Diabetes Consult: Can an App Improve Healthcare Professionals' Selection of T2D Treatment for High-Risk Patients?

Zachary Schwartz, MSC, ELS[1]; Martin Abrahamson, MD, FACP[2]; Anne Peters, MD[3]
[1]Clinical Care Options, LLC. [2]Harvard Medical School. [3]Univesirty of Southern California.

1. Background

T2D management is shifting toward treating patients with therapies that align with their level of CV and end-organ risk. These shifts create gaps in knowledge and competence, especially as they relate to managing patients with comorbid CV and/or renal disease.
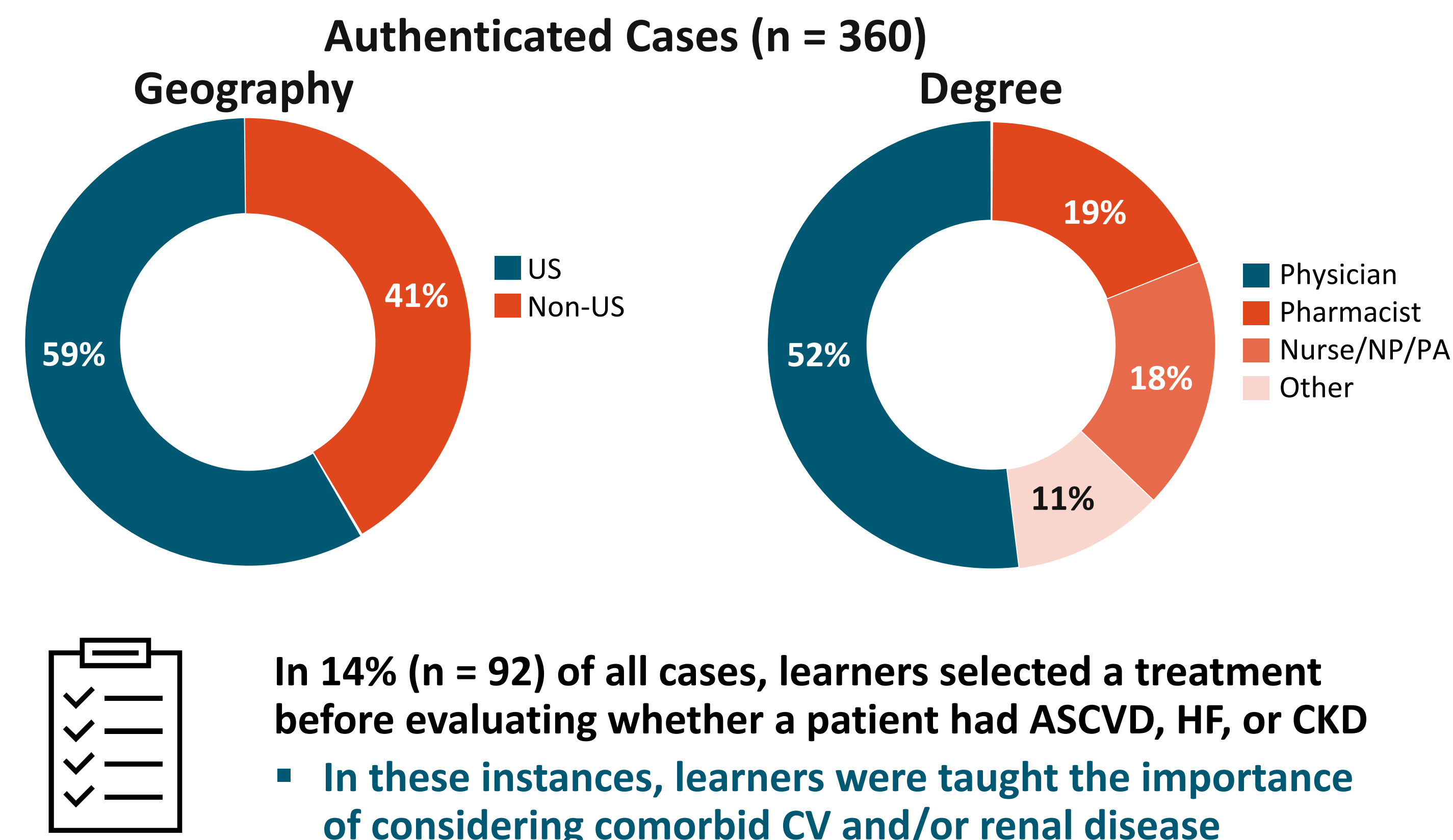
To measure how healthcare professionals choose among diabetes treatments in practice and to help them choose such treatments appropriately, we developed a decision support app in which healthcare professionals enter the characteristics of their patient and receive guidance on choice of treatment by a panel of experts.

Five diabetes experts provided therapy recommendations for 18 unique patient case scenarios based on patient variables including:
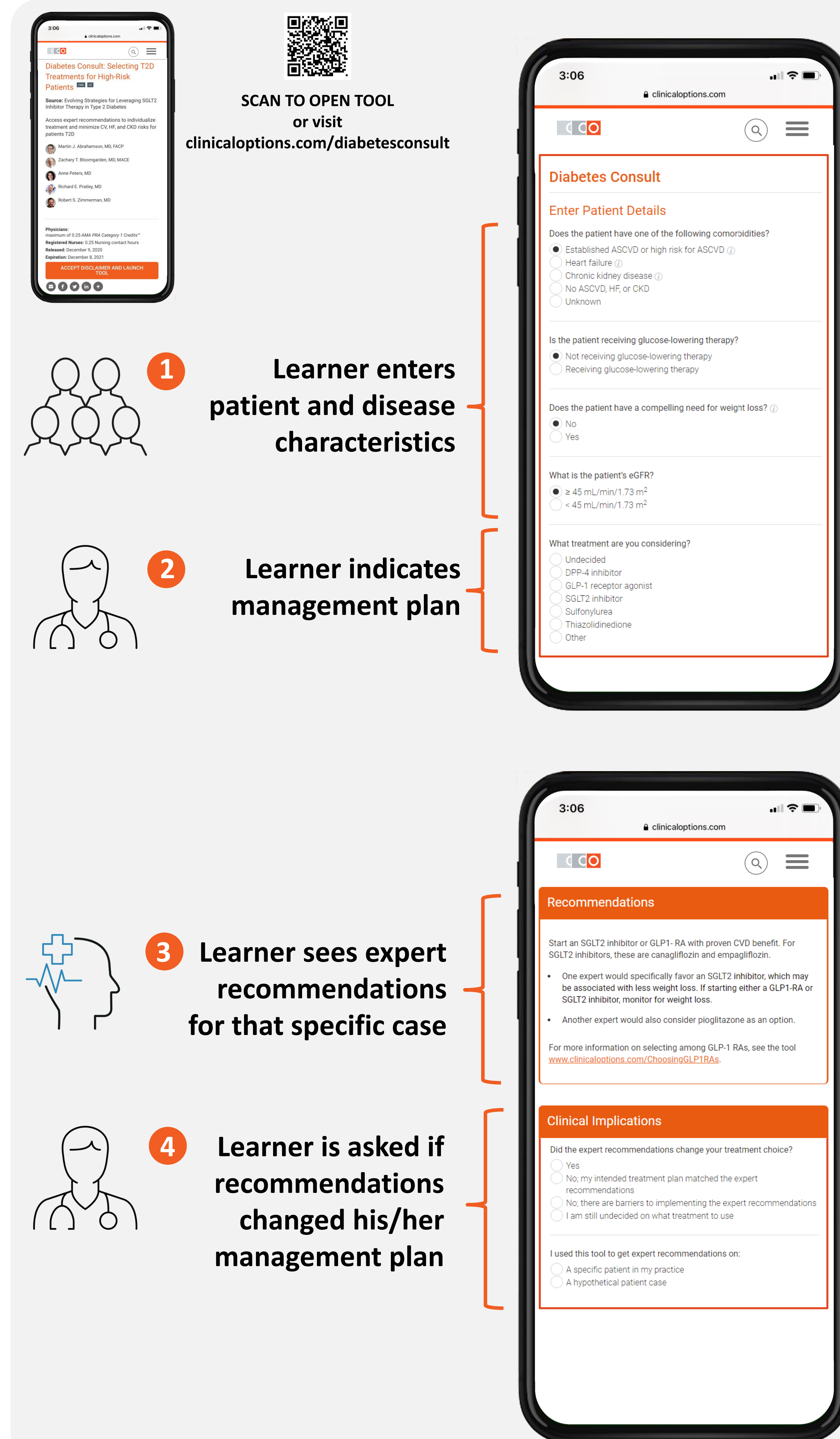
- ASCVD
- Heart failure
- CKD
- Need for weight loss
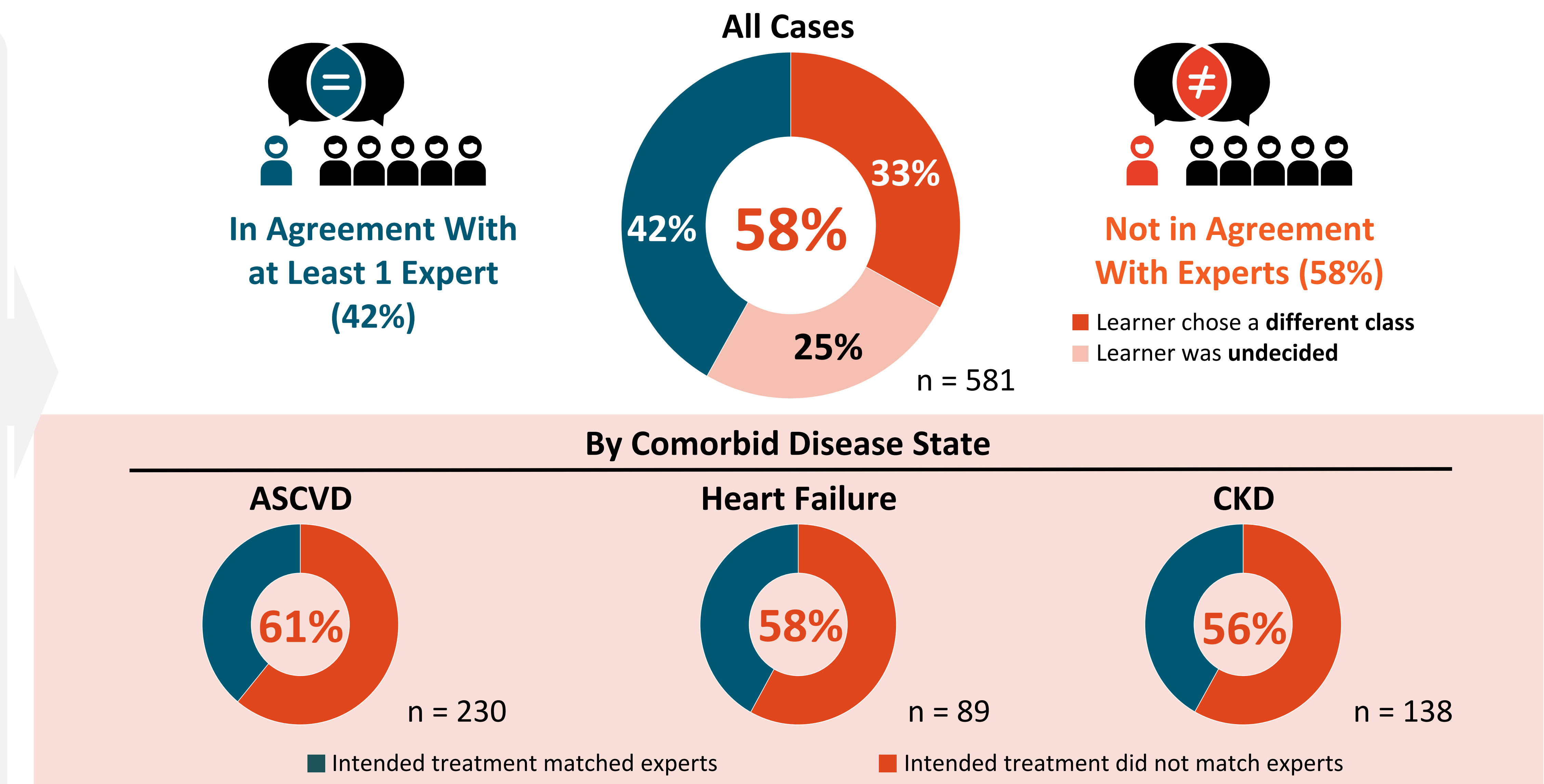- A1C
- eGFR
- Urine albumin level

2. Cases

- From December 2020 through April 2021, **434 learners** entered **673 cases** into the tool
  - 313 cases via the app (anonymous)
  - 360 cases via the CCO site (authenticated)

Authenticated Cases (n = 360)

Geography: US 41%, Non-US 59%

Degree: Physician 52%, Pharmacist 19%, Nurse/NP/PA 18%, Other 11%

In 14% (n = 92) of all cases, learners selected a treatment before evaluating whether a patient had ASCVD, HF, or CKD
- In these instances, learners were taught the importance of considering comorbid CV and/or renal disease

3. Online Decision Support Tool Provides Patient-Specific Recommendations

SCAN TO OPEN TOOL or visit clinicaloptions.com/diabetesconsult

1. Learner enters patient and disease characteristics

2. Learner indicates management plan

3. Learner sees expert recommendations for that specific case

4. Learner is asked if recommendations changed his/her management plan

4. Learners' Initial Choice of Diabetes Treatment

All Cases

In Agreement With at Least 1 Expert (42%)

58% — 42%, 33%, 25%

Not in Agreement With Experts (58%)
- Learner chose a **different class**
- Learner was **undecided**

n = 581

By Comorbid Disease State

ASCVD 61% — n = 230

Heart Failure 58% — n = 89

CKD 56% — n = 138

- Intended treatment matched experts
- Intended treatment did not match experts

5. Posteducation Impact

Subset of Learner Cases Where Baseline Plan Differed From Experts and Learner Identified Future Plan

Did the recommendation change your management choice?

Yes, changed plan to match experts — 47% — **No, did not change plan**

n = 232

6. Conclusions

- Learners' initial choice of therapy **differed from experts for 58% of case scenarios,** highlighting continuing gaps in healthcare professionals' consideration of patient factors in choosing diabetes treatment and their ability to optimize treatment options for multiple patient scenarios.

- Of cases in which the learners' intentions differed from expert recommendations, **47% indicated that they planned to change their approach** after being provided the recommendation by the tool, suggesting the tool's use can help optimize care of patients with T2D.

- A point-of-care app can be part of an implementation strategy to positively influence practice behaviors.