













# TYPE 2 DIABETES REPORT™ FLORIDA ALLIANCE FOR HEALTHCARE VALUE

With a Focus on High-Risk Coexisting Conditions



# FLORIDA ALLIANCE FOR HEALTHCARE VALUE TYPE 2 DIABETES REPORT™

### INTRODUCTION

Sanofi U.S. (Sanofi), in conjunction with the Florida Alliance for Healthcare Value, is pleased to present the ninth edition of the **Florida Alliance for Healthcare Value Type 2 Diabetes Report™** for 2023. This report provides an overview of pertinent demographic, laboratory, charge, and pharmacotherapy measures for Type 2 diabetes patients in key local markets in Florida, with a focus on how high-risk coexisting conditions can impact diabetes care. The report also includes national benchmarks that can help providers and employers identify opportunities to better serve the needs of their patients. Publicly available data on disease prevalence; income; education; and access to vehicles, providers, and broadband Internet offer insight into possible gaps around social determinants of health.

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## **EXECUTIVE SUMMARY**

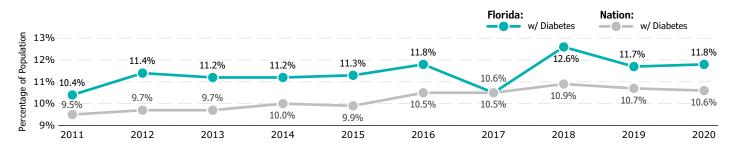


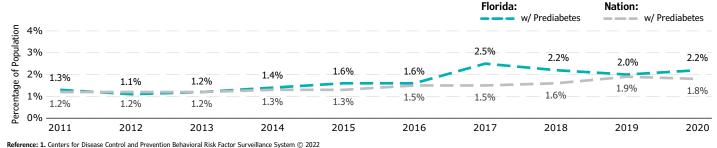
The **Florida Alliance for Healthcare Value Type 2 Diabetes Report™** offers a broad overview of the state of diabetes—with a focus on how coexisting diagnoses such as cardiovascular (CV) disease, depression, hypoglycemia, neuropathy, and obesity impact care—in markets across Florida. The report provides state and national benchmarks for commercially insured patients (including comparison with their peers covered by Medicaid or Medicare) to identify potential gaps in care and reinforce positive trends. Current as of 2022 and spanning several years, the data in this report encompass nearly 13.9 million unique patients nationally with Type 2 diabetes; of these, almost 1.2 million received care in Florida.

This year's report provides several observations to help providers and employers better meet the needs of employees. For example:

- In each of the profiled Florida markets, the shares of commercially insured patients with Type 2 diabetes who had multiple complications or comorbidities were higher than national benchmarks in 2022.
- Compared with their counterparts nationally, commercial patients with Type 2 diabetes in Lakeland (15.3%),
   Miami (13.8%), Orlando (14.3%), and statewide (12.8%) were more likely to have an A1c above 9.0% in 2022.
- The percentages of Florida commercial patients with Type 2 diabetes who also had chronic kidney disease (CKD), depression, or obesity increased from 2020 to 2022.
- In 2022, the portions of Florida commercial Type 2 diabetes patients who received A1c, blood glucose, serum cholesterol, or urine microalbumin tests fell below the corresponding U.S. benchmarks.
- Co-occurring CV disease, depression, hypoglycemia, neuropathy, and obesity were each associated with higher professional charges in the emergency department compared with the overall average for commercially insured Florida patients with Type 2 diabetes.

#### Percentage of Adults Self-Reporting Diabetes or Prediabetes, 2011–20201





NOTE: On pages 3-4, Behavioral Risk Factor Suystem (BRFSS) data on diabetes and prediabetes are based on responses to the survey question, "Have you ever been told by a doctor that you have diabetes?"

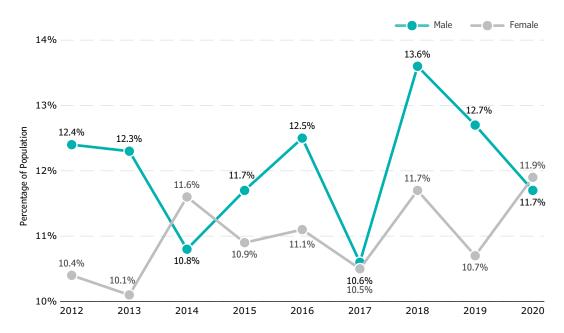


## PATIENT DEMOGRAPHICS

# FLORIDA TYPE 2 DIABETES PATIENTS ARE BESET WITH MULTIPLE CONDITIONS

In all seven profiled Florida markets, the shares of commercially insured Type 2 diabetes patients with multiple comorbidities or complications topped the corresponding national averages in 2021 and 2022. In 2022, 39.0% of commercially insured Type 2 diabetes patients across the state reported cardiovascular disease as a co-occurring condition; chronic kidney disease affected 25.3% of similar patients.

### Percentage of Florida Population Self-Reporting Diabetes, by Gender, 2012–2020<sup>1</sup>



Percentage of Type 2 Diabetes Patients, by Payer, 2021–2022 <sup>2</sup>										
	Commercia	l Insurance	Med	icare	Med	edicaid				
MARKET	2021	2022	2021	2022	2021	2022				
Jacksonville	42.7%	43.5%	50.1%	49.3%	7.2%	7.1%				
Lakeland	38.4	40.9	50.6	48.1	11.0	10.9				
Miami	44.1	46.0	46.5	45.5	9.3	8.4				
Orlando	40.0	42.4	46.2	44.1	13.8	13.5				
Palm Bay	38.9	42.3	54.7	51.3	6.4	6.3				
Tampa	31.1	33.2	62.6	61.1	6.3	5.7				
Florida	40.0	42.0	51.0	49.5	9.0	8.5				
NATION	41.2%	42.3%	45.2%	44.4%	13.5%	13.2%				

Distribution of Commercial Type 2 Diabetes Patients, by Age, 2021–2022 <sup>2</sup>										
	0-	17	18-	-35	36-	36–64 65–79		-79	80+	
MARKET	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
Jacksonville	0.3%	0.3%	2.2%	2.4%	48.6%	48.1%	38.3%	38.4%	10.6%	10.9%
Lakeland	0.3	0.4	2.4	2.7	49.6	47.9	36.6	37.8	11.2	11.2
Miami	0.2	0.2	1.9	1.9	44.8	44.8	37.8	37.8	15.3	15.2
Orlando	0.3	0.3	2.1	2.1	48.9	47.1	37.8	38.8	11.0	11.8
Palm Bay	0.2	0.2	1.5	1.6	43.5	40.3	40.4	41.9	14.4	16.1
Tampa	0.2	0.2	2.2	2.3	47.1	46.3	38.2	38.7	12.3	12.5
Florida	0.2	0.2	2.0	2.1	45.5	44.8	38.9	39.2	13.4	13.7
NATION	0.3%	0.2%	2.6%	2.5%	52.6%	51.3%	34.3%	35.3%	10.3%	10.6%

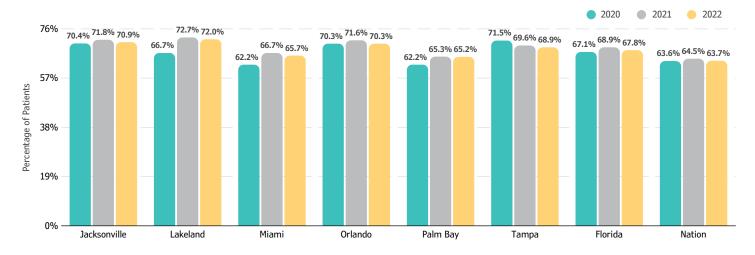
References: 1. Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System © 2022. 2. IQVIA © 2023

NOTE: Throughout this report, commercial insurance includes HMOs, PPOs, point-of-service plans, and exclusive provider organizations. Medicaid includes fee-for-service and managed care. The Lakeland market includes Winter Haven; the Miami market includes Fort Lauderdale and West Palm Beach; the Orlando market includes Kissimmee and Sanford; the Palm Bay market includes Melbourne and Titusville; the Tampa market includes St. Petersburg and Clearwater. An n/a indicates that data were not available.

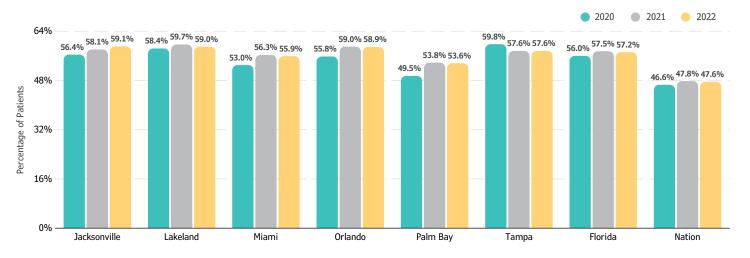
# PATIENT DEMOGRAPHICS



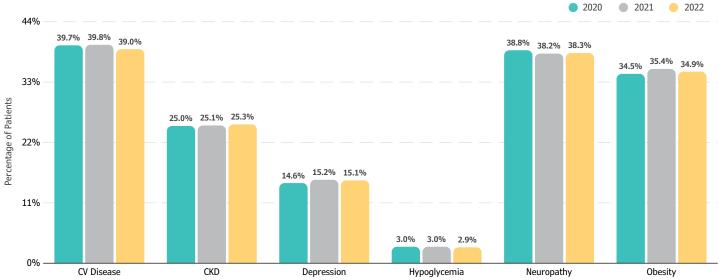
### Percentage of Commercial Type 2 Diabetes Patients With ≥2 Comorbidities, 2020–2022<sup>1,a</sup>



#### Percentage of Commercial Type 2 Diabetes Patients With ≥2 Complications, 2020–2022<sup>1,b</sup>



### Percentage of Commercial Type 2 Diabetes Patients With Various Co-Occurring Conditions, Florida, 2020–2022<sup>1,c</sup>



Reference: 1. IQVIA © 2023

a A comorbidity is a condition a patient with diabetes may also have, which may not be directly related to the diabetes. Comorbidities were narrowed down to a subset of conditions which are typically present in patients with diabetes. Comorbidities

A comorbinity is a condition a patient with diabetes may also investigating and the condition of diabetes include, but are not limited to, depression, hyperlipidemia, hypertension, obesity and pneumonia.

A complication is defined as a patient condition caused by diabetes. Complications of diabetes include, but are not limited to, atherosclerotic cardiovascular disease (ASCVD), cardiovascular (CV) disease, chronic kidney disease (CKD), congestive heart failure, diabetic ketoacidosis (DKA), end-stage renal disease (ESCND) hyperglycemia, hyperglycemia, hyporglycemia, myocardial infarction (MI), nephropathy, neuropathy, peripheral artery disease (PAD), retinopathy, and stroke. ASCVD includes patients with acute coronary syndromes (ACS), MI, stroke, and other cardiovascular diseases.

A co-occurring condition is a condition a patient with diabetes may also have, which may or may not be directly related to the diabetes. Co-occurring conditions were narrowed down to a subset of conditions, including, but not limited to atherosclerotic cardiovascular disease (ASCVD; includes patients with acute coronary syndromes, myocardial infarction, stroke, and other cardiovascular conditions), chronic kidney disease (CKD), COVID-19, depression, gastrointestinal (GI) symptoms, congestive heart failure, hyperglycemia, hypoglycemia, obesity, peripheral artery disease (PAD), and stroke.



# UTILIZATION

Percentage of Commercial Type 2 Diabetes Patients Receiving Various Services, 2020–2022 <sup>1</sup>															
		A1c Testa		Bloo	d Glucose	Test	Ophth	almologic	Exam	Serum	Cholester	ol Test	Urine M	Urine Microalbumin Test	
MARKET	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022
Jacksonville	76.9%	81.8%	82.3%	79.9%	84.5%	84.8%	41.0%	41.2%	38.5%	63.7%	68.5%	68.1%	32.5%	35.2%	34.7%
Lakeland	73.8	82.5	84.6	79.5	83.3	84.3	51.4	53.1	55.0	65.2	68.1	69.1	36.3	35.5	37.5
Miami	72.3	79.0	80.5	77.4	81.9	83.1	46.5	46.0	47.0	62.1	66.6	67.3	30.6	32.8	33.0
Orlando	76.6	81.4	83.2	80.7	82.2	82.7	41.0	48.6	53.3	65.8	66.4	66.9	33.7	33.2	33.8
Palm Bay	74.8	79.8	79.2	81.0	84.0	83.6	43.4	48.7	49.5	66.5	68.5	68.1	34.9	35.2	35.2
Tampa	78.8	81.5	81.9	82.9	84.8	85.3	50.9	53.1	53.7	69.2	70.5	70.2	38.8	37.5	37.3
Florida	74.7	79.8	80.9	79.2	82.7	83.5	46.1	47.7	48.7	64.3	67.6	67.9	33.0	34.1	34.3
NATION	80.0%	83.2%	83.5%	83.9%	86.5%	86.7%	40.1%	42.3%	42.6%	70.0%	72.9%	72.7%	41.8%	43.9%	44.0%

Percentage of Commercial Type 2 Diabetes Patients, by Setting, 2020–2022 <sup>1</sup>												
	Emerg	gency Depar	tment		Inpatient			Office/Clinic		TeleHealth		
MARKET	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022
Jacksonville	14.0%	14.5%	16.0%	19.0%	17.7%	19.4%	81.0%	79.9%	78.4%	8.2%	7.4%	8.1%
Lakeland	19.1	18.9	19.0	13.3	12.1	11.7	79.8	80.9	83.3	6.3	8.6	7.0
Miami	17.3	18.8	19.8	12.8	14.5	14.4	79.5	78.0	79.1	12.8	11.0	11.0
Orlando	21.3	19.4	17.3	12.9	11.5	10.6	81.3	81.2	84.2	12.3	10.0	10.7
Palm Bay	16.1	16.1	16.6	15.9	15.6	14.8	84.4	83.8	84.5	12.0	8.4	8.1
Tampa	15.3	16.4	17.6	13.3	13.2	13.1	76.7	74.0	77.6	10.9	8.5	8.7
Florida	17.4	18.3	18.8	14.7	15.0	14.8	80.5	79.0	80.4	11.0	9.1	9.0
NATION	18.3%	18.3%	18.2%	12.8%	12.6%	12.0%	79.0%	79.0%	79.6%	16.1%	11.8%	11.2%

	Number of Encounters per Commercial Type 2 Diabetes Patient per Year, Overall vs. With Various Co-Occurring Conditions, 2022 <sup>1,b,c</sup>										
MARKET	Overall	w/ CV Disease	w/ Depression	w/ Hypoglycemia	w/ Obesity						
Jacksonville	11.6	17.2	18.5	25.5	14.0						
Lakeland	8.6	11.1	10.5	14.9	10.5						
Miami	11.5	16.1	18.5	23.2	13.5						
Orlando	8.0	10.2	10.0	15.1	9.2						
Palm Bay	11.5	16.5	16.6	22.0	13.4						
Tampa	8.2	10.5	11.1	13.9	10.1						
Florida	10.5	14.4	14.8	20.2	12.2						
NATION	11.4	17.6	17.8	22.2	14.1						

Reference: 1. IQVIA © 2023

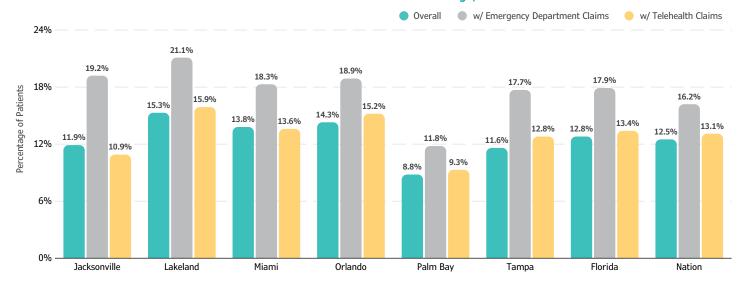
a The A1c test measures the average blood glucose over the past 3 months. Figures reflect the percentage of diabetes patients who have had at least one A1c test in a given year.
b Figures reflect the total number of provider encounters by Type 2 diabetes patients over the year shown within the given geography, divided by the total number of patients within that geography.
c A co-occurring condition is a condition a patient with diabetes may also have, which may or may not be directly related to the diabetes. Co-occurring conditions were narrowed down to a subset of conditions, including, but not limited to, atherosclerotic cardiovascular disease (ASCVD; includes patients with acute coronary syndromes, myocardial infarction, stroke, and other cardiovascular conditions), chronic kidney disease (CKD), COVID-19, depression, gastrointestinal (GI) symptoms, congestive heart failure, hyperglycemia, hypoglycemia, obesity, peripheral artery disease (PAD), and stroke.

## LABORATORY



	Distribution of Type 2 Diabetes Patients, by A1c Level Range and Payer, 2022 <sup>1,a</sup>												
		≤7.0%			7.1–7.9%			8.0-9.0%			>9.0%		
MARKET	Comm. Ins.	Medicare	Medicaid	Comm. Ins.	Medicare	Medicaid	Comm. Ins.	Medicare	Medicaid	Comm. Ins.	Medicare	Medicaid	
Jacksonville	59.2%	64.3%	55.2%	17.6%	17.5%	15.8%	11.3%	9.8%	12.7%	11.9%	8.4%	16.3%	
Lakeland	55.1	62.2	52.9	18.0	18.5	15.7	11.6	9.8	11.3	15.3	9.5	20.1	
Miami	57.0	68.3	55.3	18.1	16.4	15.8	11.1	8.4	11.5	13.8	6.9	17.4	
Orlando	55.3	64.0	52.9	18.6	17.9	16.0	11.7	9.9	12.6	14.3	8.2	18.5	
Palm Bay	64.5	68.7	60.4	17.3	16.3	16.7	9.4	8.2	8.3	8.8	6.8	14.6	
Tampa	59.5	70.7	54.4	18.1	16.6	16.2	10.8	7.6	11.0	11.6	5.1	18.4	
Florida	58.1	68.3	54.9	18.1	16.8	16.0	11.0	8.4	11.6	12.8	6.5	17.5	
NATION	58.2%	65.0%	53.1%	18.4%	17.5%	17.2%	11.0%	9.3%	11.8%	12.5%	8.2%	17.8%	

# Percentage of Commercial Type 2 Diabetes Patients With an A1c Level >9.0%, Overall vs. With Claim in Selected Settings, 2022<sup>1,a</sup>



# Percentage of Commercial Type 2 Diabetes Patients Receiving Long-Acting Basal Category 1 vs. Category 2, With an A1c Level ≤7.0% or >9.0%, 2020 and 2022<sup>1,a</sup>

		≤7.	0%			>9.	0%	
	Categ	ory 1	Categ	ory 2	Categ	ory 1	Categ	ory 2
MARKET	2020	2022	2020	2022	2020	2022	2020	2022
Jacksonville	28.1%	30.1%	28.5%	34.4%	30.0%	27.6%	28.2%	22.6%
Lakeland	26.6	29.1	23.2	31.8	31.6	35.9	28.8	25.8
Miami	23.5	28.5	25.1	29.6	34.0	31.3	29.5	25.7
Orlando	25.5	26.4	28.3	28.6	31.7	31.8	29.6	24.8
Palm Bay	29.1	36.6	35.0	36.8	30.0	21.8	24.4	21.3
Tampa	29.4	31.8	28.7	32.5	27.3	26.6	25.7	23.2
Florida	26.3	30.1	27.7	31.5	30.9	29.1	27.8	24.5
NATION	27.1%	30.3%	27.0%	31.6%	30.5%	28.6%	28.1%	24.7%

### ROUGHLY 1 IN 8 COMMERCIAL TYPE 2 DIABETES PATIENTS IN FL HAVE AN A1c ABOVE 9.0% IN 2022

In 2022, nearly 13% of commercial patients across Florida with Type 2 diabetes had an A1c greater than 9.0% on their last test, a percentage that exceeded the corresponding national benchmark. Similar Florida patients with Medicare were less apt to have an A1c in this range (6.5%); Medicaid patients were most likely, at 17.5%. Patients in this A1c level are generally regarded as poorly controlled, and thus the metric serves as an important quality measure for plans and providers alike, with lower percentages indicating higher quality care.

Reference 1. IQVIA © 2023

a The AIc test measures the average blood glucose over the past 3 months. Figures reflect the percentage of diabetes patients who have had at least one AIc test in a given year.

NOTE: "Category 1" refers to long-acting basal insulins approved through 2014 and follow-on long-acting insulins approved after 2014. "Category 2" refers to non-follow-on long-acting basal insulins approved in or after 2015.



# **CHARGES**

Professional Charges per Commercial Type 2 Diabetes Patient per Year, by Setting, 2021–2022 <sup>1,a</sup>										
	Emergency	Department	Inpa	tient	Outpa	atient	Office	/Clinic		
MARKET	2021	2022	2021	2022	2021	2022	2021	2022		
Jacksonville	\$2,381	\$2,625	\$4,923	\$4,717	\$2,132	\$2,097	\$2,593	\$2,546		
Lakeland	3,056	2,989	4,019	4,636	1,819	1,898	1,619	1,654		
Miami	2,778	2,759	4,841	4,731	2,099	1,988	2,426	2,681		
Orlando	2,684	2,808	4,377	4,453	1,956	1,908	1,581	1,637		
Palm Bay	1,917	1,967	3,698	3,739	1,529	1,439	2,884	3,016		
Tampa	2,122	2,111	4,323	4,349	2,186	2,200	1,754	1,796		
Florida	2,562	2,577	4,467	4,449	2,062	2,014	2,219	2,309		
NATION	\$1,908	\$1,919	\$4,646	\$4,784	\$1,843	\$1,888	\$2,437	\$2,572		

	Professional Inpatient Charges per	Type 2 Diabetes Patient per Year,	by Payer, 2022 <sup>1,a</sup>
MARKET	Commercial Insurance	Medicare	Medicaid
Jacksonville	\$4,717	\$6,930	\$5,113
Lakeland	4,636	5,274	5,255
Miami	4,731	6,587	5,507
Orlando	4,453	6,405	5,785
Palm Bay	3,739	5,267	5,602
Tampa	4,349	5,404	5,518
Florida	4,449	5,885	5,553
NATION	\$4,784	\$5,371	\$5,674

Professional Emergency Department Charges per Commercial Type 2 Diabetes Patient per Year, Overall vs. With Various Co-Occurring Conditions, 2022 <sup>1,a,b</sup>										
	Overall	w/ CV Disease	w/ Depression	w/ Hypoglycemia	w/ Neuropathy	w/ Obesity				
Jacksonville	\$2,625	\$2,964	\$3,251	\$4,260	\$3,010	\$2,844				
Lakeland	2,989	3,840	3,423	4,524	3,675	3,185				
Miami	2,759	3,227	3,657	4,500	3,204	3,052				
Orlando	2,808	3,154	3,340	4,161	3,109	2,935				
Palm Bay	1,967	2,335	2,317	2,815	2,373	1,919				
Tampa	2,111	2,410	2,582	3,024	2,416	2,517				
Florida	2,577	2,966	3,215	3,921	2,955	2,861				
NATION	\$1,919	\$2,241	\$2,311	\$2,900	\$2,216	\$2,043				

Professional charges are those generated by the providers delivering care to patients with diabetes in various settings.
 A co-occurring condition is a condition a patient with diabetes may also have, which may or may not be directly related to the diabetes. Co-occurring conditions were narrowed down to a subset of conditions, including, but not limited to, atherosclerotic cardiovascular disease (ASCV); includes patients with acute coronary syndromes, myocardial infarction, stroke, and other cardiovascular conditions), chronic kidney disease (CKD), COVID-19, depression, gastrointestinal (GI) symptoms, congestive heart failure, hyperglycemia, hypoglycemia, obesity, peripheral artery disease (PAD), and stroke.

### PHARMACOTHERAPY



Percentage of Co	Percentage of Commercial Type 2 Diabetes Patients Receiving Various Insulin and Combination Therapies, 2021–2022 <sup>1</sup>										
	Long-Acting Basal Category 1		Long-Acting Basal Category 2		Rapid-/Short-Acting Insulin		Fixed Ratio (Long-Acting Insulin/ GLP-1 RA)		Free Ratio (Variable Long-Acting Insulin + GLP-1 RA)		
MARKET	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	
Jacksonville	14.7%	14.5%	8.9%	9.0%	16.9%	17.3%	1.1%	1.0%	9.6%	10.8%	
Lakeland	16.5	15.6	7.3	7.8	12.6	12.8	0.6	0.6	8.1	9.5	
Miami	14.4	13.3	5.8	5.9	11.3	10.6	0.9	1.0	6.5	7.0	
Orlando	14.3	13.8	6.2	6.2	11.5	11.2	0.8	1.1	7.2	7.8	
Palm Bay	10.2	9.2	10.4	10.1	13.5	13.0	0.9	0.8	8.2	8.8	
Tampa	14.8	13.5	7.1	7.3	12.8	12.4	0.7	0.6	7.5	8.3	
Florida	14.2	13.3	7.0	7.1	12.2	11.8	0.8	0.9	7.4	8.2	
NATION	15.3%	14.1%	7.1%	7.4%	12.4%	12.2%	0.8%	0.7%	8.7%	9.6%	

Percentage of Commercial Type 2 Diabetes Patients Receiving Long-Acting Basal Insulin Category 1 vs. Category 2, by Co-Occurring Condition, 2022 <sup>1,a</sup>										
	CV Disease		Depression		Hypoglycemia		Neuropathy		Obesity	
MARKET	Cat. 1	Cat. 2	Cat. 1	Cat. 2	Cat. 1	Cat. 2	Cat. 1	Cat. 2	Cat. 1	Cat. 2
Jacksonville	32.3%	25.2%	8.9%	6.0%	3.8%	3.7%	37.9%	33.4%	33.8%	35.8%
Lakeland	29.2	31.0	13.3	8.9	5.8	4.6	40.8	44.8	48.1	49.9
Miami	31.0	28.6	9.6	7.4	3.7	3.6	35.5	31.8	36.1	34.4
Orlando	30.1	23.7	11.2	9.5	4.0	5.6	35.4	32.2	34.5	30.4
Palm Bay	34.3	25.6	8.8	8.2	3.0	2.9	39.2	34.3	30.6	29.5
Tampa	32.4	28.5	12.4	11.0	3.8	3.1	36.6	36.0	35.1	34.5
Florida	31.4	28.1	10.6	8.9	4.0	4.0	36.3	33.9	35.5	34.9
NATION	27.0%	24.3%	10.8%	10.0%	4.0%	3.9%	32.8%	31.3%	28.9%	30.5%

Percentage of Commercial Type 2 Diabetes Patients Receiving Various Non-Insulin Antidiabetic Therapies, 2021–20221											
	Biguanides		GLP-1 RAs		DPP-4 Inhibitors		Insulin Sensitizing Agents		SGLT-2 Inhibitors		
MARKET	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	
Jacksonville	58.3%	56.5%	29.1%	36.0%	9.0%	7.7%	12.2%	12.0%	21.8%	24.8%	
Lakeland	63.4	62.3	26.0	32.6	8.7	6.9	8.2	8.4	20.2	22.5	
Miami	71.5	71.8	19.1	24.2	10.2	8.0	5.3	5.5	17.2	19.4	
Orlando	66.6	67.7	23.2	27.3	8.7	7.2	7.9	7.7	18.2	20.0	
Palm Bay	62.7	60.8	25.0	31.3	8.1	6.8	6.0	6.4	23.0	25.9	
Tampa	65.5	65.5	23.5	30.0	9.1	7.8	6.9	7.0	19.7	22.0	
Florida	66.3	66.3	22.7	28.5	9.4	7.7	6.8	6.9	18.2	20.7	
NATION	68.5%	67.3%	25.7%	32.6%	9.4%	7.9%	6.9%	6.7%	20.1%	23.1%	

Reference: 1. IQVIA © 2023

**Biguanides:** Decrease the production of glucose by the liver, decrease intestinal absorption of glucose, and increase the peripheral uptake and use of circulating glucose.

Dipeptidyl Peptidase 4 (DPP-4) Inhibitors: Inhibit DPP-4 enzymes and slow inactivation of incretin hormones, helping to regulate glucose homeostasis through increased insulin release and decreased glucagon levels.

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Glucagon-Like Peptide-1 Receptor Agonists (GLP-1 RAs): Increase glucoses-dependent insulin secretion and pancreatic beta-cell sensitivity, reduce glucagon production, slow rate of absorption of glucose in the digestive tract by slowing gastric emptying, and suppress appetite. "Fixed ratio (long-acting insulin/GLP-1 RA)" refers to the two therapies combined in a single product. "Free ratio (variable long-acting insulin + GLP-1 RA)" refers to the two therapies taken separately and concurrently.

Insulin Sensitizing Agents: Increase insulin sensitivity by improving response to insulin in liver, adipose tissue, and skeletal muscle, resulting in decreased production of glucose by the liver and increased peripheral uptake and use of circulating glucose.

**Long-Acting Basal Category 1/Category 2:** Insulin replacement product with a long duration of action. "Category 1" refers to long-acting basal insulins approved through 2014 and follow-on long-acting insulins approved after 2014. "Category 2" refers to non-follow-on long-acting basal insulins approved in or after 2015.

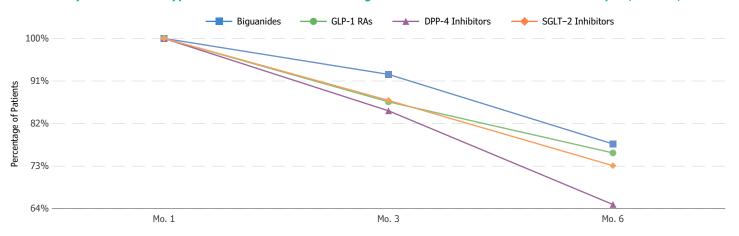
Mixed Insulin: Insulin replacement product combining a short-acting and an intermediate-acting insulin product. Rapid-/Short-Acting Insulin: Insulin replacement products including rapid-acting insulins that begin to work within 15 minutes after injection with duration of action of up to approximately four hours, and short-acting insulins that begin to work within 30 minutes after injection with duration of action of up to approximately six hours.

Sodium/Glucose Cotransporter 2 (SGLT-2) Inhibitors: Lower blood glucose concentration so that glucose is excreted instead of reabsorbed.

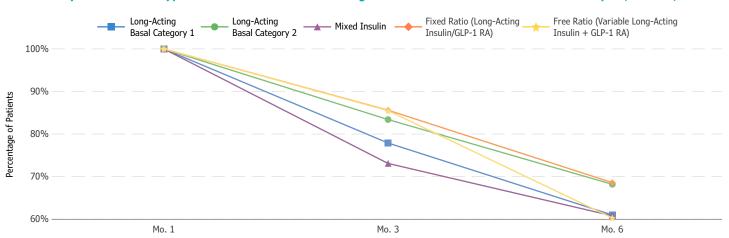
<sup>&</sup>lt;sup>a</sup> A co-occurring condition is a condition a patient with diabetes may also have, which may or may not be directly related to the diabetes. Co-occurring conditions were narrowed down to a subset of conditions, including, but not limited to, atherosclerotic cardiovascular disease (ASCVD; includes patients with acute coronary syndromes, myocardial infarction, stroke, and other cardiovascular conditions), chronic kidney disease (CKD), COVID-19, depression, gastrointestinal (GI) symptoms, congestive heart failure, hyperglycemia, hypoglycemia, obesity, peripheral artery disease (PAD), and stroke.

## PHARMACOTHERAPY

### Persistency: Commercial Type 2 Diabetes Patients Receiving Various Non-Insulin Antidiabetic Therapies, Florida, 2022<sup>1</sup>



### Persistency: Commercial Type 2 Diabetes Patients Receiving Various Insulin and Combination Therapies, Florida, 2022<sup>1</sup>



# Annual Payments per Commercial Type 2 Diabetes Patient for Various Insulin and Non-Insulin Antidiabetic Therapies, 2022<sup>1,a</sup>



Reference: 1. IQVIA © 2023

<sup>&</sup>lt;sup>a</sup> Figures reflect the per-patient yearly payments for diabetes patients receiving a particular type of therapy. These are the actual amounts paid by the insurer and patient for such prescriptions.

NOTE: "Persistency" measures whether patients maintain their prescribed therapy. It is calculated by identifying patients who filled a prescription for the reported drug class in the six months prior to the reported year. If patients fill a prescription in a month, they are reported among the patients who have continued or restarted on therapy. Continued means that the patient has filled the drug group in each of the preceding months. Restarted means that the patient did not fill in one or more of the preceding months. Continuing and restarting patients are reported together. Persistency is tracked for patients who are new to therapy (those who have not filled the therapy in question in the six months prior to their first fill of the study period). "Category 1" refers to long-acting basal insulins approved through 2014 and follow-on long-acting basal insulins approved through 2014 and follow-on long-acting basal insulins approved in or after 2015. "Fixed ratio (long-acting insulin/GLP-1 RA)" refers to the two therapies combined in a single product. "Free ratio (variable long-acting insulin sulin s

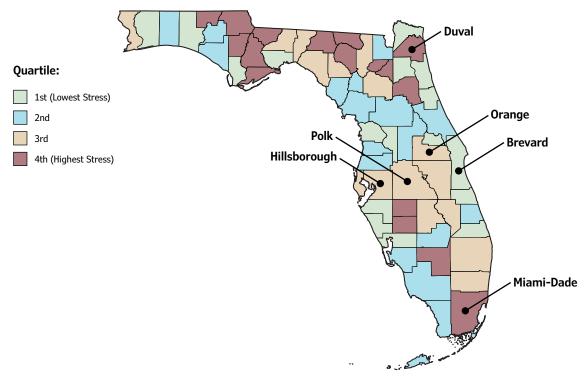
## SOCIAL DETERMINANTS OF HEALTH



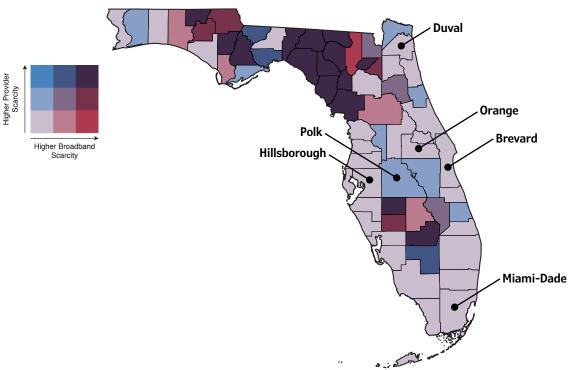
### DUVAL AND MIAMI-DADE COUNTIES SHOW HIGH SDoH STRESS; POLK COUNTY REPORTS PROVIDER SCARCITY

- In 2021, Duval (Jacksonville) and Miami-Dade (Miami)
  Counties both demonstrated high SDoH stress; each
  ranked in the fourth quartile (highest stress) for combined
  scores in income, vehicle access, owner-occupied housing,
  and high school graduation measures.
- Meanwhile, Polk County (home of Lakeland and ranked in the third quartile for SDoH stress) showed a higher provider scarcity versus counties aligned with the other profiled markets: Brevard (Palm Bay), Duval, Hillsborough (Tampa), Miami-Dade, and Orange (Orlando).

### Combined Social Determinants of Health (SDoH) Stress in Florida, by County, 2021<sup>1</sup>



### Overlap of Provider Access (per 100,000 Population) and Fixed Broadband Internet Scarcity, by County, 2020–2022<sup>2,3</sup>



References 1. U.S. Census Bureau, American Community Survey, Five-Year Estimate. © 2023 2. Health Resources and Services Administration © 2021 3. Federal Communications Commission © 2022

NOTE: Combined score represents a linear, equally weighted combination of county rankings for four SDoH elements: 1) percentage of population with income less than 150% of the federal poverty level; 2) percentage of households without a vehicle; 3) percentage of owner-occupied housing units (reversed); and 4) percentage of population aged 25+ who have completed high school (reversed). A higher combined score represents higher levels of stress with respect to these SDoH elements. Provider access data for medical doctors and doctors of osteopathy are for 2020; nurse practitioners and physician assistants data are for 2021. Fixed broadband Internet availability data are for 2021.



### **METHODOLOGY**

Unless otherwise specified, the data for this report are from IQVIA, and are generated out of health care professional (837p) and institutional (837i) insurance claims, representing nearly 13.9 million unique patients nationally in 2022 with a diagnosis of Type 2 diabetes (ICD-10 codes E08, E09, E11, E13). Data from physicians of all specialties and from all hospital types are included. Substate markets represent core-based statistical areas (CBSAs).

IQVIA also gathers data on prescription activity from the National Council for Prescription Drug Programs (NCPDP). These data account for some 4 billion prescription claims annually, or more than 92% of the retail prescription universe and 72% of the traditional and specialty mail order universe. These prescription data represent the sampling of prescription activity from a variety of sources, including retail chains, mass merchandisers, and pharmacy benefit managers. Cash, Medicaid, and third-party transactions are tracked. Data arriving into IQVIA are put through a rigorous process to ensure that data elements match to valid references, such as product codes, ICD-10 (diagnosis) and CPT-4 (procedure) codes, and provider and facility data.

Proprietary lab data derive from one of the largest independent commercial lab companies in the U.S. Patient information is de-identified, matched, and linked with other patient data assets (e.g., medical claims data). The most common attributes used are the de-identified patient ID, observation date, diagnosis, test name, test code, and test result.

Claims undergo a careful de-duplication process to ensure that when multiple, voided, or adjusted claims are assigned to a patient encounter, they are applied to the database, but only for a single, unique patient.

Through its patient encryption methods, IQVIA creates a unique, random numerical identifier for every patient, and then strips away all patient-specific health information that is protected under the Health Insurance Portability and Accountability Act (HIPAA). The identifier allows IQVIA to track disease-specific diagnosis and procedure activity across the various settings where patient care is provided (hospital inpatient, hospital outpatient, emergency rooms, clinics, doctors' offices, and pharmacies), while protecting the privacy of each patient.