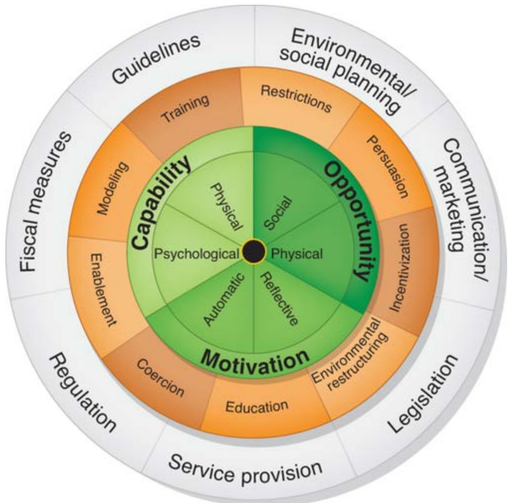
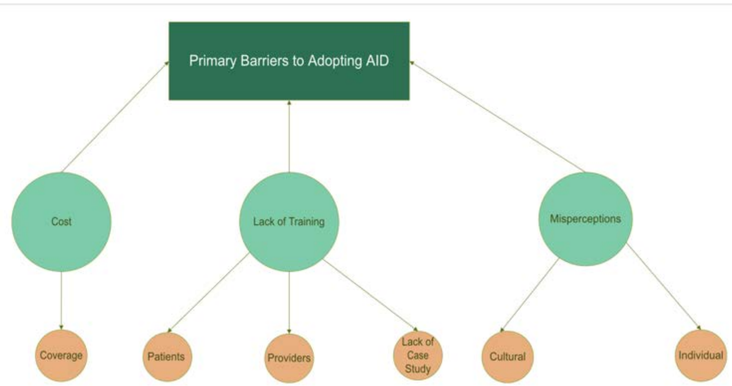
AUTONOMY RESEARCH CENTER FOR STEAHM

Improving Social Medicine with Autonomy

FAMILIA-DT: Fostering Awareness and Management in Latinx Individuals with Innovations in Technology and Access to Diabetes Care

Theme	Barriers	Solutions	Example Quotes
Systemic Barriers	Cost, policy, insurance coverage	Education, financial solutions	*"Cost is a barrier...who will pay for these AID systems?"*
Training and Education	Lack of AID educators, patient training	Dedicated training teams	*"Staff shortages are an issue in many hospitals."*
Mistrust & Perceptions	Mistrust of technology, cultural stigma	Tailored education	*"Mistrust of pharmaceutical/biotech by certain patients."*
Patient Self-Management	Complexity, low adherence, literacy	Simplified training, follow-up	*"Some patients are not motivated to take on additional tasks as they often feel overwhelmed."*
Strategies for Adoption	Limited resources, training time	Dedicated time for education, PCP and endocrinologist follow-up	*"Protected time during the day to learn."*
Racial & Cultural Issues	Cultural barriers, disparities	Training, equitable access	*"It's not a matter of cultural competency or patient's racial background. The educational resources must be there."*





Synopsis

Our study is focused on the utilization of diabetic technology as a way for individuals in the Latinx community to monitor their diabetes.

- Utilized a qualitative survey and thematic analysis grounded in multiple health-based theories.
- Previously identified barriers around this issue seem to be based upon cost, language barriers, or healthcare access.
- Used a holistic approach to explore the other reasons as to why a barrier might exist, such as cultural values, cultural norms, and a healthcare provider relationship built on trust.

Research Objective

This mixed method study integrates qualitative interviews with healthcare providers and a literature review focusing on the unique characteristics of the Latinx population in relation to adopting Automated Insulin Delivery (AID) systems in hospital settings.

- Qualitative component of 10 participant survey interviews to gather direct insight from healthcare providers.
- Literature review component consisted of examining theoretical frameworks and practical models.
- The **COM-B model** states that behavior change occurs when individuals possess the Capability, Opportunity, and Motivation to engage in the desired behavior.(1)

Research Approach

The qualitative interviews allowed us insight to the physician perspective, however the literature reviews demonstrated how much cultural values influence decision making.

- Our team found several cultural values prevalent in Latinx communities that could influence the adoption of diabetes monitoring technology.
- Understanding these cultural values is crucial for promoting the effective use of diabetes monitoring technology within the Latinx community.(2)

Research Results and Products

Ten physicians, ranging in specialty and workplace, responded to our qualitative survey. The key findings after interpreting the data are as follows:

- What physicians perceive as barriers do NOT line up with what patients perceive as barriers.
- The physicians expressed a belief that they should not be held solely reliable for educating their patients.
- **Familismo** (loyalty to family), **Fatalismo** (belief that life is predetermined), **Confianza** (building trust with healthcare professionals)

Commercialization and/or Societal Impact Opportunities

Application: Diabetic technology as a way to manage blood glucose levels; technology such as CGMs, insulin pens, insulin pumps, etc.

Key Values: Building a better relationship between the healthcare provider and their patient so that more Latinx individuals could utilize diabetic technology.

Team Names & Collaborators

ARCS Students
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Faculty
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Collaborator
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Citations

1. McCrossan, T., Lannon, R., Tarling, R., Dooher, M., Forshaw, M., & Poole, H. (2022). Utilising the "COM-B" bio-psychosocial approach to aid diabetes management. LJMU Research Online. *Practical Diabetes, 39 (3).* https://researchonline.ljmu.ac.uk/id/eprint/17038/

2. *Addala, A., Hanes, S., Naranjo, D., Maahs, D. M., & Hood, K. K. (2021). Provider implicit bias impacts pediatric type 1 diabetes technology recommendations in the United States: Findings from the Gatekeeper Study. Journal of Diabetes Science and Technology, 15(5), 1027–1033. https://doi.org/10.1177/19322968211006476*

3. Cahill, K. M., Updegraff, K. A., Causadías, J. M., & Korous, K. M. (2021). Familism values and adjustment among hispanic/latino individuals: a systematic review and meta-analysis.. Psychological Bulletin, 147(9), 947-985. https://doi.org/10.1037/bul0000336

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Updated 10/2024