Michigan Collaborative for Type 2 Diabetes: Mixed Methods Change Readiness Assessment of Provider Organizations and Clinical Champions

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BACKGROUND

Optimal glycemic control and avoiding cardiovascular, renal, and metabolic complications are important treatment goals in Type 2 Diabetes (T2D). The Michigan Collaborative for Type 2 Diabetes (MCT2D) is a state-wide collaborative quality initiative launched in 2021 and supported by Blue Cross Blue Shield of Michigan. A total of 25 physician organizations (POs) enrolled 238 primary care practices along with collaborating specialists across the state with the goal of improving T2D care.

MCT2D has identified optimizing use of sodium-glucose cotransporter 2 inhibitors (SGLT2i) and glucagon-like peptide 1 receptor agonists (GLP1-RA), low carbohydrate diets (LCD), and continuous glucose monitoring (CGM) as initial quality initiatives. **We conducted a mixed methods study of Physician Organizations (POs) and practices to understand factors that will influence successful implementation.**

MCT2D INITIAL QUALITY INITIATIVES

AIMS

1. Understand the factors that will influence successful implementation of the three initial quality improvement goals.
2. Understand how practice structure and staffing effects confidence of practices to implement these quality improvement measures.

METHODS

We conducted qualitative interviews with leaders from all 25 POs using the Consolidated Framework for Implementation Research (CFIR) to assess anticipated barriers and needs.

We then surveyed clinical champions at each participating practice on confidence for implementing these initiatives. Of the 238 practices, 196 consented to de-identified use of their responses.

Confidence implementing MCT2D initiatives were measured using a likert scale. *(Not At All Confident, Somewhat Confident, Moderately Confident, Mostly Confident, Very Confident)*

Responses were stratified by the 2021 Community Needs Index (CNI), which is the average score of 5 barriers: income, cultural, education, insurance, and housing. CNI scores range from 1 (least need) to 5 (highest need).

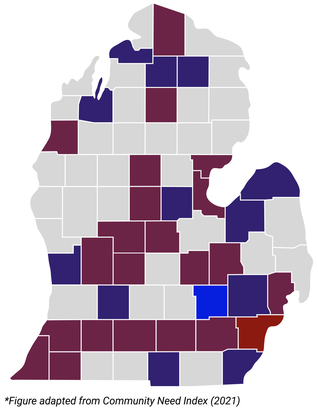
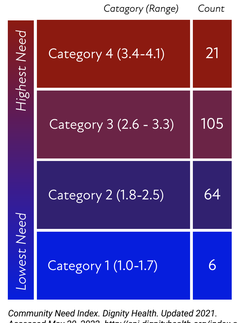


*Figure adapted from Community Need Index (2021)



Community Need Index. Dignity Health. Updated 2021. Accessed May 20, 2022. http://cni.dignityhealth.org/index.asp

All practices are confident that they can increase prescribing of newer meds, CGMs, and lower carb diets, but major barriers exist.

89% of clinical champions were moderately, mostly, or very confident that their practice would be able to **implement medications.**

87% of clinical champions were moderately, mostly, or very confident that their practice would be able to **implement CGMs.**

91% of clinical champions were moderately, mostly, or very confident that their practice would be able to **implement low carb diet.**

RESULTS: BARRIERS TO IMPLEMENTATION

Responses to *"What do you anticipate being the largest challenge for your PO related to MCT2D participation?"*		
Theme	**Exemplar responses**	**Frequency**
Clinician Engagement and Change Fatigue	"Physicians that have been around for years kind of take the wait and see attitude"	7
Lack of Resources	"We have very limited resources … for data [reports.]"	7
Cost of GLP1-RAs/SGLT2is and CGM Insurance Coverage Limitations	"The medications are costly [its] every major barrier."	6
Patient Activation, Motivation, and Engagement	"Getting patients engaged can be difficult when you're talking about lifestyle change."	6
Busy Physician Schedules	"[We have a] national staffing shortage due to the pandemic."	4
Clinician Education Needs	"The nurse care managers … can only provide so much education "	2
Access to Diabetes Education	"Across our region, we've really struggled with diabetes education [and] we only have one Endocrinologist. Diabetes education for all the regional, the rural areas are very limited, if non-existent after Covid."	1
Access to Dieticians for Low Carbohydrate Diet (LCD) Counseling	"The care managers, the office can only provide so much education to them and support, it really falls on the patient to be compliant in the long run."	1
Impact of Risk Sharing Contracts	"For the PO level, there's a lot more risk sharing contracts that have been out there with blueprint and other risk sharing contracts that we have, so one of the concerns was if we have a large contingent of our population switch over to these drugs, what that might look like from the cost side of things."	1
Total		**35**

Table 1. Provider Organization (PO) interview results: *Themes related to the anticipated largest challenges for PO participation in MCT2D*

RESULTS: PRACTICE SURVEY

Table 2. *Characteristics of practice clinical champion responses stratified by weighted average Community Needs Index (CNI)*

	Category 1 (1-1.7)	Category 2 (1.8-2.5)	Category 3 (2.6-3.3)	Category 4 (3.4-4.1)	p-value
Weighted Average CNI	*Lowest Need*			*Highest Need*	
Number of practices per category	**6**	**64**	**105**	**21**	
Demographic Information					
Number of PCPs in the practice	3.33 ± 4.4	3.61 ± 3.56	3.72 ± 3.68	2.76 ± 2.41	0.467
Employed	33.33%	23.44%	51.00%	4.76%	<0.0001*
Safety Net	0%	6.25%	13.00%	0%	0.229
Questionnaire Responses					
Clinic employed Pharmacist or routinely refer patients with Type 2 Diabetes.	16.67%	26.56%	37.14%	33.33%	0.472
Clinic currently refers patients for nutrition counseling.	83.33%	90.63%	95.24%	66.67%	0.003*
Practice has prescribed a continuous glucose monitor (CGM) for a patient with Type 2 Diabetes.	50.00%	84.38%	65.71%	95.23%	0.002*
How confident are you that your practice will be able to implement the lower carbohydrate diet quality improvement initiative? *Mostly/Very Confident*	33.33%	75.00%	55.24%	90.48%	0.0099*
How confident are you that your practice will be able to implement the medication (increased use of GLP1-RA and SGLT2-I) quality improvement initiative? *Mostly/Very Confident*	100.00%	90.63%	87.62%	95.24%	0.0130*
How confident are you that your practice will be able to implement the Continuous Glucose Monitoring quality improvement initiative? *Mostly/Very Confident*	33.33%	81.25%	50.48%	76.19%	0.0043*

Values are Mean ± SD or % unless noted otherwise.
*P-value<=0.05

Figure 1. *Employment Status (N/Y) vs. Average Composite Score of Confidence Implementation Initiatives (CGM, MED, LCD) (p-value= <0.0001)*

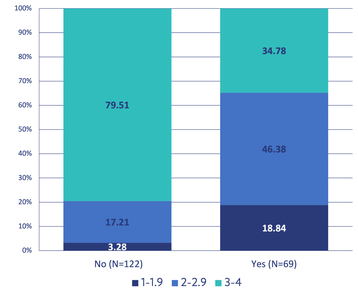


Figure 2. *Safety Net (N/Y) vs. Average Composite Score of Confidence Implementation Initiatives (CGM, MED, LCD) (p-value= 0.0425)*

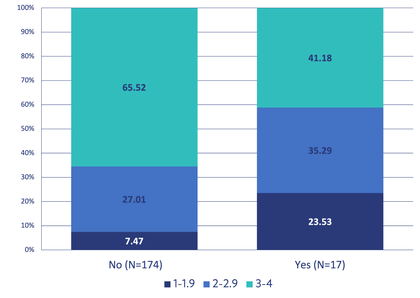
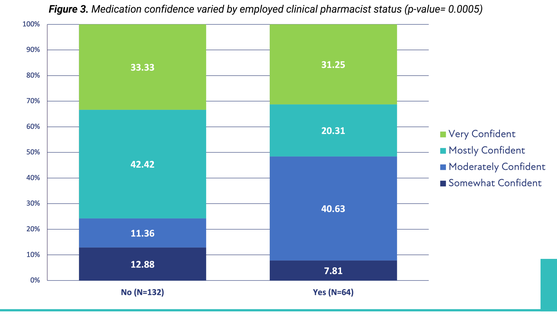


Figure 3. *Medication confidence varied by employed clinical pharmacist status (p-value= 0.0005)*



CONCLUSIONS

Our members are confident but challenges remain!
Barriers to implementation were used to modify MCT2D's implementation plans. We incorporated a patient advisory council, considered physician burnout in our requirements, and advocate with insurers for cost of medications. As a collaborative, we are:

- *Addressing patient activation via patient advisory council*
- *Being sensitive to physician burnout and COVID-19's damage to primary care resiliency*
- *Advocating for cost of medications as a collaborative.*
- *Removing data burden from practices.*