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Correspondence Memorandum

Date: October 7, 2024

To: Group Insurance Board

From: Jessica Rossner, Data and Compliance Unit Director
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Office of Strategic Health Policy

Subject: Benefit Change Evaluation

This memo is for informational purposes only. No Board action is required.

Background

This memo provides the Group Insurance Board (Board) with background and information on two benefits the Board changed for non-Medicare members. The two benefit changes being evaluated are bariatric surgery and specialty pharmacy clear bagging. Merative completed the analyses using data from the Board's health care claims data warehouse, Data Analytics, and Insights (DAISI).

Bariatric Surgery

In 2019, the Department of Employee Trust Funds (ETF) proposed adding coverage for bariatric surgery to all health insurance plan designs offered by the Board (Ref. GIB | 05.15.19 | 8C) for the 2020 plan year. Previously this benefit was only available through the Access Plan, a nationwide PPO plan. However, in efforts to simplify benefits, in 2018 the Access Plan's coverage was standardized to match Uniform Benefits (UB), the coverage provided by all regional HMOs in the Board's program (Ref. GIB | 02.08.17 | 8C). As a result, bariatric surgery was no longer covered by any of the Board's plans.

The Board approved adding coverage for individuals with a body mass index (BMI) of 35 or higher. Plans could allow surgeries for BMIs under 35 based on evidence-based criteria. BMI is a tool healthcare providers use to estimate a patient's amount of body fat by using their height and weight measurements. BMI can be a useful indicator of a person's risk for certain diseases, such as heart disease, high blood pressure, and type 2 diabetes.

Reviewed and approved by Renee Walk, Director, Office of Strategic Health Policy
Electronically Signed 10/31/2024

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Bariatric surgery requires prior authorization from the health plan, and patients must undergo services like nutritional and mental health counseling to ensure readiness. This benefit change was approved and implemented for the 2020 plan year.

An analysis of the bariatric surgery benefit was performed using claims data from the beginning of 2020, when it was approved as a uniform benefit, through the end of the 2023 plan year, the last full year of available claims data. This analysis evaluates the trend in actual utilization and the cost of the surgical benefit and provides an initial assessment of the impact of the surgery on health outcomes and costs for bariatric surgery patients participating in the Group Health Insurance Program (GHIP). The latter was achieved by comparing GHIP members who received bariatric surgery to a similar group of GHIP members who qualified for, but did not have, the surgery. Details of the approach and analytic considerations, possible explanation for observed trends, expectations for future utilization of the benefit, health outcomes for bariatric surgery patients, and costs to the GHIP program are included below. Attachment A provides additional details.

Bariatric Surgery Analysis

Analytic Considerations

The assessment of the GHIP bariatric surgery uniform benefit from 2020 to 2023 is based on claims data sourced from DAISI. Barring any unusually late adjudication of related claims, this provides a complete representation of GHIP member claims experience. Eligible members needed to have a BMI of 35 or higher, as indicated by a primary or secondary diagnosis of obesity. Only members who were continuously enrolled in the GHIP program in all 48 months of 2020 through 2023 are included in multi-year comparisons. This is to ensure that utilization and costs are comparable over the time period. Utilization and costs for members who were only partially enrolled during the period may be lower and not comparable to those enrolled the whole period.

For the study, two mutually exclusive groups were identified. The “study group” consisted of eligible members who also met eligibility requirements and received bariatric surgery in 2021, and who also had no history of bariatric surgery before and after that year. The “control group” included eligible members who did not undergo bariatric surgery and have no record of the surgery. Even though the benefit was available starting in 2020, ETF chose 2021 for evaluation due to low utilization of the benefit in 2020, allowing for more comprehensive data analysis.

GHIP Members Qualified for Bariatric Surgery

The number of GHIP members with a BMI of 35 or higher steadily increased from 9,402 in 2020, to 15,390 in 2023, rising from 3.7% to 5.9% of the total GHIP population (Attachment A, Figure 1). Most qualifying members are older, with the average age of 52 years for female and 54 years for male members. The highest representation seen among females, while younger males have the lowest representation (Attachment A,

Figure 2). These trends align with rising obesity rates in the U.S.[1] Common comorbidities, often chronic, are prevalent among obese GHIP members, contributing significantly to lower overall program costs (Attachment A, Table 1). Some of these conditions may improve or go into remission following bariatric surgery[2], potentially enhancing quality of life and reducing healthcare costs for affected members.

The financial impact of members meeting the bariatric surgery BMI requirement is substantial. In 2023, these members incurred $25,020 in annual medical and prescription drug expenses, with an average risk score[3] of 520, nearly three times the risk score of 185 for those not meeting the requirement. (Attachment A, Figures 3 and 4). Although this group represented just 5.9% of the GHIP population, their inclusion caused an 11% increase in the overall average annual membership cost. Without this group, the average cost was $8,981, but when considering the entire GHIP population, it rose to $9,971. (Attachment A, Figure 5). This trend persisted throughout the 2020-2023 period, underscoring the disproportionate healthcare utilization and cost burden of this population.

Bariatric Surgery Experience

The utilization of the bariatric surgery benefit among GHIP members increased from 166 patients in 2020 to 297 patients in 2021, representing 1.8% and 2.7% of qualifying members, respectively (Attachment A, Figure 6). However, these numbers dropped to 260 (2.3%) in 2022 and 242 (1.6%) in 2023, with more stable utilization seen starting in 2022. The quarterly breakdown of surgeries shows lower utilization in early 2020, likely due to the newness of the benefit and disruptions from the COVID-19 pandemic, with an increase in late 2020 and early 2021, likely driven by pent-up demand (Attachment A, Figure 7). Over 77% of all surgeries during the 2020-2023 period were performed on female GHIP members, with women ages 36-55 consistently accounting for 50% or more of the patients (Attachment A, Table 2).

Nearly all GHIP bariatric surgeries involved either laparoscopic gastric bypass (procedure code 43644) or laparoscopic sleeve gastrectomy (procedure code 43775)[4], with utilization of the sleeve procedure increasing in recent years. The relative use of laparoscopic gastric bypass decreased in 2022 and 2023, while the use of laparoscopic sleeve gastrectomy increased, which aligned with U.S. national trends[5]. The gastric bypass procedure is more expensive, averaging $6,800 to $8,500 between 2020 and

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[1] Centers for Disease Control and Prevention. Prevalence of Obesity and Severe Obesity Among Adults: United States, 2017-2018, https://www.cdc.gov/nchs/products/databriefs/db360.htm
[2] Chang, Stoll, Song; "The Effectiveness and Risks of Bariatric Surgery." JAMA Surgery Published online March 2014. https://jamanetwork.com/journals/jamasurgery/fullarticle/1790378
[3] Analysis used Merative's risk score and member risk category methodology. Merative's risk scores are values indicating the expected utilization of medical and prescription drug resources by member.
[4] University of Michigan Health, Types of Bariatric Procedures https://www.uofmhealth.org/conditions-treatments/surgery/types-bariatric-procedures
[5] American Society for Metabolic and Bariatric Surgery, Metabolic and Bariatric Surgery, https://asmbs.org/resources/metabolic-and-bariatric-surgery/

2023, compared to $5,500 to $6,000 for the sleeve gastrectomy (Attachment A, Figure 8).

Over 98% of bariatric surgery patients required hospitalization. This inpatient component accounted for about 70% of the overall per patient care cost. The remaining 30% of the cost was attributed to professional fees, primarily for the procedure itself (Attachment A, Figures 9 and 10).

The overall annual cost of the bariatric surgery to GHIP ranged from $5.17M for 166 patients in 2020 to a peak of $10.05M for 297 patients in 2021. The per patient cost has been relatively stable over the 2020 to 2023 period, and the variation in overall costs is primarily driven by utilization. The most recent year analyzed shows a cost of $7.82M for 242 patients in 2023 and is a good indication of future costs to GHIP (Attachment A, Figure 11).

Rates of complications from bariatric surgery for GHIP patients are generally aligned with U.S. averages. Conditions like post-surgery nutritional deficiencies make up most of the general complication rates of about 20%. The more involved complications, such as those requiring readmissions, have much lower rates, decreasing from 1.8% in 2020 to 0.8% in 2023. Typical complications requiring readmissions include abdominal hernias (Attachment A, Figures 12 and 13)[6].

Post Bariatric Surgery Assessment

The GHIP bariatric surgery benefit evaluation compared a “study group” of 169 GHIP members who received surgery in 2021 to a “matched control group” of 169 members who qualified but did not undergo surgery. Both groups were continuously enrolled in the GHIP from 2020 to 2023, with a cohort matching based on demographics, risk categories, and disease severity using a propensity score approach[7] . Based on the study group analysis, bariatric surgery had a marked positive impact on health outcomes. By 2023, only 13% of the study group remained in severe stages of obesity compared to 43% in the control group. Comorbidities like diabetes dropped from 23% to 12% in the study group, while increasing from 26% to 30% in the control group. Hypertension prevalence in the study group fell from 13% to 9% by 2023, whereas it increased in the control group from 15% to 21%. Similar trends were observed for musculoskeletal conditions like spinal and low back disorders. Figures 14 a-d and 15 a-d highlight these changes (Attachment A). Additionally, conditions like sleep apnea and abnormal lipid levels improved more significantly in the study group post-surgery than in the control group.

[6] Chang, Stoll, Song; “The Effectiveness and Risks of Bariatric Surgery.” JAMA Surgery Published online March 2014. https://jamanetwork.com/journals/jamasurgery/fullarticle/1790378
[7] Luvsandorj, Z, A Beginner’s Guide To Propensity Score Matching, published February 2023 https://builtin.com/data-science/propensity-score-matching

Financial analysis using a "difference in differences" approach revealed that bariatric surgery resulted in substantial healthcare cost reductions[8]. By 2023, the study group had a net average cost reduction of $4,131 compared to the control group, as shown in Figure 16 and Table 3 (Attachment A). The baseline year for the assessment was 2021, the year surgery was performed, excluding surgery costs. The study group saw lower medical and prescription drug costs by $1,354 from 2021 to 2022, and by $4,131 from 2022 to 2023. These trends suggest a promising financial benefit in the short term, with estimated savings of around $5,500 within two years of surgery. However, further evaluation with additional claims data is recommended to assess long-term cost savings and determine the breakeven point, which previous studies have estimated to range from 26 months to 10 years[9] [10] [11] [12]. Additionally, the impact of complications and readmissions, though generally low, needs to be monitored to ensure the GHIP experience is in line with current best practices (Attachment A, Figures 12 and 13).

Conclusion

The bariatric surgery benefit has proven effective in reducing obesity among GHIP members who underwent the procedure. In the first two years following surgery (2022 and 2023), the study group exhibited a more significant decrease in the prevalence of obesity and comorbidities compared to a matched control group that qualified for surgery but did not receive it. This improvement in health outcomes led to a decreased utilization of medical and prescription drug services for the study group, resulting in lower average costs compared to the control group during this period.

The ROI expectations for this benefit are still in flux because it has only recently become widely available as a benefit. Future evaluations are required to assess if the relatively lower costs and health outcomes for the study group are sustained over time and if they justify the expenses associated with the bariatric surgery benefit. ETF will continue to monitor the viability of this benefit in the context of overall member health outcomes and expenditures for the GHIP program.

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[8] Huntington-Klein, Nick, The Effect, Differences-in-Differences, https://theeffectbook.net/ch-DifferenceinDifference.html

[9] Klein. S, Ghosh. A, Wiley Online Library, “Economic Impact of the Clinical Benefits of Bariatric Surgery in Diabetes Patients with BMI ≥35 kg/m², published September 2012, https://onlinelibrary.wiley.com/doi/full/10.1038/oby.2010.199

[10] Finkelstein. E.A., Brown. D.S., American Journal of Managed Care (AJMC), “A Cost-benefit Simulation Model of Coverage for Bariatric Surgery Among Full-time Employees”, published October 2005, https://www.ajmc.com/view/oct05-2141p641-646

[11] Klebanoff, Chhatwal. Nudel; “Cost-effectiveness of Bariatric Surgery in Adolescents with Obesity”, JAMA Surgery, published February 2017, https://jamanetwork.com/journals/jamasurgery/fullarticle/2572731

[12] Lauren, Lim, Krikhely; “Estimated Cost-effectiveness of Medical Therapy, Sleeve Gastrectomy, and Gastric Bypass in Patients With Severe Obesity and Type 2 Diabetes”, JAMA Network Open, published February 2022, https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2789003

Clear Bagging Program
In November 2019, the Board approved an initiative regarding specialty drugs and the site where those specialty drugs are administered to members (Ref. GIB | 11.13.19 | 6). Information gathered for this initiative was presented to the Board in November 2021 (Ref. GIB | 11.17.21 | 5A), as the Specialty Drugs and Site of Care Report (Report).

Among other things, the Report researched options to lower the cost of drugs by examining drug bagging, which is the practice of having specialty drugs that are administered in a hospital, infusion center, or clinic setting supplied by a specialty pharmacy contracted with the pharmacy benefit manager (PBM), rather than the health plan. Bagging options allow for the specialty drug to be processed under the PBM rather than the health plan.

While white bagging calls for a prescription to be shipped to the hospital, infusion center, or clinic from an outside specialty pharmacy and brown bagging requires the specialty pharmacy ship the drug to the patient, clear bagging calls for the provider's own internal specialty pharmacy to dispense the prescription and transport it to where the drug is administered.[13]

A clear bagging program allows for fewer people to touch a drug before it is administered, and the drug would not be handled by a non-medical professional. Clear bagging allows for members to continue to have their drug administered in the same location and by the same medical professionals as before the program is established.

Also mentioned in the November 2021 Board memo was an analysis that Navitus Health Solutions (Navitus), the Board's PBM, conducted of the health plans' specialty pharmacy claims data from December 2019 through November 2020. Navitus compared the specialty drug costs under the health plans' medical pharmacy benefit versus what the drug would have cost the Board if the claim had been paid under the pharmacy benefit. Navitus's analysis found that if all the medical specialty drugs during the time frame examined had been by paid for using the pharmacy benefit, the Board would have saved about $17.4 million.

After the November 2021 Board meeting, staff met with representatives from the Wisconsin Hospital Association, the Pharmacy Society of Wisconsin, Rural Wisconsin Health Cooperative, Wisconsin Association of Health Plans, the University of Wisconsin (UW) Specialty Pharmacy, and Navitus to discuss some of the options for pharmacy coverage that were laid out for the Board. It quickly became apparent from these discussions that a clear bagging program would be the best program to implement and have the least resistance from stakeholders. It was also determined that a clear bagging program would need to exclude oncology and multiple sclerosis drugs, due to their complexity that often requires dose adjustments and treatment delays.

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[13] Keck Medicine of USC. (2021, February 18). California State Board of Pharmacy. Retrieved from White Bagging Informational Hearing: https://pharmacy.ca.gov/meetings/agendas/2021/keck_presentation.pdf

In May of 2022, ETF recommended the Board implement a clear bagging program for 2023 through the UW Specialty Pharmacy for non-Medicare members receiving care within the UW Hospital System (Ref. GIB | 05.18.22 | 5C). The UW Specialty Pharmacy was one of the two specialty pharmacies that non-Medicare members must use to get their specialty drugs, and already had a contractual relationship with Navitus.

The Board approved the establishment of a clear bagging program for non-Medicare members, starting January 1, 2023. Staff committed to providing updates to the Board on the clear bagging program's progress, cost savings, and member experience.

After examining more medical pharmacy data during the summer of 2022, Navitus found that a vast majority of members who had their drugs administered in the UW Hospital System also had Quartz Health Solutions (Quartz) as their medical insurance provider. Discussions among staff from Quartz, Navitus, UW Specialty Pharmacy, and ETF continued through the fall to ensure that the start of the program would not interrupt members' treatments. Thanks to the hard work of all of ETF's partners, there have been no member issues, delays, or appeals regarding the clear bagging program.

In 2023, 292 GHIP members filled 952 prescriptions for specialty drugs under the clear bagging program. These drugs cost the Board $1.68 million in net payments, under the prescription drug benefit.

This analysis is an assessment of the clear bagging program using the claims experience of the GHIP commercial members for all of 2023. The intention of this analysis is to examine the level of savings the GHIP received for the specialty drugs now covered under the pharmacy benefit instead of the medical benefit.

Clear Bagging Data Analysis

The commercial, fee-for-service constraints are critical to the validity of the cost comparisons in this assessment; however, they also limit the data for claims paid under the medical benefit available for comparisons. The implication is that some of the clear bagging claims experience had to be excluded from subsequent cost considerations because there are no equivalent medical claims from the GHIP experience. Costs associated with other payment arrangements such as capitation, percentage of fees, bulk payments etc., may not represent the true cost of the specialty drug and therefore are excluded from this analysis.

The available comparable data can still support the assessment of most of the clear bagging program: 790 of the 952 prescriptions, and $1.40M of the $1.68M in net payment made by the GHIP for specialty drugs, representing about 83% of the utilization and the cost of the program, respectively.

Attachment B shows the list of 24 specialty drugs, a description, utilization, and costs in the 2023 calendar year. The specialty drugs that do not have equivalent medical claims

for cost comparisons, and are thus excluded from further cost considerations, are highlighted.

Results of the analysis for the subset of specialty drugs with available comparable costs paid under the medical benefit is shown in Attachment C. The unit costs for the specialty drugs provided under the clear bagging program (Plan Paid per Unit Rx) are determined by dividing the total amount paid by the GHIP by the base units of the drug provided. Similar medical costs are obtained by dividing the total net paid amount under the medical benefit by the equivalent number of base units [Plan Paid Per unit (Med.)]. A percentage savings or extra per unit cost (% Plan Savings/Extra) is calculated by comparing the unit cost under the medical benefit to the unit cost under the clear bagging program. A positive value percentage indicates savings, while a negative percentage indicates that the GHIP is paying more for the specialty drug under the clear bagging program than the average cost under the medical benefit. The last column on the right of Attachment B shows the total savings or extra for each specialty drug.

Most of the specialty drugs, 13 of the 16, representing about 94% of utilization and 84% of net payment, show considerable per unit savings under the clear bagging program. The GHIP is paying more for three of the specialty drugs under the clear bagging program when compared to the average cost under the medical benefit. These represent about 6% and 16% of the utilization and costs of the specialty drugs being assessed, respectively.

There is an aggregate savings of $713,710, representing just under 51% of the $1.40M net payment cost to the GHIP. The number of members and the number of drugs in the 2023 clear bagging program are less than Navitus's Specialty Pharmacy Site of Care Analysis, a confidential attachment to the November 2021 Board memo. However, the Board did realize savings on the specialty drugs in the 2023 clear bagging as laid out in the Navitus Specialty Pharmacy Site of Care Analysis.

Overall, the cost of the sample of specialty drugs provided under the clear bagging program is considerably lower than the average cost of the same drugs provided under the medical benefit.

Next Steps

Future evaluations are required to assess if the relatively lower costs and health outcomes are sustained over time and justify the expenses associated with the bariatric surgery benefit. ETF will continue to monitor the viability of the bariatric surgery benefit change in the context of overall member health outcomes and expenditures for the GHIP program and provide the Board with updates.

The clear bagging program will continue as is for 2025, and ETF will continue to monitor the program for member and cost benefits. Expanding the program to other health systems and other insurers will be discussed during contract negotiations on the new

Third-Party Administrations of Pharmacy Benefits Program agreement set to begin January 1, 2026.

Staff will be at the Board meeting to answer any questions.

Attachment A: Merative Assessment of Bariatric Surgery and Clear Bagging Programs

Attachment B: 2023 Clear Bagging Program Utilization and Costs (Confidential)

Attachment C: 2023 Clear Bagging Program Evaluation of Cost Savings (Confidential)