



TOBACCO CESSATION AND MEDICAID COVERAGE IN NORTH DAKOTA

PROGRESS AND OPPORTUNITIES

March 2022

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What impact does tobacco have on the health of North Dakotans with Medicaid?

Tobacco use rates are twice as high as the general population and on the rise

Almost 40% of North Dakota adults with Medicaid coverage smoke cigarettes (39.1%).¹ This is **more than double** the rate of smoking in North Dakota overall (2020: 17.4%).²

Recently, adult smoking rates in North Dakota increased from 17.0% in 2019 to 17.4% in 2020.² Also, in 2020, annual cigarette sales rose nationwide for the first time in 20 years, indicating commercial tobacco use is still a major health issue for many North Dakotans.³

Increased healthcare costs for Medicaid-served

Annual healthcare costs in North Dakota directly caused by smoking are \$326 million.⁴ Almost 20% of those costs - **\$57 million** – are paid by Medicaid.⁴

Cessation rates fall below national benchmarks

In 2020, only 75% of Medicaid tobacco users were advised to quit smoking and a mere 50% discussed cessation medication and strategies with a health care provider, falling below the national benchmarks.⁵ Over the past five years, only 28% of NDQuits participants with North Dakota Medicaid reported being abstinent from tobacco for at least 30 days at a seven-month follow-up, falling short of the North Dakota average (31%) and the North American Quitline Consortium (NAQC) recommended 30% quit rate.⁶

Risk factors are higher

Studies have shown that targeting by the tobacco industry and other contextual factors, including inequities in health outcomes, are related to some population groups using tobacco at higher rates than the general population.² In North Dakota, these groups include:

- Adults eligible for Medicaid
- American Indian / Alaska Native individuals
- Pregnant individuals
- Individuals with behavioral health conditions
- Individuals living in rural North Dakota
- Youth and young adults (18-24 years)

*These populations **do not exist in isolation**; instead, these groups overlap with one another in that one individual can identify with multiple of these characteristics. An intersectional framework should be used to think about how these identities overlap.*



One example of intersectionality from the NDQuits program is a higher proportion of participants with North Dakota Medicaid among pregnant participants and among participants who identify as American Indian or Alaska Native.⁶ Additionally, roughly 65% of those with North Dakota Medicaid also report at least one behavioral health condition.⁶

How does North Dakota's Medicaid program support tobacco and nicotine cessation?

North Dakota's Medicaid coverage expansion for tobacco cessation

North Dakota's Medicaid program includes tobacco cessation medication coverage for all enrollees. In 2020, North Dakota removed a requirement for physician prior authorization, leading to greater availability of tobacco cessation medications. [This brief report focuses on how the 2020 change impacts North Dakotans with Medicaid coverage compared to 2019.](#) The data analyzed to inform this report used North Dakota Medicaid claims data, from the Department of Human Services (DHS). See the Appendix for details.

How North Dakota's Tobacco Prevention and Control Program is addressing it

North Dakota's Tobacco Prevention and Control Program (TPCP) has implemented innovative and evidence-based strategies to engage North Dakota communities in developing local prevention and cessation solutions. These efforts work in tandem to ensure the program is fiscally responsible and working to prioritize the health and economic interests of the state. This report focuses specifically on the overlap of cessation efforts for those North Dakotans with Medicaid coverage.

Major milestones in Medicaid coverage

- 2010 ● The Affordable Care Act required Medicaid programs to cover tobacco cessation counseling and medications for pregnant women.
- 2014 ● North Dakota Medicaid adopted the Medicaid eligibility expansion criteria. The Affordable Care Act prohibits state Medicaid programs from excluding any of the seven FDA-approved tobacco cessation medications (Chantix, bupropion, nicotine patches, nicotine gum, nicotine lozenges, nicotine nasal spray, and nicotine inhaler) from traditional Medicaid coverage.
- 2020 ● North Dakota Medicaid removed the requirement for prior authorization from a physician, making cessation medications more widely available.
- 2022 ● North Dakota Medicaid expanded tobacco cessation counseling coverage to include all enrollees.

Expanded counseling coverage

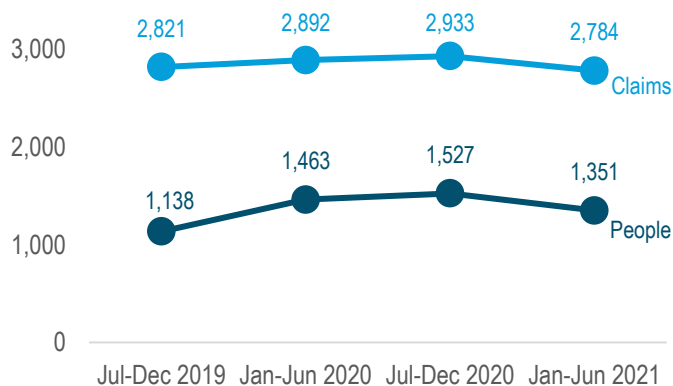
On January 1, 2022, North Dakota Medicaid expanded coverage for tobacco cessation counseling to all Medicaid enrollees, thus providing comprehensive tobacco cessation coverage for all of its members. This report covers the time period *before* this change.

How often are these North Dakota Medicaid tobacco cessation coverages utilized?

Since the prior authorization removal in 2020, 8,600 cessation-related claims were submitted to Medicaid for 3,400 unique North Dakotans.

The number of tobacco cessation-related claims submitted to North Dakota Medicaid has stayed steady around 2,800 per six-month period. These claims include procedure codes for cessation counseling and pharmacy claims for cessation medications. The number of unique North Dakotans with cessation claims rose from July 2019 to June 2020, which is expected as more people could access medications without the prior authorization requirement.

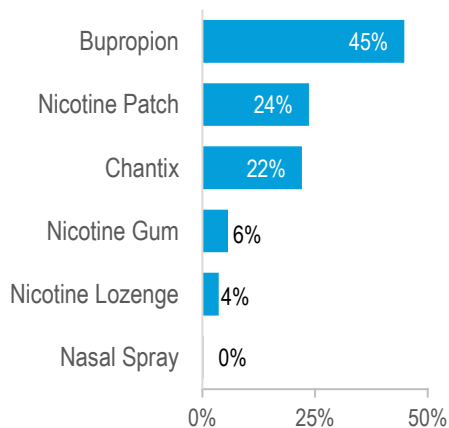
Total number of cessation-related claims and the number of unique people with claims are stable.



Over 80% of submitted claims are for cessation medications.

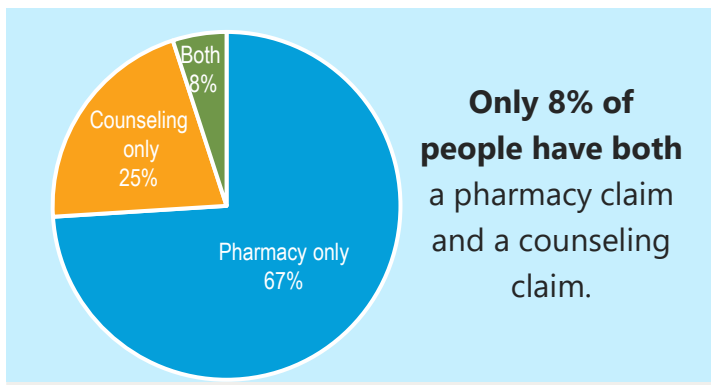
When looking at the types of claims submitted, most were pharmacy claims for cessation medications, accounting for 84% of claims in late 2019 and 82% of claims since the prior authorization removal (January 2020 – July 2021). A breakdown by medication is provided below.

Bupropion, nicotine patches, and Chantix are the most often submitted pharmacy claims (all years combined, Jul 2019-Jun 2021).



* Nicotine inhaler data not available

Of the procedure claims submitted after January 2020, almost 80% are for 3-10 minutes of cessation counseling (CPT code 99406) while 21% are for more than 10 minutes of counseling (CPT code 99407). Prior to January 1, 2020, it was 62% for 99406 vs. 38% for 99407.

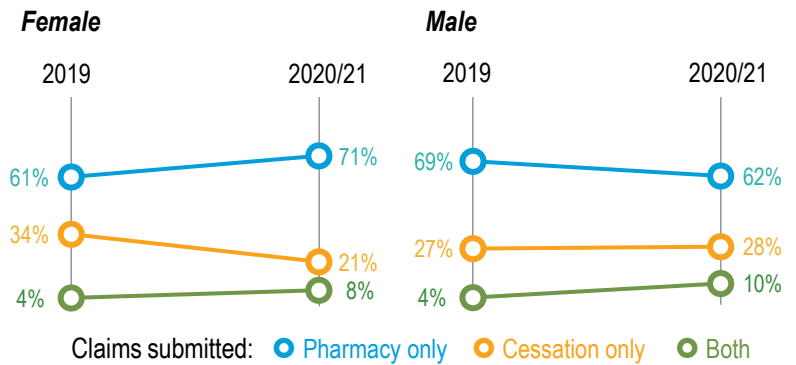


Who is utilizing the North Dakota Medicaid tobacco cessation coverages?

Almost 60% of unique people with submitted claims are female.

Most of the unique people are female (59%) for each time period. A higher percent of males and females had claims for both pharmacy and cessation counseling after the prior authorization removal.

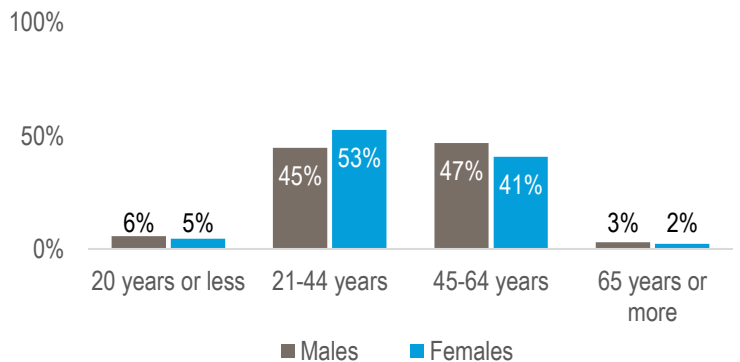
Females had a 10% rise in submitted pharmacy claims after prior authorization removal and a 13% fall in submitted cessation counseling claims. The percent of submitted claims for males stayed similar.



Medicaid enrollees aged 45-64 years tend to utilize more counseling services than those aged 21-44 years.

Almost 50% of those with any claim are between 21 and 44 years old; 43% are between 45 and 64 years old; 7% are younger than 21 years or older than 64 years. This age distribution aligns with expectations based on Medicaid eligibility and is the same before and after the prior authorization removal. Females with submitted claims tend to be younger than males with submitted claims.

Females tend to be younger than males.



When looking at types of submitted claims by age, about three-fourths of people aged 21-64 years have at least one pharmacy claim. Those aged 45-64 years have slightly higher rates of counseling claims than those aged 21-44 years (34% vs. 29%). This means the 45-64-year-old group is utilizing more comprehensive tobacco cessation services (e.g., cessation counseling and pharmacy) than the 21-44-year-old group (13% vs. 9%).

Who is utilizing the North Dakota Medicaid tobacco cessation coverages? (Continued)

60% of the cessation claims were eligible under Medicaid Expansion.

Medicaid Expansion Eligibility

Before 2014, the Medicaid program was primarily available to individuals with children and household income up to 100%-133% of the federal poverty level (FPL) depending on the age of the child(ren), pregnant women, and individuals with a disability. When North Dakota Medicaid expanded their coverage starting January 1, 2014, childless individuals aged 19-64 years with household income up to 138% of the FPL were eligible for coverage for the first time ever.

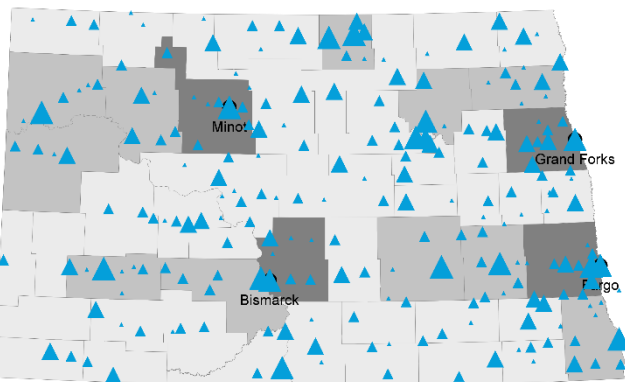
About 60% of unique people with tobacco cessation claims had Medicaid Expansion coverage. Those with Medicaid Expansion coverage and tobacco cessation claims included **more males** (47% vs. 32%) and **older ages** than those with cessation claims that did not have Medicaid Expansion coverage (50% aged 45-64 years eligible vs. 41% aged 45-64 years not eligible). Additionally, those that had Medicaid Expansion coverage had a higher percentage of people with a pharmacy claim and no counseling (73%) compared to those that did not have Medicaid Expansion coverage (58%).

North Dakotans across the state are utilizing cessation coverage, though the western part of the state has fewer claims.

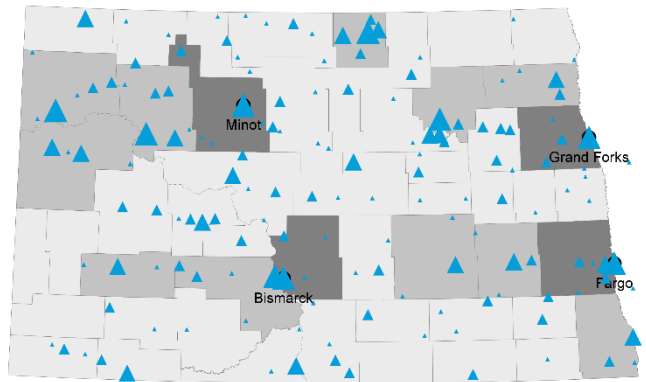
Cessation claims are coming in for people across North Dakota. Generally, there were fewer claims submitted for people in the state's western area compared to the central and eastern areas, especially for pharmacy claims. Counseling claims were sparser, especially in rural counties, possibly due to COVID-19 (see Conclusions for more details about COVID-19 effects).

Medicaid claims come from North Dakotans across the state, especially for pharmacy claims.

Number of people with pharmacy claims 2020-2021:



Number of people with counseling claims 2020-2021:



Number of people with claims: ▲ 1 person ▲▲ 2-4 people ▲▲▲ 5-25 people ▲▲▲▲ 26+ people

2019 population (Census Bureau estimate): Rural (<10,000) Micropolitan (10,000 to <50,000) Metropolitan (50,000+)

What comorbid diagnoses are being reported on cessation counseling claims?

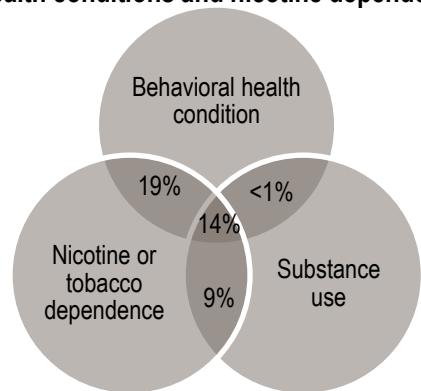
Background: Using tobacco cessation CPT codes 99406 (3-10 minutes of cessation counseling) and 99407 (>10 minutes of cessation counseling) should be documented with relevant diagnosis codes to facilitate claim submission and reimbursement. Diagnosis codes are determined by the provider/facility doing the tobacco cessation counseling and are based on what was covered during the visit when the tobacco cessation counseling occurred. Up to 25 diagnosis codes can be provided. These diagnosis codes do not represent a complete picture of a patient's health and comorbidities; only a snapshot of the issues that were addressed when the tobacco cessation counseling took place. Thus, the results on this page should be used to help understand what other conditions were addressed during the visit with cessation counseling and opportunities for improved billing practices.

Over 30% of people receiving cessation counseling have at least one diagnosis code for a behavioral health condition.

The diagnosis codes on tobacco cessation counseling claims provide an opportunity to assess intersectionality of tobacco use, substance use, and behavioral health conditions (BHCs).

There were 1,348 unique people with at least one cessation counseling claim from 2019-2021. Of those, 34.1% had at least one diagnosis code for a BHC (excluding substance use or abuse and nicotine dependence) and 23% had a diagnosis code for substance use or abuse. There was significant overlap among those with BHC and tobacco dependence (19%); and 14% had all three (BHC, tobacco dependence, and substance use). This overlap indicates that a significant portion of these enrollees have multiple risk factors for tobacco use, making their cessation journey even more difficult.

There is considerable overlap in behavioral health conditions and nicotine dependence.



Of these cessation counseling claims, 96% included a diagnosis code for tobacco or nicotine dependence. This means roughly 4% of cessation counseling claims did not have this diagnosis. This represents an opportunity for improved provider billing practices.

Rates of comorbid conditions related to tobacco use are fairly low.

When looking at comorbid conditions associated with tobacco use⁷ among people receiving cessation counseling, circulatory system problems (30%), chronic obstructive pulmonary disease (COPD; 11%), and type 2 diabetes (T2D; 11%) are the most commonly addressed comorbidities during visits with tobacco cessation counseling. Asthma (4%), emphysema (1%), lung cancer (1%), and stroke (1%) were less commonly addressed during visits when cessation counseling occurred.

Which providers are helping North Dakotans utilize the Medicaid tobacco cessation coverages?

Pharmacy providers are widespread across North Dakota, while cessation counseling providers are lacking in some rural areas.

Medication claims

There were 138 unique pharmacies submitting over 9,400 cessation medication claims.

The types of pharmacies submitting claims (in order of most claims submitted) include:

- 50% community/retail pharmacies
- 30% other types of pharmacies (clinical, long-term care, home infusion therapy, compounding, unspecified)
- 7% durable medical equipment/medical supplies
- 7% mail order pharmacies
- 6% Indian health pharmacies

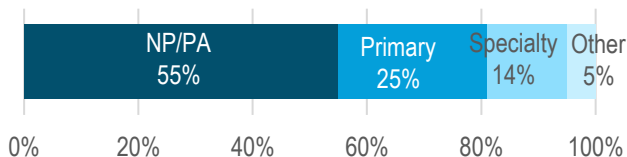
The geographic locations of pharmacies providing cessation medications cover most of the state, including rural counties. Only two counties do not have any pharmacies submitting claims.

Counseling claims

There were 44 unique health care facilities submitting cessation counseling claims, including 11 NDQuits Cessation (NDQC) Grantees. **These 11 NDQC facilities submitted 54% of all counseling claims.**

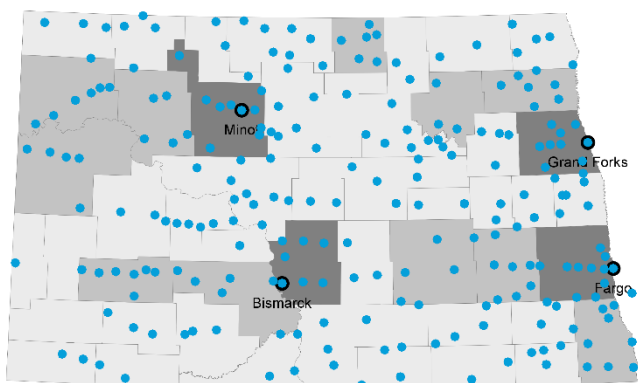
The facilities include clinics, federally qualified health centers, behavioral health facilities, critical access hospitals, and specialty group practices.

Nurse practitioners and physician assistants submit the most counseling claims (55%), followed by primary and specialty care.

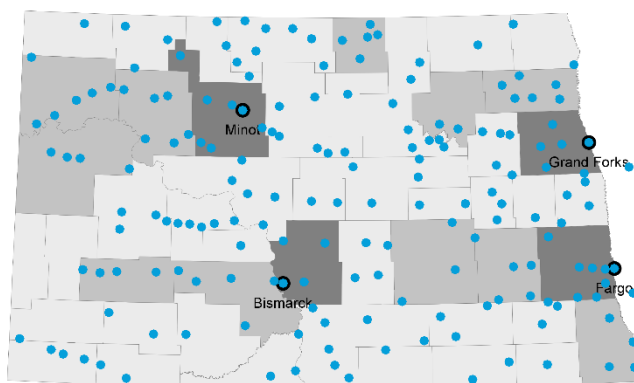


There are fewer counseling services in the southwestern area of the state as well as in many rural counties. Ten rural counties have one or no providers submitting cessation counseling claims.

Pharmacies submitting claims 2019-2021:



Health care facilities submitting claims 2019-2021:

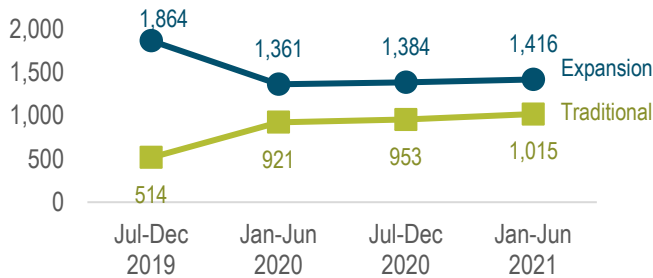


How often are North Dakota Medicaid tobacco cessation claims being paid?

Medication claims were paid almost 100% of the time after the removal of prior authorization; Counseling claims only 35%.

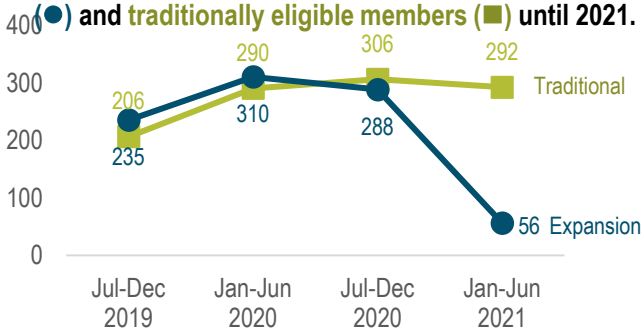
The average number of submitted medication claims is roughly 4,000 per year. Volumes of medication claims decreased for expansion eligible members and increased for traditionally eligible member from 2019 to 2020. Generally, expansion eligible members have more claims.

Total number of medication claims was higher for expansion eligible members (●) than traditionally eligible members (■) across the study period.



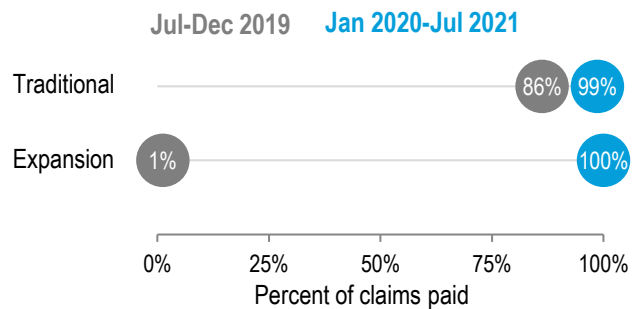
The average number of submitted cessation counseling claims is roughly 1,200 per year. Volumes of counseling claims dropped in 2021 for expansion eligible members while volumes for traditionally eligible members stayed stable.

Total number of counseling claims (professional and facility) was similar for expansion eligible members (●) and traditionally eligible members (■) until 2021.



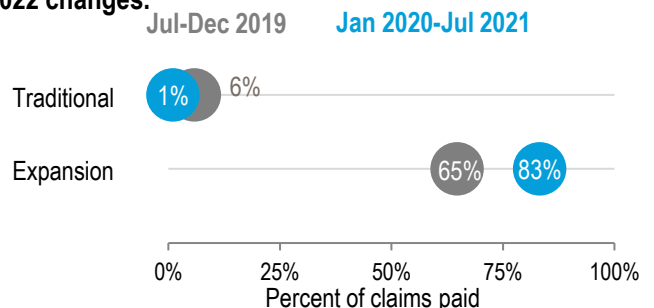
Medication claims for traditionally eligible members were paid most of the time before prior authorization was removed and 99% after while paid claims for expansion members jumped to 100%. This indicates removing the prior authorization requirement may have removed a barrier to receiving tobacco cessation medications.

After North Dakota Medicaid dropped the prior authorization requirement in 2020, the percent of paid medication claims jumped to almost 100%.



There were no coverage changes for counseling claims in 2020, so paid rates were not expected to change. Paid counseling claims (professional and facility) for expansion members surprisingly rose from 65% to 83% after January 2020 while paid rates for traditionally eligible members stayed stable.

The percent of paid counseling claims remained lower. These rates are expected to increase with the January 2022 changes.

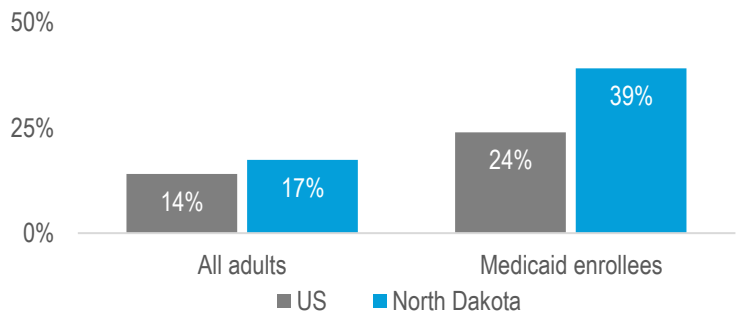


How does North Dakota Medicaid data compare to national Medicaid reporting?

Cigarette use rates among Medicaid enrollees in North Dakota are higher than among Medicaid enrollees in the U.S.

In the U.S., adults enrolled in Medicaid smoke cigarettes at a rate that is roughly 10% higher than overall adults.⁸ In North Dakota, adults enrolled in North Dakota Medicaid smoke cigarettes at a rate that is roughly 20% higher than overall North Dakotans.^{1,2} This rate in North Dakota is concerning, as it's a bigger percentage jump as compared to the national rate.

Cigarette smoking rates are higher in North Dakota than in the U.S. overall, even more so among Medicaid enrollees in North Dakota than in the U.S. overall.



North Dakota's Medicaid enrollees report less tobacco cessation support with physicians compared to benchmarks.

According to the 2020 Annual Technical Report of the North Dakota Medicaid Expansion Program, patients using tobacco are being advised to quit and discussing cessation medications at lower rates than the national benchmarks.⁵

CAPHS Metric (rolling 2-year averages)*	2019 Rate	2020 Rate	Compared to Benchmark
Advising smokers to quit	76.9%	75.2%	◆
Discussing cessation medications	52.1%	51.8%	◆
Discussing cessation strategies	48.1%	50.0%	◆◆

* Table taken from 2020 annual technical evaluation report⁵

Starting in 2022, North Dakota Medicaid joins 17 other states in offering comprehensive tobacco cessation coverage.

The U.S. Surgeon General's 2020 Smoking Cessation report states, "Cessation medications approved by the U.S. Food and Drug Administration and behavioral counseling increase the likelihood of successfully quitting smoking, particularly when used in combination."⁹ In 2020 the prior authorization requirement for all seven cessation medications was removed. And in January 2022, cessation counseling was added as a covered service for all enrollees. These changes mean North Dakota is joining 17 other states in offering comprehensive tobacco cessation coverage (medication and counseling).¹⁰

Implications and next steps

The results in this report mirror the evidence in the peer reviewed literature about the prevalence of tobacco use and co-morbid conditions in this population.¹¹ There are some high-level implications from the analysis for North Dakota Medicaid claims data from July 2019 – June 2021, as follows:

- **Tobacco use is still a problem.** The rate of smoking for those enrolled in North Dakota Medicaid is twice as high as the rate for all North Dakotans. Continued efforts for the North Dakota TPCP and North Dakota Medicaid to partner are vital to addressing the high cost of health care expenditures and health burden caused by untreated tobacco use.
- **Removing the prior authorization requirement for tobacco cessation medications removed a barrier to tobacco cessation for North Dakota Medicaid enrollees.** Since the prior authorization was removed in 2020, North Dakota Medicaid is covering all FDA-approved tobacco cessation medications almost 100% of the time.
- **Tobacco cessation counseling is an important tobacco cessation service.** Tobacco cessation is most successful when cessation medications and counseling are used together. During the study time frame, cessation counseling was not universally covered. Starting January 2022, tobacco cessation counseling is a covered service, providing comprehensive tobacco cessation care to North Dakotans with Medicaid.
- **The COVID-19 public health emergency may have negatively impacted tobacco cessation opportunities.** Some of the ways COVID-19 may have presented challenges to and impacted tobacco cessation include:
 - The Centers for Medicare and Medicaid Services made eligibility changes during COVID-19 to prevent member disenrollment. This potentially means a larger population of people needed services.
 - Health care services were less available and less desirable. During the height of the COVID-19 pandemic, the stay-at-home mandate and healthcare facility closures may have prevented patients from receiving services or obtaining care. During those times of high case rates, patients may not have felt comfortable going to their doctor for a face-to-face visit even if one was available. Though telehealth visits were more widely available towards the middle/end of 2020, not all people have the technology or skills to navigate telehealth.
 - Additional stress from other effects of the pandemic (i.e., economic strain from losing job/hours, children at home doing distance learning, day cares and other facilities closed, family members sick, etc.) may have caused people to use more tobacco or may have created a barrier to seeking tobacco cessation care (e.g., tobacco use was no longer their main health concern).

Next steps: This analysis will be repeated at a future point to assess the added benefit of comprehensive tobacco cessation coverage and to aid as the TPCP and North Dakota Medicaid continue to partner in efforts to support cessation for tobacco users served by Medicaid.

References

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- ¹⁰ Centers for Disease Control and Prevention STATE Medicaid Tobacco Cessation Fact Sheet. Available here: <https://www.cdc.gov/statesystem/factsheets/medicaid/Cessation.html>. Accessed May 8, 2021.
- ¹¹ DiGiulio A, Jump Z, Babb S, et al. State Medicaid Coverage for Tobacco Cessation Treatments and Barriers to Accessing Treatments - United States, 2008-2018. *MMWR Morb Mortal Wkly Rep*. 2020;69(6):155-160.

Appendix - Methods

Data Source Description

In fall 2020, the North Dakota TPCP requested North Dakota Medicaid claims data from the North Dakota Department of Human Services Medicaid Office. All claims from January 1, 2018 – June 30, 2020 with at least one of the following CPT or pharmacy codes were requested:

- Current Procedural Terminology (CPT) codes:
 - 99406 (3-10 minutes of tobacco cessation counseling) or
 - 99407 (10 or more minutes of tobacco cessation counseling)
- Pharmacy codes:
 - First Databank (FDB) Therapeutic Class Specific Code of J3A (Smoking deterrent agents – Ganglionic Stimulant) or J3C (Smoking deterrent – Nicotinic Receptor Partial Agonist) or
 - FDB Generic ID of:
 - 16387 (Bupropion HCL SR 100mg tablet),
 - 16386 or 27901 (Bupropion HCL SR 150mg tablet),
 - 17573 (Bupropion HCL SR 200mg tablet),
 - 27046 (Chantix 0.5mg tablet),
 - 27047 (Chantix 1mg tablet),
 - 27048 (Chantix starting month box),
 - 03421 (Nicotine 7mg/24hr patch),
 - 03422 (Nicotine 14mg/24hr patch),
 - 03423 (Nicotine 21mg/24hr patch),
 - 18772 (Nicotine transdermal patch),
 - 03200 (Nicotine 2mg chewing gum),
 - 03201 (Nicotine 4mg chewing gum),
 - 14689 (Nicotine 2mg lozenge),
 - 14688 (Nicotine 4mg lozenge), or
 - 03434 (Nicotrol nasal spray 4mg)

Data were grouped by calendar year (2018, 2019, 2020) to reflect the periods leading up to and just after Medicaid expansion.

Additional data included: rendering provider facility, type, and zip code; member sex, age group, and zip code; up to 25 supporting diagnosis codes for the CPT codes; claim status and remittance reasons.