Utah Primary Care Spending Report

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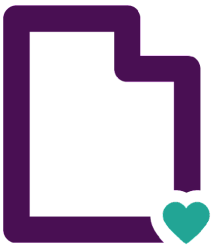

Utah Department of
Health & Human Services
Data, Systems & Evaluation

Utah Department of Health and Human Services

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Health Care Information and Analysis Programs

Health Care Statistics Program

http://stats.health.utah.gov/

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About this report

The Utah Department of Health and Human Services' Health Care Information & Analysis Programs (HIA) produced this Primary Care Spend Report for the Utah Academy of Family Physicians (UAFP). In late 2020, the Utah Department of Health (UDOH) Office of Health Care Statistics (OHCS) was tasked with using the Utah All Payer Claims Database (APCD) to calculate the total amount of spending on primary health care services as a percentage of all health care expenditures, using data from 2018 and 2019 as two separate calculations, while using the Maine Quality Forum's definition of primary care.[1] As part of this project, OHCS was also tasked with providing the UAFP with a description of the methodology used to perform the calculations, a description of the limitations, a breakout of primary care spending across payer types for each year, and a breakout by age cohorts and outcomes data for the aforementioned years, leveraging the Utah Health Care Facility Database.

On July 1, 2022, UDOH merged with the Utah Department of Human Services and is now the Utah Department of Health and Human Services (DHHS). The OHCS was renamed Health Care Information & Analysis Programs.

This report utilized the same methodology to create an updated analysis of primary care spending using data from 2020 and 2021.

About the Data

Utah's All Payer Claims Database

The HIA is responsible for managing the APCD under authority granted to DHHS and the Utah Health Data Committee (HDC).[2] Licensed commercial health insurance carriers and pharmacy benefit managers covering 2,500 or more Utahns are required to submit member eligibility, medical claims, dental claims, and pharmacy claims as well as a health care provider file by administrative rule.[3] In addition to commercial insurance data, the APCD collects data from Medicaid. The HIA contracts with Milliman MedInsight for APCD data collection and processing. Milliman also enhances these data with risk adjusters, cost calculations, quality measures, and patient-provider attribution before delivering the APCD back to the HIA on a semi-annual basis.

Utah Health Care Facility Database

The DHHS and the HDC developed a health care facility encounter database and began collecting inpatient discharge from all licensed hospitals in Utah and the Veterans Administration Medical Center in 1992. In addition to these important data, ambulatory surgery and emergency department encounter data collection was established in 1996. These data represent almost every

[1] https://mhdo.maine.gov/_mqfdocs/MQF%20Primary%20Care%20Spending%20Report_Jan%202020.pdf
[2] Utah Code 26-33a-104, https://le.utah.gov/xcode/Title26/Chapter33A/26-33a-S104.html
[3] Utah Administrative Rule R428-15, https://adminrules.utah.gov/public/rule/R428-15/Current%20Rules?searchText=428-15

hospitalization, emergency department visit, and ambulatory surgery in Utah for any given year regardless of payer.

About the Health Care Information & Analysis Programs

The Health Care Statistics (HCS) program, formerly known as OHCS, implements the goals and directions of the Health Data Committee (HDC) and requirements outlined in U.C.A. §26-33a, Utah Health Data Authority. The program collects, analyzes, and disseminates health care data. These data help people understand cost, quality, access, and value in our health care system and allow users to identify opportunities for *improvement*.

The data sets under the purview of the program include:

- Consumer Assessment of Health Care Providers and Systems (CAHPS) - Annual customer satisfaction surveys relating to health plan performance.
- Healthcare Effectiveness Data and Information Set (HEDIS) - Annual quality measures relating to health plan performance.
- Health Care Facility Data (HFD) - A collection of information about all inpatient, emergency room, and outpatient surgery/diagnostic procedures performed in the state.
- All Payer Claims Data (APCD) - A collection of data about health care paid for by third parties, including insurers, plan administrators, and dental and pharmacy benefits plans.

Utah Health Data Committee

The HDC was created by Utah Code 26-33a.[4] Members are appointed by the governor, confirmed by the senate, and represent various perspectives from industry and the community—public health, purchasers, providers, payers, and patients. By law, members are required to have experience with health data.

HDC Mission Statement (Adopted 1994, Amended 2020)

The mission of the HDC is to support health improvement initiatives through the collection, analysis, and public release of health care information. Through public-private collaboration, the HDC actively participates in the planning, development, implementation, and maintenance of a statewide health data reporting system, which provides accurate and independently validated information regarding health care in the state of Utah. The HDC implements policies to transform data into objective baseline, trend, and performance measurement information, which is made available while preserving patient privacy and confidentiality.

[4] Utah Health Data Authority Act https://le.utah.gov/xcode/Title26/Chapter33A/26-33a.html

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Acknowledgements

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The HIA would like to thank Matt Cottrell and Ryan Christenson for their analytic talent and their work on this report. Special thanks also go to Sydney Groesbeck (Utah Health Workforce Information Center Lead) for contributing the support functions necessary for this project to occur. This second iteration of this statutory report would have not been possible without the guidance, expertise and efforts put forth by those across the Data, Systems and Evaluation Division, including: Kyle Lunt, Rick Little, Lori Savoie, and Mike Martin.

Methodology

Quality Checks

Understanding local insurance practices and trends are vital to ensuring the data used are accurate and represent the population measured. This report uses the same methodology as last year's report for identifying payers (detailed in Appendix C - Payer Methodology) but applies it to 2020 and 2021 claims data.

The claims data included in this report cover approximately 100% of the Children's Health Insurance Population (CHIP) population, 90% of the commercially-insured population, 35% of the Medicaid population, and 92% of the Medicare Part C population in Utah, which makes these results well-representative of the respective underlying populations.

Tabulating Primary Care Spending

The methodology used to compute primary care spending follows the methodology used by the Maine Quality Forum in their 2020 annual report.[5] Beyond use of the Maine Quality Forum methodology, HIA also used the set of data quality checks to ensure inclusion of complete and accurate data.

Provider Specialty

Provider specialty was determined by linking to the National Provider and Payer Enumeration System (NPPES)[6] using NPI and extracting the "primary taxonomy code," which indicates a provider's primary specialty. Since claims in the Utah APCD have both billing and servicing provider NPIs, specialty was assigned using the following logic:

- *Is the listed servicing provider NPI on the claim tied to an individual?*
    - If yes, use the servicing provider primary taxonomy code from NPPES.
    - If no, proceed to the next step.

- *Is the listed billing provider NPI on the claim tied to an individual?*
    - If yes, use the billing provider primary taxonomy code from NPPES.
    - If no, proceed to the next step.

- *Is the listed servicing provider NPI on the claim tied to an organization?*
    - If yes, use the servicing provider primary taxonomy code from NPPES.
    - If no, proceed to the next step.

- *Is the listed billing provider NPI on the claim tied to an organization?*

[5] "Primary Care Spending in the State of Maine", https://mhdo.maine.gov/_mqfdocs/MQF%20Primary%20Care%20Spending%20Report_Jan%202020.pdf
[6] "National Plan and Provider Enumeration System (NPPES)", https://nppes.cms.hhs.go

- If yes, use the billing provider primary taxonomy code from NPPES.
- If no, assign to “unknown primary taxonomy”.

Primary Care Services

Primary care services were measured in two different ways:

- All services performed by primary care providers (broad measure).
- Specific primary care services performed by primary care providers (narrow measure).

Since providers with women’s health specialties sometimes function as primary care providers, primary care services rendered by women’s health specialists were included in the broad measure. The lists of provider specialty taxonomy codes and HCPCS/CPT procedure codes used to define primary care providers and primary care services are located in the appendix of this report.

Limitations

Various approaches have been proposed for calculating primary care spending. The results from this analysis may differ with other states' results due to variations in methods used.

The Utah All Payer Claims Database (APCD) is composed of medical claims extracted from insurer and major government payer systems. Payments to health care providers outside of these claims systems are not represented in the database. Payments not in the database include health care paid by charities, with cash, by smaller governmental programs (such as Indian Health Services), and by other non-insurance arrangements. Furthermore, spending on primary care by insurers and government programs outside of the claims system (e.g., as part of a value-based arrangement) are not included.

The APCD includes a large part of the covered Utah population. However, Medicare Part A and B and complete self-funded employer coverage are not in the APCD. Since approximately a third of Utah Medicare recipients use Medicare Part C in lieu of Part A and B, the results may not be completely representative of the broader Medicare population. Inclusion of self-funded employer data is limited to entities that opted to participate and contribute data to the APCD. As noted in the Methodology section, the data used for this analysis covers a little more than half of the commercially-insured population in Utah.

As outlined in the Methodology section, provider specialty was determined by linking NPIs listed on the claims to NPPES. The accuracy of the listed provider specialty in NPPES was not verified. Because of this, some claims may have been erroneously classified.

Primary Care Spending in Utah by Payer Type

The tables below provide a breakdown of primary care spending in Utah for calendar years 2020 and 2021 by payer type, and utilize both the narrow and broad measures for primary care spending. Across all payer types, CHIP represents the payer with the highest proportion of primary care spending for 2020 (12.3% and 15.2%, narrow and broad measures, respectively) and 2021 (12.3% and 17.1%, narrow and broad measures, respectively). The narrow and broad measures for commercial payers were 6.5% and 8.4% across narrow and broad measures in 2020; 6.2% and 8.2% in 2021. In 2020, Medicaid narrow and broad measures were 6.4% and 8.4% respectively, and 6.2% and 8.2% in 2021. Lastly, Medicare Part C's percentage of primary care spending was 5.0% and 7.9% across narrow and broad measures in 2020, 5.2% and 8.1% in 2021.

Between the two years in this observation, the payer types that experienced an increase in primary care spending were CHIP (+1.9% broad) and Medicare Part C (+0.2% narrow, +0.2% broad). The two payer types whose primary care spending decreased from 2020 to 2021 were commercial (-0.3% narrow, -0.2% broad) and Medicaid (–0.1% narrow). When including all payers in this observation, primary care spending using the narrow measure was 6.3% in 2020 and 6.1% in 2021; 8.4% in 2020 and 8.3% in 2021 using the broad measure.

Table 1: Percentage of spending to primary care by payer type in 2020

Payer Type	Narrow	Broad	Unclassified
CHIP	12.3%	15.2%	0.0%
Commercial	6.5%	8.4%	0.9%
Medicaid	6.4%	8.4%	0.0%
Medicare Part C	5.0%	7.9%	0.6%
Combined	6.3%	8.4%	0.7%

Table 2: Percentage of spending to primary care by payer type in 2021

Payer Type	Narrow	Broad	Unclassified
CHIP	12.3%	17.1%	0.0%
Commercial	6.2%	8.2%	1.0%
Medicaid	6.3%	8.4%	0.0%
Medicare Part C	5.2%	8.1%	0.4%
Combined	6.1%	8.3%	0.8%

Primary Care Spending in Utah by Age Groups

The tables below illustrate primary care spending in Utah by age groups and use narrow and broad measures for primary care spending. Consistent with the higher rates of primary care spending for CHIP on the previous page, the age group with the highest proportion of primary care spending in Utah is for those in the 0-17 age group. Primary care spending for the 0-17 age group was 14.4% and 16.9% in 2020 across narrow and broad measures, 13.5% and 16.3% in 2021. The age groups that experienced a slight increase in primary care spending between 2020 and 2021 were 75-79, 80-84, and 85+; across all other age groups we observe a decrease in both narrow and broad measures between the two years except for 65-74 which stayed the same.

Table 3: Percentage of spending to primary care by age in 2020

Age Group	Narrow	Broad	Unclassified
0-17	14.4%	16.9%	0.5%
18-24	6.0%	8.5%	1.1%
25-34	4.9%	7.0%	0.8%
35-44	5.0%	6.9%	1.0%
45-54	4.5%	6.1%	0.7%
55-64	3.7%	5.1%	0.8%
65-74	4.7%	7.4%	0.7%
75-79	4.4%	7.1%	0.6%
80-84	4.6%	7.5%	0.6%
85+	4.7%	7.6%	0.4%
Combined	6.3%	8.4%	0.7%
Unknown	1.3%	1.9%	0.2%

Table 4: Percentage of spending to primary care by age in 2021

Age Group	Narrow	Broad	Unclassified
0-17	13.5%	16.3%	0.5%
18-24	5.9%	8.4%	1.5%
25-34	4.6%	6.8%	1.1%
35-44	4.8%	6.7%	0.8%
45-54	4.3%	5.9%	0.7%
55-64	3.5%	4.9%	0.6%
65-74	4.7%	7.4%	0.7%
75-79	4.8%	7.7%	0.5%
80-84	5.0%	8.0%	0.3%
85+	5.1%	8.1%	0.3%
Combined	6.1%	8.3%	0.8%

The Unknown Age Group was excluded due to a low sample population compared to previous years; specifically, from 2018 to 2020 there have been between 47,937 and 49,214 claims but in 2021 there were only 924. Furthermore, the amount of Unclassified Spending for the Unknown Age Group jumped from $99,271 in 2020 to $1,632,465 in 2021 while the Total Amount Paid dropped from $42,864,012 in 2020 to $1,746,410 in 2021.

Utah Hospitalizations and Emergency Department Visits

The table below provides counts of hospitalizations and emergency department visits from 2020 and 2021.

Table 5: Hospitalizations and Emergency Department Visits, 2020 and 2021

Type	2020	2021
Total Hospitalizations	273,113	289,369
Emergency Department Visits	659,214	786,590

Conclusion

In conclusion, this report used the Maine Quality Forum methodology to explore what percentage of Utah's total health care expenditure for 2020 and 2021 is attributed to primary care spending. The analysis demonstrates Utah's primary care spending is consistent with primary care spending found in other states, according to the most recent report from Maine.[7] Given that the Maine report is not inclusive of all states, it is uncertain how Utah's primary care spending fares at a national level.

[7] https://www.pcpcc.org/sites/default/files/resources/MQF%20Primary%20Care%20Spending%20Report__Jan%202020.pdf

Appendix A – Primary Care Specialty Taxonomy Codes

Allopathic & Osteopathic Physicians

207Q00000X - Family Medicine Physician
207R00000X - Internal Medicine Physician
207RG0300X - Geriatric Medicine (Internal Medicine) Physician
207V00000X - Obstetrics & Gynecology Physician
207VG0400X - Gynecology Physician
208000000X - Pediatrics Physician
2083P0500X- Preventive Medicine/Occupational Environmental Medicine Physician
208D00000X – General Practice Physician

Ambulatory Health Care Facilities

261QF0400X - Federally-Qualified Health Center (FQHC)
261QP2300X – Primary Care Clinic/Center
261QR1300X - Rural Health Clinic/Center

Nursing Service Providers

163W00000X - Registered Nurse

Other Service Providers

175F00000X – Naturopath 175L00000X – Homeopath

Physician Assistants & Advanced Practice Nursing Providers

363A00000X - Physician Assistant
363AM0700X - Medical Physician Assistant
363L00000X - Nurse Practitioner
363LA2200X - Adult Health Nurse Practitioner
363LF0000X - Family Nurse Practitioner
363LP0200X - Pediatric Nurse Practitioner
363LP2300X - Primary Care Nurse Practitioner
363LW0102X - Women's Health Nurse Practitioner
363LX0001X - Obstetrics & Gynecology Nurse Practitioner
364S00000X - Clinical Nurse Specialist

Appendix B — Primary Care Services

Alcohol and drug rehabilitation/detoxification
99408, 99409

Consultation, evaluation, and preventative care
99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99356, 99357, 99358, 99359, 99360, 99367, 99381, 99382, 99383, 99384, 99385, 99386, 99387, 99391, 99392, 99393, 99394, 99395, 99396, 99397, 99401, 99402, 99403, 99404, 99406, 99407, 99411, 99412, 99420, 99429, 99487, 99490, 99491, 99497, 99498, G0108, S0610, S0612, S0613

Diagnostic physical therapy
96110

Diagnostic procedures, male genital
G0102

HCPCS not classified
G8420, G8427, G8482, G8709, G8711, G8730, G8950, G9903, G9964, G9965, G9966, G9967

Laboratory - Chemistry and Hematology
G0103

Mammography
G0202

Microscopic examination (bacterial smear, culture, toxicology)
G0475, G0476

Non hospital-based care (e.g., home health care, hospice)
99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99339, 99340, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, G0151, G0249

Other diagnostic procedures, female organs
G0101, G0123

Other Laboratory
G0472

Other non-OR therapeutic cardiovascular procedures
G0166

Other therapeutic procedures
96372, 96373, 96374

Pathology
G0145

Prophylactic vaccinations and inoculations
90281, 90287, 90288, 90291, 90296, 90371, 90375, 90376, 90384, 90385, 90386, 90389, 90393, 90396, 90399, 90460, 90461, 90465, 90466, 90467, 90468, 90471, 90472, 90473, 90474, 90476, 90477, 90581, 90585, 90586, 90587, 90620, 90621, 90625, 90630, 90632, 90633, 90634, 90636, 90644, 90645, 90646, 90647, 90648, 90649, 90650, 90651, 90653, 90654, 90655, 90656, 90657, 90658, 90659, 90660, 90661, 90662, 90663, 90664, 90665, 90666, 90667, 90668, 90669, 90670, 90672, 90673, 90674, 90675, 90676, 90680, 90681, 90682, 90685, 90686, 90687, 90688, 90689, 90691, 90697, 90698, 90700, 90701, 90702, 90703, 90704, 90705, 90706, 90707, 90708, 90712, 90713, 90714, 90715, 90716, 90717, 90718, 90719, 90720, 90721, 90723, 90725, 90727, 90732, 90733, 90734, 90735, 90736, 90738, 90739, 90740, 90743, 90744, 90746, 90747, 90748, 90749, 90750, 90756, G0008, G0009

Psychological and psychiatric evaluation and therapy
90785, 96160, 96161, 99354, 99355

Telehealth
98966, 98967, 98968, 98969, 99441, 99442, 99443, 99444, 99495, 99496

Appendix C — Payer Methodology

In 2020 data from the Utah All Payer Claims Database (APCD) covering 2018 and 2019 were assessed at the payer level to evaluate suitability for inclusion in the primary care spending analysis. Payers that did not meet minimum quality levels were excluded from analysis. The current report uses the same payers but uses claim data from 2020 and 2021.

The following quality checks were used as a guideline to determine inclusion:

Per Member Per Month (PMPM)
Are the payers' average PMPMs within historical expected ranges for the relevant line of business?

- Commercial PMPM between $250–$350.[8]
- Medicare between $500–$700.
- Medicaid/CHIP between $150–$250.

Financial Field Sums
Are the payers' financial field sums within historical expected ranges across claim types (inpatient, outpatient, and professional)?

- Share of spending on commercial inpatient claims between 21%-27%.
- Share of spending on commercial outpatient claims between 31%– 42%.[9]
- Share of spending on commercial professional claims between 32%–40%.
- Share of spending on Medicaid and Medicare inpatient claims between 33%–42%.
- Share of spending on Medicaid and Medicare outpatient claims between 22%–27%.
- Share of spending on Medicaid and Medicare professional claims between 22%–33%.

HCPCS/CPT Codes
Do the payers' HCPCS/CPT code distributions follow expectations for completeness?

- 50%–60% of commercial HCPCS/CPT codes should start with 9.
- 15%–20% of commercial HCPCS/CPT codes should start with 8.[10]
- 6%–8% of commercial HCPCS/CPT codes should start with 7.
- 45%–55% of Medicaid HCPCS/CPT codes should start with 9.
- 8%–15% of Medicaid HCPCS/CPT codes should start with 8.
- 6%–8% of Medicaid HCPCS/CPT codes should start with 7.
- 35%–50% of Medicare HCPCS/CPT codes should start with 9.
- 15%–25% of Medicare HCPCS/CPT codes should start with 8.[11]
- 6%–9% of Medicare HCPCS/CPT codes should start with 7.
- Fewer than 1% of all insurance types HCPCS/CPT codes should be missing.

[8] One commercial plan was included despite having an average PMPM around $400.
[9] One commercial plan was included despite having outpatient spending above 42%.
[10] Two commercial plans were included despite falling slightly out of this range.
[11] One Medicare plan was included despite falling below this range.

National Provider Identifiers

Are the payers' billing and servicing provider NPIs complete and valid?

- No more than 2.5% of the claims should have missing or invalid NPIs.

Ultimately, the following payers were included in the analysis:

- Aetna (Commercial, Medicare Part C)
- Cigna (Commercial)
- Humana (Medicare Part C)
- United Healthcare (Commercial, Medicare Part C) -WellPoint (Commercial)
- Molina (CHIP, Medicaid)
- PEHP (Commercial)
- Regence (Commercial)
- Select Health (Commercial, CHIP, Medicaid)
- EMI (Commercial)
- University of Utah Healthy U (Medicaid)