Striving to provide standard of care: insulin pump use by demographics

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Background

Diabetes technology has historically resulted in inequitable access with a greater proportion of privately insured and white patients using diabetes technology

- Historical data in 2023 showed that at Children's of Alabama (COA) insulin pump use differed by race and insurance status

A multidisciplinary team at COA was formed with the aim: reduce the insurance and racial disparity gap for insulin pump initiation to +/- 5% by June 2026.

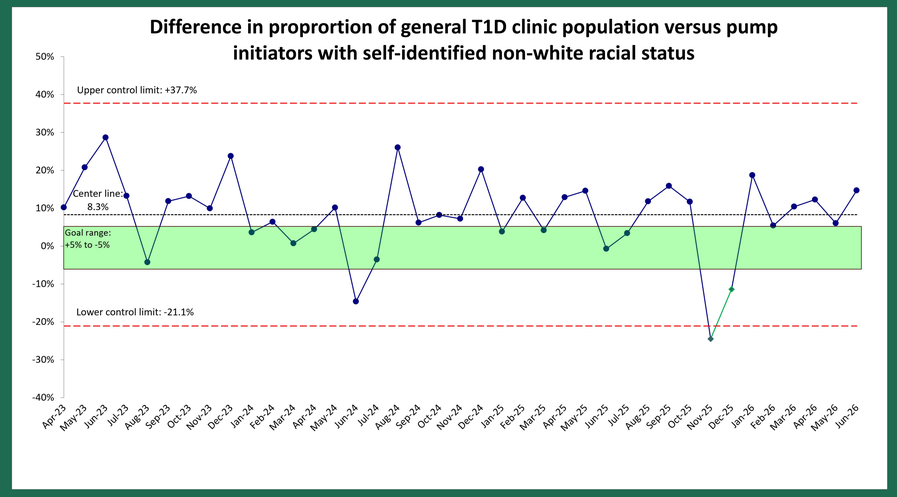
Methods

Monthly data compared demographics of patients starting an insulin pump at COA to patients on the T1D registry seen at COA

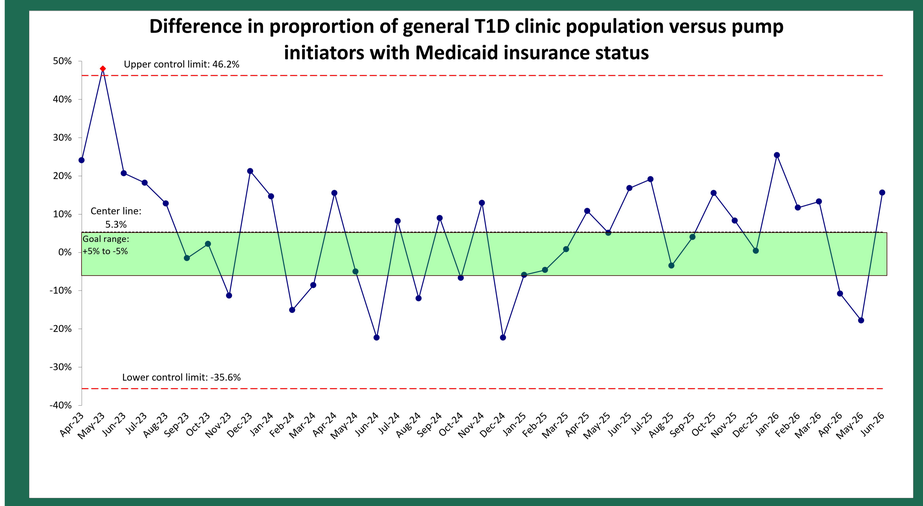
The proportion of all T1D patients with Medicaid was subtracted from the proportion of pump initiators (PI) to calculate the disparity gap.

- If the demographics of PI were perfectly in line with the clinic population, the gap would be 0.
- A positive gap indicated overrepresentation of patients with non-Medicaid insurance and white race in PI
- A negative gap indicated overrepresentation of patients with Medicaid insurance and non-white race in PI

Interventions:
- Insurance-specific support
- Forced documentation on technology
- Payor advocacy
- Pump demonstration box
- Streamlined pump education for specific pump types
- Proactive documentation support



Efforts to reduce insurance and racial disparities in insulin pump initiation did not show sustained improvement.



Racial disparity (+8.3%) remained higher than insurance disparity (+5.3%) which neared goal range.

Results

- Data period: April 2023 – June 2026
- Racial gap: +8.3%
- Insurance gap: +5.3%
- Both showed overrepresentation of non-Medicaid and white patients in PI population
- Special cause variation in Nov-Dec 2025 for racial gap noted corresponded to streamlined pre-pump education classes
- Variability remained high with wide control limits

Limitations

- Does not capture PI who receive training outside of COA
- Does not capture active insulin pump users
- Does not account for duration of diabetes
  - Alabama Medicaid requires 6-months of diabetes prior to approval for insulin pump

Conclusions

- Despite multiple interventions, racial and insurance disparities in PI were not reduced
- Proactive documentation support received minimal engagement
- Further work is needed to improve access for all to standard-of-care technology, with focus on underserved populations
- *If you have any ideas for improvement, please contact us at: jessicaschmitt@uabmc.edu*

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