



# Allied Health Professionals Treat an Increasing Proportion of Type 2 Diabetes Patients

February 11, 2024

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## Key Takeaways

- Patients with chronic conditions such as type 2 diabetes have abundant options for care management, ranging from primary care providers (PCPs), specialists like endocrinologists and allied health professionals, in a variety of care settings ranging from traditional physician clinics to retail and virtual care settings offered by newer entrants like Amazon and Walmart.
- While nationally PCPs are the main prescribers of type 2 diabetes drugs, there is variation across states in terms of which providers prescribe the highest proportion of these medications.
- *Compass+ Exclusive: Analyzing Changes in the Share of Providers Treating Type 2 Diabetes Patients and Changes in Share of Providers Prescribing Ozempic®.*

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Patients with chronic conditions like type 2 diabetes have abundant options for care management. Effective chronic condition management relies heavily on established patient-provider relationships that allow for personalized treatment adjustments and individualized patient education. These relationships are essential for ensuring optimal outcomes.<sup>1,2,3</sup>

Historically, primary care providers (PCPs) and endocrinologists managed diabetes treatment through in-person engagement. However, in recent years, retail and virtually enabled new entrants (e.g., Walmart, CVS, Amazon) have introduced chronic condition management platforms. These platforms are often overseen by allied health professionals (e.g., nurse practitioners (NPs), physician assistants (PAs)), providing both synchronous and asynchronous care.

Effective cost management of chronic conditions requires consistent and predictable access to preventive care and continuous, personalized treatment. While new entrants have expanded omni-channel options for chronic condition management, the increasing access introduces the risk of fragmented care.<sup>4</sup> As the well-documented workforce shortages among primary care physicians persists while the supply of NPs and PAs increases, understanding how these trends are impacting diabetes care is important.<sup>5,6,7</sup> As a result, we were interested in comparing the difference in the types of providers treating type 2 diabetes patients by state, how this distribution has shifted over time and if the distribution of providers prescribing Ozempic<sup>®</sup> has shifted over time.


## **Background**

The U.S. prevalence of chronic conditions (e.g., hypertension, arthritis, chronic lung disease) is rising, underscoring the need for improved care management.<sup>8,9</sup> In particular, the rate of type 2 diabetes is growing among individuals younger than age 60.<sup>10</sup> The Centers for Disease Control and Prevention estimates that in 2022, 37.3M Americans (11.3%) had diabetes, 22.8% of which (8.5M) were undiagnosed.<sup>11</sup>

Among U.S. adults with diabetes, 78.8% report having at least one usual source of diabetes care, including endocrinologists, PCPs, other specialists and new entrants.<sup>12</sup> Endocrinologists, PCPs and other specialists typically provide in-person examinations, disease progression monitoring and treatment of diabetes-related complications. In contrast, new entrants have developed platforms for chronic condition management,

offering telehealth, remote monitoring of symptoms and vital signs and in-person consultations at pharmacy- and clinic-enabled retail locations.<sup>13</sup> Treatment for type 2 diabetes is one of the top diagnoses for patients accessing care at retailers like Walmart, but where diabetes management falls in the list of top reasons for visits varies by individual retailer (Figure 1).

FIGURE 1. MOST COMMON DIAGNOSES AT SELECT RETAILERS, 2021-2022

 <b>CVS Health.</b>	 <b>Walmart</b>	 <b>Walgreens</b>	 <b>VillageMD</b>
REASON FOR VISIT	REASON FOR VISIT	REASON FOR VISIT	REASON FOR VISIT
Contact with/exposure to communicable disease	Other general symptoms and signs	[Redacted]	[Redacted]
Observation for suspected disease	Type 2 diabetes	[Redacted]	[Redacted]
Encounter for screening for infectious disease	Special examination without complaint	[Redacted]	[Redacted]
COVID-19	Contact with/exposure to communicable disease	[Redacted]	[Redacted]
Acute pharyngitis	Primary hypertension	[Redacted]	[Redacted]
Other general symptoms and signs	Chronic obstructive pulmonary disease	[Redacted]	[Redacted]
Chronic kidney disease	General examination without complaint	[Redacted]	[Redacted]
Acute sinusitis	Type 1 diabetes	[Redacted]	[Redacted]

Note: Volume for immunizations not shown. Data is only shown for a select number of high-volume clinical reasons. Source: Trilliant Health national all-payer claims database. • [PNG](#)



*To explore common diagnoses at Walgreens and VillageMD, log in to [Compass+](#).*

While the types of prescriptions or lab tests ordered at new entrants may not differ from those at traditional providers, the care pathways can vary depending on the platform patients choose to utilize. Although not all patients with type 2 diabetes are treated with medication, diabetes management medication prescription volume is a useful proxy to identify providers treating type 2 diabetes patients.

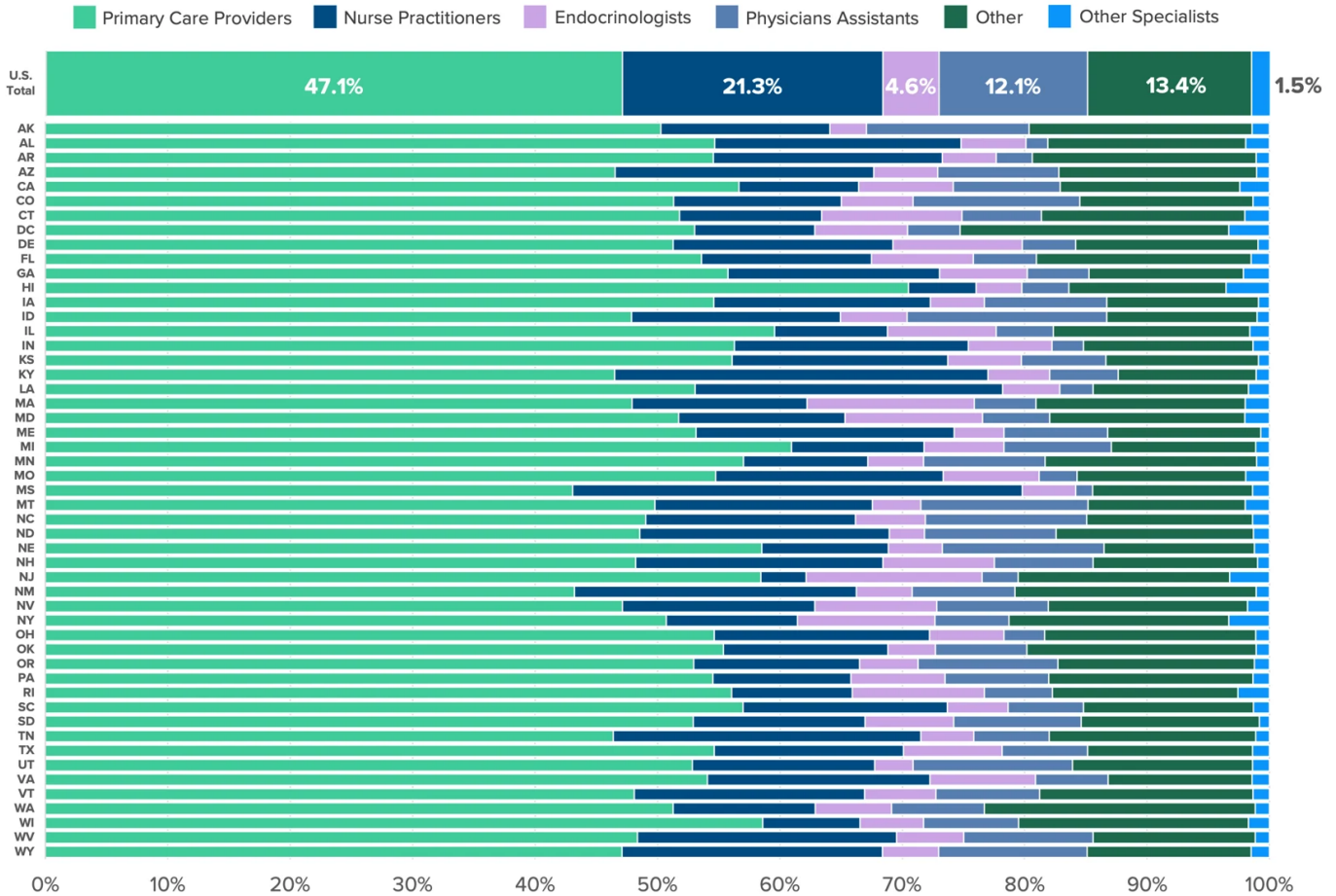
## Analytic Approach

Leveraging our national all-payer claims database and Provider Directory, we analyzed type 2 diabetes medication management patterns across different provider types, both geographically and longitudinally. The type 2 diabetes drug classes included in the medication management analysis were insulin, glucagon-like peptide-1 (GLP-1) agonists, sulfonylureas and metformin. The provider types included are primary care physicians, endocrinologists, other specialists, PAs and NPs. All other provider types were grouped as “Other.” We examined prescribing trends annually from 2017 to 2022, and the provider distribution by state in 2022. Additionally, we examined the proportion of Ozempic<sup>®</sup> prescriptions by provider type from 2017 and 2022.

## Findings

In 2022, PCPs rendered the most diabetes prescriptions (47.1%), followed by NPs (21.3%), PAs (12.1%) and other providers (13.4%) (Figure 2). Endocrinologists prescribed type 2 diabetes drugs least frequently, accounting for only 4.6% of prescriptions. While PCPs prescribe most type 2 diabetes drugs, the share of prescriptions written by PCPs in each state varied, ranging from 70.5% in Rhode Island to 43.1% in Mississippi. Mississippi also had the highest share of diabetes medication prescriptions rendered by NPs (36.7%), while Massachusetts had the lowest share (3.7%). This variation can be attributed in part to state licensure laws dictating whether NPs and PAs can evaluate patients, make diagnoses, order and interpret tests or initiate and manage treatment without physician supervision or collaboration.<sup>14</sup> Interestingly, Mississippi had the highest share of diabetes medication prescriptions rendered by NPs but has moderately restrictive NP scope of practice laws (i.e., requiring collaboration with another provider to deliver patient care).<sup>15</sup> In contrast, Massachusetts had the lowest share of prescriptions rendered by NPs but allows NPs to practice at the top of their license.<sup>16</sup> Multiple factors beyond regulation will inevitably influence prescribing patterns at the local level.

**FIGURE 2. NATIONAL AND STATE SHARE OF TYPE 2 DIABETES MEDICATION PRESCRIPTIONS BY PROVIDER TYPE, 2022**



Note: Type 2 diabetes drug classes included in the medication management analysis were insulin, glucagon-like peptide-1 (GLP-1) agonists, sulfonylureas and metformin. The provider types included are primary care physicians, endocrinologists, other specialists, PAs and NPs. All other provider types were grouped as "Other." Data includes both on and off-label use (i.e., patient without a diabetes diagnosis).  
 Source: Trilliant Health national all-payer claims database and Provider Directory. • PNG



## Compass+ Exclusive: Analyzing Changes in the Share of Providers Treating Type 2 Diabetes Patients Over Time and Changes in Share of Providers Prescribing Ozempic®

**FIGURE 3. NATIONAL SHARE OF TYPE 2 DIABETES MEDICATION PRESCRIPTIONS BY PROVIDER TYPE, 2017-2022**



FIGURE 4. NATIONAL SHARE OF OZEMPIC® PRESCRIPTIONS BY PROVIDER TYPE, 2017-2022

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While PCPs provide most type 2 diabetes care management, the share of allied health professionals treating these patients is increasing steadily, driven primarily by growing healthcare consumerism and physician shortages. As we have published previously, patients are increasingly seeking non-emergent care at retail pharmacies and other new entrants, while primary care utilization is trending downwards. As patient preferences for accessing preventive care changes, so might their preferences for treatment of chronic conditions. Are prescription volumes changes driven by patient preference for sites of care or rather by behavior changes based on provider availability?

Because NPs and PAs receive lower reimbursement rates than physicians and are often more accessible to patients, it is possible to increase access to diabetes care at a lower cost.<sup>21,22</sup> With the rising prevalence of type 2 diabetes and ongoing primary care shortage, accessible and affordable care is crucial for managing chronic conditions more effectively. However, NPs and PAs, especially within a new entrant models like Walmart or Amazon, may face challenges in establishing long-term relationships with patients and providing comprehensive monitoring and treatment, traditionally considered essential for successful type 2 diabetes management.

The changes to management of diabetes patients implicate numerous health economy stakeholders. Will payors change policies to incentivize chronic condition management from specific provider types? As more comorbid Americans age into Medicare, how will that affect which providers deliver care? What are the clinical implications for patients receiving “transactional” care in the form of prescriptions as opposed to longitudinal

care management with established providers? Are patients seeing multiple providers to treat their type 2 diabetes, introducing the potential for duplication and fragmentation? Could total cost of diabetes care decline if payors directed patients to lower-cost providers? Will population health improve, or worsen, if additional access points for type 2 diabetes care are opened but more fragmentation is introduced?

***Thanks to Austin Miller and Sarah Millender for their research support.***

## Premium Compass+ Resources

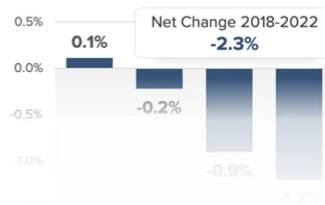
### PROVIDER SHORTAGES

#### WHAT IS THE STATE OF THE PROVIDER SHORTAGE?

It is well established that the nation's physician shortage has been exacerbated by heightened provider burnout, the Great Resignation and an aging provider workforce. The result is that provider entries are not keeping pace with provider exits, as evidenced by the net 2.3% reduction in the physician workforce between 2018 and 2022.

Remediating the workforce shortage will require changes to residency programs, incentives from employers and actions to improve working conditions for healthcare providers at all levels of specialization. By 2024, the projected gap in total physicians could reach up to 124,000.

YEAR-OVER-YEAR PERCENT CHANGE OF ALL PHYSICIANS



#### Topic Guides

Get up to speed with a one-page reference sheet on the complexities surrounding crucial topics, **such as provider shortages**, by exploring the who, what,

when, where, why and how. [Access Here](#) →

#### Data Tracking

Utilize exclusive interactive visualizations to stay abreast of patterns and trends quarter-over-quarter percent change in GLP-1 filled prescriptions. Data through Q2 2023 now available. [Access Here](#) →



### Quarter-Over-Quarter Percent Change in GLP-1 Filled Prescriptions, Q1 2020-Q2 2023

This interactive data visualizer presents quarter-over-quarter percent change in GLP-1 filled prescriptions between Q1 2020 and Q2 2023.

From 2020 to 2022, the volume of filled GLP-1 prescriptions consistently increased quarter over quarter. Growth in filled GLP-1 prescriptions slowed between Q1 2023 and Q2 2023 (+17.2%), as compared to growth between Q4 2022 and Q1 2023 (+40.9%).



Note: GLP-1 denotes glucagon-like peptide-1 receptor agonist. Analysis includes injectable drugs only. Source: Trilliant Health national all-payer claims database.



GLP-1 PATIENT DEMOGRAPHICS, 2022

	OZEMPIC®	WEGOVY®
MALE (%)	37.8%	37.8%
FEMALE (%)	62.2%	62.2%
AGES <18	0%	0%
AGES 19-44	26.2%	26.2%
AGES 45-64	55.2%	55.2%
AGES 65-84	14.3%	14.3%
AGES 85+	0.4%	0.4%

## Premium Health Economy Trends Report Findings

Go deeper on strategic topics like GLP-1s with premium data stories detailing patient demographics for Ozempic® vs Wegovy®, prescriber details, variation by market, and more. [Access Here →](#)

## Strategic Commentary

In part two of our series examining how health plan price transparency data will revolutionize employer benefits, explore how the shift towards value-based benefit design could impact providers by driving “regression to the

A FIVE-YEAR STRATEGY FOR **REDESIGNING EMPLOYEE HEALTH BENEFITS** TO COMPETE IN THE ERA OF “VALUE FOR MONEY”

Part 2

mean” for healthcare prices and forcing providers to take on the role of suppliers in a competitive and transparent market. [Access Here →](#)



