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

Katie Robinson, PhD¹, Douglas Seifert, PhD², and Robert A. Esgro¹

¹Vindico Medical Education, Thorofare, NJ; ²Syandus Simulation, Exton, PA

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 mortality.²
  - By 2030, nearly 55 million Americans may have diabetes.
- Adults with diabetes have a 50% higher risk of death from any cause versus those without.²

Up to 50% of patients with T2DM in the US do not reach their glycemic goals.³

- 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.

Establishing Partnerships

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

2 Participation & Demographics

1,376 Unique Participants

12,063 Decisions made

The majority were family practice physicians.

3 Simulation Overview

1. Initial presentation and work-up

Medications & Medical History
- Statins 20 mg/day
- GLP-1 or SGLT2 inhibitors

Initial Labs
- FPG ≤ 100 mg/dL
- HDL ≥ 46 mg/dL
- Atorvastatin 20 mg daily
- No evidence of CVD, HF, or renal disease

2. Initial goal setting and treatment

- A1C Goal Set
- <7.0%
- 22%

- Prescribed metformin
- Missing A1C target more frequently

3. Re-evaluation and treatment after 1 year

- A1C Goal Set - 7.0%
- Prescribed metformin
- <22%

4 Decision-Making Insights

Overall Quality of Decisions

- Poor: 79%
- Adequate: 19%
- Ideal: 19%

Across the sim, 79% of decisions were ideal.

Re-evaluation of Treatment Decisions

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

SGLT2 inhibitor 26% (GlaxoSmithKline and Lilly)

Sulfonylureas 27% (JazzPharm and Lilly)

GLP-1 RA 19% (Sanofi, Takeda, and Lilly)

PPAR-γ Agonists 6% (Sanofi and Lilly)

Thiazolidinediones 6% (JazzPharm and Lilly)

Basal Insulin 1% (Sanofi, Takeda, and Lilly)

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

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

5 Preference of Add-On Treatment by Experience

NEW

76%

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

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

This activity was supported by an educational grant from Lilly; and Boehringer Ingelheim Pharmaceuticals, Inc. and Lilly USA, LLC.