

Impact of Social Vulnerability on Resources for CGM Initiation Across Michigan Primary Care Practices

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Michigan Collaborative for Type 2 Diabetes (MCT2D)

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BACKGROUND

- Continuous glucose monitors (CGMs) are being more widely prescribed by primary care physicians (PCPs) for patients with type 2 Diabetes (T2D).
- The Michigan Collaborative for Type 2 Diabetes (MCT2D) is a state-wide quality initiative supported by Blue Cross Blue Shield of Michigan that aims to improve the treatment of type 2 diabetes through three initiatives: (1) Prescribing of SGLT2i/GLP-1 RAs, (2) CGMs, (3) Low carbohydrate eating patterns.
- The statewide collaborative is made up of: Over 1,000 physician members, representing 310 primary care practices, 21 endocrinology practices, and 15 nephrology practices from 28 of Michigan's 40 physician organizations.

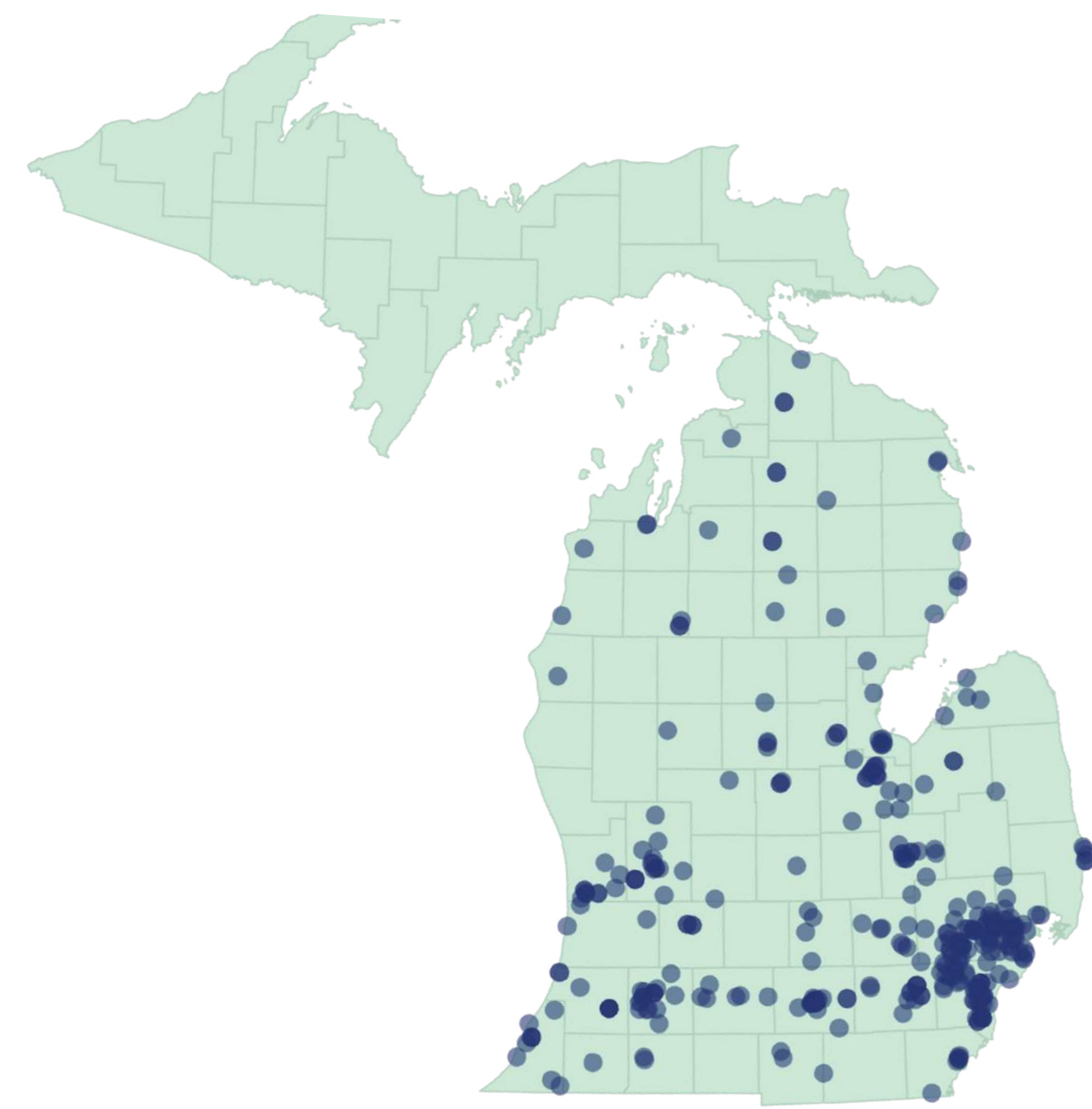


Figure 1. MCT2D Primary Care Practices

AIM

To describe practice-level resources and barriers to CGM initiation and problem-solving in practice counties with high and low social vulnerabilities.

METHODS

- We surveyed primary care practice clinical champions about practice-level CGM patient education and barriers, and their understanding of Medicaid insurance coverage.
- We received 169 responses out of 264 invited (64% response rate).
- Using the practice's county-level Centers for Disease Control and Prevention's (CDC) Social Vulnerability Index, we classified practices as high vulnerability (HV; quartile 4) (N=39), or low vulnerability (LV; quartiles 1-3) (N=130), regardless of patients' residence.

Social Vulnerability Index			
HIGH	MEDIUM HIGH	LOW MEDIUM	LOW

High Vulnerability Practices (Top 25%) N=39

Low Vulnerability Practices (Bottom 75%) N=130

- The CDC's Social Vulnerability Index (SVI) considers 4 main themes:

THEME 1	THEME 2	THEME 3	THEME 4
Socioeconomic Status	Household Characteristics	Racial & Ethnic Minority Status	Housing Type & Transportation

CDC/ATSDR Social Vulnerability Index. Centers for Disease Control and Prevention. Updated 2022. Accessed May 3, 2023. <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>

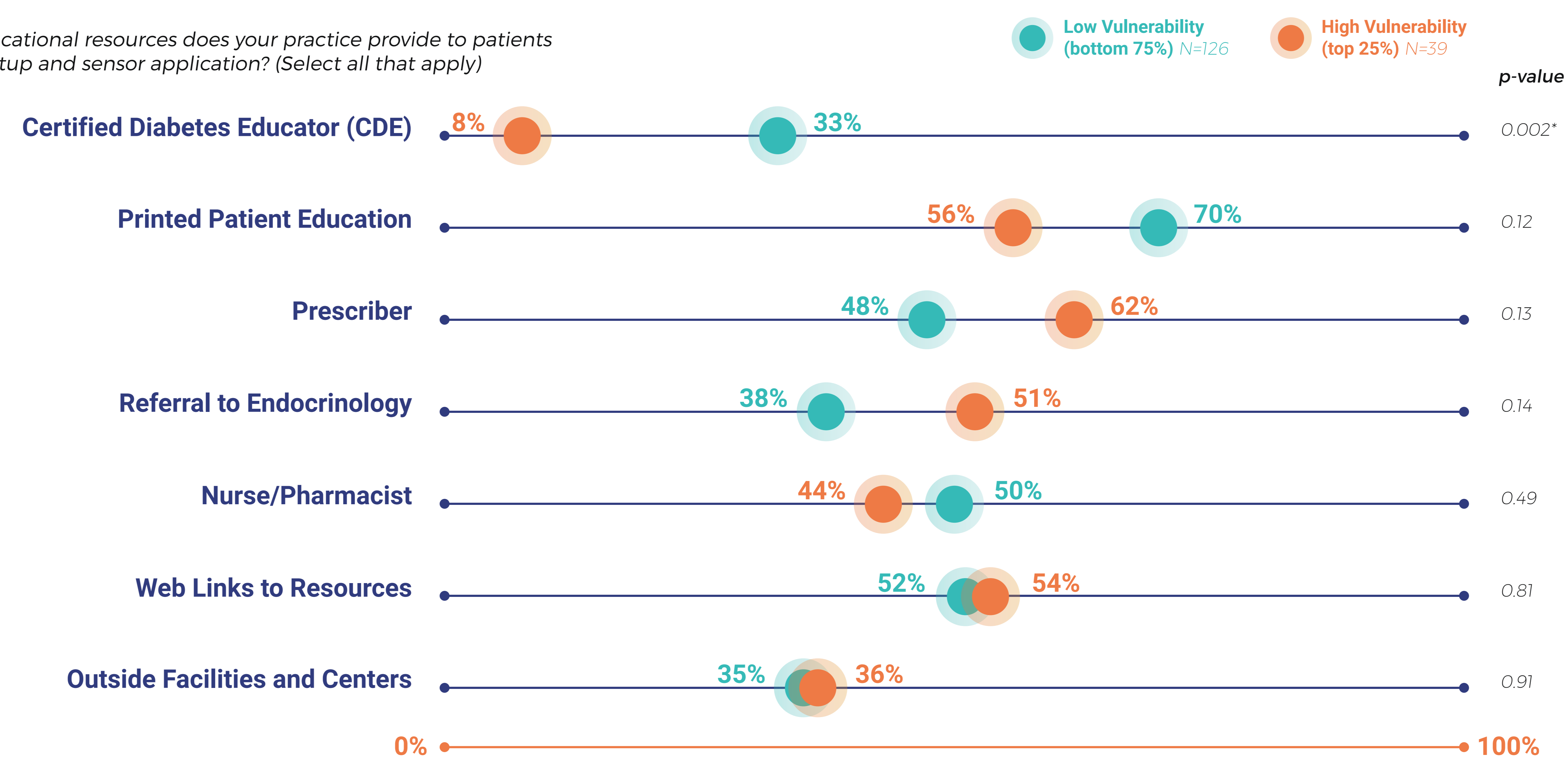
Figure 2. MCT2D practices and social vulnerability showing the number of responses from each county

Practices in **high** vulnerability counties have **fewer resources for CGM support**. Practices in **low** vulnerability counties face **more barriers in CGM data sharing**.

Regardless of vulnerability, practices were **uniformly low in their understanding of Medicaid coverage of CGMs** for patients with type 2 diabetes.

RESULTS

Figure 3. What educational resources does your practice provide to patients to support CGM setup and sensor application? (Select all that apply)



Support for MCT2D is provided by Blue Cross and Blue Shield of Michigan as part of the BCBSM Value Partnerships program. Although Blue Cross Blue Shield of Michigan and MCT2D work collaboratively, the opinions, beliefs and viewpoints expressed by the author do not necessarily reflect the opinions, beliefs and viewpoints of BCBSM or any of its employees.

RESULTS (cont.)

Figure 4. What is the biggest barrier to practices for successful CGM data sharing with patients? (Select all that apply)

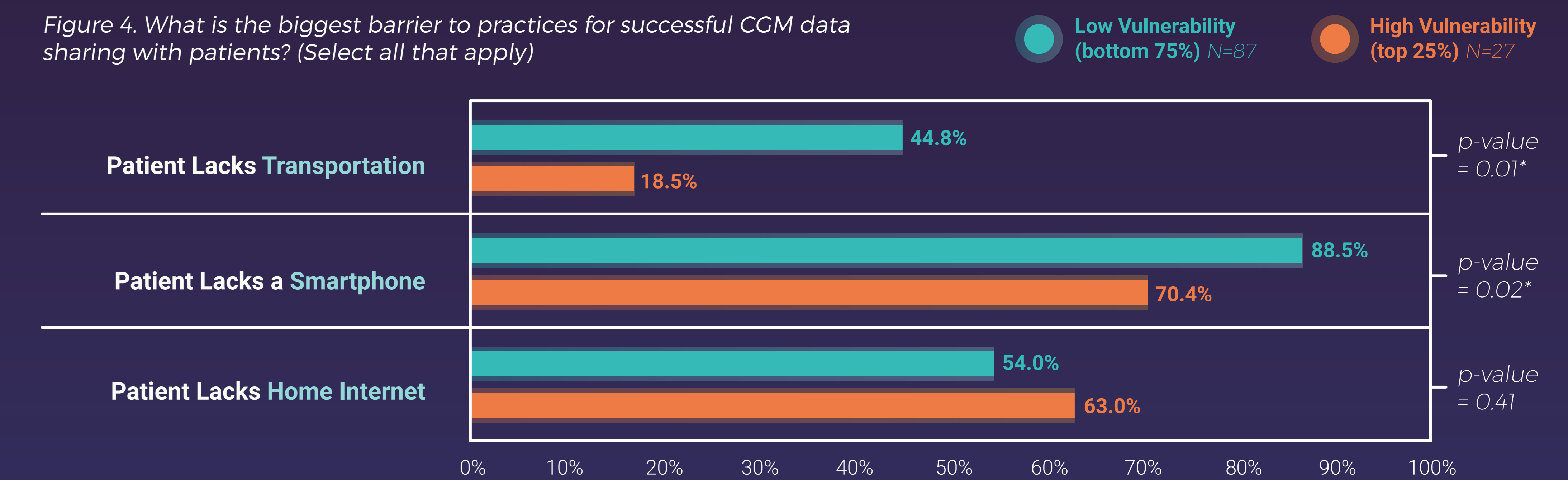


Figure 5. When a patient requests assistance for difficulties with either CGM setup, data capture, and/or data sharing, what is the most common course of action?

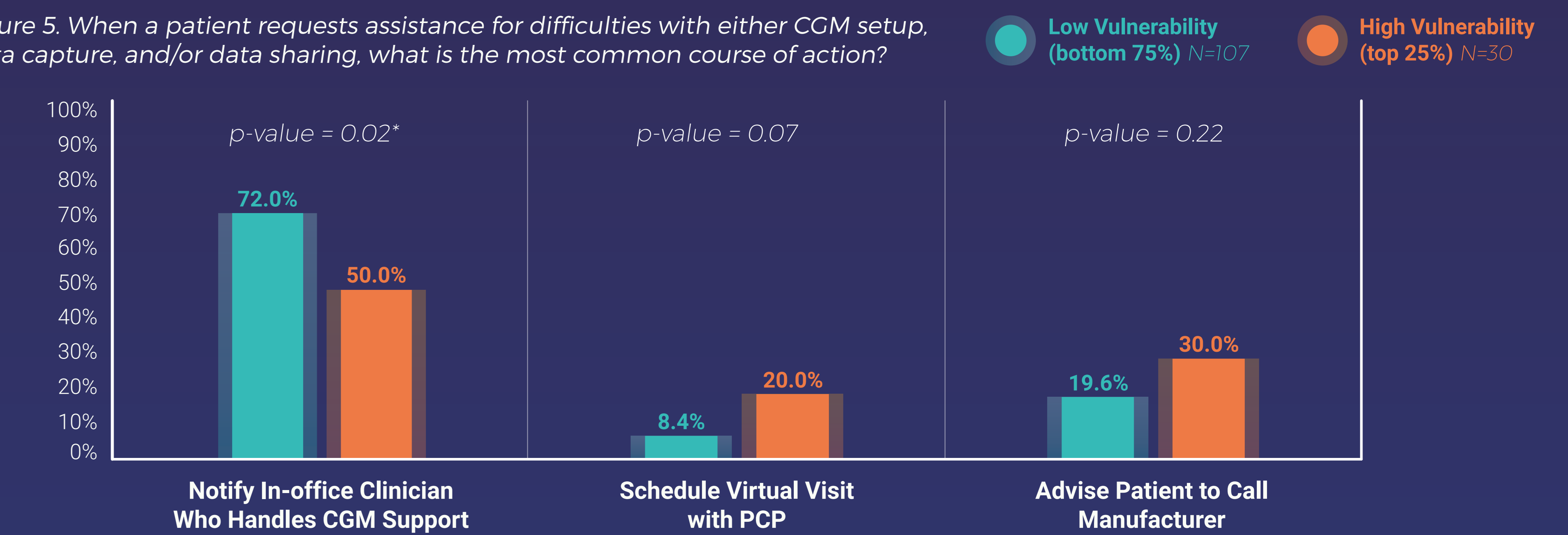
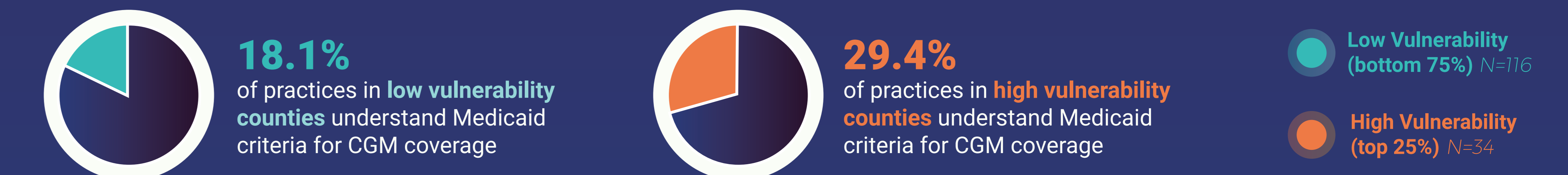


Figure 6. What is your current understanding (practice level) of which patients with T2D are eligible for CGM coverage by Michigan Medicaid?



No statistically significant difference in understanding of Medicaid coverage by practice social vulnerability. (p-value = 0.15)

CONCLUSIONS

Findings

- Compared to practices in low vulnerability counties, those in high vulnerability counties have less support for CGM initiation and troubleshooting, while their patients were less impacted by data sharing barriers.

Implications

- Efforts should be made to better identify and support practices located in vulnerable areas.
- Practices in high vulnerability counties may require more in-office support surrounding CGM use, while practices in low vulnerability counties may require resources for data sharing.
- State funded programs should be more transparent regarding CGM coverage.

Limitations

- Insufficient power to detect smaller effects or conduct adjusted analyses due to small sample (cell) size.
- Use of county-level vulnerability data may be an imprecise measure for individual patient's social determinants of health.

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