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Analysis of LC 23.0532.01000 Relating to Diabetes Drugs and Supplies

Prepared for the North Dakota Legislative Council
Pursuant to North Dakota Century Code 54-03-28

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I. Evaluation of Proposed Mandated Health Insurance Services

The North Dakota Legislative Council (NDLC) was asked to perform a cost benefit analysis of LC 23.0532.01000 (Draft Bill) for the standing Legislative Assembly pursuant to the North Dakota Century Code (NDCC) 54-03-28. This Draft Bill creates and enacts section 26.1-36-09.16, amends and reenacts 26.1-36.6-03 of the NDCC, provides for an application; provides an effective date; and declares an emergency. This Draft Bill proposes coverage for cost sharing for a 30-day supply of:

A. Prescribed insulin drugs which may not exceed twenty-five ($25) dollars per pharmacy or distributor, regardless of the quantity or type of insulin drug used to fill the covered individual's prescription needs, where insulin includes the following categories:
    a. Rapid-acting insulin
    b. Short-acting insulin
    c. Intermediate-acting insulin
    d. Long-acting insulin
    e. Premixed insulin product
    f. Premixed insulin/GLP-1 RA product
    g. Concentrated human regular insulin

B. Prescribed medical supplies for insulin dosing and administration, the total of which may not exceed twenty-five ($25) dollars per pharmacy or distributor, regardless of the quantity or manufacturer of supplies used to fill the covered individual's prescription needs.
    a. Blood glucose meters
    b. Blood glucose test strips
    c. Lancing devices and lancets
    d. Ketone testing supplies, such as urine strips, blood ketone meters, and blood ketone strips
    e. Glocagon, injectable or nasal forms
    f. Insulin pen needles
    g. Insulin syringes

NovaRest, Inc. has been contracted as the NDLC's consulting actuary, and has prepared the following evaluation of diabetes drugs and supply coverage.

This report includes information from several sources to provide more than one perspective on the proposed mandate to provide a totally unbiased report. As a result, there may be some conflicting information within the contents. Although we only used sources that we consider credible, we do not offer any opinions regarding whether one source is more credible than another, leaving it to the reader to develop his/her conclusions.

NovaRest estimates the additional percentage impact above current diabetes drug and supply coverage on health care costs and premiums ranges from 0.2% to 0.3% on a percentage of premium basis, and $0.74 to $1.21 on a per member per month (PMPM) basis.

II. Process

NovaRest was charged with addressing the following questions regarding this proposed mandate:

- The extent to which the coverage will increase or decrease the cost of the service;
- The extent to which the coverage will increase the appropriate use of the service;
- The extent to which the coverage will increase or decrease the administrative expenses of carriers, including health maintenance organizations, or other organizations authorized to provide health benefit plans in the State, and the premium and administrative expenses of policyholders and contract holders; and
- The impact of this coverage on the total cost of health care.

NovaRest reviewed literature (including reports completed for other states that were either considering or have passed similar legislation) and developed an independent estimate of the proposed mandate's impact on premiums.

III. Coverage for Diabetes Drugs and Supplies

Prevalence of Coverage

This Draft Bill would not add new benefits or services, but instead would limit member cost sharing for the insulin and supplies mentioned above.

There are approximately 54,372 people in North Dakota with diagnosed diabetes,[1] approximately 31% of those diagnosed use insulin.[2] The Draft Bill would only impact the North Dakota Public Employees Retirement System (NDPERS) plans, which enrolls approximately 8% of the North Dakota Population.[3] We estimate over 2,000 NDPERS members would receive lower cost insulin and insulin supplies because of the Draft Bill.

State Employee Retiree Group Health Insurance

NDPERS currently includes coverage for the following diabetic supplies when medically necessary:[4]

- Insulin
- Blood glucose test strips
- Glucagon
- Glucometers
- Glucose Agents
- Lancets and lancet devices
- Prescribed oral agents for controlling blood sugars
- Syringes
- Urine testing strips

Coverage is also available when medically necessary for continuous Glucose Monitor, Insulin infusion devices, and insulin pumps through Durable Medical Provider.

Prescription Medications and nonprescription diabetes supplies are subject to a dispensing limit of a 100-day supply.

For members on the PPO/Basic Grandfathered and Non-Grandfathered plans, cost sharing for diabetes supplies are as follows:

- Generic - $7.50 Copayment, then a 12% member coinsurance.
- Brand - $25 Copayment, then a 25% member coinsurance.
- Non-formulary - $30 Copayment, then a 50% member coinsurance.
- Copayment Amounts do not apply to the following nonprescription diabetes supplies: syringes, lancets, blood glucose test strips, urine test products and control solutions. Coinsurance still applies.

For members on the High Deductible Health Plan, cost sharing for diabetes supplies are as follows:

- Formulary – 20% member coinsurance
- Non-formulary - 50% member coinsurance

Questions Concerning Mandated Coverage for Diabetes Drugs and Supplies

The extent to which the coverage will increase or decrease the cost of the service.

Mandating a service or product often increases the demand for that service or product, which typically increases the cost of the service, where allowed. Insurers can offset this upward pressure on price by contracting with providers and/or using managed care protocols.

Diabetic drugs and supplies are currently covered by NDPERS plans. The Draft Bill will require a 30-day supply of prescribed insulin and prescribed medical supplies for insulin which may not exceed $25. We do not believe this will impact the cost of insulin or prescribed medical supplies for insulin.

The extent to which the coverage will increase the appropriate use of the service.

A 2021 study found that 18.6% of people with type 1 diabetes and 15.8% of people with type 2 diabetes ration their insulin to save money.[5] The Draft Bill would limit member cost-sharing for insulin and insulin supplies, which we believe would increase utilization of prescribed insulin and insulin supplies. However, we do not have data to estimate this increase.

The extent to which the coverage will increase or decrease the administrative expenses of carriers, including health maintenance organizations, or other organizations authorized to provide health benefit plans in the State, and the premium and administrative expenses of policyholders and contract holders.

NDPERS plans already cover diabetic drugs and supplies. We do not expect a change in administrative expenses.

The impact of this coverage on the total cost of health care.

Changes to the cost of the service or utilization of the service would impact the total cost of health care. We do not anticipate any significant change in the cost but expect a slight increase in utilization for those cannot currently afford the cost sharing for their prescribed insulin or insulin supplies. We do not have the data to estimate this increase, but we do not believe the total cost would increase significantly. We also note this cost may be offset by savings from preventing more serious diseases. If left untreated or not treated properly, diabetes can lead to life threatening diseases such as cardiovascular disease, nerve damage (neuropathy), kidney damage (nephropathy), and eye damage (retinopathy).[6]

NovaRest Estimate

Data

- NDPERS provided the premiums, claims, membership, and age distribution in NDPERS for 2021.
- The age and gender proportions of North Dakota's population are based on the 2021 Vintage population estimates.[7]
- Information on North Dakota households is based on 2021 American Community Survey (ACS) Data.[8]

Assumptions

- There is not much information on the distribution, type(s) of insulin used, or the dosage(s), since these are prescribed on an individualized basis. For insulin, we assumed 62 units per day.[9] The cost per unit is based on GoodRx prices.[10]
- Cost of insulin supplies were based on a variety of sources.[11,12,13]
- The types of insulin used are primarily on the Brand drug tiers.[14] We therefore used the NDPERS PPO/Basic Brand cost sharing (detailed above) to determine the current member cost sharing.[15]
- 2021 membership, incurred claims and earned premiums were provided by NDPERS.
- We assume 11.3% of the NDPERS population have diabetes.[16]
- We assume 5-10% of people with diabetes are Type 1,[17] and 100% of people with Type 1 diabetes use insulin.[18]
- We assume 90-95% of people with diabetes are Type 2,[19] and 25% of people with Type 2 diabetes use insulin.[20]
- Pregnancies in North Dakota were estimated using ACS data[21] to determine the number of live births, and assuming 62% of pregnancies end in live birth.[22]
- We assume 2% to 10% of pregnancies result in gestational diabetes,[23] and 20% of these cases will use insulin.[24]

Methodology

- Using the assumptions described above, we estimated the average current member cost sharing for people who use insulin, for insulin and insulin supplies. We then estimated the member cost sharing under the proposed $25 limitation on insulin and insulin supplies. The difference would be the cost sharing dollars shifted from the members to NDPERS plans.
- Using NDPERS data and public sources, we estimated the number of members who use insulin. This was applied against the cost-sharing dollars shifted to the NDPERS plans to determine the cost impact.

Cost

NovaRest estimates the additional percentage impact above current diabetes drug and supply coverage on health care costs and premiums ranges from 0.2% to 0.3% on a percentage of premium basis, and $0.74 to $1.21 on a per member per month (PMPM) basis.

IV. Other State Diabetes Drugs and Supplies Laws[25]

There are approximately 21 states and Washington, D.C. that have passed legislation addressing the issue of capping copays for diabetes drugs and supplies. Below is a summary of that legislation.

State	Legislation
Alabama[26]	$35 cap for a 30-day supply of insulin
Colorado	$100 cap for a 30-day supply of insulin
Connecticut	$25 cap for a 30-day supply of insulin $100 per month cap for insulin-related supplies, such as test strips, BGMs, and CGMs $25 per month cap for other glucose-lowering medications
Delaware	$100 cap for a 30-day supply of insulin
Illinois	$100 cap for a 30-day supply of insulin
Kentucky	$30 cap for a 30-day supply of insulin
Maine	$35 cap for a 30-day supply of insulin
Maryland	$30 cap for a 30-day supply of insulin
Minnesota	$50 cap for a 90-day supply of insulin $35 for emergency 30-day supply of insulin
New Hampshire	$30 cap for a 30-day supply of insulin
New Mexico	$25 cap for a 30-day supply of insulin
New York	$100 cap for a 30-day supply of insulin
Oklahoma[27]	$30 cap for a 30-day supply of insulin
Oregon	$75 cap for a 30-day supply of insulin
Rhode Island	$40 cap for a 30-day supply of insulin
Texas	$25 cap for each insulin prescription per month
Utah	$30 cap for a 30-day supply of insulin
Vermont	$100 cap for a 30-day supply of insulin
Virginia	$50 cap for a 30-day supply of insulin
Washington	$100 cap for a 30-day supply of insulin
Washington, D.C.	$30 cap for a 30-day supply of insulin
West Virginia	$100 cap for a 30-day supply of insulin

V.Limitations

NovaRest has prepared this report in conformity with its intended use by persons technically competent to evaluate our estimate regarding this Draft Bill. Any judgments as to the data contained in the report or conclusions about the ramifications of that data should be made only after reviewing the report in its entirety, as the conclusions reached by review of a section or sections on an isolated basis may be incorrect. Appropriate staff is available to explain and/or clarify any matter presented herein. It is assumed that any user of this report will seek such explanations as to any matter in question.

NovaRest did not have access to actual insurer claims data by service type or reimbursement rates. NovaRest has developed projections in conformity with what we believe to be the current and proposed operating environments and are based on best estimates of future experience within such environments. It should be recognized that actual future results may vary from those projected in this report. Factors that may cause the actual results to vary from the projected include new insurance regulations, differences in implementation of the required coverage by NDPERS, changes in medical treatments and practices, accounting practices, changes in federal and/or local taxation, external economic factors such as inflation rates, investment yields and ratings, and inherent potential for normal random fluctuations in experience.

VI. Reliance and Qualifications

We are providing this report to you solely to communicate our findings and analysis of this Draft Bill. The reliance of parties other than the North Dakota Legislative Council (NDLC) on any aspect of our work is not authorized by us and is done at their own risk.

To arrive at our estimate, we made use of information provided by NDPERS and other public sources. We did not perform an independent investigation or verification. If this information was in any way inaccurate, incomplete, or out of date, the findings and conclusions in this report may require revision.

This memorandum has been prepared in conformity with the applicable Actuarial Standards of Practice.

We have no conflicts of interest in performing this review and providing this report.

We are members of the American Academy of Actuaries and meet that body's Qualification Standards to render this opinion. We meet the Qualification Standards promulgated by these professional organizations to perform the analyses and opine upon the results presented in this Actuarial Report.

Appendix A: Definitions

a) "Insulin drug" means prescription drug that contains insulin and is used to treat a form of diabetes mellitus. The term does not include an insulin pump, an electronic insulin-administering smart pen, or a continuous glucose monitor, or supplies needed specifically for the use of such electronic devices. The term includes insulin in the following categories:

1) Rapid-acting insulin
2) Short-acting insulin
3) Intermediate-acting insulin
4) Long-acting insulin
5) Premixed insulin product
6) Premixed insulin/GLP-1 RA product
7) Concentrated human regular insulin

b) "Medical supplies for insulin dosing and administration" means supplies needed for proper insulin dosing, as well as supplies needed to detect or address medical emergencies in an individual using insulin to manage diabetes mellitus. The term does not include an insulin pump, an electronic insulin-administering smart pen, or a continuous glucose monitor, or supplies needed specifically for the use of such electronic devices. The term includes:

1) Blood glucose meters
2) Blood glucose strips
3) Lancing devices and lancets
4) Ketone testing supplies, such as urine strips, blood ketone meters, and blood ketone test strips
5) Glucagon, injectable or nasal forms
6) Insulin pen needles
7) Insulin syringes

c) "Pharmacy or distributor" means a pharmacy or medical supply company, or other medication or medical supply distributor filling a covered individual's prescriptions.

d) "Policy" means accident and health insurance policy, contract, or evidence of coverage on a group, individual, blanket, franchise, or association basis.

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[1] https://diabetes.org/sites/default/files/2021-10/ADV_2021_State_Fact_sheets_North%20Dakota.pdf
[2] https://www.cdc.gov/diabetes/data/statistics-report/diagnosed-undiagnosed-diabetes.html
[3] 2021 NDPERS enrollment provided by NDPERS compared to "Annual Estimates of the Resident Population by Single Year of Age and Sex for North Dakota: April 1, 2020 to July 1, 2021 (SC-EST2021-SYASEX-23)". U.S. Census Bureau, Population Division. June 2022.
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[5] About the authors Andrew Briskin, et al. "Insulin: No More Rationing." DiaTribe, 14 Nov. 2022, https://diatribe.org/insulin-no-more-rationing.

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[7] "Annual Estimates of the Resident Population by Single Year of Age and Sex for North Dakota: April 1, 2020 to July 1, 2021 (SC-EST2021-SYASEX-23)". U.S. Census Bureau, Population Division. June 2022.
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[10] https://www.goodrx.com/healthcare-access/research/how-much-does-insulin-cost-compare-brands
[11] https://health.costhelper.com/glucose-meter.html#:~:text=Typical%20costs%3A,on%20the%20meter's%20extra%20features.
[12] https://www.goodrx.com/glucagon?dosage=amphastar-of-1mg&form=kit&label_override=glucagon&quantity=1&sort_type=popularity
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[15] https://www.ndpers.nd.gov/active-members/insurance-plans-active-members
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[17] https://www.cdc.gov/diabetes/basics/what-is-type-1-diabetes.html
[18] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4714726/
[19] https://www.cdc.gov/diabetes/basics/type2.html
[20] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4714726/
[21] "2021 ACS 1-year Estimates Detailed Tables: Coupled Households by Type in North Dakota." United States Census Bureau.
[22] https://www.cdc.gov/nchs/pressroom/99facts/pregrate.htm#:~:text=This%20means%20that%2062%20percent,in%20a%20miscarriage%20or%20stillbirth.
[23] https://www.cdc.gov/diabetes/basics/gestational.html
[24] https://www.tommys.org/pregnancy-information/pregnancy-complications/gestational-diabetes/taking-medication-and-insulin-gestational-diabetes
[25] Norris, Louise. "State and Federal Programs to Cap Insulin out-of-Pocket Costs." Verywell Health, https://www.verywellhealth.com/programs-to-cap-insulin-costs-5667166#:~:text=Oregon%20governor%20and%20legislature%20pass,American%20Diabetes%20Association.
[26] ByStaff. "Sewell Votes to Cap Monthly Insulin Copay Costs at $35." Alabama Political Reporter, 1 Apr. 2022, https://www.alreporter.com/2022/04/01/congresswoman-sewell-votes-to-cap-monthly-insulin-costs-at-35/#:~:text=Beginning%20in%202023%2C%20the%20bill,of%20a%20plan's%20negotiated%20price.
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