred at an inpatient hospital and at least 10 percent occurred in a hospital outpatient setting. Total spending includes insurer and enrollee payments for the facility portion of the surgical procedure; the physician portion billed on a separate professional claim is not included. Inpatient procedure costs include the hospital payment for the entire stay associated with the surgery. Outpatient procedure costs include the hospital payment for all lines on the outpatient claim for the surgery. The five procedures are: laparoscopic cholecystectomy (CPT procedure code 47562 for outpatient surgeries and ICD-9 procedure code 5123 for inpatient surgeries); laparoscopic appendectomy (CPT 44970 and ICD-9 procedure code 4701); arthrodesis (CPT 22845 and 22551; and ICD-9 procedure code 8102); laparoscopic total hysterectomy (CPT 58570, 58571, 58572, and 58573; and ICD-9 procedure code 6841); and laparoscopic vaginal hysterectomy (CPT 58552, 58553, and 58554; and ICD-9 procedure code 6841).

This analysis updated earlier HPC work examining trends between 2011 and 2013. See 2015 Cost Trends Report for reference.

4 Shifts between non-hospital and hospital settings

Use of select services by setting among Medicare beneficiaries in Massachusetts and the U.S.

4.1 Data

The HPC used the Medicare Provider Utilization and Payment Data: Physician and Other Supplier Public-Use File (PUF) for 2012-2015. This PUF provides information on services and procedures provided to Medicare beneficiaries by physicians and other healthcare professionals. The universe is 100% of Medicare enrollment and fee-for-service data from Part B non-institutional, final action claims. Procedures are denoted by Healthcare Common Procedure Coding System (HCPCS) codes. The data are arrayed by State—HCPCS—Setting combinations (i.e., the location, procedure, and site of service).

4.2 Definitions

"Facility" settings includes: Inpatient Hospital, Outpatient Hospital, Emergency Room-Hospital, Ambulatory Surgical Center (ASC), Military Treatment Facility, Skilled Nursing Facility (SNF), Hospice, Ambulance – Land, Ambulance – Air or Water, Inpatient Psychiatric Facility, Psychiatric Facility–Partial Hospitalization, Community Mental Health Center, Psychiatric Residential Treatment Center, and Comprehensive Inpatient Rehabilitation Facility.

"Non-Facility" settings includes: Pharmacy, School, Homeless Shelter, Prison/Correctional Facility, Office, Home or Private Residence of Patient, Assisted Living Facility, Group Home, Mobile Unit, Temporary Lodging, Walk-in Retail Health Clinic, Urgent Care Facility, Birthing Center, Nursing Facility and Skilled Nursing Facilities (SNFs) , Custodial Care Facility, Independent Clinic, Federally Qualified Health Center, Intermediate Health Care Facility/Mentally Retarded, Residential Substance Abuse Treatment Facility, Non-Residential Substance Abuse Treatment Facility, Mass Immunization Center, Comprehensive Outpatient Rehabilitation Facility, End-Stage Renal Disease Treatment Facility, State or Local Health Clinic, Rural Health Clinic, Independent Laboratory, and Other Place of Service.

Based on the context for the specific services studied, we have assumed that most instances of services provided in a "facility" setting occur in the outpatient hospital setting. We have assumed that most instances of services provided in a "non-facility" setting occur in the office setting.

4.3 Analysis

Using the PUF, the HPC calculated a total cost per procedure (denoted by HCPCS code) and setting ("Facility" or "Non-Facility") using the physician component ("allowed amount") and facility component. These "facility fees" were obtained using CMS's Outpatient Prospective Payment System (OPPS) Addendum B, Final OPPS Payment by HCPCS Code for CY 2012-2015. For State-specific payments, a wage indexed adjustment factor was added (according to OPPS guidelines) to account for regional wage differences. These Geographic Adjustment Factors (GAFs) can be found in Table 4A-2 and 4B-2, "Wage index and Capital Geographic Adjustment Factor for Acute Care Hospitals in [Urban, Rural] areas by CBSA and by State" for 2012-2015.