

Provider Experience Drives Clinical Decision Making in T2DM: Insights from Realistic Training Simulations

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1 Need for Clinical Simulations

Defining the Need for Clinical Simulations



The prevalence of T2DM in the US is increasing and associated with increased risk of mortality¹⁻³

- By 2030, nearly 55 million Americans may have diabetes³
- Adults with diabetes have a 50% higher risk of death from any cause versus those without²⁻³



Up to 50% of patients with T2DM in the US do not reach their glycemic goals⁴

- These patients remain at elevated risk for adverse outcomes



A vast array of clinical presentations and therapeutic options make decision-making challenging

- Providers do not know how to optimally individualize treatment
- Clinical simulations may identify drivers of clinical decision-making and address management gaps

Establishing Partnerships



- ✓ Accredited CE provider
- ✓ Faculty coordination & content development
- ✓ Outcomes analysis

- ✓ Technology development
- ✓ Scenario design
- ✓ Data collection & reporting

2 Participation & Demographics

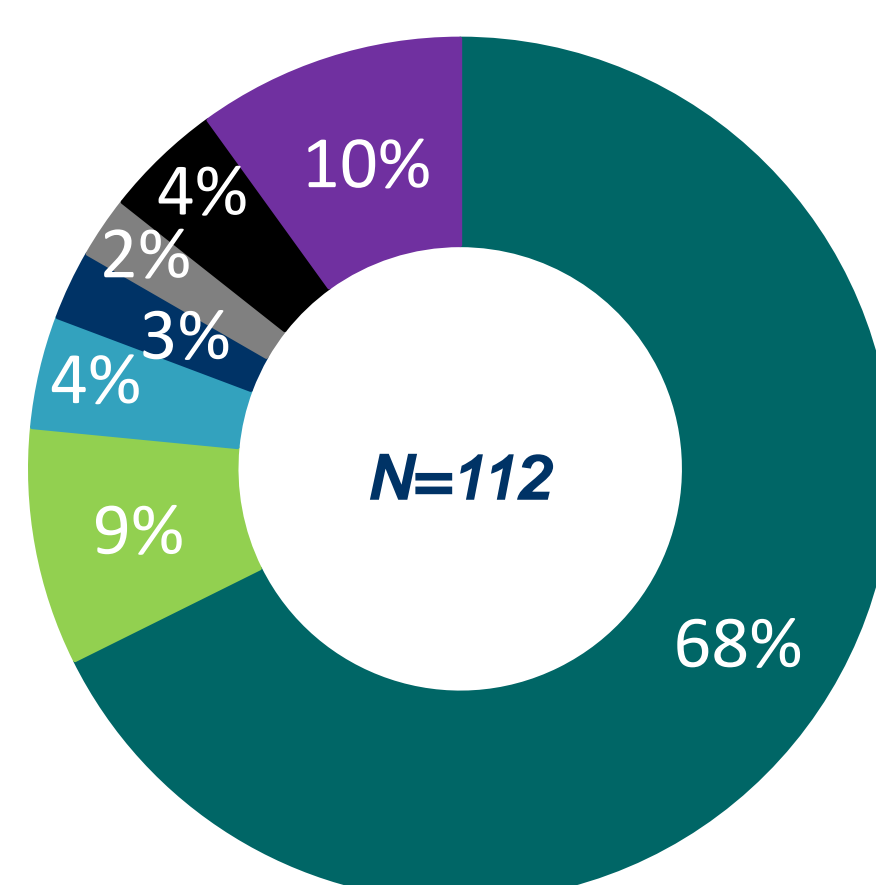


1,376
Unique Participants

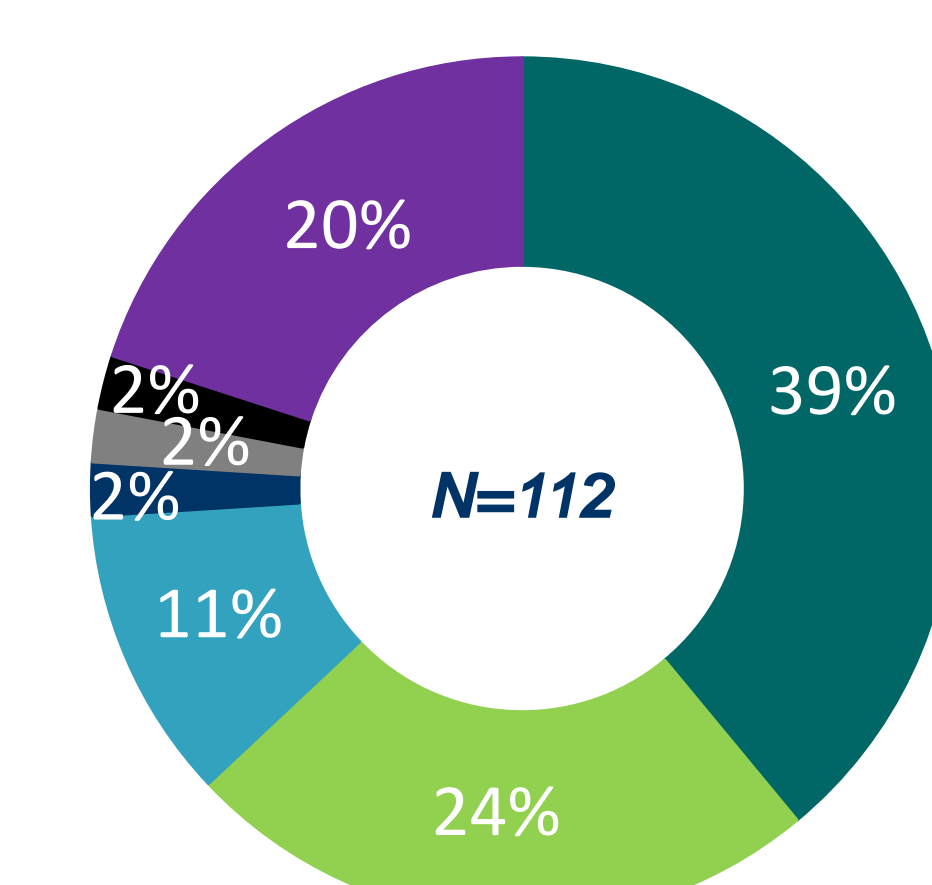


12,063
Decisions made

Degree



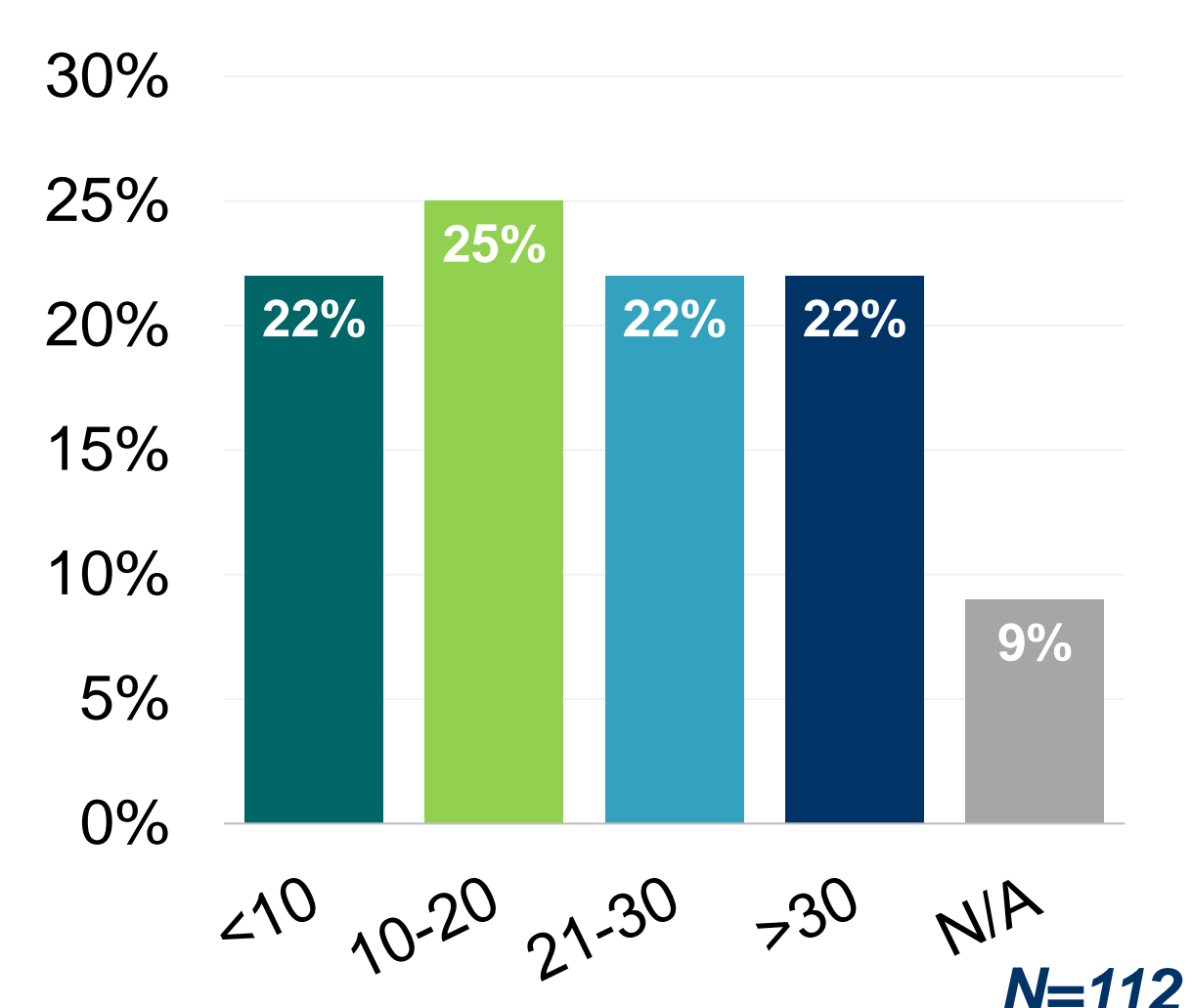
Specialty



The majority were **family practice physicians**

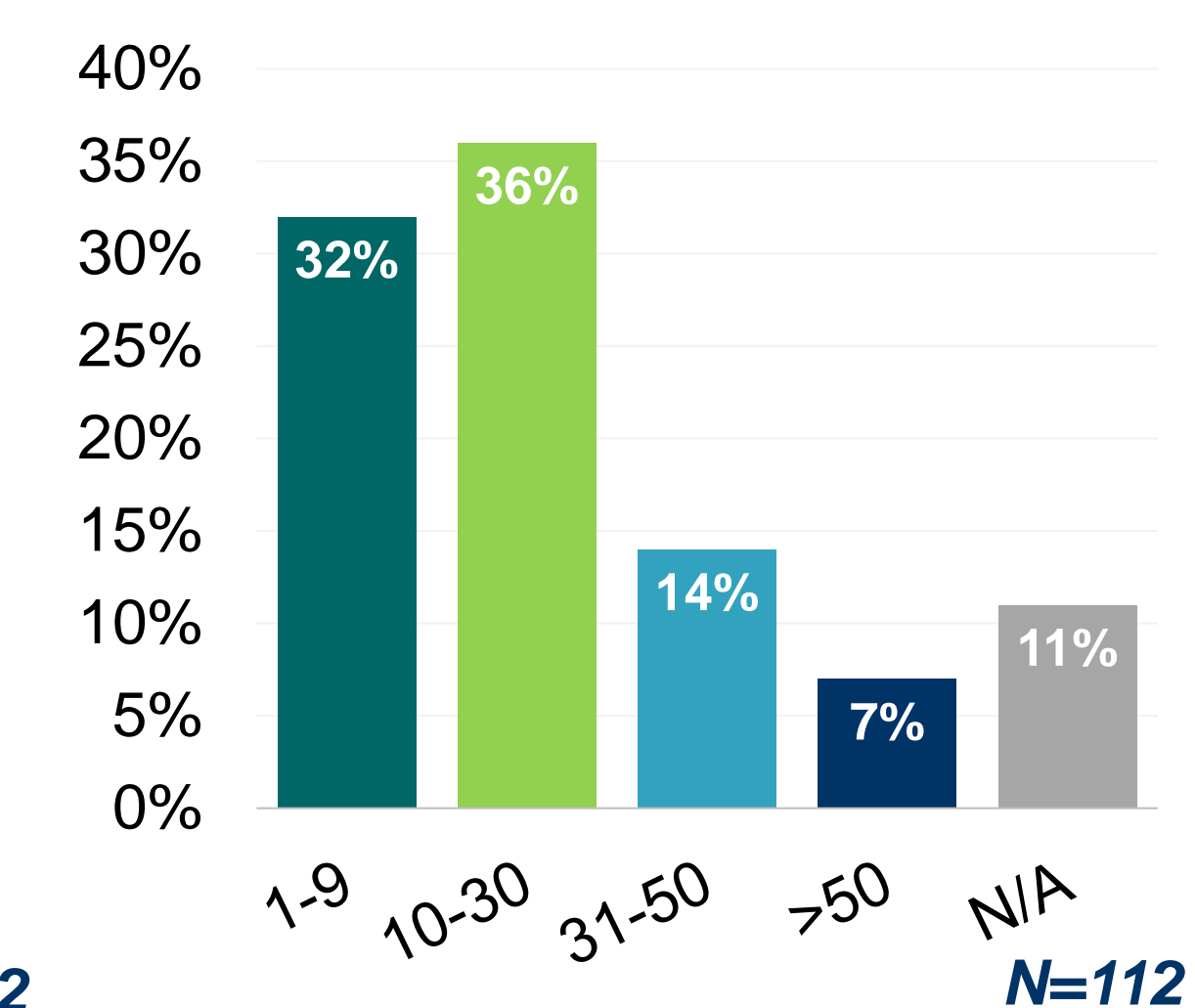
Years in Practice

Treating patients with T2DM



Patients per Week

Seen with T2DM



- ✓ Participants were of **varied experience**
- ✓ Participants see on average **12 patients per week** with T2DM

3 Simulation Overview

1. Initial presentation and work-up

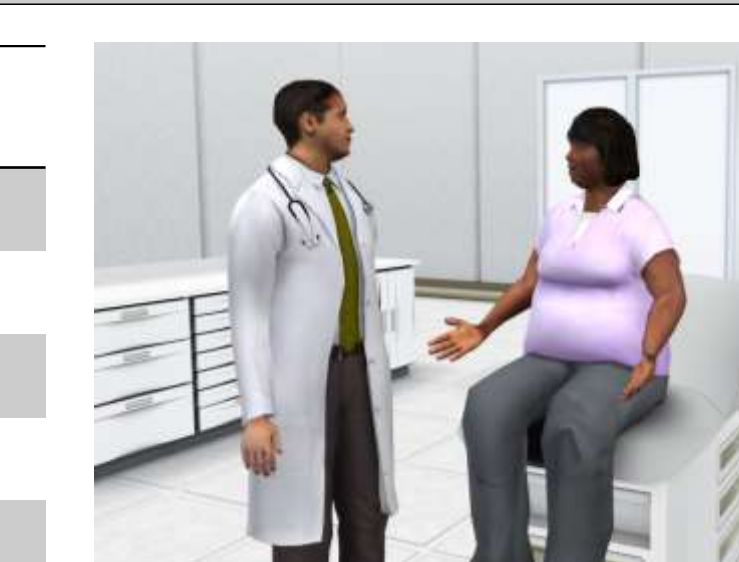


Medications & Medical History

HCTZ 25 mg daily; BP – 142/92 at visit
Atorvastatin 20 mg daily
No evidence of CVD, HF, or renal disease
Non-smoker, mild exercise, obesity
Highly-motivated

Initial Labs

FPG – 153 mg/dL LDL-C – 122 mg/dL
A1C – 7.8% HDL-C – 46 mg/dL
Cr – 0.7 mg/dL TG – 170 mg/dL
eGFR >90 mL/min/1.73 AST – 18 IU/L
No urinary albumin ALT – IU/L



2. Initial goal setting and treatment

- ✓ A1C Goal Set - **<7.0%**
- ✓ Counselor on diet and exercise
- ✓ Prescribed metformin

3. Re-evaluation and treatment after 1 year

- ✗ Missing A1C target more frequently

4 Decision-Making Insights

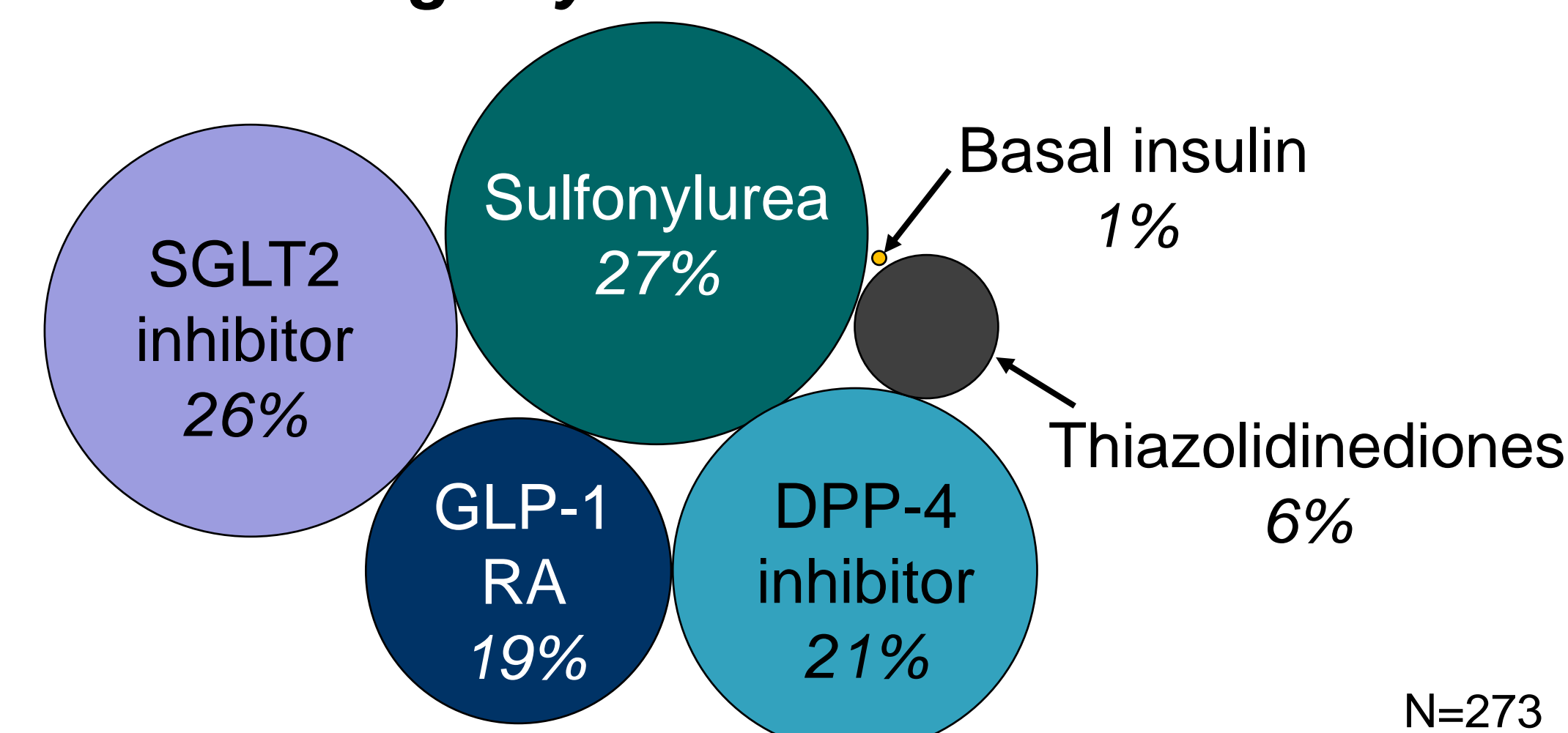
Overall Quality of Decisions



Across the sim, 79% of decisions were ideal

Re-evaluation of Treatment Decisions

After failure to achieve A1C targets with metformin 2 g/day



Most would select an oral agent (SGLT2 inhibitor or sulfonylurea) for initial add-on

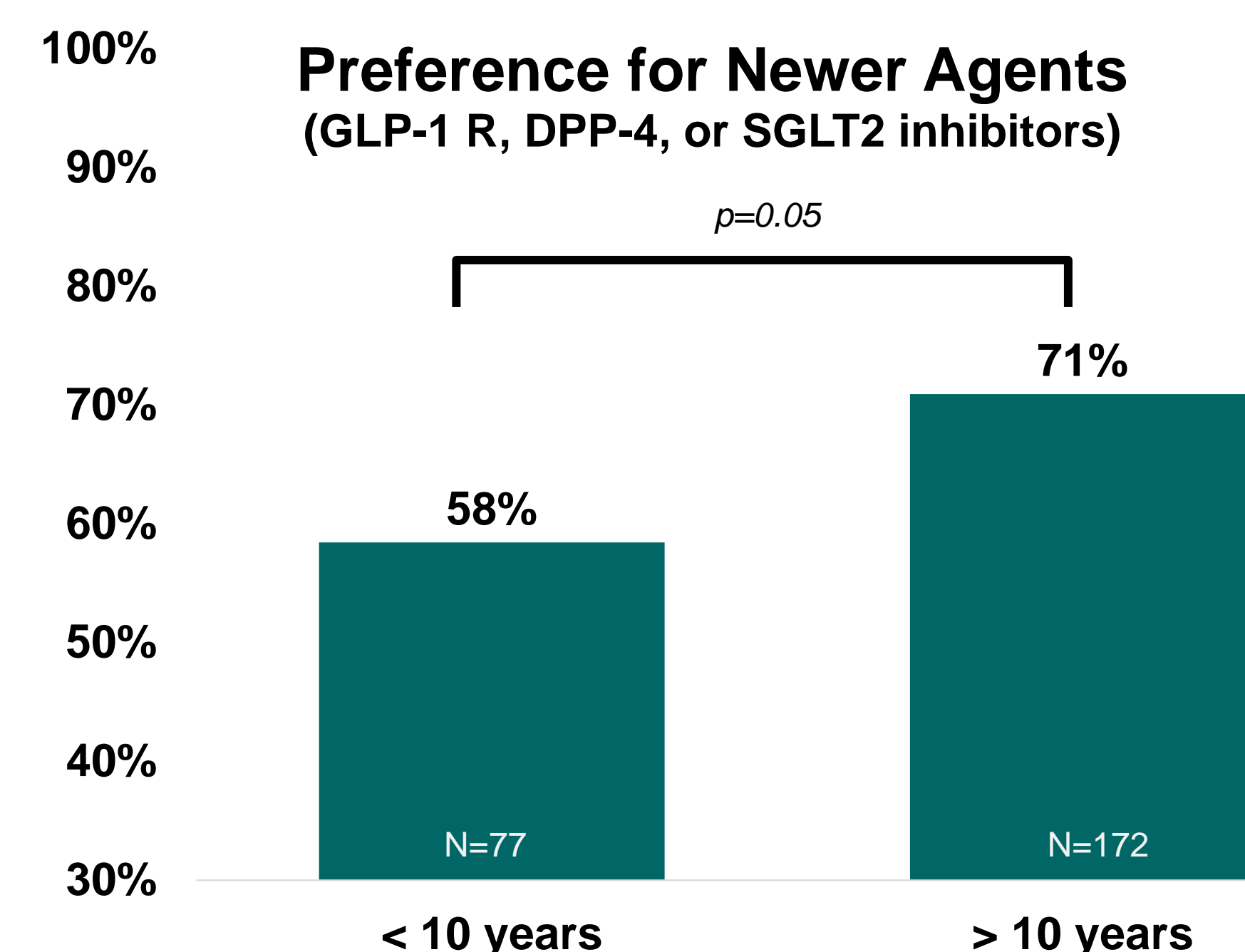
5 Preference of Add-On Treatment by Experience



76%

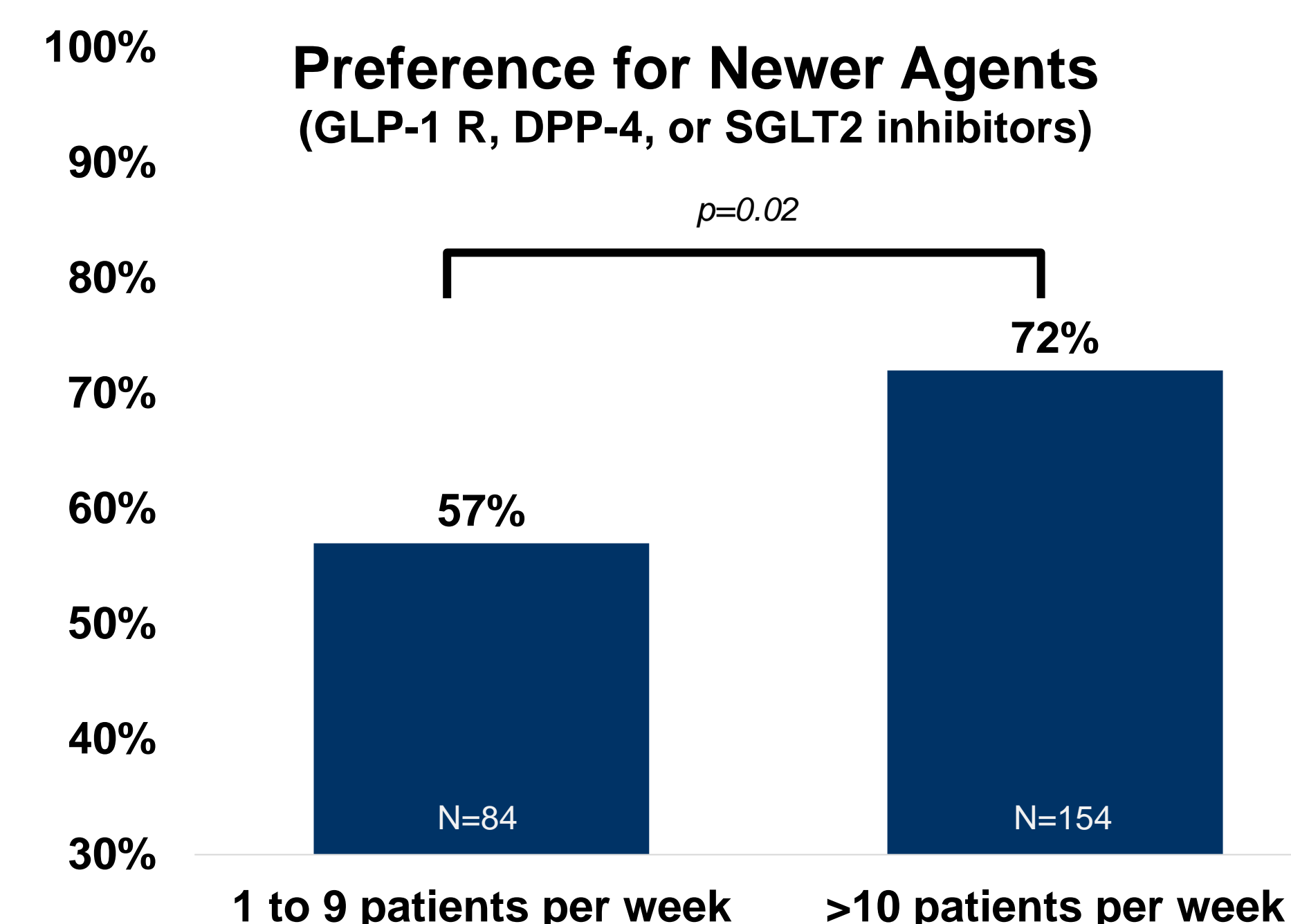
Overall percentage of participants who selected newer agents (e.g., DPP-4 inhibitors, GLP-1 RAs, or SGLT2 inhibitors) versus older agents

Years in Practice



Providers with **>10 years experience** have a stronger preference for **newer therapies** vs. less-experienced colleagues

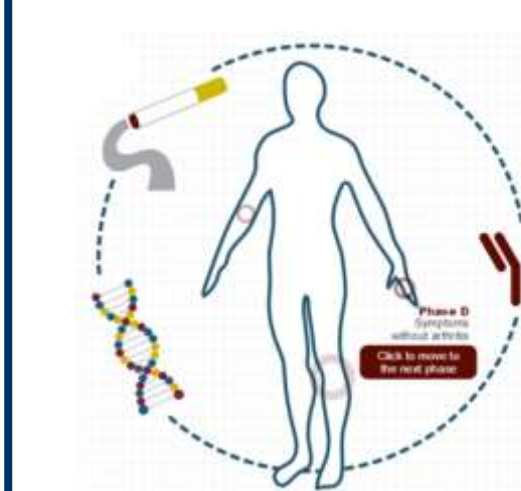
Patient Volume



Providers who see **>10 patients per week** with T2DM have a stronger preference for **newer therapies**

6 CONCLUSIONS & OPPORTUNITIES

Realistic Clinical Simulations



- ✓ Are an impactful method to engage providers
- ✓ Provide meaningful insights into clinical-decision making

Clinical Decision-Making in T2DM



- ✓ Overall, providers prefer newer agents to older ones for add-on treatment
- ✓ Less-experienced providers rely on older agents more so than more experienced colleagues
- ✓ This audience may benefit from targeted continuing education regarding therapeutic advances

References

1. N Eng J Med. 2017;376:1419-1429.
2. Diabetes Care. 2016;39(11):1987-1995.
3. Popul Health Manag. 2017;20(1):6-12.
4. Clin Med Insights: Endocrinol Diabetes. 2016;9:23-30.