INEQUITY IN PHYSICAL REHABILITATIVE HEALTH SERVICES UTILIZATION

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INTRODUCTION

Chiropractic services, physical therapy, acupuncture, and massage therapy are commonly used as complementary or alternative services to surgeries or prescription drugs, which can be more intensive. While commercial health insurance plans will often cover these services with cost sharing, recognizing that these are traditionally lower cost services, they may require prior authorization and benefits are often limited to a certain number of treatments/visits per year (e.g., up to ten or twelve services in a benefit period).

Historically, these services have not received much attention in claims analysis. However, they offer an important alternative to more invasive and costly procedures. Some of these services, such as acupuncture, are relatively new inclusions in medical benefit coverage. This initial and exploratory work maps trends and impact in the commercial markets for these physical rehabilitative health services (PRH): chiropratic, physical therapy, acupuncture, and massage therapy. The study primarily focuses on physical therapy and chiropractic care because they have the most substantial spending and utilization among the four measures.

OBJECTIVES

The Health Policy Commission (HPC) aimed to understand commercial utilization and cost-sharing for a set of rehabilitative services (chiropractic services, physical therapy, acupuncture, and massage therapy). This study examines commercial trends in spending and cost-sharing for these PRH services and explores how service utilization varies by commercial member geography and community income.

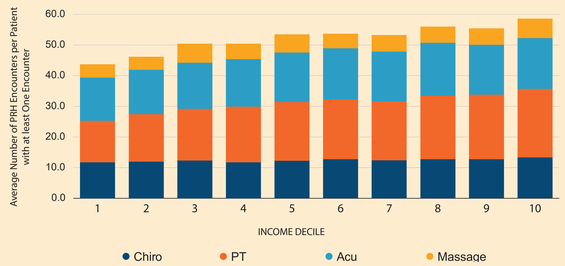
STUDY DESIGN

This study used data from the Massachusetts All-Payer Claims Database (APCD), 2017-2021. First, medical claim lines for PRH services were identified by using taxonomy codes for service providers and procedure codes. All medical claim lines identified as having PRH services were collapsed into visits, defined as encounters involving the same person, same day, and same provider. Member zip codes were linked to median community-level incomes from the American Community Survey as well as Massachusetts geographic regions. This analysis examines total spending for all PRH services as well as total cost-sharing (i.e., the sum of deductible, co-pays, and co-insurance).

In 2021, the HPC reviewed claims for 1,668,048 unique members across 6 commercial health plans (representing 39.1% of the commercial Massachusetts market): 77,889 members had at least one chiropractic visit, 77,915 had at least one physical therapy visit, 8,778 had at least one acupuncture visit, and 2,726 had at least 1 massage therapy visit. The most common primary diagnosis codes on the medical claims for PRH services are for pain and injury.

RESULTS

EXHIBIT 1. Average Number of Encounters per Physical Rehabilitative Health Service Patient by Income Decile, 2021

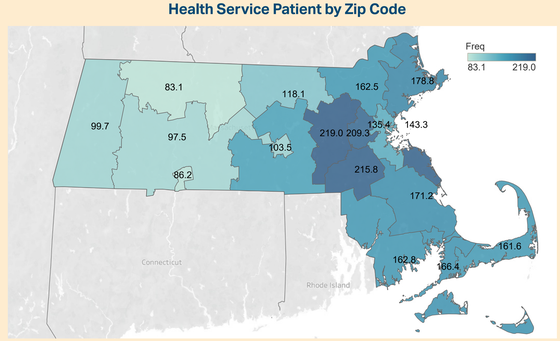


Sources: HPC analysis of Center for Health Information and Analysis Massachusetts All-Payer Claims Database, v2021, 2021

EXHIBIT 2. Number of individuals with at least 1 Physical Rehabilitative Health Service per 100 members by income decile, 2021

Sources: HPC analysis of Center for Health Information and Analysis Massachusetts All-Payer Claims Database, v2021, 2021

EXHIBIT 3. Average Number of Encounters per Physical Rehabilitative Health Service Patient by Zip Code



Sources: HPC analysis of Center for Health Information and Analysis Massachusetts All-Payer Claims Database, v2021, 2021. Map created with Tableau software.

Chiropractic Treatment and Physical Therapy Spending & Cost-Sharing

Physical therapy and chiropractic treatments represent about 1.1% of Massachusetts commercial total medical expenditures in 2021 ($270 million). Chiropractic spending ($86 million) accounted for 0.4% of total medical expenditure in Massachusetts in 2021, and physical therapy spending ($165 million) for 0.8%.

From 2017 to 2021, chiropractic treatment spending increased by five percent from $82 million to $86 million while cost sharing for chiropractic services increased by fourteen percent, from $40 million to $45 million. For physical therapy, total spending in the commercial market increased from $144 million to $165 million (15% increase) and total cost sharing increased from $55 million to $65 million (19% increase).

Cost sharing as a percentage of total spending is relatively high for all PRH services. For example, compared to sick visits (18%) chiropractic services have a cost sharing percentage of almost three times that rate (52%).

Physical Therapy and Chiropractic Treatment Utilization

Approximately 25% of physical therapy and 12% of chiropractic patients had over 12 visits per year. There are higher rates of utilization for these services among residents living in higher-income areas than lower- income areas **(Exhibit 1)**. Individuals living in higher-income areas were also more likely to have any utilization at all **(Exhibit 2)**. For example, for patients residing in the wealthiest income decile area, physical therapy utilization is 66% higher than for patients residing in the lowest income decile area. The initial uptake of any one of these services is 86% higher for patients in the highest income decile area compared to the lowest.

Geographic differences are similar to income differences. Western Massachusetts has much lower relative rates of physical therapy, acupuncture, massage therapy, and chiropractic services compared to Eastern Massachusetts **(Exhibit 3)**.

For example, a more rural region in Western Massachusetts has the lowest relative utilization with 83.1 services per 100 residents, compared to an area in the Metro Boston suburbs which has a utilization rate of 219 services per 100 residents.

CONCLUSIONS

This preliminary exploration of these physical rehabilitative services found that residents living in higher-income and more densely populated areas are more likely to have received any chiropractic treatment or physical therapy. Prior HPC research has found that residents living in lower-income communities are less likely to receive medical care and to utilize primary care. The HPC finds a similar pattern with PRH services – which may have health equity implications if lower income patients are not able to access these services due to location, availability, inability to take time off work, transportation, or the high cost sharing associated with these services. It is also possible that individuals living in lower income areas have less generous benefits and might not be covered for as many of these service visits as a higher-income individual.

There are several limitations to this work that require further study. This study is not assessing all PRH utilization, but only those observable in commercial claims. Claims listed through worker's compensation and services paid completely out-of-pocket (not through insurance) were not able to be examined.

POLICY IMPLICATIONS

Income and regional differences exist for chiropractic, physical therapy, acupuncture, and massage therapy utilization. These services are often used for injury and pain management, sometimes in lieu of opioids or other prescription pain management. Many patients with a high number of visits per year have high levels of cost sharing or bear the burden of paying for these services outside of insurance coverage, potentially entirely out-of-pocket due to payer restrictions on the number of services that are covered annually. Payers and providers should work together to make access and utilization more equitable, with particular attention to serving rural and lower income populations.

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