



UTEP

Management of Uncontrolled Type 2 Diabetes Mellitus with Combination Therapy with Metformin and/or GLP-1RA/ SGLT-2i

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The University of Texas at El Paso
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Overview

10 Day Reflective Practice

PICOT Question

Literature review GLP-1RA / SGLT-2i

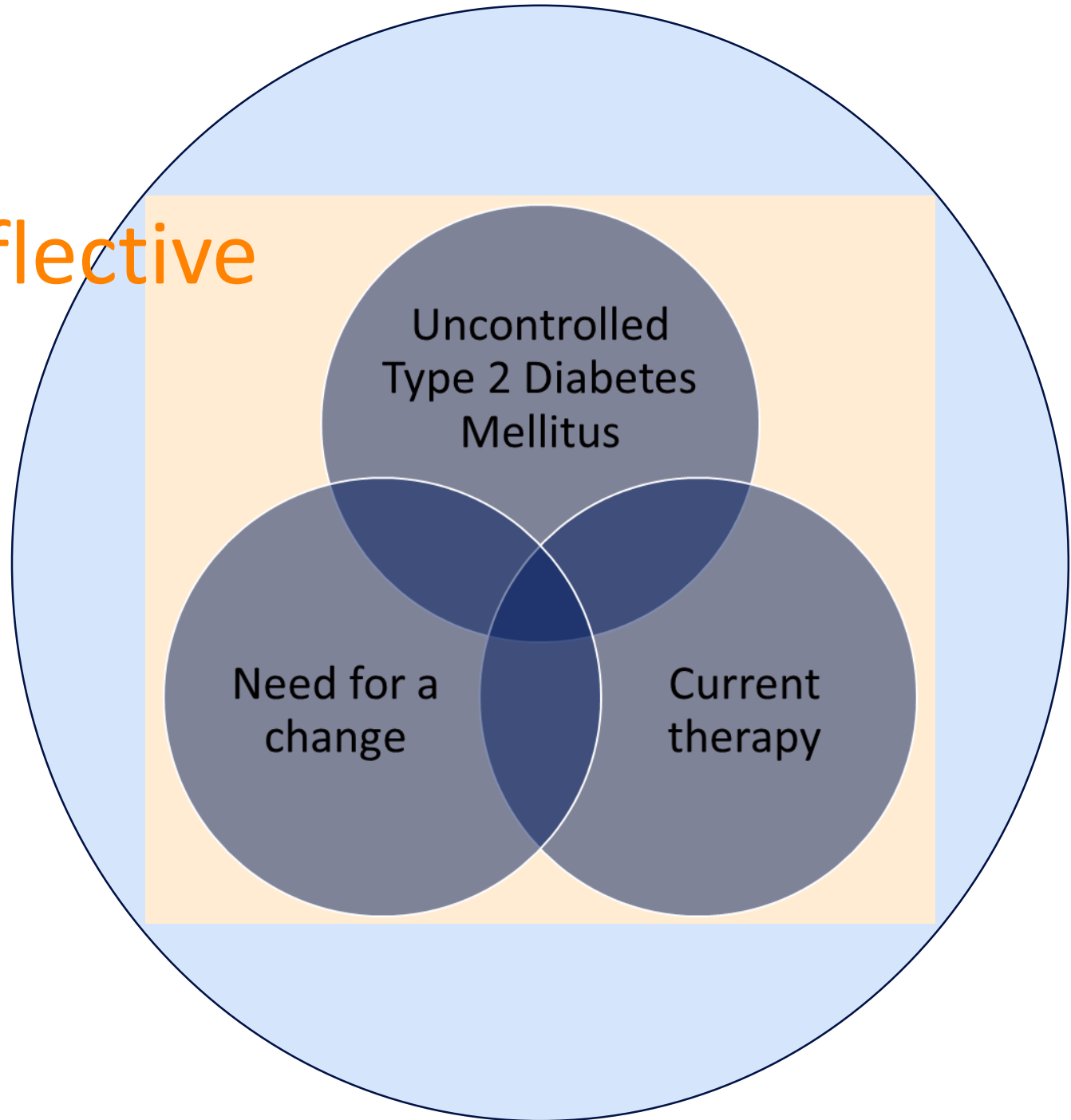
Project Design

Planning the Intervention/Theoretical Framework/QI Model

Analysis/Outcomes

Evaluation and Conclusions

10 Day Reflective Practice



PICOT Question

- P: Patients 18–80 years of age who have been diagnosed with uncontrolled T2DM and managed with metformin
- I: Addition of a GLP-1RA and/or an SGLT-2i to metformin (i. e., combination therapy)
- C: Monitor blood glucose via HbA1c levels
- O: Reduction in HbA1c levels
- T: Four weeks

Literature Review: Cochrane Database

- Metformin
- GLP1-RA / SGLT-2is
- First line treatment
- Combination:
 - Efficacy
 - Tolerability
 - Safety

SGLT-2i

Glycosuria

Decrease glucose

empagliflozin (Jardiance[®])

ertugliflozin (Steglatro[®])

GLP-1RA

Insulin secretion

Inhibit glucagon

Fullness

Reduced intestinal motility

dulaglutide (Trulicity[®])

semaglutide (Ozempic[®])

Project Design

QI Proposal and Work Letter

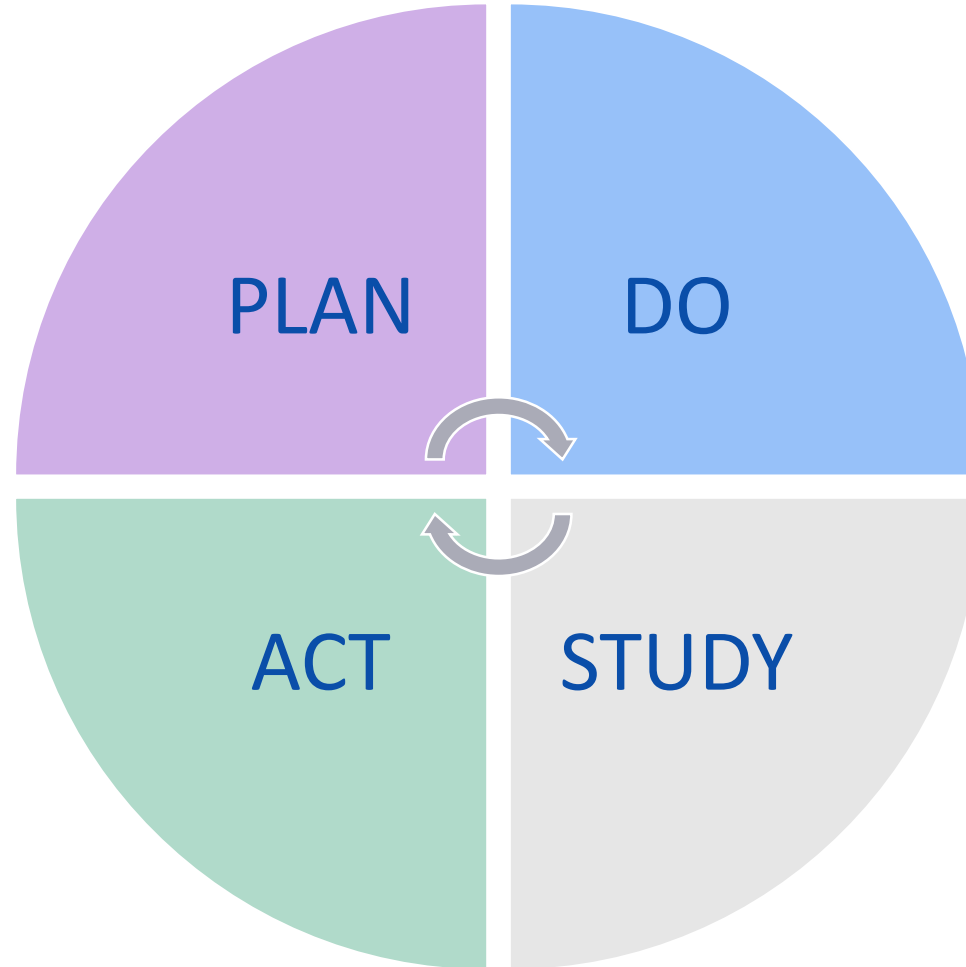
IRB at UTEP/Letter

Work Setting and Resources

Planning the Intervention: Theoretical Framework: Lewin's Change Model



Planning the Intervention: QI Model: PDSA



QI Project

Implementation



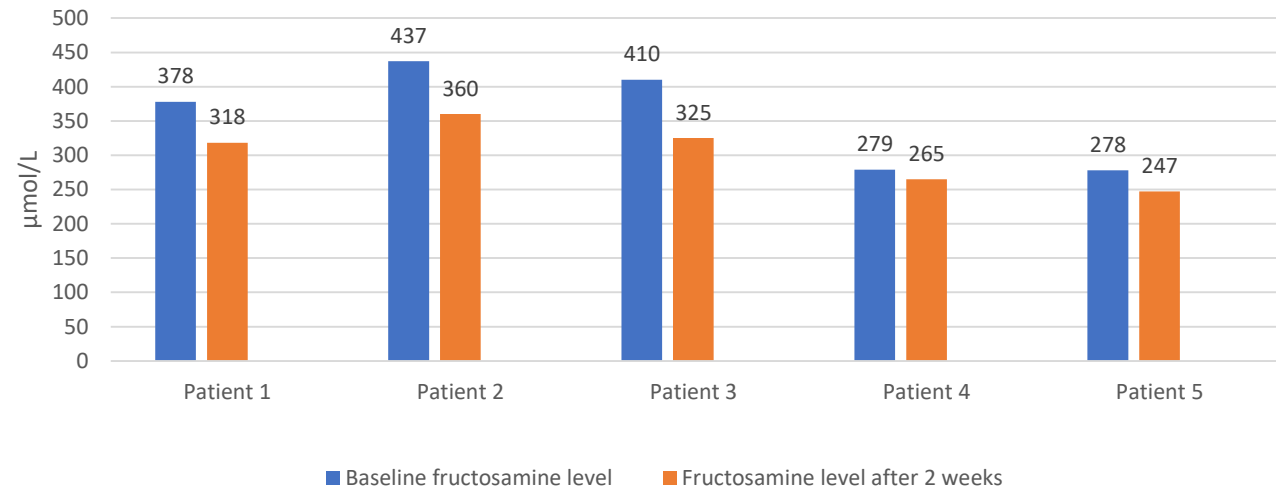
QI Project Implementation

- Patient 1 • 56 m, GLP1-RA+SGLT-2i, S/E
- Patient 2 • 61 f, GLP1-RA
- Patient 3 • 55 f, GLP-1RA+SGLT-2i
- Patient 4 • 57 m, SGLT-2i
- Patient 5 • 49 f, SGLT-2i

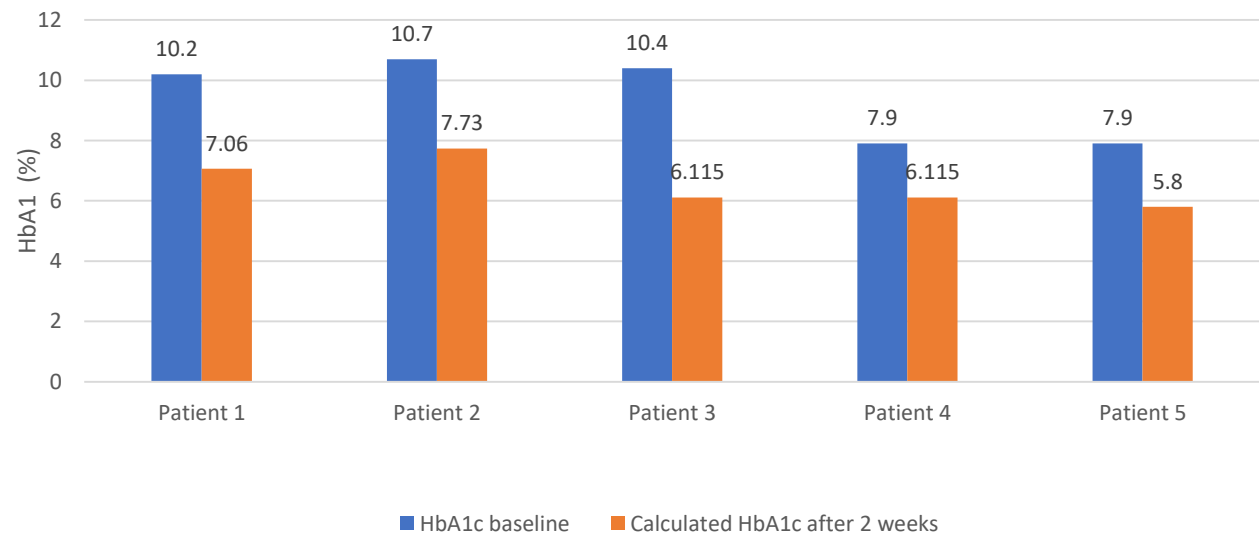
- Patient 6 • 53 m, GLP1-RA
- Patient 7 • 57 m, GLP-1RA, S/E
- Patient 8 • 50 f, GLP-1RA, S/E
- Patient 9 • 77 m, GLP-1RA
- Patient 10 • 46 F, GLP-1RA

Analysis/Clinical Outcomes

Fructosamine Levels Before and After Implementation

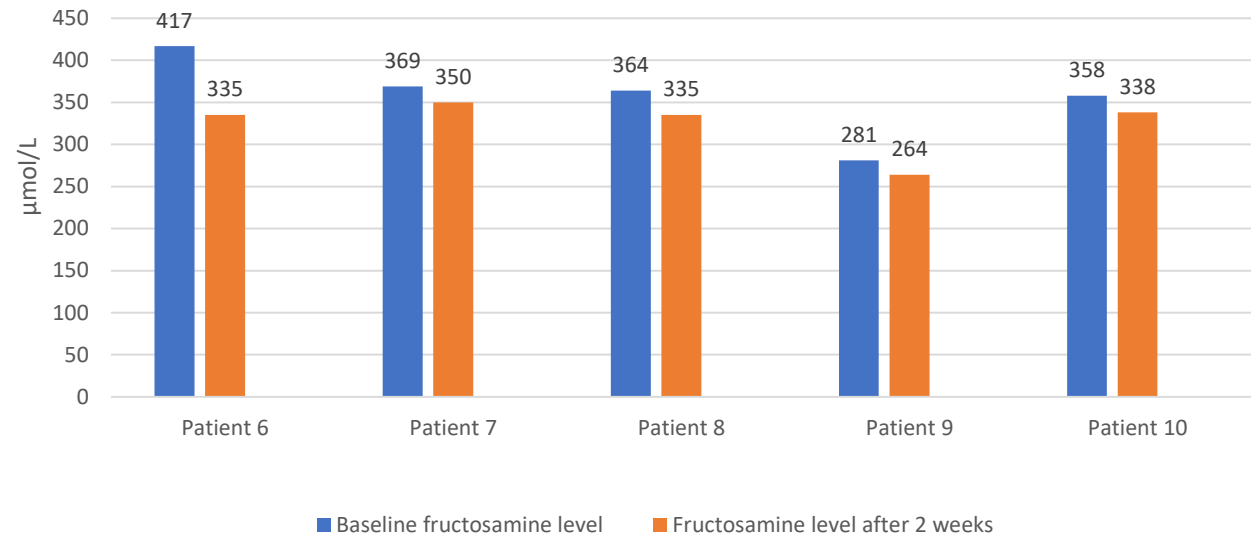


HbA1c Calculated from Fructosamine Levels Before and After Implementation

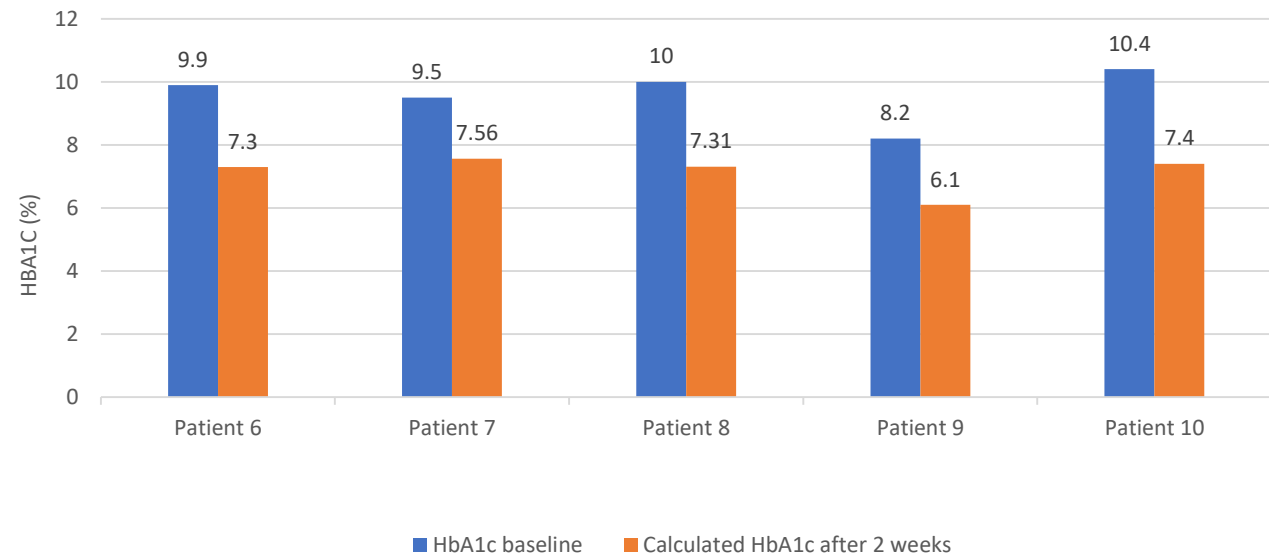


Analysis/Clinical Outcomes

Fructosamine Levels Before and After Implementation



HbA1c Calculated from Fructosamine Levels Before and After Implementation



Evaluation and Conclusions

It works!!



Questions??



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References

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