

BACKGROUND

- Prevalence of cardiovascular and kidney complications of Type 2 Diabetes (T2D) is increasing in the United States, in part due to suboptimal implementation of guideline-directed therapies.
- The Saint Luke's Haverty Cardiometabolic Center (CMC) of Excellence model implements a team-based, patient-centered approach focused on comprehensive risk reduction for patients with T2D and cardiovascular disease (CVD), including use of cardioprotective anti-diabetic agents such as glucagon-like-peptide-1 receptor agonists (GLP-1RA) and sodium-glucose-cotransporter type-2 inhibitors (SGLT-2i).
- We sought to assess outcomes during the first two years of CMC.

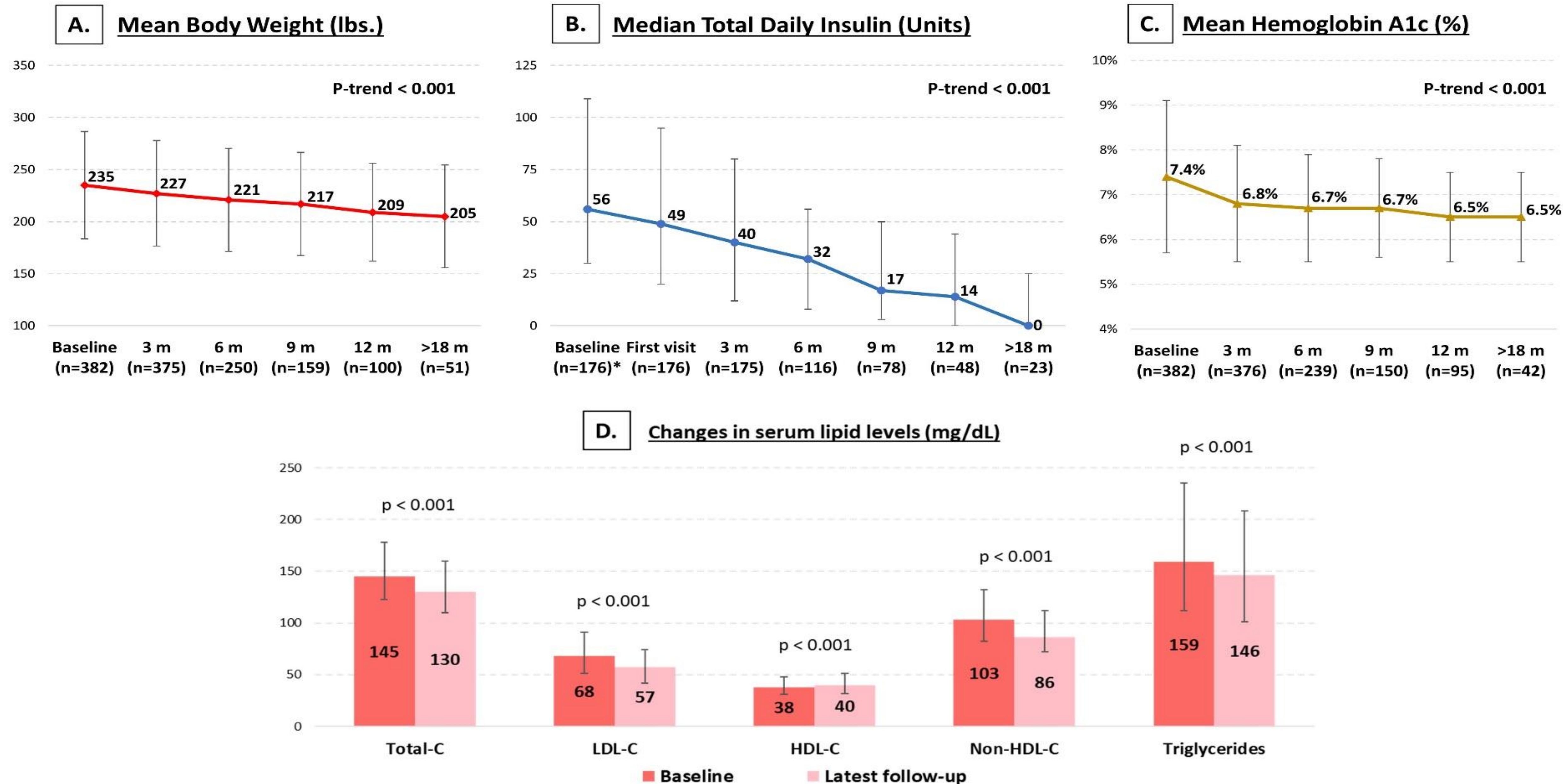
METHODS

- We included consecutive patients who had at least two visits at CMC between January 2019 and December 2020.
- We compared change in outcomes of interest between baseline and last CMC visit.

RESULTS

- Among 382 patients, mean age was 64.8±10.8 years, 62% were men, 81% Caucasian, BMI was 35.8±7.3 kg/m², 90% had T2D.
- At baseline, 52 patients (14%) were on GLP-1RA [5 (1%) on target dose] and 86 patients (23%) on SGLT-2i.
- After median follow-up of 6.5 (3.7-11.4) months, 338 (89%) patients were receiving GLP-1RA [249 (65%) on target dose], and 240 (63%) SGLT-2i, with 222 (58%) on both agents.
- During follow-up, patients experienced substantial reductions in mean body weight (235.2 ± 51.7 to 220.1 ± 50.9 lbs.; p<0.001), median total daily insulin dose (56 (30 - 109) to 32 (8 - 65) units; p<0.001), and mean hemoglobin A1c (7.4 ± 1.7% to 6.7 ± 1.3%; p<0.001).
- There were also significant reductions in total, LDL, non-HDL cholesterol, and triglycerides.
- In total, 18 patients (5%) discontinued GLP1-RA due to tolerability (predominantly GI in nature), and 9 (3.6%) discontinued SGLT2i due to tolerability (predominantly genital-urinary infections).

RESULTS



CONCLUSIONS

- CMC team-based approach was associated with greater adoption of guideline-directed therapies, including GLP-1RA and SGLT-2i, substantial reductions in all key CVD risk factors, and demonstrated that these therapies are generally well tolerated.
- The adoption of novel implementation strategies such as CMC is important for more effective implementation of guidelines into practice.