

Background

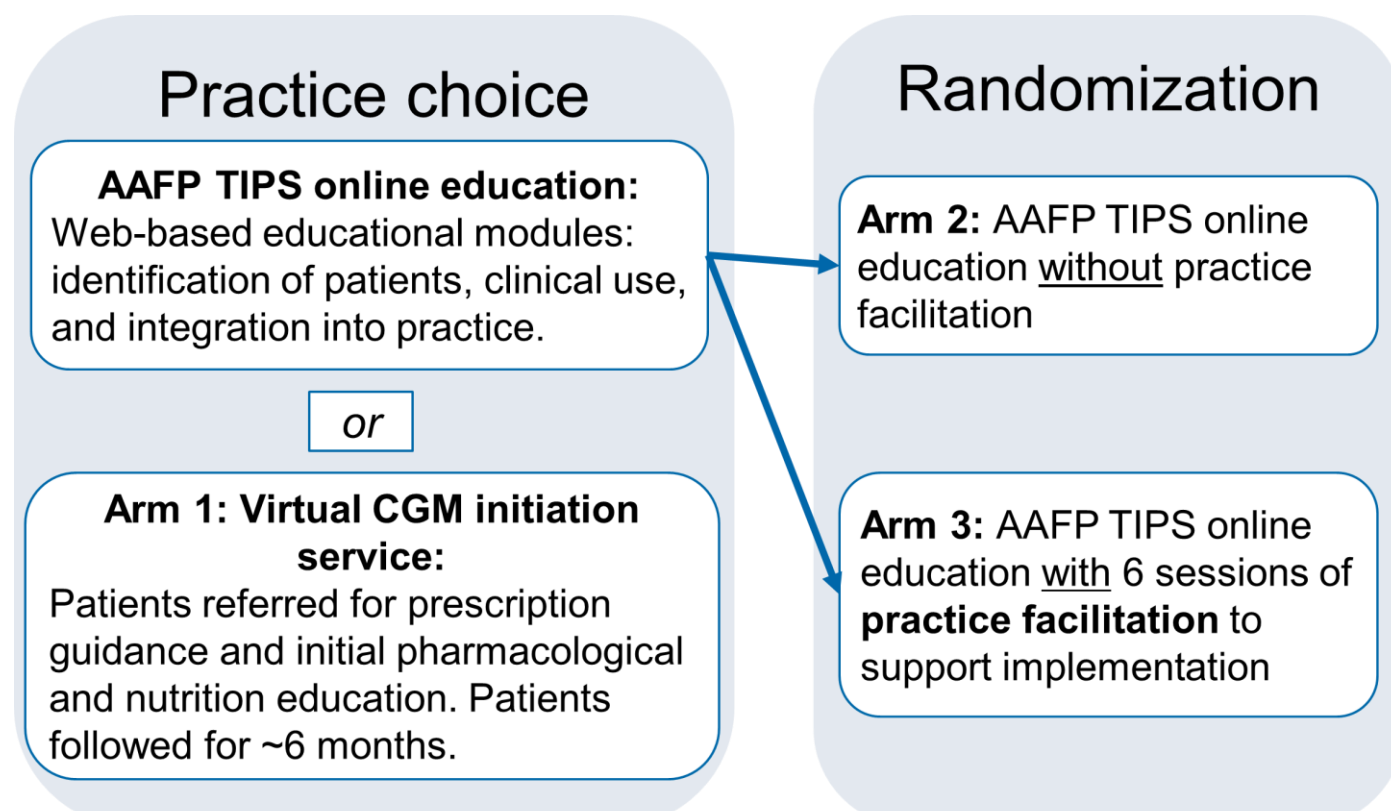
- **Continuous glucose monitoring (CGM)** can help improve glycemic outcomes.
 - Part of American Diabetes Association Standards of Care.
- Primary care physicians (PCPs) and care teams want to offer CGM to patients with diabetes.
 - Need training/knowledge to use CGM to optimize diabetes care.
- Most diabetes care takes place in primary care settings.
 - Implementing CGM can decrease diabetes care disparities.
- PREPARE 4 CGM compares three implementation strategies for CGM in primary care.

Objective

Describe **challenges, successes, and lessons learned** across 3 strategies for **CGM implementation** in primary care.

Methods

- CGM implementation strategies:
 - Practice Choice: Virtual CGM initiation service or AAFP TIPS online educational modules
 - Within AAFP TIPS, randomized to implement with or without *practice facilitation*



- 76 Colorado primary care practices enrolled; 63 practices completed the project.

Results

Practice Characteristics	Overall		Virtual CGM Initiation Service		AAFP TIPS		AAFP TIPS + Practice Facilitation	
	%	n	%	n	%	n	%	n
<i>Organization Type</i>		76		30		22		24
Clinician-owned/Independent	50%	38	43%	13	59%	13	50%	12
FQHC or Rural Health Center	32%	24	37%	11	27%	6	29%	7
Hospital-owned	18%	14	20%	6	14%	3	21%	5
<i>Specialty</i>		76		30		22		24
Family Medicine	61%	46	67%	20	50%	11	63%	15
Multi-specialty primary care	26%	20	17%	5	27%	6	38%	9
Internal Medicine	8%	6	10%	3	14%	3	0%	0
NP-led	5%	4	7%	2	9%	2	0%	0
<i>Size</i>		63		22		18		23
5+ clinicians	43%	27	41%	9	44%	8	43%	10
<i>Geographic Location</i>		76		30		22		24
Metro	62%	47	57%	17	73%	16	58%	14

• Patients referred to study:

388

• Patients enrolled in study:

192

• Practices referred patients to study:

41

Preliminary Practice Member Interview Results

AAFP TIPS

- AAFP TIPS modules helped practices understand how to interpret and act on CGM data (time in range, etc.).
- "I wrote notes about what the individual things meant, what you're getting off the monitors, and how to utilize that information to figure out what's really going on with the patient. To me, that was the most important thing." -Physician

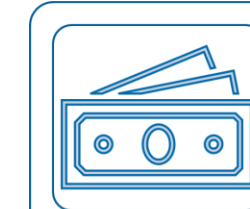
AAFP TIPS + Practice Facilitation

- Practice facilitators helped practices apply AAFP TIPS modules through policy development, successful documentation and processes for prior authorization.
- "The study helped enormously because, as I said, I was so scared. I didn't know how to do it, what to do correctly... Before the study we had only two or three patients and the coverage was not good, so had just very few patients on the personal CGM, and now since the study helped us to understand that it's not difficult; it's not a lot of work involved, and now that we're confident, we're doing it much more often." -Physician

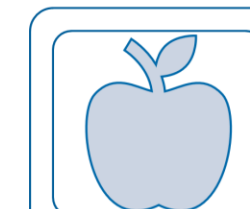
Virtual CGM Initiation Service

- Helped practices get patients started on CGM by alleviating time burden, helping understand documentation for insurance authorization.
- "I don't think I've referred anyone for at least 6 months or so, and I think that's a reflection that we're actually doing a lot of that on our own now as far as patients who are wanting to do the continuous glucose monitoring." -Physician
- "I think the most useful is for our practice not having to deal with the insurance and make sure all the criteria were met and to get that lined up, so the patients could do it." -Physician

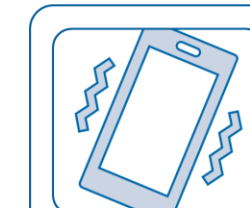
Preliminary Patient Interview Results



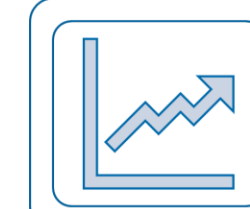
CGM cost is **challenging** for many patients, especially without insurance coverage.
"It wasn't covered. I can't afford \$200 or however much it was each month." -Patient



CGM helps patients **understand effect of foods and health behaviors** on glucose levels.
"CGM really helped me understand how your blood sugar is impacted by high carb and high fat hours after you've eaten, and so it's really helped me make different lifestyle choices around late-night eating, but also it helped me understand what kind of exercises either raise or lower my blood sugar." -Patient



Most had positive feedback about CGM; some described **difficulties with device adherence, technology, pain when removing**.
"It took me a while to figure out... the sensor was pulling away from my body part, and only intermittently then connected or reconnecting, and reconnecting badly. Once they kinda pull away a little bit, there's just no way to get 'em back in." -Patient



Patients **benefitted when PCP could view CGM data**, but many PCPs did not have access to data.
"I can share it with my PCP, so she sees my data and she can look back at it and say, 'Hey. What were you doing here? Why did this spike, or what is this drop?' So, it's pretty convenient when you can say, well, yeah, I splurged and had an ice cream cone." -Patient



Virtual CGM Initiation Service helped patients apply CGM sensors and interpret readings.
"They both [nutritionist and pharmacist] had good suggestions on what to eat and how to monitor and see what spiked my sugars, and I got a better understanding of what did increase my sugars and what to avoid." -Patient

Lessons Learned

Challenges

PCPs may not feel confident prescribing CGM and/or interpreting CGM data.

Solutions

- Free educational & training resources for providers (e.g., AAFP TIPS).
- Partner with external entity to provide services to patients (perhaps via telehealth, as in Virtual CGM Initiation Service).

Even if PCPs feel confident prescribing CGM, insurance coverage is limited, often depends on insulin usage. Patients may also struggle with costs.

- Professional CGM or samples.
- Intermittent CGM use.
- Evidence demonstrating value of expanded coverage.

CGM data is not integrated into EHR for most practices.

- Review CGM data online through most brands.
- Loan CGM readers to patients, review data in appointments.
- Consider data review before visit.

Conclusions

- **Virtual CGM initiation service** may expand access to CGM in primary care, **reduce workload**.
- Cost, insurance, and prior authorization (for both patients and clinicians) can be barriers and change rapidly.
- **Online education** and collaboration with **virtual CGM initiation service** may help **improve understanding of insurance documentation requirements**.
- Important for PCPs to stay up-to-date with frequently updated insurance requirements.

Future Directions

- Patient, practice, and health economics outcomes across three strategies (analysis in progress).
- Build support for expanded coverage and affordability.
- OTC FDA-cleared biosensors (CGM) may increase access.
- Explore interaction of practice context and effective CGM implementation.
- Policy changes are needed to expand CGM access, reduce burden of obtaining CGM.