Maine Quality Forum
MEASURING TO IMPROVE

Public Law, Chapter 244

2021 Annual Report:

Primary Care Spending

Submitted to: Senator Sanborn, Representative Tepler and the Joint Standing Committee on Health Coverage, Insurance and Financial Services
Commissioner Lambrew, Department of Health and Human Services

CC: Colleen McCarthy Reid, OPLA Analyst
Bethany Beausang, Senior Policy Advisor, Office of Governor Mills
MQF Primary Care Advisory Committee

Submitted by: Karynlee Harrington, Director Maine Quality Forum

Date: February 26, 2021

Public Law, Chapter 244, requires the Maine Quality Forum to develop an annual report on primary care spending using claims data from the Maine Health Data Organization. Please find attached a copy of our second annual report.

Under contract with the Maine Quality Forum (MQF), the University of Southern Maine, Muskie School of Public Service, Cutler Institute, with consultation from Judy Loren, provided MQF technical support in the preparation of this report.

Table of Contents

Executive Summary 1

Requirement and Overview of Process 2

- Public Law Chapter 244 2
- Overview of Process and Changes from First Annual Report 2
- Report Overview 3

Environmental Scan and Consultation with States and Other National Organizations 3

- Summary of Prior Report Findings and Updated National and State Activities 3
- NESCSO Regional Multi-state Primary Care Spending report 3
- The Primary Care Collaborative 2020 Evidence Report 4

Analysis of Primary Care Spending in Maine Year 2 Annual Report 6

- Defining Primary Care 6
- Methods: Revisions for Year 2 Report 7
- Summary of Findings 8
- Conclusion and Future Considerations 12

Attachments: Supporting Documentation 14

Attachment A – Public Law Chapter 244 15

Attachment B – Advisory Committee Members 17

Attachment C – Public Law Ch. 244 Advisory Committee Meeting Summary Notes 18

Attachment D – Methodology for Defining Primary Care 26

Attachment E – Comparison of Maine Results from MQF, NESCSO, and Primary Care Collaborative Reports 35

Attachment F – Glossary 36

Attachment G – Endnotes 38

Executive Summary

Public Law Chapter 244, *An Act to Establish Transparency in Primary Care Health Care Spending*, requires the Maine Quality Forum to submit an annual report on primary care spending in Maine to the Joint Standing Committee on Health Coverage, Insurance and Financial Services and the Commissioner of the Department of Health and Human Services.

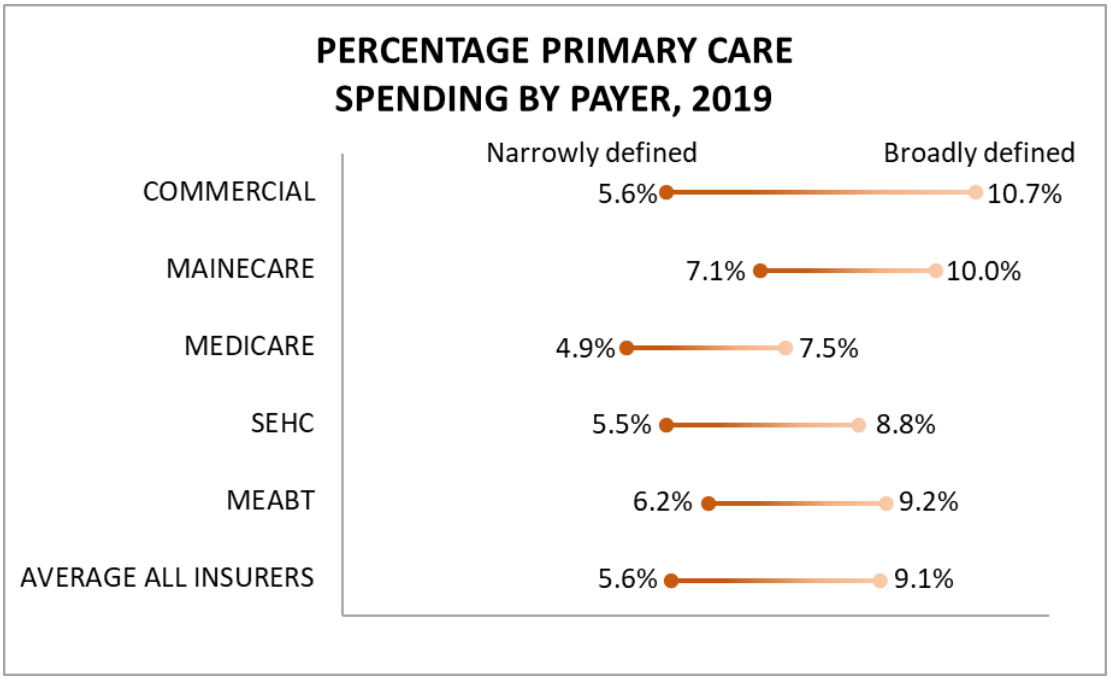
This second annual primary care spending report:

- Updates the environmental scan of other regional and national efforts to quantify primary care spending,
- Summarizes modifications we have made to our definitions of what is considered primary care in Maine to align with those efforts, and
- Presents the results of the analyses of Maine primary care spending in calendar year 2019 using the Maine Health Data Organizations All-Payer Claims Data.

Key Findings:

- The environmental scan of national primary care spending reports and Maine's participation in the regional New England States Consortium Systems Organization (NESCSO) effort revealed that modifications to narrow and broad definitions of primary care produce similar estimates of primary care spending as reported in MQF's first annual report.
- Primary care spending in Maine, based on 2019 claims data, ranged from 5.6% (narrow definition of primary care) to 9.1% (broad definition of primary care), overall across all payers (see Chart 1). While varying somewhat within payer, estimated primary care as a percent of total healthcare spending by both broad and narrow definition in Maine is relatively constant across the three-year period.

Chart 1. Percentage of Primary Care Spending by Payer, 2019



SEHC = State Employee Health Commission
MEABT = Maine Education Association Benefits Trust

Requirement and Overview of Process

Public Law Chapter 244

In 2019, the Maine legislature passed Public Law Chapter 244, *An Act to Establish Transparency in Primary Care Health Care Spending* requiring the Maine Quality Forum (MQF) to submit an annual report on primary care spending to the Department of Health and Human Services and the Joint Committee of Health Coverage, Insurance and Financial Services of the Maine State legislature.[1]

The legislation requires that the annual report include the percentage paid for primary care of respective total expenditures by commercial insurers, the MaineCare program, Medicare, the organization that administers the state employee benefits, the Maine Education Association Benefits Trust (MEABT) and the average paid across payers based on claims data reported to the Maine Health Data Organization (MHDO).

The legislation defines primary care as "regular check-ups, wellness and general health care provided by a provider with whom a patient has initial contact for a health issue, not including an urgent care or emergency health issue, and by whom a patient may be referred to a specialist."

Lastly, Public Law Chapter 244 requires the Maine Quality Forum to consult with other state and national agencies and organizations to determine the best practices for reporting spending on primary care services by insurers.

Overview of Process and Changes from First Annual Report[i]

During the development of the MQF's first annual primary care spending report, the MQF's Primary Care Advisory Committee encouraged the MQF to align its methodology, including definitions and how to measure the amount of primary care spending in Maine with regional and or national efforts as appropriate. In the spring of 2020 MQF joined a multi-state project led by the New England States Consortium Systems Organization (NESCSO). The goal of the NESCSO project was to develop a uniform methodology to report on primary care spending across the New England states using each state's all payer claims data (APCD) and non-claims payment data when available. The output of this work helped inform the methodology for MQF's year two report.

The MQF convened its Primary Care Advisory Committee in the fall of 2020 where we discussed the differences in methodology between the MQF's first annual report and the NESCSO project. The committee agreed to a few revisions in how MQF defines primary care in the second annual report. The committee also discussed several other topics including:

- Assessing variation in primary care spending by different demographic subgroups,
- Including patient out-of-pocket primary care costs and non-claims based payments in estimates,
- Continuing to monitor efforts to standardize primary care spending definitions and align with other efforts,
- Investigating how other states have changed primary care payment policies as a result of measuring primary care spending, and
- Acknowledging the impact of the pandemic on primary care and future reporting to include telehealth.

A copy of the Advisory Committee list of members and meeting agenda with summary notes can be found in *Attachments B and C.*

[i] https://mhdo.maine.gov/_mqfdocs/MQF%20Primary%20Care%20Spending%20Report__Jan%202020.pdf

Report Overview

This second annual report documents modifications to the year one process used to define and quantify primary care spending in Maine; and presents the results of the analyses of Maine primary care spending in calendar years 2017-2019 using MHDO's All-Payer Claims Data (APCD).

Environmental Scan and Consultation with States and Other National Organizations

Summary of Prior Report Findings and Updated National and State Activities

An extensive review was conducted for the first annual report of efforts underway nationally and in other states to measure primary care investment. Based on that review, we reported that there was no standardized definition of primary care (numerator) or total cost of care (denominator) to determine primary care spending estimates.[2]

Definitions used in other state and national reports varied in terms of:

- Provider types identified as primary care providers (e.g. OB/GYNs, Behavioral health included in some, excluded from others),
- Services included as primary care (e.g., all services or only specific procedures/ HCPCS codes)
- 'Spending' definitions (insurer paid amount vs total allowed amount including the consumer cost-share)
- Inclusion of non-claims payments in states that required reporting of non-claims data.
- Definitions of total medical expenditures (e.g., only medical spending for inpatient and outpatient medical services vs including prescription drugs).

In 2020, for the second annual report, we continued to monitor national efforts to measure primary care spending to improve Maine's definitions and to investigate how states are using primary care spending targets to inform policy change. We participated in national meetings and regional efforts related to improving methods for measuring primary care spending. We also reviewed new analyses and methods released since our last report measuring primary care investment to assess how their definitions compared with our methodology to inform any changes for the second report.

NESCSO Regional Multi-state Primary Care Spending report[ii]

To support greater alignment of our methods with other states and to allow benchmarking across states, MQF participated in a multi-state regional effort to measure primary care spending using APCD data in six New England states. With support from the Milbank Memorial Fund, the New England States Consortium Systems Organization (NESCSO) collaborated with Maine, Massachusetts, Vermont, Rhode Island, New Hampshire, and Connecticut to develop a multi-state report on primary care spending across all payers using a consensus definition to support cross-state comparison of primary care spending levels.[3]

Similar to Maine's first annual report, NESCSO's primary care spending definitions built upon methodologies outlined in previous studies including the Milbank Bailit[4], PCC reports and other state primary care reports, with state-specific input from participating states. NESCSO's primary care definitions are generally similar but methods differed from those used for MQF's first annual report.

Key differences between NESCSO and Maine's methods include:

- Use of allowed amounts rather than paid amounts in APCD data.

[ii] https://nescso.org/wp-content/uploads/2021/01/NESCSO-New-England-States%E2%80%99-All-Payer-Report-on-Primary-Care-Payments-2020-12-22.pdf

- Taxonomy codes used to define primary care providers (e.g., inclusion or exclusion of OB/GYN).
- Shorter list of primary care services and HCPCS codes used in narrow definition.
- Results for Medicare Advantage and Medicare FFS shown separately rather than combining them.
- Secondary payer amounts were excluded, and all Medicaid amounts for patients over 65 were excluded.
- Presented estimates across all states and payers by age.
- Included non-claims payment data for states that required reporting.

Key Finding:

Despite these differences in definitions and methods, Maine's estimates generated for the NESCSO report were very similar to our estimates in MQF's first annual report (See Table 1, NESCSO definitions 1 and 2 and MQF's narrow and broad definition for 2018). The final report for results across states was released January 2021.

Table 1. Findings NESCSO and Maine: Primary Care as % of Total Medical $ (Incurred CY 2018)

Primary Payer Type	NESCSO DEFINITIONS – MAINE %		RATES FROM MQF's 2020 REPORT	
	Primary Care Expenditures (Definition 1)	Primary Care Expenditures (Definition 2)	NARROW	BROAD
Commercial	5.1%	10.8%	5.7%	10.5%
Medicaid FFS	7.8%	10.8%	6.8%	9.6%
Medicare Advantage	6.1%	10.7%		
Medicare FFS	4.2%	6.4%	4.7%*	7.1%*

*Includes Medicare Advantage

- **The Primary Care Collaborative 2020 Evidence Report**[iii]

In December 2020, the Primary Care Collaborative (PCC) also released a report[5] comparing private insurance primary care spending using a standardized definition across states using FAIR Health 2019 commercial claims data.

Key differences between PCC's and MQF's APCD analyses in 2020 include:

- Different dataset analyzed. PCC used FAIR Health database and combined commercial and Medicare Advantage data of large insurers and self-insured plans.[iv]
- PCC included only patients with 12 months continuous coverage; MQF included all insurer costs regardless of how long the patient was eligible.
- PCC included imputed pharmacy costs in the medical spending total. MQF included only medical costs.
- PCC had to impute state residence. MQF data include information about state of residence.
- PCC defined narrow/broad definitions by which types of provider they deemed as providing primary care.
    - Narrow – only includes Family Medicine, Internal Medicine, Pediatrics and General practitioners. Includes all services they provide, does not limit to a defined set of services

[iii] https://www.pcpcc.org/sites/default/files/resources/PCC_Primary_Care_Spending_2020.pdf

[iv] While the PCC report does not specify the total # of commercial Maine claims included, it is likely lower than the number of claims captured in Maine APCD.

- Broad - includes provider types above and adds other provider types including NPs, PAs, Geriatric medicine, Adolescent medicine, and Gynecology. Includes all services they provide, does not limit to a defined set of services.

- PCC adjusted state primary care spending percentages by age category to reflect differences in state population characteristics.

Key Finding:

Despite using different data sources and methods, PCC Maine commercial rates in 2019 for both narrow and broad definition of primary care percentage of total expenditures are comparable to MQF's analyses in the 2020 report and NESCSO's estimates (See *Attachment E*). The PCC report also includes an Appendix comparing their estimates with those from state All-Payer Claims Databases (APCDs) and reasons for potential differences. The PCC report also included an update of state policy changes to increase primary care investment.

State Policies to Support Greater Investment in Primary Care

As of December 2020, five states are now measuring and setting targets for primary care spending as a percent of commercial and/or Medicaid total medical spending, or have announced an intent to do so. The target percent of primary care spending of total health care spending varies by state ranging from 10-12%.[5]

State policies also vary in terms of specifying how primary care investments were to be increased and whether they were incorporated into broader cost containment initiatives. For example, Rhode Island's initiative in 2010 was part of a larger affordability standards law to reduce growth in commercial sector health spending through price controls and annual price inflation caps, transition to DRG-based hospital payments, in addition to increasing the share of spending on primary care services by 1 percentage point per year without raising consumer premiums. Rhode Island specified that increased investments be in the form of direct PCMH type payments to practices in support of care management and implementing electronic health records and a statewide health information exchange for care coordination and quality tracking, not an increase in fee-for-service (FFS) payments and required insurers to report non-claims payments to the state.

In contrast, Washington is contractually requiring its Medicaid MCOs and plans serving school employees to report on primary care spending and has a minimum payment requirement on commercial plans participating in the Cascade Public Option plan to pay 135% of Medicare for primary care services. Massachusetts also introduced legislation in advance of the 2020 legislative session that would measure and set targets for primary care and behavioral health spending percentages, but the effort has been slowed by the need to focus on pandemic response. Several of these states have issued or are planning to issue reports measuring primary care spending in the context of broader healthcare cost benchmarking efforts (VT, WA, OR, CT, DE).

Evidence about how primary care spending targets or greater primary care investment improve outcomes and impact total cost of care is still evolving. There is substantial evidence that investment in advanced primary care models such as patient-centered medical homes decreases utilization and total costs.[6-11] Other studies have also suggested greater investment in Medicare primary care providers could lead to a reduction in overall Medicare costs.[12,13]

Rhode Island's broad affordability standards on commercial payers that included increased PCMH primary care payments and other hospital price controls resulted in increases in primary care spending and decreases in total spending after implementation.[14-16] However, a recent study concluded these decreases in total spending were primarily due to the price control measures not the increased investment in primary care spending.[14]

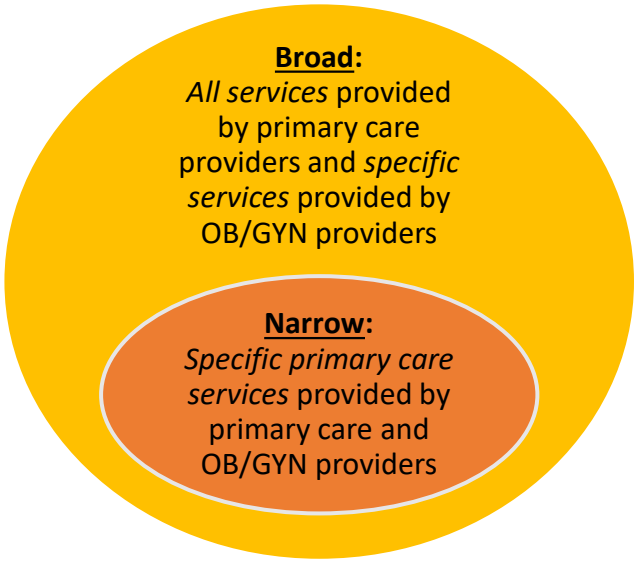
Analysis of Primary Care Spending in Maine Year 2 Annual Report

Defining Primary Care

As with the first annual report, we show a range of estimates of primary care spending in Maine using a broad and narrow definition of primary care as defined below. The year two report has revised the definition of primary care to include two additional taxonomy codes (see *Attachment D*).

Broad definition (All services provided by primary care providers): The Broad definition of Primary care includes all services provided by health care professionals that have a primary care provider type (i.e., with a primary care-related specialty or taxonomy code) with the exception of services delivered in an inpatient or emergency department setting.[v] [vi] OB/GYN providers were included as primary care for specific services only.[vii]

Narrow definition (Specific primary care services provided by primary care providers): The Narrow definition of primary care only includes a specific set of services provided by health care professionals that have a primary care provider type (i.e. with a primary care-related specialty or taxonomy code), again with the exception of those services delivered in an inpatient or emergency department setting.



[v] As required by definition established in PL 244. See *Attachment A*.

[vi] Taxonomy codes are administrative codes set for identifying the provider type and area of specialization for health care providers. Each taxonomy code is a unique alphanumeric code that enables providers to identify their specialty at the claim level. See *Attachment D* for the full list of provider specialty taxonomy codes used as Primary Care.

[vii] A key difference between NESCSO and Maine's primary care definition was that NESCSO did not include OB/GYN providers providing primary care services, while 4 Maine insurers included OB/GYN providers in their definition of primary care providers in the 2019 Maine insurer survey so we continued to include them in Maine's estimates.

Who are primary care providers?

For this report, primary care providers are defined the same for both broad and narrow definitions, as provider types specializing in primary care for last year's report and adding subspecialty codes for family medicines in geriatric and adolescent medicine as used in the NESCO report.[x] These include:

What are primary care services?

For the narrow definition of primary care and for the broad definition for OB/GYN providers, the list of specific

- Family medicine (including subspecialties of Geriatric, Adult, and Adolescent)
- Internal medicine
- General medicine
- Pediatrics (including adolescent medicine)
- Geriatric medicine
- Naturopathic/homeopathic medicine
- Physician assistants[viii]
- Nurse practitioners (family, pediatrics, primary care, general medicine, adult health, gerontology)
- Federally Qualified Health Centers (FQHCs)
- Rural health centers
- Preventive medicine
- Obstetrics and gynecology (includes NP)[ix]

procedure codes are identical to the list from last year's report based on studies in other states and results from the state Insurer questionnaire, and input from the Advisory Committee.

- Office visits (includes Medicare/Medicaid clinic visits)
- Home visits
- Preventive Visits
- Immunizations and injections
- Transitional Care Management
- Chronic Care Management
- Telehealth Services

A complete list of primary care provider taxonomy codes and primary care specific service procedure codes used to identify the payments to primary care providers can be found in *Attachment D.*

▪ Methods: Revisions for Year 2 Report

For the year two report we analyzed one additional year of data from MHDO's claims data, calendar year 2019 to estimate the percentage paid for primary care of total medical expenditures by commercial insurers, Medicaid, Medicare, the Maine Education Association Benefit Trust (MEABT) and the State Employee Health Commission (SEHC). We also conducted separate analyses of primary care spending by age, gender and, for commercial insurers, the total allowed amount to estimate the percent of primary care spending paid by consumers.

Non-Claims Based Payments:

[viii] Some physician assistants working with specialists may be included in the primary care estimate because they could not be separately identified in claims.

[ix] While some other states also include behavioral health and psychiatry as part of primary care, no Maine insurer included them in their definition, and based on guidance from the Advisory Committee, behavioral health providers were excluded.

[x] Includes all primary care providers regardless of subspecialty, due to limitations of subspecialty provider reporting methods within claims.

While some states are collecting non-claims information, there is currently no standardized approach for how to collect this data. Non-claims based payments are not included in MQF's year two report; however, MHDO has authorized the development of a rule for collecting non-claims payments, which, once adopted could be included in future reports. MHDO is also currently working with the National Association of Health Data Organizations and the APCD Council to encourage development of a national standard on how to define and collect non-claims based payments.

Summary of Findings

- As shown in Table 2, on average Maine insurers paid approximately 5.6% (narrow definition) to 9.1% (broad definition) of total medical expenditures on primary care.
- Differences in how primary care is defined changes the estimates of percent primary care spending of total medical expenditures. When using the broad definition (including all services provided by primary care providers), the percentages of primary care spending are approximately two thirds higher on average across payers compared to the narrow definition (only counting payments for specific services deemed as primary care by those primary care providers).
- The average percentage of total expenditures spent on primary care by all category of insurers remained relatively constant over the 3-year period for both broad and narrow definitions of primary care.
- Primary care spending as a percent of total medical expenditures by both narrow and broad definition also varies by payer type.[xi] While somewhat differing based on narrow and broad definitions, commercial payers and MaineCare consistently have higher rates of primary care spending than Medicare potentially due to the differences in the populations they serve as discussed further below.
- The differences in narrow and broad definitions on the estimated primary care percentage of total spending are even more pronounced for some payer groups, with commercial insurers broad definition being nearly 90% higher than narrow.
- Relative to commercial insurers generally, the SEHC has comparable or slightly lower rates of primary care spending rates using either the broad or narrow definition, while the Maine Education Association Benefits Trust (MEABT) has comparable or slightly higher or lower primary care spending rates depending on the definition.
- Examples of services provided by primary care providers and paid for by insurers that were included in the broad definition but were not included in the narrow and that accounted for the greatest amount in terms of primary care services paid for include family planning services, diagnostic imaging, laboratory tests (e.g., HbA1Cs), and injectable drugs, among other services.

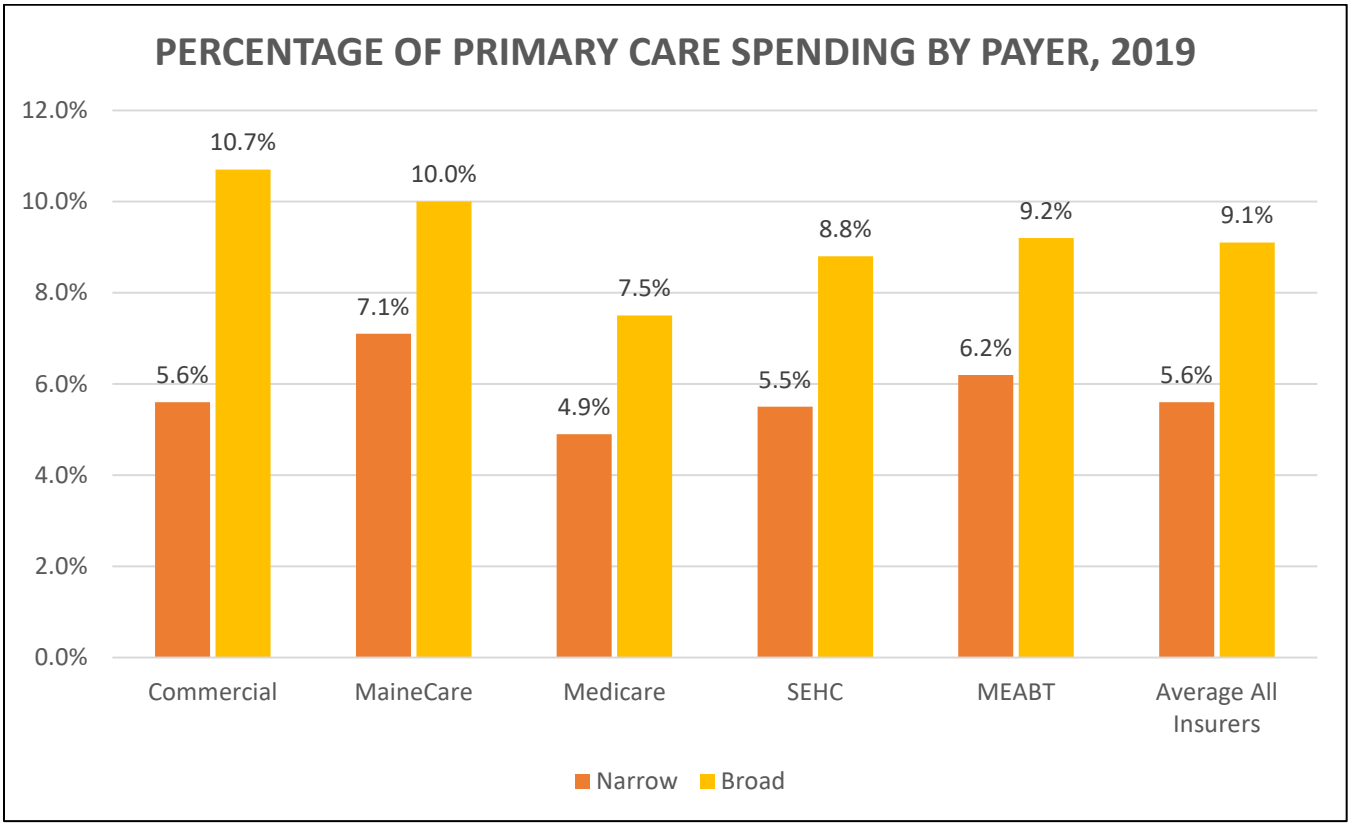
[xi] PCC report reported declines of -.59% narrow and -.76% broad among Maine commercial insurers during this same period, which could be due to differences in how they defined primary care. See *Attachment E* for key differences in definitions.

Table 2. Percentage of Total Medical Expenditures Spent on Primary Care by Narrow and Broad Definitions

Primary Care Definition: (Narrow & Broad)	% Primary Care Spending by Payer					
	2017		2018		2019	
	Narrow	Broad	Narrow	Broad	Narrow	Broad
Commercial	6.0%	11.0%	5.7%	10.9%	5.6%	10.7%
MaineCare	7.2%	10.1%	7.0%	9.8%	7.1%	10.0%
Medicare	4.8%	7.0%	4.8%	7.2%	4.9%	7.5%
SEHC*	5.6%	9.7%	5.7%	8.7%	5.5%	8.8%
MEABT*	6.4%	11.1%	6.3%	9.3%	6.2%	9.2%
Total All Insurers	5.7%	8.9%	5.5%	8.9%	5.6%	9.1%

SEHC = State Employee Health Commission
MEABT = Maine Education Association Benefits Trust
* SEHC and MEABT are reported separately as required by PL Chapter 244, but are a subset of commercially insured.

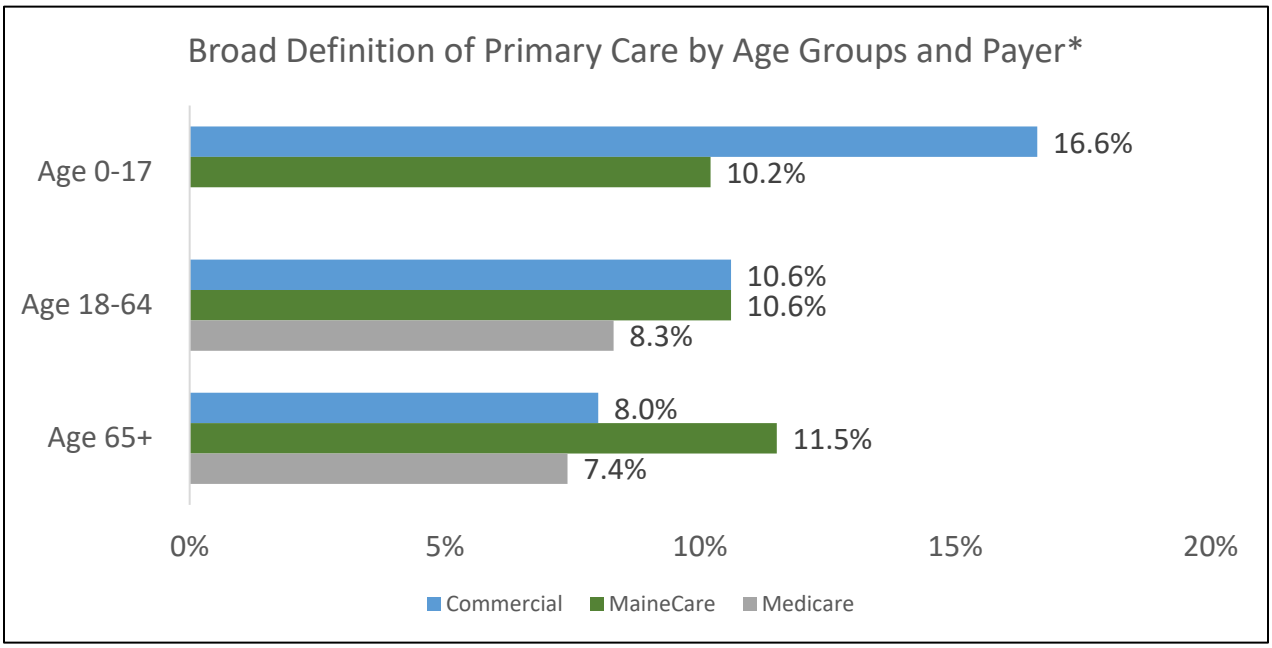
Chart 2. Percentage of Primary Care Spending by Payer, 2019



SEHC = State Employee Health Plan
MEABT = Maine Education Association Benefits Trust

In an effort to understand some of these differences among payers, and based on recommendations in last year's report, Chart 3 shows the percent of primary care spending by payer in 2019 within specific age groups (children (age 0-17), adults (age 18-64) and older adults (age 65+)).

Chart 3. Primary Care Percentage of Total Medical Expenditures by Age Group and Payer



*Medicare numbers for Age 0-17 were too small for reliable reporting.

Consistent with age-based rates reported across New England states by NESCSO and by PCC for commercial insured persons nationally, on average across all Maine payers reported in the MHDO APCD, children under 18 insured tend to have a larger percentage of their total medical expenditures spent on primary care than older adults. Similar to NESCSO's results, this was not necessarily true for specific payers depending on the definition. For example, while commercially insured children had the highest percentage of total medical expenditures spent on primary care spending than commercially insured adults age 18-64 and age 65+, MaineCare adults age 65+ had the highest percentage of their total medical expenditures spent on primary care.

In addition to the age-based analysis, we looked at rates of primary care use by gender and found that women tend to have slightly higher primary care spending percentages than men, particularly for MaineCare. This finding is consistent with research that has found lower primary care services among men.[17]

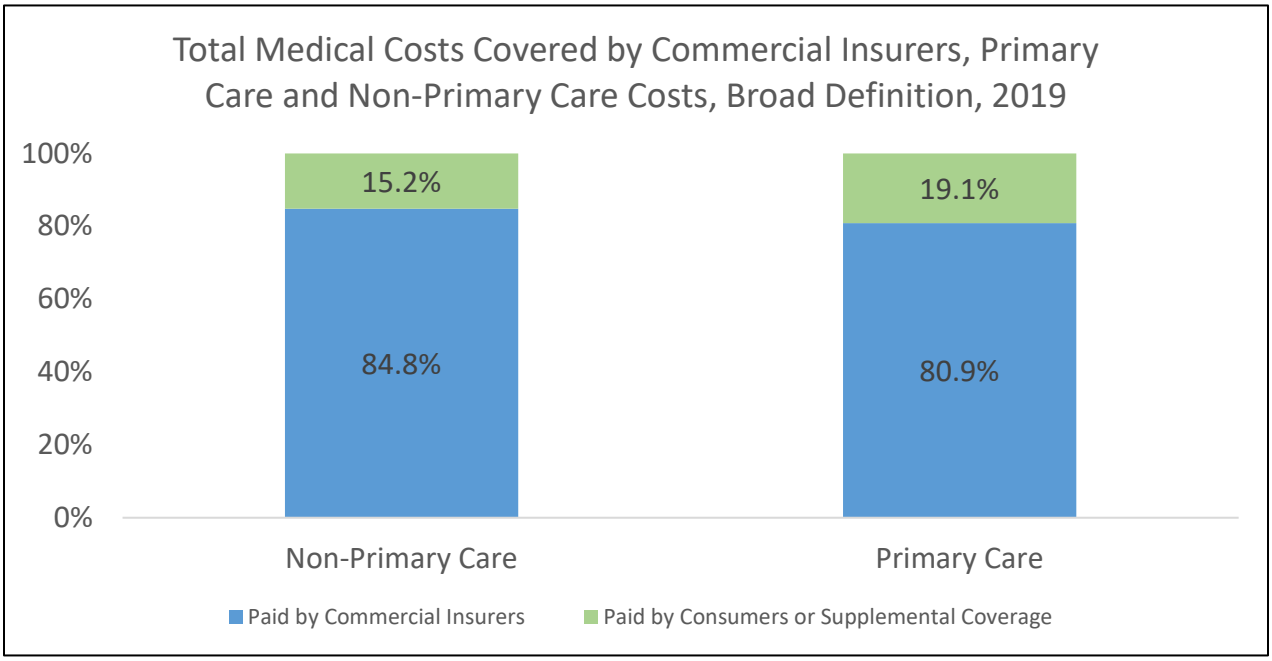
Based on recommendations from the MQF's Primary Care Advisory Committee we also investigated whether and how to include consumer cost sharing in the estimates of primary care spending.

Understanding consumer cost-sharing is relevant in considering potential state policies to increase the percentage of healthcare spent on primary care as some policies could have the negative impact of increasing consumer costs thereby discouraging use of primary care services. The challenge for measuring consumer cost sharing in all payer claims data is that the amount that the primary claims processor assigns to the consumer may be paid by additional benefits the consumer has, such as a supplemental plan or membership in two primary plans. This kind of overlap is likely to be particularly large for the population covered by both Medicare and Medicaid (MaineCare), also known as the dually eligible, where Medicaid covers most or all of the members Medicare out of pocket expenses. As entered in the APCD, the primary claim shows any amount owed to the provider that the plan does not cover as a consumer expense. Secondary processing may show those same amounts paid by another plan on a separate claim making it difficult to isolate what payments are actually paid

by consumers. Since Medicare and Medicaid eligible beneficiaries are more likely to have supplemental policies, we focused our consumer cost-sharing for commercial claims only.

Chart 4 shows how costs for primary and non-primary care medical expenditures are shared between commercial plans and the consumer or the consumer's additional coverage. In 2019, commercial insurance plans covered approximately 81% of the cost of primary care, leaving 19% to be paid out-of-pocket by consumers or their supplemental coverage. For all other non-primary care medical care expenses, insurers paid 85% of costs, while consumers or their supplemental coverage paid for 15%. Reasons for higher consumer cost sharing for primary care services require further investigation by plan type but may be related to the increasing share of Maine's privately insured population being enrolled in in high deductible plans (HDPs).[18] With the exception of cost-sharing for primary care preventive services, which the federal Affordable Care Act (ACA) eliminated, consumers assume the costs for all services, including primary and specialty care, paying out of pocket until their deductibles are met. In areas where HDPs are the dominant form of coverage, the average primary care spend (as reflected by services paid for by insurance) may be skewed/biased downward. In addition, patients in high-deductible plans who are healthier that use primary care almost exclusively pay for much of that care out of pocket during their deductible period. Patients who require more specialty services tend to use up their deductible, so the plan picks up more of the cost of non-primary care services.

Chart 4. Percentage of Total Medical Costs Covered by Commercial Plans, Primary Care and Non-Primary Care Expenditures



Conclusion and Future Considerations

This is the MQF's second Primary Care Spending report on the estimated percentage of primary care spending in Maine using both a narrow and broad definition of primary care. These definitions are consistent with the definition in P.L. 244 and generally align with best practices nationally.

Similar to the previous report estimates of primary care spending can vary depending on whether you use a broad or narrow definition. If you limit the definition to only include a subset of services provided by primary care providers, it results in much lower estimates than when you include all services provided by those providers. This was also true for national and regional studies that used slightly different narrow and broad definitions of primary care, which produced very similar estimates of primary care spending in Maine. To the extent that future state policies are designed to affect this measure, it will be important to refine the definition used to capture the intended effect. For example, if the policy is intended to increase investment in primary care providers in general and not limited to preventive services or other specific services they provide, it would not be appropriate to confine the definition of primary care to a small set of services they deliver (i.e. the narrow definition).

As noted in last year's report, primary care utilization and costs are heavily influenced by the population's needs and providers' standards for care for meeting those needs (e.g., more frequent well-child visits required for young children). As shown in this year's report, the age and gender breakdowns show variation in primary care spending rates. This further confirms that characteristics of the population matter in interpreting results both across states and within state across payers.

The MQF Primary Care Advisory Committee has suggested that future reports should consider including breakdowns by health risk, and geography (e.g., rural/urban) or control for these factors, to better explain variation in percentage primary care spending by payer. Future reports may also consider including utilization, per unit costs or per member per month as other explanatory variables for variation in primary care spending. Minnesota's analyses of primary care investment examined both spending and utilization. They found primary care spending as a percentage of total health care spending was lower among the publicly insured than privately insured and particularly for older and sicker members. However, the mean number of PCP visits for these groups were much higher.[19] Thus the lower percentage of primary care spending for these groups was more a function of per unit costs and use of primary care and other non-primary care specialty services they received than related to lower use of primary care services in this population. Future reports may also include absolute dollar amounts by primary care specialty area.

The Advisory Committee also suggested that assessing variation by race/ethnicity and social determinants of health (e.g., poverty) would be valuable to include in future reports if data are available. In January 2021, CMS issued guidance to states about addressing social determinants of health to improve outcomes, reduce health disparities, and lower overall costs.[20] As there is currently no standardized approach for conducting social risk adjustment analyses, further work would be needed to pursue.

Other considerations for future reporting raised by the Advisory Committee include the need to understand how increased investment in primary care affects the total cost of care. The evidence of how primary care spending targets improve the quality, outcomes, and cost of care is still limited.[7] Some studies have found associations between increased primary care primary care spending and decreased utilization of other higher-cost services (e.g. reduced emergency department visits, total hospitalizations, and hospitalizations for ambulatory care-sensitive conditions),[9] but these do not show causality. While states who have invested in transforming the delivery of primary care have seen cost savings,[8,11] the study of Rhode Island's affordability standards that included primary care spending targets concluded that reductions in total costs were more a function of simultaneous price controls imposed on hospitals than on increased primary care investment. Currently there is

no clear standard about what should be the percent of spending on primary care. This report does not analyze the total cost of care but this may be a consideration in the future.

Finally, it is important to acknowledge that although this report does not reflect the impact of COVID-19, we are tracking national and other states that are measuring the impact of COVID-19's on primary care in anticipation of future reporting on primary care spending in Maine.

Early evidence suggests that the impact of public health emergency measures and the temporary office closures for non-emergent care significantly reduced in-person visits for many outpatient providers including primary care providers. One national study of over 31 billion private insurance claims, reported declines in outpatient pediatric primary care of 52-58% in visits and 32-35% in revenues in March and April of 2020 compared to the same period in 2019. Adult primary care saw even greater declines of 60-68% drop in visits and 47-54% drop in revenues in March/April. Decreases varied by age with little change in preventive visits for pediatric patients 0-4, and larger declines for older children and adults.[21] More recent studies have shown that primary care utilization has increased since that early plummet in visits, but has not fully recovered to pre-pandemic levels.[22]

The adoption of COVID-19 emergency telehealth reimbursement changes nationally and in Maine expanded telehealth coverage across payers in the state.[23] These new telehealth codes will be considered and added to next year's primary care spending report to assess the impact of those policies on primary care utilization and spending. A study of rural and urban use of telehealth in Maine using MHDO's claims data pre-pandemic revealed that even with comprehensive telehealth policies, telehealth use was very low (0.28% in 2016) in both rural and urban areas of Maine for all services including primary care.[24]

Early evidence from national studies of telehealth use during the pandemic suggest that telehealth increased exponentially particularly in the Spring/early summer of 2020. While telehealth helped offset the level of the decline in outpatient visits early in the pandemic, it did not completely return them to normal. One report found one third of practices, particularly smaller practices, never used telehealth.[9] However, other reports of Medicaid/CHIP telehealth use showed Maine providers as being among the highest users of telehealth in the first two quarters of 2020.[25]

The significant shifts in primary care visits during 2020 will be reflected in future analyses in Maine. It is also likely to accelerate movement toward value based payment models to support primary care rather than fee-for-service (FFS) models that rely on visits, making the need for developing a mechanism for reporting non-claims payments even more important in upcoming years.

Attachments: Supporting Documentation

A. Public Law Chapter 244

B. Advisory Committee Members

C. Public Law Ch. 244 Advisory Committee Meeting Summary Notes

D. Methodology for Estimating Primary Care Spending Percentage

E. Comparison of Maine Results from MQF, NESCSO, and Primary Care Collaborative Reports

F. Glossary

G. Endnotes

Attachment A – Public Law Chapter 244

APPROVED	CHAPTER
JUNE 7, 2019	244
BY GOVERNOR	PUBLIC LAW

STATE OF MAINE

IN THE YEAR OF OUR LORD

TWO THOUSAND NINETEEN

S.P. 421 - L.D. 1353

An Act To Establish Transparency in Primary Health Care Spending

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 24-A MRSA §6903, sub-§13-B is enacted to read:

13-B. **Primary care.** "Primary care" means regular check-ups, wellness and general health care provided by a provider with whom a patient has initial contact for a health issue, not including an urgent care or emergency health issue, and by whom the patient may be referred to a specialist.

Sec. 2. 24-A MRSA §6951, sub-§12 is enacted to read:

12. **Primary care reporting.** Beginning January 15, 2020 and annually thereafter, the forum shall submit to the Department of Health and Human Services and the joint standing committee of the Legislature having jurisdiction over health coverage and health insurance matters a report on primary care spending using claims data from the Maine Health Data Organization and information on the methods used to reimburse primary care providers requested annually from payors, as defined in Title 22, section 8702, subsection 8. The report must include:

A. Of their respective total medical expenditures, the percentage paid for primary care by commercial insurers, the MaineCare program, Medicare, the organization that administers health insurance for state employees and the Maine Education Association benefits trust and the average percentage of total medical expenditures paid for primary care across all payors; and

B. The methods used by commercial insurers, the MaineCare program, Medicare, the organization that administers health insurance for state employees and the Maine Education Association benefits trust to pay for primary care.

Sec. 3. Maine Quality Forum to conduct health spending reporting study. The Maine Quality Forum, established in the Maine Revised Statutes, Title 24-A, section 6951, shall consult with other state and national agencies and organizations to determine the best practices for reporting spending on primary care services by insurers. For

purposes of this section, "primary care" means regular check-ups, wellness and general health care provided by a health care provider with whom a patient has initial contact for a health issue, not including an urgent care or emergency health issue, and by whom the patient may be referred to a specialist.

Attachment B – Advisory Committee Members

Sarah Calder
MaineHealth

Rob Chamberlin, MD
MaineHealth ACO

Ned Claxton, MD
Maine State Senator

Jon Fanburg, MD
American Academy of Pediatrics

Deborah Halbach
Maine Academy of Family Physicians

Peter Hayes
Healthcare Purchaser Alliance of Maine

Jennifer Kent
Maine Education Association Benefits Trust

Neil Korsen, MD
MaineHealth

Lisa Letourneau, MD
Maine Department of Health and Human Services

Andrew MacLean
Maine Medical Association

Lisa Harvey McPherson
Northern Light Health

Katherine Pelletreau
Maine Association of Health Plans

Michelle Probert
Maine DHHS, Office of MaineCare Services

Darcy Shargo
Maine Primary Care Association

Trevor Putnoky
Healthcare Purchaser Alliance of Maine

Beth Wilson, MD
MaineHealth

Attachment C – Public Law Ch. 244 Advisory Committee Meeting Summary Notes

Public Law Ch. 244 Advisory Committee Meeting - Minutes

November 20, 2020 | 10:00 – 11:30 AM | Via Zoom

PURPOSE

Reconvene Advisory Committee charged with providing input to the Maine Quality Forum on the development of the annual report on primary care spending in Maine.

ATTENDEES

ADVISORY COMMITTEE:

Neil Korsen MD, Sarah Calder, Darcy Shargo, Andrew MacLean, Lisa Harvey McPherson, Ned Claxton, Michelle Probert, Katherine Pelletreau, Jon Fanburg MD, Trevor Putnoky, Jennifer Kent, Beth Wilson, Peter Hayes, Deborah Halbach

OTHER ATTENDEES & STAFF:

Karynlee Harrington, Lisa Letourneau MD, Kimberley Fox, Carolyn Gray, Jennifer MacKenzie, Judy Loren, Catherine McGuire

AGENDA	DISCUSSION SUMMARY
Welcome	
• **Introductions** (Karynlee Harrington)	Karynlee Harrington introduced the meeting by asking the group to introduce themselves. She also reviewed the agenda and the purpose of the meeting.
• **Requirements of Public Law Chapter 244** (Karynlee Harrington)	Maine Quality Forum is required to produce an annual report on primary care spending and submit it to the DHHS and joint standing committee of the Legislature. The law specifies that we measure the percentage paid for primary care by payers in the state.
• **Role of the Advisory Committee** (Karynlee Harrington)	The Advisory Committee provides input to the MQF on the content of the annual report, including the methods used to define primary care. After we meet today, staff will begin drafting the 2nd annual report. We plan to produce a draft report in December and hope to finalize it by the end of January.

AGENDA	DISCUSSION SUMMARY
Defining Primary Care	
• **Review highlights from MQF's first Annual Report** (Karynlee Harrington)	Karynlee reviewed findings from the first annual report, summarizing how we looked at other states' efforts to measure and define primary care and learned that there is no standard way to do this (see Slides 4-6). Other highlights of the year one report included: We surveyed the insurers in Maine and asked how they define primary care and pay for it. We asked specifically about their methodology around non-claims based payments. Based on their responses, definitions in other state and national reports identified in an environmental scan, and input from the Advisory Committee, we came up with both a broad and narrow definition of primary care. We measured primary care spending based on claims data from 2016 – 2018, excluding pharmacy, long-term care, dental. Non-claims based payments were not included in primary care spending estimates, as they are not reported to MHDO. Karynlee also summarized the recommendations made by the Advisory Committee identified in the report on what to consider in future reports, such as: • Showing variations in primary care spending based on various demographic subgroups. • Including patient out of pocket costs. • Investigating how other states have changed primary care payments based on findings from measuring their own primary care spending. • Including non-claims based payments. • Monitoring of efforts to standardize a definition of primary care in other states or nationally.
• **NESCSO multi-state project** (Karynlee Harrington & Kimberley Fox)	Karynlee described the New England States Consortium Systems Organization (NESCSO) effort to report primary care spending across all payers in the six New England states using All-payer claims data (APCD) from 2017 – 2018. MQF participated in the effort and provided support for the Maine analyses, with the Muskie School and Judy Loren applying specifications defined by NESCSO and its contractor OnPoint. The full report should be available at the end of this year and MQF will share it with the group. Kim Fox described the primary differences in methods and key findings from the NESCSO report (Slides 8-12). OnPoint developed standardized specifications for states to apply using a distributed model. While specifications were standardized, every state may have interpreted the code a little differently. NESCSO looked at 4 different ways to define primary care, using existing Millbank reports and state reports to come up with a list of taxonomy and service codes. In two of the definitions, they also isolated OB-GYN services

AGENDA	DISCUSSION SUMMARY
	provided by OB-GYN specialists and by primary care providers to assess percent of total spending this accounted for, to consider as a potential add on. There were slight variations in taxonomy codes and procedure codes included in the broad and narrow definitions NESCSO used, compared to the first MQF report. However, these had little impact on the overall primary care spending estimates relative to MQF's prior estimates (Slide 9). While results across NE states have not officially been released, Maine generally fell in the middle of the range of percent spent on primary care for most payers. Key differences between the MQF and NESCSO methodology: • NESCSO split Medicare Advantage and Medicare FFS results, while MQF results combined them. • NESCSO had a slightly shorter list of services defined as 'primary care'. MQF's list was longer because we had surveyed Maine insurers and included all the codes identified by at least one Maine insurer. Several payers provided a detailed list of codes they use for defining primary care for MQF to include. • There were some differences in taxonomy codes. NESCSO's definition did not include OB-GYNs that provided primary care services, while MQF included them in both the narrow and broad definition. NESCSO included some other subspecialty taxonomy codes that we excluded (see Appendix). These differences had little impact on the results. • MQF only included paid amounts by insurers and did not include consumer out of pocket costs. NESCSO used allowed amounts rather than paid amounts in their estimates, which include consumer cost share. • NESCSO excluded secondary payers. Dually eligible members for Medicare and Medicaid were counted for both over and under 65 duals in Medicare estimates. • NESCSO excluded services provided by out of state providers, while MQF included payments for all services paid by Maine insurers, including out-of-state providers.
• **MQF's Second Annual Report** (Kimberley Fox)	Kim Fox presented recommendations for MQF's second annual report which included: • Updating the first year annual report with CY 2019 data, and showing trend over time from 2017 through 2019. We would rerun baseline for 2017 and 2018 based on any potential revisions to our primary care definition. • Add age breakouts for children, non-elderly (children and adults), and elderly.

AGENDA	DISCUSSION SUMMARY
	• In anticipation of significant changes in primary care spending in 2020, Karynlee also suggested including a section to address the effect of the COVID-19 pandemic on primary care. Regarding incentive/non-claims based payments, Karynlee mentioned that NESCSO included some data on those payments from some of the states that collect it. NESCSO raised some concerns about the quality of that data. There needs to be a national standard on how to define non-claims based payments and a way to collect it. Karynlee is working with NAHDO and the APCD Council to encourage this at the national level. She has also talked with interested parties about the possibility of Millbank funding such an effort because of their interest in this data. NESCSO did create a data collection spreadsheet for the payers to report their non-claims based primary care payments. MQF shared the spreadsheet with the five largest commercial payers in Maine and asked them to provide the information. Unfortunately, the pandemic made it a challenge for them. The MHDO Board has authorized the development of a rule for collecting non-claims based payments. If all goes according to plan, the MHDO board will adopt a rule in 2021 with an effective date for receiving non-claims based data for the 2022 annual primary care report. The payers have expressed interest in working with MHDO on how best to define and structure a data collection rule for non-claims based payments. Karynlee plans to convene a group of payers to start the conversation in early 2021.
Next Steps and Timeline	
	Timeline: Karynlee requested that Committee members provide feedback today and or send written comments to her by November 30. The goal is to finalize the draft report in December and share it with the Committee members for feedback prior to finalizing, which is scheduled for end of January (at the latest). Karynlee stated that there has been some interest in MQF's reporting methodology for our second annual report to align with NESCSO's. NESCSO's report reflects data through CY2018. MQF's year two report will reflect the time-period CY2019. Our recommendation is that we include in MQF's year two report a link to the NESCSO report along with an overview of their key findings. MQF will update our methodology to add new provider subcategories from NESCSO taxonomies but otherwise will not change the methodology from last year's report. We would re-run the prior years' using the updated methodology. This would create a baseline for comparisons going forward. Karynlee asked the Committee for specific feedback on suggested changes to the year two report, including: • Adding a COVID-19 section. Should we include a section on what has changed in the market due to the pandemic, such as a telehealth section? This would help to establish a baseline for the 2022 report. • Calculating the consumer cost-share.

AGENDA	DISCUSSION SUMMARY
	• Breaking results down by age groups and gender. • Adding information on how other states have been changing policies as a result of measuring primary care. • Input on the list of services, especially for payers that might be incenting some types of services. There was some discussion within the Committee and when asked there were no objections made to the suggested changes. A summary of the Committee's comments made both during and after the meeting are included in the following table.

SUMMARY OF ISSUES RAISED BY MEMBERS OF ADVISORY COMMITTEE AND NEXT STEPS

ISSUE	MQF RESPONSE	OUTCOMES/NEXT STEPS (as of December 17, 2020)
NESCSO versus MQF methods: There was a discussion on what is the impact on the results between NESCSO's and MQF's methods? What does 1% mean in terms of total dollars? Should we care what .6% is? Is that a million dollars or a much smaller amount?	MQF would like to define primary care as accurately as possible, regardless of whether a code affects the overall percentage of primary care spend. The impact on the overall percentages is small, but the differences in how we measured the duals may have a more significant impact. Consumer out of pocket costs as percent of the total was a very small amount. We did find that certain provider groups (subspecialties like geriatrics) have a slightly larger impact, but it is still a small percentage change. We looked at how including certain service codes would affect the total percent of primary care spending. Including some codes would make a difference in percentage of total, but it would need to be a significant amount to affect the primary care percentage of total.	Include a section in MQF second annual report describing NESCSO report results.

SUMMARY OF ISSUES RAISED BY MEMBERS OF ADVISORY COMMITTEE AND NEXT STEPS

ISSUE	MQF RESPONSE	OUTCOMES/NEXT STEPS (as of December 17, 2020)
Alignment with NESCSO method for benchmarking with other states: There was a discussion regarding the value of aligning Maine's method with that of other states, to allow for benchmarking. The general conclusion was that Maine should try to align the definition and methodology as much as possible and not do things differently than others. There was a recommendation by one member that we should report OB-GYNs doing primary care separately; and that we should review Maine law to see what providers are covered to provide primary care.	It was not clear whether the other five New England states will adopt the methodology used by NESCSO for their own reports. Based on conversations within the group it seems reasonable to assume we will all adopt the same baseline and then may have state specific differences.	MQF Y2 annual report will include: 1. A section describing NESCSO study and results. 2. NESCSO taxonomy codes not included in MQF's Y1 annual report.
Total Cost of Care: There was discussion on whether MQF is tracking the total cost of care. The theme of the discussion was that it does not make sense to spend more money on primary care, without understanding how that investment will reduce the total cost of care. Otherwise, it will be difficult to convince employers to invest additional dollars into the system.	MQF has not analyzed the total cost of care. This is a consideration for future reporting. It was noted that there is not much research on what percentage of spending should go to primary care, but it does make sense to look at the relationship between primary care spend and total cost of care. Risk adjustment is an important part of the methodology when looking at total cost of care.	MQF's Y2 report will include: 1. A section on the importance of looking at total cost of care 2. A section summarizing the policies of other states regarding investment in primary care.
Non-claims based payments: There was a discussion on incentive payments and other types of non-claims based payments. There was a recognition that collecting this type of financial information may be challenging, but it is important to do so in order to capture the total investment.	Based on feedback from the payers last year, there is significant Investment in primary care that is not captured in the claims data submitted to MHDO. Based on the recommendation of this committee, the MHDO board of directors has directed staff to develop a rule that will govern the collection of non-claims based payments.	MQF's Y2 report will include a status update on developing a rule to collect non-claims based payments.

SUMMARY OF ISSUES RAISED BY MEMBERS OF ADVISORY COMMITTEE AND NEXT STEPS

ISSUE	MQF RESPONSE	OUTCOMES/NEXT STEPS (as of December 17, 2020)
Taxonomy codes: There was a discussion on whether the Y2 report will include the lesser used taxonomy codes which NESCSO included, such as adolescent medicine?	MQF does want the list of codes to be inclusive, even if there aren't a lot of dollars associated with them.	MQF's Y2 report will include subspecialty taxonomy codes included in NESCSO's report (i.e. geriatrics, adolescent medicine).
COVID-19 and Telehealth: There was a discussion on whether we should look at telehealth numbers from 2019 in order to compare it to 2020 and beyond. The volume of telehealth is very high right now. Because of the amount that primary care has dropped off in 2020, it will throw the reporting trend line off next year. We should plan and anticipate this. There was a recommendation that we should include a list of identified qualifiers for telehealth. There was a question from staff for the committee on whether the provider consult specialist telehealth codes (those between providers) should be counted as primary care or specialty care. A Committee member confirmed that those are usually specialists talking to primary care providers and it is a challenge as to how to categorize it. Lastly, there was a comment that sometimes telehealth providers are paid under a contract and not billed through claims. Is there a way to capture that impact on primary care?	Staff acknowledged that COVID-19 will have a significant impact on future reporting affecting both primary care and total spending for 2020, making a comparison to previous years difficult. Staff also confirmed that telehealth codes were in the Y1 annual report, but will make sure new telehealth codes are included for baseline going forward. Staff will research the e consult issue and will address in next year's report.	MQF Y2 annual report will include telehealth codes including the modifiers used in last year's report.

SUMMARY OF ISSUES RAISED BY MEMBERS OF ADVISORY COMMITTEE AND NEXT STEPS

ISSUE	MQF RESPONSE	OUTCOMES/NEXT STEPS (as of December 17, 2020)
Results by Demographics: There was a recommendation that the results in MQF's Y2 report should be shown by race and ethnicity.	The current data in the APCD data does not include data on race and ethnicity. MHDO's board of directors recently adopted a rule change (Chapter 243) that requires payers to include in their claims submissions race and ethnicity data beginning with their January 2021 data.	MQF will consider including race/ethnicity analyses in future reports when data are available.
Behavioral Health Services: There was a suggestion that we should flag behavioral health services as part of primary care for a future report.		Consistent with NESCSO, the Y2 report will not include behavioral health services. MQF will consider potential inclusion of behavioral health services in future reports.
Social Risk Adjustment: There was discussion about the importance of including a social risk adjustment in the methodology. There was also the recognition that there is no standard methodology to adjust for social determinants of health (SDOH).	Staff concurred there is no method for adjusting for SDOH and MQF does not have the necessary data to create a standard methodology at this time.	MQF's Y2 annual report will raise social risk adjustment as a consideration for future reports.

Attachment D – Methodology for Defining Primary Care

To determine the percentage of total healthcare expenditures spent on primary care in Maine using the Maine Health Data Organization's (MHDO) all payer claims data (APCD) for the second annual report, we reviewed our primary care definitions based on the following:

- Language in P.L. Chapter 244, Sec. 2. 24-A MRSA §6903, sub-§13-B,
- Methods and definitions used in the first annual report and recommendations for future reporting,
- Review of definitions used in NESCSO's multi-state primary care spending report to consider potential modifications,
- Consultation with the Advisory Committee on proposed changes to Maine's definitions.

For the first annual report, we sent a questionnaire to Maine's 6 largest insurers asking how they define primary care, whether they offer non-claims payments or incentives for primary care and whether they track these payments to inform potential future non-claims reporting to the state. We vetted other national and state definitions and those reported by Maine insurers with the Advisory Board. Given the lack of a standard primary care definition, MQF reported a range of primary care spending estimates using narrow and broad definitions. For both narrow and broad definitions, primary care provider types and specific primary care services included were those identified from the environmental scan and/or where at least one Maine insurer identified them in its definition.

Data Source

Information for calendar years 2017-2019 from Maine's APCD maintained by the MHDO was used to conduct this study. The Maine APCD contains claims and enrollment information for commercial insurance carriers, third party administrators, pharmacy benefit managers, dental benefit administrators, MaineCare (Maine's Medicaid and CHIP program), and Medicare.[xii] The largest self-funded plans in Maine, exempt from the state mandate to submit information to the MHDO due to Supreme Court ruling[xiii], voluntarily submit claims data to the MHDO.

Health care claims processors must submit periodically (typically monthly) to the MHDO a complete health care claims data set for all members who are Maine residents. The submissions include files with member eligibility, medical claims, pharmacy claims, and/or dental claims information.

The APCD does not include claims information from:

- Claims processors with less than $2 million per calendar year of Maine adjusted premiums or claims processed;
- Claims for health care policies issued for specific diseases, accident, injury, hospital indemnity, disability, long-term care, vision, coverage of durable medical equipment;
- Claims related to Medicare supplemental, Tricare supplemental, or other supplemental if claims are not considered to be primary; and
- Claims for workplace injuries covered by worker's compensation insurance.

Additionally, the APCD does not include information about Mainers who are uninsured or any health care that is paid out-of-pocket.

[xii] Medicare Advantage plans and regular fee-for-service Medicare are included.

[xiii] *Gobeille v. Liberty Mutual Insurance Company*, US Supreme Court Decision that Employee Retirement Income Security Act (ERISA) standards preempt state reporting requirements.

This study used Medical claims (CY 2017-2019), excluding long term care[xiv], dental and pharmacy claims.

The APCD contains information about the payer for the health care service. This information was used to categorize claims paid for the following populations: commercial (excluding Medicare Advantage); Medicaid; Medicare (including both Medicare Advantage and Fee-for-service plans). Additionally, as required by the legislation, claims for two plan sponsors were tabulated: the Maine Education Association Benefit Trust (MEABT) and the State Employee Health Commission.

Primary Provider Identification

Medical claims contain identifiers (National Provider Identifiers (NPI)) for multiple levels of providers. To determine whether the provider of a claim met the definition of a Primary Care Provider, the billing and servicing provider IDs were examined to find the Individual provider. If both billing and servicing providers were organizations, the servicing provider was used. Once a single provider was identified for each claim, the taxonomy code was determined using a copy of the National Provider and Payer Enumeration System (NPPES) database maintained in the MHDO Enclave data management system (July 2020 update).

Identification of Primary Care Services

Both professional (1500 claim form) and facility (Uniform Billing Form (UB-04)) claim types were examined to find procedure codes included in the narrow definition of primary care services.[xv] The lists of primary care specialties and procedure codes were developed from studies done by other states including Rhode Island, Oregon, Colorado, Connecticut, Massachusetts and Vermont, Millbank and NESCSO, as well as the results from the state insurer questionnaires collected as part of this study. Primary care services provided in hospice, nursing and custodial care facilities were included based on the guidance of the Advisory Committee.

While some states indicated using ICD-10 diagnosis codes to identify primary care, the lack of methodological clarity on how these are incorporated led to their not being included as part of the definition of Primary Care in this study.

Health care services provided in hospital inpatient, emergency departments and urgent care facilities were excluded from Primary Care as mandated by the legislation.

Broad definition (All services provided by primary care providers): The Broad definition of Primary care includes all services provided by health care professionals that have a primary care provider type (i.e., with a primary care-related specialty or taxonomy code) with the exception of services delivered in an inpatient or emergency department setting.[xvi] OB/GYN providers were included as primary care for specific services only. The list of primary care provider types for this definition, and the list of primary care services that were counted for OB/GYNs, can be found in *Attachment D*

Narrow definition (Specific primary care services provided by primary care providers): The Narrow definition of Primary care includes a specific set of services provided by health care professionals that have a primary care provider type (i.e. with a primary care-related specialty or taxonomy code), again with the exception of those

[xiv] MaineCare long-term services and supports (LTSS) expenditures for Medicaid were excluded based on the percentage of LTSS service costs to the total Medicaid service costs.

[xv] Inclusion of facility claims allowed for the identification of facility fees associated with primary care including hospital associated providers, who use both professional and facility claims, as well as federally qualified (FQHC) and rural (RHC) health care facilities, who use only facility claims.

[xvi] Taxonomy codes are administrative codes set for identifying the provider type and area of specialization for health care providers. Each taxonomy code is a unique alphanumeric code that enables providers to identify their specialty at the claim level. See *Attachment D* for the full list of provider specialty taxonomy codes used as Primary Care.

services delivered in an inpatient or emergency department setting. The list of procedures used for this definition is identical to last year's report (see following tables).

Identification of Costs

As mandated by the legislation, medical and primary care costs identified in this study include payments by insurers during the measurement year that meet the inclusion criteria identified above. Deductibles, co-pays, co-insurance and out-of-pocket costs paid by the patient were included in the analysis of consumer cost share.. Non-claims based payments were not considered in this analysis. The denominator, or base for the calculation of Primary Care percentage, was the sum of plan paid amounts for all medical (not pharmacy or dental) claims used in this study (see *Data Source*, above). For the narrow definition, the numerator for the analysis was the sum of the plan paid amounts on claim lines that met the narrow definition criteria.

No consideration was given to the length of time a member was covered by health insurance during the measurement year.

Primary Care Provider Type Taxonomy Codes and Description Included in Broad and Narrow Definitions

Primary Care	
261QF0400X	Federally Qualified Health Center
261QP2300X	Primary Care Clinic
261QR1300X	Rural Health Clinic
207Q00000X	Physician, Family Medicine
207R00000X	Physician, General Internal Medicine
175F00000X	Naturopathic Medicine
208000000X	Physician, Pediatrics
208D00000X	Physician, General Practice
363L00000X	Nurse Practitioner
363LA2200X	Nurse Practitioner, Adult Health
363LF0000X	Nurse Practitioner, Family
363LP0200X	Nurse Practitioner, Pediatrics
363LP2300X	Nurse Practitioner, Primary Care
363A00000X	Physician Assistants
363AM0700X	Physician Assistants, Medical
207RG0300X	Physician, Geriatric Medicine
207QG0300X	Family Practice Geriatrics
207QA0505X	Family Practice Adult
207QA0000X	Family Practice Adolescent
175L00000X	Homeopathic Medicine
2083P0500X	Physician, Preventive Medicine
364S00000X	Certified Clinical Nurse Specialist
163W00000X	Registered Nurse, Non-Practitioner
OB/GYN Codes[xvii]	
207V00000X	Physician, Obstetrics and Gynecology
207VG0400X	Physician, Gynecology
363LW0102X	Nurse Practitioner, Women's Health
363LX0001X	Nurse Practitioner, Obstetrics and Gynecology

[xvii] For OB/GYN taxonomy codes, we only included payments for primary care services listed in narrow definition.

Narrow Definition Primary Care Service Procedural Terminology (HCPCS) Codes and Description

Procedure Codes included in the Narrow Primary Care Definition	
Procedure Codes	**Description**
Immunizations and Injections	
90281	Immune Globulin
90287	Botulinum antitoxin, equine, any route
90288	Botulism immune globulin, human, for intravenous use
90291	Cytomegalovirus immune globulin (CMV-IgIV), human, for intravenous use
90296	Diphtheria antitoxin, equine, any route
90371	Hepatitis B immune globulin
90375 - 90376	Rabies immune globulin
90384 - 90386	Rho(D) immune globulin
90389	Tetanus immune globulin
90393	Vaccinia immune globulin
90396	Varicella-zoster immune globulin
90399	Unlisted immune globulin
90460 - 90461	Immunization through age 18, including provider consult
90465 - 90466	Immunization administration younger than 8 years of age
90467 - 90468	Immunization administration younger than age 8 years
90471 - 90472	Immunization by injection/oral/intranasal route
90473 - 90474	Immunization administration by intranasal or oral route
90476 - 90477	Adenovirus vaccine
90581	Anthrax vaccine
90585	Bacillus Calmette-Guerin vaccine (BCG) for tuberculosis
90586	Bacillus Calmette-Guerin vaccine (BCG) for bladder cancer,
90587	Dengue vaccine
90620	Meningococcal recombinant protein and outer membrane vesicle vaccine
90621	Meningococcal recombinant lipoprotein vaccine
90625	Cholera vaccine
90630	Influenza virus vaccine
90632 - 90633	Hepatitis A vaccine, pediatric/adolescent dosage-2
90634	Hepatitis A vaccine, pediatric/adolescent dosage
90636	Hepatitis A and hepatitis B vaccine
90644	Meningococcal conjugate vaccine
90645 - 90648	Hemophilus influenza b vaccine
90649 - 90650	Human Papilloma virus (HPV) vaccine
90651	Human Papilloma virus vaccine
90653 - 90661	Influenza virus vaccine
90662	Flu
90663 - 90664	Influenza virus vaccine
90665	Lyme disease vaccine

Procedure Codes included in the Narrow Primary Care Definition	
Procedure Codes	**Description**
90666 - 90668	Influenza virus vaccine
90669 - 90670	Pneumococcal conjugate vaccine
90672 - 90674	Influenza virus vaccine
90675 - 90676	Rabies vaccine
90680 - 90681	Rotavirus vaccine
90682	Influenza virus vaccine
90685 - 90689	Influenza virus vaccine
90691	Typhoid vaccine
90696	DtaP-IPV
90697	DTaP-IPV-Hib-HepB
90698	Diphtheria, tetanus toxoids, acellular pertussis vaccine, haemophilus influenza Type B, and poliovirus vaccine,
90700	DTaP
90701	DTP
90702	Diphtheria and tetanus toxoids (DT)
90703	Tetanus toxoid adsorbed
90704	Mumps virus vaccine
90705	Measles virus vaccine
90706	Rubella virus vaccine
90707	Measles, mumps and rubella virus vaccine (MMR)
90708	Measles and rubella virus vaccine
90710	Measles, mumps, rubella, and varicella vaccine (MMRV)
90712 - 90713	Poliovirus vaccine
90714 - 90715	Tetanus, diphtheria toxoids adsorbed
90716	Varicella virus vaccine
90717	Yellow fever vaccine
90718	Tetanus and diphtheria toxoids (Td) adsorbed
90719	Diphtheria toxoid,
90720	Diphtheria, tetanus toxoids
90721	Diphtheria, tetanus toxoids, and acellular pertussis vaccine and Hemophilus influenza B vaccine (DtaP-Hib)
90723	Diphtheria, tetanus toxoids, acellular pertussis vaccine, Hepatitis B, and poliovirus vaccine, inactivated (DtaP-HepB-IPV)
90725	Cholera vaccine
90727	Plague vaccine,
90732	Pneumococcal polysaccharide vaccine
90733	Meningococcal polysaccharide vaccine
90734	Meningococcal conjugate vaccine
90735	Japanese encephalitis virus vaccine
90736	Zoster (shingles) vaccine
90738	Japanese encephalitis virus vaccine,

Procedure Codes included in the Narrow Primary Care Definition	
Procedure Codes	**Description**
90739 - 90740	Hepatitis B vaccine (HepB)
90743 - 90744	Hepatitis B vaccine
90746 - 90747	Hepatitis B vaccine
90748	Hepatitis B and Hemophilus influenza b vaccine (HepB-Hib)
90749	Unlisted vaccine/toxoid
90750	Zoster (shingles) vaccine
90756	Influenza virus vaccine
90785	add-on code specific for psychiatric service
Therapeutic, Prophylactic, and Diagnostic Injections and Infusions (Excludes chemotherapy and other highly complex drug or highly complex biologic agent administration)	
96160 - 96161	Administration of health risk assessment (replaces 99420 as of 1/1/2017)
96372 - 96374	Therapeutic, prophylactic, or diagnostic injection
Non-face-to-Face Non-Physician Services	
98966 - 98968	Non-physician telephone services
98969	Online assessment, mgmt. services by non-physician
Evaluation and Management Services	
Office Visits	
99201 - 99205	Office or outpatient visit for a new patient
99211 - 99215	Office or outpatient visit for an established patient
99241 - 99245	Office or other outpatient consultations
Home/NH Visits	
99304 - 99310	Nursing Facility Care
99315 - 99316	Nursing Facility Care
99318	Nursing Facility Care
99324 - 99328	Domiciliary or rest home Custodial Care
99334 - 99337	Domiciliary or rest home Custodial Care
99339 - 99340	Domiciliary or rest home multidisciplinary care planning
99341 - 99346	Home visit for a new patient
99347 - 99350	Home visit for an established patient
99354 - 99360	Prolonged Service Office Visit
99360	Standby service
99367	Medical team conference
Preventive Visits	
96110	Developmental screen
99381 - 99385	Preventive medicine initial evaluation
99386 - 99387	Initial preventive medicine evaluation
99391 - 99397	Preventive medicine periodic reevaluation
99401 - 99404	Preventive medicine counseling and/or risk reduction intervention
99406 - 99409	Smoking and tobacco use cessation counseling visit (Alcohol/Substance Abuse Screening)
99411 - 99412	Group preventive medicine counseling and/or risk reduction intervention

Procedure Codes included in the Narrow Primary Care Definition	
Procedure Codes	**Description**
99420	Administration and interpretation of health risk assessments
99429	Unlisted preventive medicine service
99441 - 99443	Telephone calls for patient mgmt.
99444	Non-face-to-face on-line Medical Evaluation
99487	Chronic Care Management
99490 - 99491	Chronic Care Management
99495 - 99496	Transitional care management service
99497 - 99498	Advance Care Planning
G0102	Prostate cancer screening; digital rectal examination
G0108 – G0109	Diabetes outpatient self-management training services
G0472	Hepatitis C antibody screening
G0475	HIV antigen/antibody, combination assay, screening
G0476	Pap test add-on
G8420	BMI is documented within normal parameters
G8427	Med review
G8482	Influenza immunization administered or previously received
G8709	Patient prescribed antibiotic
G8711	Patient prescribed antibiotic for documented medical reason
G8730 – G8731	Pain assessment documented
G8950	BP reading documented
G9903	Patient screened for tobacco use and identified as a non-user
G9964	Patient received at least one well-child visit with a pcp during the performance period
G9965	Patient did not receive at least one well-child visit with a pcp during the performance period
G9966	Children who were screened for risk of developmental, behavioral and social delays
G9967	Children who were NOT screened for risk of developmental, behavioral and social delays
S0610	Annual gynecological exam, established patient
S0612	Annual gynecological exam, new patient
S0613	Annual gynecological exam; clinical breast exam without pelvic
Other Primary Care HCPCS Codes (Medicaid/Medicare)	
G0008	Administration of influenza virus vaccine
G0009	Administration of influenza virus vaccine
G0103	PSA screening
G0101	CA screen;pelvic/breast exam
G0123	Screen cerv/vag thin layer
G0145	Scr c/v cyto,thinlayer,rescr
G0151	Hhcp-serv of pt,ea 15 min
G0166	Extrnl counterpulse, per tx
G0202	Screening mammography digital
G0249	Provide inr test mater/equip

Procedure Codes included in the Narrow Primary Care Definition	
Procedure Codes	**Description**
G0279	Tomosynthesis, mammo
G0283	Elec stim other than wound
G0299	Hhs/hospice of rn ea 15 min
G0399	Home sleep test/type 3 porta
G0402	Welcome to Medicare visit
G0438	Annual wellness visit
G0439	Annual wellness visit
G0424	Pulmonary rehab w exer
G0442	Annual alcohol screening
G0443	Brief alcohol misuse counsel
G0444	Annual depression screening
G0447	Face to face Behavioral Counseling for Obesity
G0454	Md document visit by npp
G0463	Hospital Outpatient Clinic Visit (Medicare)
G0466	FQHC Visit, new patient
G0467	FQHC Visit, established patient
G0468	FQHC Preventive visit
G0480	Drug test def 1-7 classes
G0481	Drug test def 8-14 classes
G0483	Drug test def 22+ classes
G0498	Chemo extend iv infus w/pump
G0500	Mod sedat endo service >5yrs
G8400	Pt w/dxa no results doc
G8978	Mobility current status
G8979	Mobility goal status
G9162	Lang express current status
G9163	Lang express goal status
G9197	Order for ceph
G9551	Abd imag no les,kid/livr/adr
G9557	Ct/cta/mri/a no thyr <1.0cm
G9655	Toc tool incl key elem
G9656	Pt trans from anest to pacu
G9771	Anes end, 1 temp >35.5(95.9)
G9775	Recd 2 anti-emet pre/intraop
G9968	Pt refrd 2 pvdr/spclst in pp
G9969	Pvdr rfrd pt rprt rcvd
G9970	Pvdr rfrd pt no rprt rcvd
T1015	Clinic visit, all-inclusive(FQHC)

Attachment E – Comparison of Maine Results from MQF, NESCSO, and Primary Care Collaborative Reports

Comparison of Maine's % Primary Care Spending Estimates in MQF, NESCSO, and Primary Care Collaborative 2020 report

	2018		
	MQF (2019 report)	**NESCSO**	**PCC (2019 data)[xviii]**
NARROW			
Commercial and Medicare Advantage	Not combined/ Medicare Advantage combined in Medicare	Not combined/ Medicare Advantage shown separately	5.66%
Commercial	5.7%	5.1%	6.07%
Medicaid	6.8%	7.8%	Not included
Medicare FFS[x]	4.7%	4.2%	Not included
Medicare Advantage		6.1%	
BROAD			
Commercial and Medicare Advantage	Not combined/ Medicare Advantage combined in Medicare	Not combined/ Medicare Advantage shown separately	9.18%
Commercial	10.5%	10.8%	9.83%
Medicaid	9.6%	10.8%	NA
Medicare FFS*	7.1%	6.4%	NA
Medicare Advantage		10.7%	NA

Maine reported Medicare FFS and Medicare Advantage combined.

Other PCC Key Findings for Maine:

- Relative to other states, Maine was higher than the national average in 2019 for both the narrow and broad definitions and was in the top twenty states of % primary care spending of total medical expenditures for both definition.
- Maine's % spending on primary care declined slightly between 2017 and 2019, -.59% for their narrow definition and -.76 by their broad definition, ranking 40th compared to other states, but the report does not test for statistical significance of these declines
- While PC spending declined nationally the report does caveat there is no clear explanation for why.
- Also showed overall primary care spending by age (Figure 3.0, p15) which like NESCSO reports showed great differences in PC % spending by age, so age adjusted rates could also be a factor. (Age breakdowns
- The PCC report indicates their results are not directly comparable to state reports using APCDs and references Maine's 1st annual report (p 21, p 39) and NESCSO forthcoming report and Maine's participation (p22). Appendix G also shows the direct comparison with MQF's report for commercial payers (p 38).

[xviii] PCC report only showed data for 2019 and % increase/decrease from 2017 to 2019.

Attachment F – Glossary[xix]

Claim: Communication from a health care provider to a health care payer requesting payment for services rendered by the provider. A claim includes information about the patient's diagnoses, the procedures performed by the provider, the amount the payer and patient will pay for the service under a health insurance plan, and — in the case of a paid claim — the amount paid by the payer.

Commercial health plan: Group or individual health insurance plan offered by a health insurance carrier.

Federally Qualified Health Center (FQHC): Safety net providers that primarily provide services furnished in an outpatient clinic. FQHCs include community health centers, migrant health centers, health care for the homeless, health centers, public housing primary care centers, and health center program "lookalikes." They also include outpatient health programs or facilities operated by a tribe or tribal organization or by an urban Indian organization. FQHCs are paid based on the FQHC Prospective Payment System (PPS) for medically-necessary primary health services and qualified preventive health services furnished by a FQHC practitioner.

Fee for Service (FFS): A method of paying providers for covered services rendered to members. Under Maine's fee-for-service system, the provider is paid for each discrete service provided to a patient.

Healthcare Common Procedure Coding System (HCPCS): A uniform set of codes that represent health care procedures, service, supplies and products which may be provided to Medicare and Medicaid beneficiaries and to individuals enrolled in private health insurance programs. HCPCS includes two levels of codes: Level I codes consist of the AMA's CPT® codes. Level II codes are maintained by CMS and primarily include non-physician products, supplies, and procedures.

Health care payer: Health insurance plan or health coverage program that pays doctors, hospitals and other health care providers for care and services received by a person with health care coverage. A health care payer includes commercial and public plans such as Medicaid and Medicare.

International Statistical Classification of Diseases and Related Health Problems (ICD) 10 Codes: A uniform set of codes used to describe a disease and identify the diagnosis of a particular medical condition, so that the patient, health care provider as well as the insurance payer can better comprehend the medical condition under treatment.

Maine Education Association Benefits Trust (MEABT): A benefit plan that provides health insurance to Maine public school employees and their families.

Maine State Employee Health Commission (SEHC): Maine State Employee Health Commission ("SEHC") is a self-insured health benefit plan that covers State of Maine and University of Maine System employees and non-Medicare retirees, and their families.

MaineCare: Maine's Medicaid and Children's Health Insurance (CHIP) program. Medicaid provides low income children, pregnant women, and parents with health insurance coverage for little or no cost. The program also covers low income elderly and people with disabilities. Adults without children may be eligible through the non-categorical waiver, but the Maine expansion program was implemented in July 2018.

Non-claims-based payment: Payment to a health care provider intended to motivate efficient care delivery, reward achievement of quality or cost-savings goals, and build health care infrastructure and capacity. Non-claims-based payments are not payments for specific services rendered by a provider and reported on a health

[xix] Definitions partially sourced from: Oregon Health Authority. *Primary Care Spending in Oregon: A Report to the Oregon State Legislature.* February 2019.

care claim, although they may be awarded based on information reported on claims. *Non-claims-based payments are not included in this report.* Examples of non-claims-based payments may include capitated or salary primary care payments, risk-based payments, practice-level payments (e.g. Patient Centered Medical Homes, Health Homes), and provider incentives.

Primary care: Health care that includes general exams and assessments, preventive care and care coordination. Primary care providers respond to new patient needs and undiagnosed conditions, help patients navigate the health system, and maintain relationships over time. For purposes of reporting on medical spending allocated to primary care under P.L. Chapter 244, we used the broad definition of all services provided by primary care providers and the narrow definition of a specific set of health care services delivered by specific types of primary care providers (see *Attachment D – Methodology for Defining Primary Care* for details).

Rural Health Clinics (RHCs): The Rural Health Clinic (RHC) program is intended to increase access to primary care services for patients in rural communities. RHCs can be public, nonprofit, or for-profit healthcare facilities. To receive certification, they must be located in rural, underserved areas. They are required to use a team approach of physicians working with non-physician providers such as nurse practitioners (NP), physician assistants (PA), and certified nurse midwives (CNM) to provide services. The clinic must be staffed at least 50% of the time with a NP, PA, or CNM. RHCs are required to provide outpatient primary care services and basic laboratory services.

Self-insured employer: Employer that sets aside funds to pay for health care expenses of employees rather than buying a group health insurance plan offered by a private insurance company. Primary care spending by self-insured employers that voluntarily submit data to the APCD are included in this report. The Maine State Employee Health Commission and Maine Education Association Benefits Trust are the two largest self-insured employers in Maine.

Supplemental plan: An additional health insurance plan that helps pay for healthcare costs that are not covered by a person's regular health insurance plan. These costs include copayments, coinsurance, and deductibles. There are many different types of supplemental health insurance, including vision, dental, hospital, accident, disability, long-term care, and Medicare supplemental plans. There are also supplemental health insurance plans for specific conditions, such as cancer, stroke, or kidney failure. Some types of supplemental health insurance may also be used to help pay for food, medicine, transportation, and other expenses related to an illness or injury.

Taxonomy Code: The Healthcare Provider Taxonomy Code Set is a hierarchical code set that consists of codes, descriptions, and definitions designed to categorize the type, classification, and/or specialization of health care providers. The Code Set consists of two sections: Individuals and Groups of Individuals, and Non-Individuals. The Code Set is a Health Insurance Portability and Accountability (HIPAA) standard code set. As such, it is the only code set that may be used in HIPAA standard transactions to report the type/classification/specialization of a health care provider when such reporting is required. Each taxonomy code is a unique alphanumeric code that enables providers to identify their specialty at the claim level.

Attachment G – Endnotes

1. An Act To Establish Transparency in Primary Health Care Spending, P.L 2019, ch. 244, Sec. 1 - 3, 24-A MRSA §6903, §6951.
2. Maine Quality Forum. *Public Law, Chapter 244 2020 Annual Report: Primary Care Spending in State of Maine.* Augusta, ME: MQF; January 15, 2020.
3. New England States Consortium Systems Organization and Onpoint Health Data. *The New England States' All-Payer Report on Primary Care Payments.* Shrewsbury, MA: NESCSO; December 22, 2020.
4. Bailit MH, Friedberg MW, Houy ML. *Standardizing the Measurement of Commercial Health Plan Primary Care Spending.* New York, NY: Milbank Memorial Fund; July, 2017.
5. Kempski A, Greiner A. *Primary Care Spending: High Stakes, Low Investment.* Washington, DC: Primary Care Collaborative; December 2020.
6. Nielsen M, Buelt L, Patel K, Nichols LM. *The Patient-Centered Medical Home's Impact on Cost and Quality: Annual Review of Evidence 2014-2015.* Washington, DC: Patient-Centered Primary Care Collaborative; February, 2016.
7. Friedberg MW, Hussey PS, Schneider EC. Primary care: a critical review of the evidence on quality and costs of health care. *Health affairs (Project Hope).* 2010;29(5):766-772.10.1377/hlthaff.2010.0025
8. Crowley R, Daniel H, Cooney TG, Engel LS. Envisioning a Better U.S. Health Care System for All: Coverage and Cost of Care. *Ann Intern Med.* 2020;172(2 Suppl):S7-s32.10.7326/m19-2415
9. Jabbarpour Y, Greiner A, Jetty A, et al. *Investing in Primary Care: A State-level Analysis.* Washington, DC: Robert Graham Center; July, 2019.
10. Pham H, Ginsburg PB. Payment and Delivery-System Reform — The Next Phase. *New England Journal of Medicine.* 2018;379(17):1594-1596.10.1056/NEJMp1805593
11. Gelmon S, Wallace N, Sandberg B, Petchel S, Bouranis N. *Implementation of Oregon's PCPCH Program: Exemplary Practice and Program Findings.* Portland, OR: Portland State University; September 2016.
12. Reschovsky JD, Ghosh A, Stewart K, Chollet D. *Paying More for Primary Care: Can It Help Bend the Medicare Cost Curve?* New York, NY: The Commonwealth Fund;2012.
13. Jabbarpour Y, DeMarchis M, Bazemore A, Grundy P. *The Impact of Primary Care Practice Transformation on Cost, Quality, and Utilization.* Washington, DC: Patient-Centered Primary Care Collaborative and Robert Graham Center; July, 2017.
14. Baum A, Song Z, Landon BE, Phillips RS, Bitton A, Basu S. Health Care Spending Slowed After Rhode Island Applied Affordability Standards To Commercial Insurers. *Health Affairs.* 2019;38(2):237-245. http://ejournals.ebsco.com/direct.asp?ArticleID=44F6B0DA86F13743E022.
15. Care Transformation Collaborative of Rhode Island. *A Bridge to Better Health: Annual Report 2014.* Providence, RI: CTC-RI;2017.
16. Koller CF, Khullar D. Primary Care Spending Rate - A Lever for Encouraging Investment in Primary Care. *The New England journal of medicine.* 2017;377(18):1709-1711.10.1056/NEJMp1709538
17. Wang Y, Hunt K, Nazareth I, Freemantle N, Petersen I. Do men consult less than women? An analysis of routinely collected UK general practice data. *BMJ Open.* 2013;3(8):e003320.10.1136/bmjopen-2013-003320
18. State Health Access Data Assistance Center. State-level Trends in Employer-sponsored Health Insurance (ESI), 2015-2019. SHADAC. September 2020. Accessed January 14, 2021. https://www.shadac.org/ESIReport2020.

19. Mink P. Using the Minnesota All Payer Claims Database to Measure Investment in Primary Care. Paper presented at: NAHDO 35th Annual Conference; August 17, 2020.

20. Centers for Medicare and Medicaid Services. *SHO# 21-001 RE: Opportunities in Medicaid and CHIP to Address Social Determinants of Health (SDOH).* Baltimore, MD: U.S. Department of Health and Human Services; January 7, 2021.

21. FAIR Health. *Healthcare Professionals and the Impact of COVID-19: A Comprehensive Study of Revenue and Utilization* New York, NY: FAIR Health, Inc.; June 10, 2020.

22. Mehrotra A, Chernew M, Linetsky D, Hatch H, Cutler D, Schneider EC. The Impact of the COVID-19 Pandemic on Outpatient Care: Visits Return to Prepandemic Levels, but Not for All Providers and Patients. The Commonwealth Fund. October 15, 2020. Accessed January 14, 2021. https://www.commonwealthfund.org/publications/2020/oct/impact-covid-19-pandemic-outpatient-care-visits-return-prepandemic-levels.

23. Northeast Telehealth Resource Center. NETRC COVID-19 Telehealth Resources. October 16, 2020. Accessed January 14, 2021. https://www.netrc.org/COVID-19/.

24. Jonk YC, Burgess A, Williamson ME, et al. Telehealth Use in a Rural State: A Mixed-Methods Study Using Maine's All-Payer Claims Database. *J Rural Health.* 2020. doi:10.1111/jrh.12527.

25. Centers for Medicare and Medicaid Services. *Services Delivered via Telehealth Among Medicaid & CHIP Beneficiaries During COVID-19.* Baltimore, MD: U.S. Department of Health and Human Services; June 30, 2020.