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**MHDO** Maine Health  
Data Organization  
Information | Insight | Improvement

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TO: Senator Gratwick, Representative Hymanson and Members of the Joint Standing Committee on Health and Human Services.

CC: Anna Broome, Legislative Analyst, MHDO Board of Directors

FROM: Karynlee Harrington

DATE: January 22, 2019

RE: Maine Health Data Organization Briefing Memo

Please find enclosed a briefing memo that describes the legislative duties of the Maine Health Data Organization. Below is a summary of the contents of the memo. I look forward to reviewing the highlights with the committee during the orientation session.

Part 1. General Overview-pages 1-2  
Part 2. Examples of how MHDO Data is used and Recent Comments from MHDO Data Users-pages 2-3  
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## 1. General Overview

- The MHDO was created by the Legislature in 1995 as an independent executive agency- Title 22 Chapter 1683- that operates under the supervision of a multi-stakeholder Board of Directors. The Governor appoints the members of the board. Board composition includes representation from: Payers, Hospitals, Providers, Home Health Care, Chiropractic, Consumers, Employers/Chamber, Government.
- MHDO's purpose is to create and maintain a useful, objective, reliable and comprehensive health information data warehouse that is used to improve the health of Maine citizens **and** to promote transparency of the cost and quality of healthcare in the State of Maine by procedure, payer, facility and provider in collaboration with the Maine Quality Forum (MQF).
- The MHDO is the data center that is responsible for the collection, storage, management and distribution of healthcare data and information, including claims data, hospital inpatient and outpatient encounter data, hospital quality data, and hospital financial and organizational data.
- MHDO maintains over 1 billion healthcare records and that number continues to grow every month new data is submitted.
- The MHDO receives its funding from an assessment on payers, hospitals and non-hospital providers-not from the general fund and from data access fees. The assessment is approximately \$1.5M/year.
- The annual budget is approximately \$2 Million.
- Legislative Committee of oversight is the Joint Standing Committee on Health and Human Services
- **Priorities** of the MHDO as established by the MHDO Board of Directors:
  1. Manage a high-quality, comprehensive health information data warehouse
  2. Promote the appropriate release of healthcare data and information
  3. Promote the transparency of healthcare cost and quality information
  4. Support ongoing stakeholder engagement with our data providers, data users and consumers
  5. Support a culture of change based on our stakeholders' needs
- **Guiding Principles** of the MHDO as established by the MHDO Board of Directors:

1. Responsive and timely: Communicate data availability and manage data releases to published timeframes
  2. Accurate: Ensure consistency and conformity of all data submissions
  3. Accessible: Provide self-service applications where possible and remove barriers to access
  4. Streamlined: Build efficient processes for data collection and release; leverage national standards when available
  5. Secure: Protect the confidentiality of personal health data – electronic threats change and systems must adapt to meet these challenges
- In 2013 after a competitive bid process MHDO entered into a contract with Human Services Research Institute (HSRI) out of Cambridge, Mass., partnered with NORC at the University of Chicago. HSRI and NORC assist the MHDO with our operations including data storage, data collection, data release, CompareMaine, developing mandated and ad-hoc reporting.
  - For over 10 years the MHDO data has been an important source in the analysis of health care costs, utilization, and outcomes. Specifically, MHDO claims data is used to identify high cost providers, high cost conditions by geographic area, and cost and utilization variations.

## 2. Examples of how MHDO Data has been used:

- **All-Payer Analysis of Variation in Healthcare in Maine** Conducted on behalf of Dirigo Health Agency's Maine Quality Forum & The Advisory Council on Health Systems Development. - April, 2009
- **Healthcare Associated Infections in Maine, 2018 Annual Report** Prepared by the Maine Quality Forum in collaboration with the Maine CDC and Muskie. - May 2018
- **Div. of Unintentional Injury Prevention, Nat'l Center for Injury Prev. and Control, CDC-MHDO's** all payer claims data was used to evaluate the impact of MaineCares' Prior Authorization (PA) policy for opioids.
- **Maine Office of Attorney General**-MHDO's claims data has been used for competitive analysis of merger and non-merger reviews by the Maine Attorney General pursuant to antitrust laws.
- **Maine Department of Health and Human Services**-MHDO claims data has been used to evaluate the SIM work in healthcare quality and effectiveness as well as statewide healthcare utilization and expenditure trends.
- **Maine Hospital Association**-MHDO's hospital inpatient data has been used to conduct volume and service use analyses across Maine hospitals.
- **Maine Health Management Coalition**-MHDO claims data was used to create Primary Care Practice Reports which provide practices with utilization and quality information specific to their patients.
- **MaineHealth**-MHDO's claims and hospital data has been used for years to inform MaineHealth system's efforts to (1) improve the quality and safety of the services provided, (2) identify opportunities to make the services provided less costly, and (3) support member organizations

and strategic affiliates to assume the responsibilities and risks of an Accountable Care Organizations participating in the Medicare Shared Savings Program and similar arrangements with commercial payers

- **Eastern ME Healthcare Systems**-MHDO claims and hospital data has been used by the planning department to determine utilization patterns to plan for future needs.
- **St. Mary's Health System and St. Joseph Hospital**-MHDO claims data has been used to determine if pricing is in line with the market and where there is variation.
- **Anthem BCBS ME**-MHDO claims data has been used to explore the impacts of regional variations in care; assist with the development of payment innovation models; and understand the dynamics of the market because of the Affordable Care Act.
- **VA Medical Center**-MHDO claims data was used to determine the healthcare services of V.A. enrollees outside of the V.A. system.
- **Muskie School of Public Service**-MHDO claims data is being used to support an evaluation of the state's community paramedicine pilot project to determine if the pilot projects have helped the Maine health care system avoid a limited number inpatient admission costs.
- **Yale University, School of Medicine**-MHDO claims data is being used to examine the relationship between cardiovascular and all-cause hospitalization/ED utilization with population well-being.

**Link to MHDO public posting of data requests can be found here:**

<https://mhdo.maine.gov/datarequest.aspx>

### **Recent Comments from MHDO Data Users:**

"My experience working within the MHDO data structure has been a wholly positive experience. The Enclave system presents itself to a Data Analyst as a professional and secure workspace that allows me to focus on producing outcomes and removes some of the burden around understanding a new systems intricacies and architecture. The system has been laid out in a thoughtful manner and meets or exceeds industry standards/expectations in many capacities."

"The biggest value of the MHDO APCD comes with the ability to Benchmark. Without statewide data, it is difficult to know if the population you serve is unique or is like the broader population. This is particularly helpful when dealing with relatively small numbers. It is valuable to have a larger dataset to leverage."

"The quality of the MHDO hospital data is the best it has ever been."

"MHDO's APCD data is the only statewide data set that integrates medical claims and pharmacy claims data which opens up the possibility for various analysis. Example, understanding the patterns associated with prescribing antibiotics which may help inform future programs specific to Antimicrobial stewardship."

"MHDO's Claims Data was identified as the best data source for our evaluation: (a) it's longitudinal, a merit of data for policy and intervention evaluation; (b) it provides a full picture of health care use including use of opioids; (c) it provides the valuable opportunity of using public payers and commercial payers as comparison groups, which increase the rigorousness of our evaluation."

### 3. [www.CompareMaine.org](http://www.CompareMaine.org)

- In 2014 MHDO partnered with the Maine Quality Forum (as required by statute) to work on enhancing efforts on promoting the transparency of healthcare cost and quality data. With the support of two federal grants and several external partners a new website, [www.CompareMaine.org](http://www.CompareMaine.org) was launched in the fall of 2015.
- CompareMaine reports the average cost for over 200 health care procedures at 155 facilities by the top 5 commercial payers in the State.
- The total payments on CompareMaine represent approximately 45% of the total payments for all procedures (commercial only) in the MHDO claims data.
- Goal supported by MHDO Board of Directors at June 2018 retreat is to target and report on high cost and high utilization procedures where at least 3-5 facilities are providing the service.
- The total number of healthcare facilities represents 51% of all healthcare facilities in the MHDO claims data. (Healthcare facilities defined as hospitals, surgical centers, diagnostic imaging centers, health centers, laboratories, and clinics).
- Below is a table that lists the procedure categories on CompareMaine and the potential opportunities for expansion. (Note: MHDO plans to add cost data for the top 3 infusion therapy medications where there are at least three settings, hospital, clinic and home, with the April 2019 release).

Category	% of Payments on CM Out of All Commercial APCD Payments	# CPT Codes on CM vs. AMA
Deliveries	100%	12 / 12
Office Visits	97%	27 / 73
PT & OT	94%	24 / 33
Mental & Behavioral Health	97%	12 / 36
OB/GYN	43%	12 / 265
Laboratory	49%	94 / 1,433
Radiology & Imaging	58%	35 / 576
Integrative Medicine	22%	8 / 16
Surgical Procedures	11%	45 / 5,392
Outpatient Procedures	23%	9 / 773
<b>Total</b>	<b>51%</b>	<b>278 / 8,609</b>

- CompareMaine reports on several quality measures including patient survey ratings, preventing serious complications and preventing healthcare associated infections. The April 2019 release of CompareMaine will include the addition of the following quality measures:
  - Falls with Injury
  - Pressure Ulcers
  - Hospital-Wide All-Cause Unplanned Readmission
  
- Staff is working on a strategy to continue to increase the number and variety of healthcare quality indicators reported on CompareMaine by the Institute of Medicine's (IOM) domains of health care quality (i.e. safe, effective, patient-centered, timely, efficient). We are exploring including quality measures that are publicly available as well as testing other measures that may be generated from MHDO data.

Show the cost of:

Colonoscopy with biopsy for noncancerous growth

CPT Code: 45330

This estimate is for a 1-day episode of care. It includes related medical services the day of the surgery such as such as surgeon fees and anesthesia. The services included in this estimate are provided by a variety of doctors and facilities. The estimate is attributed to the facility that was paid the most, usually the one where the surgery took place. The episode of care was created using the MEG grouper software. Estimates are for outpatient procedures.

Sometimes one type of general surgery can be identified by many CPT codes that have small variations from each other, for example, whether or not a biopsy is taken. For this procedure, episodes are identified by one of the following CPT codes: 45330, 45383, 45384, 45385, 45338

Maine State Average

\$2,877

List

Map

Learn About The Data

Search:

within 25 miles of

City or ZIP Code

Search

Show prices by insurance company:

Show all insurance companies

Compare Selected Facilities

Sort by: Facility Name

Average Total Cost

**Blue Hill Memorial Hospital**  
57 Water Street Blue Hill, ME 04614

Patient Experience

N/A  
Preventing Serious Complications

Preventing Healthcare-Associated Infections (C. diff)  
View more quality data

\$3,521

cost breakdown  
count of 190

**Bridgton Hospital**  
10 Hospital Dr Bridgton, ME 04009-1148

Patient Experience

N/A  
Preventing Serious Complications

Preventing Healthcare-Associated Infections (C. diff)  
View more quality data

\$2,991

cost breakdown  
count of 270

**Calais Regional Hospital**  
24 Hospital Ln Calais, ME 04619-1329  
Multiple locations

N/A  
Patient Experience

N/A  
Preventing Serious Complications

Preventing Healthcare-Associated Infections (C. diff)  
View more quality data

\$3,121

cost breakdown  
count of 130

<b>Top 25 Procedures Searched on CompareMaine January 1, 2018 – December 31, 2018</b>		
<b>Procedure</b>	<b>CPT Code</b>	<b>Rank</b>
Colonoscopy with Biopsy for Noncancerous Growth	45380	1
Vaginal Delivery	59400	2
Colonoscopy without Biopsy for Encounter for Preventative Health Services	45378	3
Knee Replacement	27447	4
Hip Replacement	27130	5
MRI Scan of Brain	70551	6
MRI Scan of Leg Joint	73721	7
MRI Scan of Lower Spinal Canal	72148	8
C-Section (Cesarean Delivery)	59510	9
Gallbladder Removal	47562	10
MRI Scan of Arm Joint	73221	11
Carpal Tunnel Release Surgery	64721	12
Blood Test for Electrolyte Levels (sodium potassium, chloride, carbon dioxide)	80051	13
MRI Scan of Brain, with and without Contrast	70553	14
CT Scan of Abdomen	74150	15
New Patient Preventive Care Visit for Adult, Ages 18 to 39	99385	16
X-ray of Chest, 2 Views, Front and Side	71020	17
MRI Scan of Upper Spinal Canal	72141	18
CT Scan of Chest	71250	19
CT Scan of Head or Brain	70450	20
Digital screening mammogram of both breasts	G0202	21
Surgical Arthroscopy of Knee	29881	22
Transvaginal Ultrasound	76830	23
Blood Test for Lipids (cholesterol and triglycerides)	80061	24
Surgical Arthroscopy of Shoulder	29826	25

- Law requires MHDO to update the cost and quality information twice a year. Plan is to update CompareMaine in the spring and fall of each year.
- October 2018 release included the following enhancements: Added Chiropractic data to the site, added the number of times a facility performs the specific procedure and developed a historical/trending dashboard report which can be found here: <https://www.comparemaine.org/?page=trends>
- The trend dashboard reports how the average total costs reported on CompareMaine have changed over time. Example is below:



## CompareMaine Trends Over Time

**Facility Name**  
 Statewide

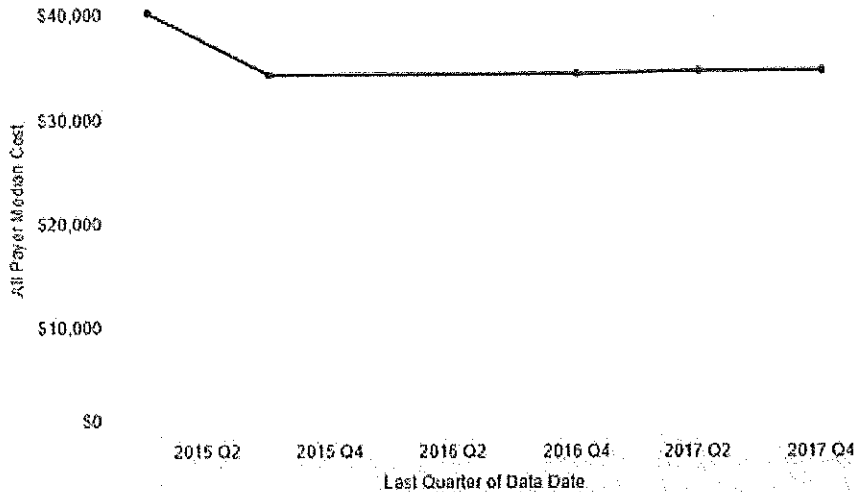
**Insurance Companies**  
 All Payers

**Category**  
 Surgical Procedures

**Sub-Category**  
 Joint Surgery

**Procedure(s)**  
 27447 - Knee replacement

### All Payers Statewide Costs Over Time



#### CPT Code(s)

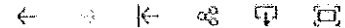
27447

#### Percent of Cost Changes Between CompareMaine Releases

Procedure Code	CM2	CM4
27447	.9%	0%

Note: If no graph appears, the reporting criteria wasn't met for the selected procedure.

+ a b l e a u



- In November 2016 Consumer Reports ranked CompareMaine # 2 for stand-alone health care transparency websites. A summary of the report can be found here: [http://www.consumerreports.org/media-room/press-releases/2016/11/save\\_money\\_and\\_get\\_the\\_best\\_care\\_from\\_your\\_health\\_plan/](http://www.consumerreports.org/media-room/press-releases/2016/11/save_money_and_get_the_best_care_from_your_health_plan/)

## 4. Mandated Reports: Title 22, Chapter 1683, §8712. REPORTS

1. **Quality.** The organization shall promote public transparency of the quality and cost of health care in the State in conjunction with the Maine Quality Forum established in Title 24-A, section 6951 and shall collect, synthesize and publish information and reports on an annual basis that are easily understandable by the average consumer and in a format that allows the user to compare the information listed in this section to the extent practicable. The organization's publicly accessible websites and reports must, to the extent practicable, coordinate, link and

compare information regarding health care services, their outcomes, the effectiveness of those services, the quality of those services by health care facility and by individual practitioner and the location of those services. The organization's health care costs website must provide a link in a publicly accessible format to provider-specific information regarding quality of services required to be reported to the Maine Quality Forum. [ 2009, c. 2, §63 (COR) .]

**2. Payments.** The organization shall create a publicly accessible interactive website that presents reports related to payments for services rendered by health care facilities and practitioners to residents of the State. The services presented must include, but not be limited to, imaging, preventative health, radiology, surgical services, comparable health care services as defined in Title 24-A, section 4318-A, subsection 1, paragraph A and other services that are predominantly elective and may be provided to a large number of patients who do not have health insurance or are underinsured. The website must also be constructed to display prices paid by individual commercial health insurance companies, 3rd-party administrators and, unless prohibited by federal law, governmental payors. Beginning October 1, 2012, price information posted on the website must be posted semiannually, must display the date of posting and, when posted, must be current to within 12 months of the date of submission of the information. Payment reports and price information posted on the website must include data submitted by payors with regard to all health care facilities and practitioners that provide comparable health care services as defined in Title 24-A, section 4318-A, subsection 1, paragraph A or services for which the organization reports data pertaining to the statewide average price pursuant to this subsection or Title 24-A, section 4318-B. Upon notice made by a health care facility or practitioner that data posted by the organization pertaining to that facility or practitioner is inaccurate or incomplete, the organization shall remedy the inaccurate or incomplete data within the earlier of 30 days of receipt of the notice and the next semiannual posting date.

**3. Comparison report.** At a minimum, the organization shall develop and produce an annual report that compares the 15 most common diagnosis-related groups and the 15 most common outpatient procedures for all hospitals in the State and the 15 most common procedures for nonhospital health care facilities in the State to similar data for medical care rendered in other states, when such data are available. The comparison report can be found here: <https://mhdo.maine.gov/tableau/8712Reports.cshtml>

**4. Physician services.** The organization shall provide an annual report of the 10 services and procedures most often provided by osteopathic and allopathic physicians in the private office setting in this State. The organization shall distribute this report to all physician practices in the State. The first report must be produced by July 1, 2004. The Physician services report can be found here: <https://mhdo.maine.gov/tableau/8712Reports.cshtml>

**5. NEW-Prescription drug information.** By December 1, 2018 and annually thereafter, the organization shall provide a report containing the following information about prescription drugs, both brand name and generic:

A. The 25 most frequently prescribed drugs in the State;

- B. The 25 costliest drugs as determined by the total amount spent on those drugs in the State; and
- C. The 25 drugs with the highest year-over-year cost increases as determined by the total amount spent on those drugs in the State.

The Prescription drug report can be found here:  
<https://mhdo.maine.gov/tableau/prescriptionReports.cshtml>

**NEW:** The Maine Health Data Organization shall develop a plan to collect data from manufacturers related to the cost and pricing of prescription drugs in order to provide transparency in and accountability for prescription drug pricing.

The organization shall consult with other state and national agencies and organizations to determine how to institute such data collection. The organization shall submit the plan, its findings and any recommendations for suggested legislation to the First Regular Session of the 129<sup>th</sup> Legislature no later than April 1, 2019.

The joint standing committee of the Legislature having jurisdiction over judiciary matters may report out legislation related to prescription drug price transparency and the organization's findings and recommendations to the First or Second Regular Session of the 129th Legislature.

## 5. Other Legislative Reports MHDO Data Supports:

- **Workers Comp: Title 39-A section 209-A(3)(5)**
- **An Act to Prevent Opiate Abuse by Strengthening the Controlled Substances Prescription Monitoring Program: PL 488 Sec. 38**
- **Maine Guaranteed Access Reinsurance Association Program: Title 24-A, Chapter 54-A**
- **Annual Report to Health and Human Services Committee on the state of Healthcare Associated Infections in Maine-Title 24-A, Chapter 87, §6951**
- **An Act to Encourage Maine Consumers to Comparison Shop for Certain Health Care Procedures and to Lower Health Care Costs... a carrier may comply with the requirements of this paragraph by directing enrollees to the publicly accessible health care costs website of the Maine Health Data Organization.**
- **Ad-hoc report requested by a subcommittee of the Task Force on Health Care Coverage for All of Maine titled: Top 25 Cost Drivers for Inpatient & Outpatient Procedures Among Commercial Payers can be found here:**  
<https://mhdo.maine.gov/tableau/healthcareProcCostDrivers.cshtml>

## 6. State and National Activities:

- MHDO entered into a memorandum of understanding with the University of Maine System, acting through the University of Southern Maine Health Informatics Research Cluster (HIRC)-an Interdisciplinary team of computer science, public health, statistics and other faculty and research staff. Funded through special, legislatively appropriated funds from the Maine Economic Improvement Fund (MEIF), one of the HIRC's key goals is to provide workforce development and training in the area of health data management and analysis.
  - Recognizing the growing demand for health data analytics in Maine, under this MOU, the MHDO and the University of Southern Maine HIRC have combined resources to advance health data training opportunities within the University.
- MHDO's executive director is a member of the National Association of Health Data Organizations (NAHDO) board of directors. The MHDO works closely with this association on national issues that impact data definitions, standards, collection and release of data.
- MHDO is advocating nationally for adoption of a common data layout (CDL) for the submission of claims data to all APCD's. The goal of States adopting a national standard is to streamline the data submission process for the carriers submitting data which should also improve the quality of the data submissions.