Establishing Social Determinants of Health Screening to Improve Pediatric Diabetes Patient Outcomes

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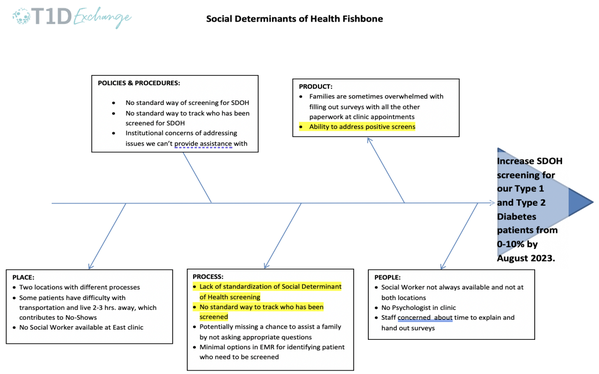
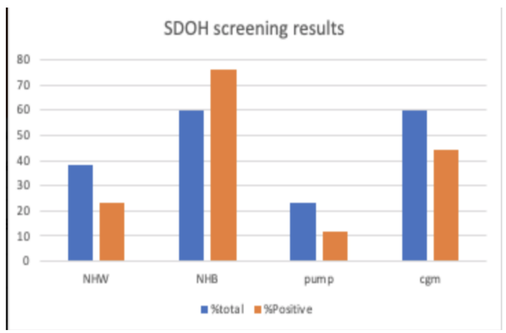
Introduction

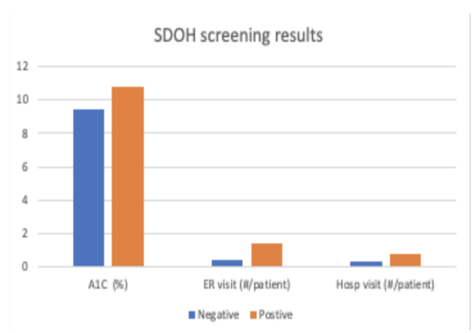
- Le Bonheur Diabetes Clinic partners with families to aid them in finding the best ways to manage their children's diabetes. Despite the existing research correlating social factors with worse glycemic control, our clinic was not previously screening for Social Determinants of Health (SDOH) in our diabetic patient population.
- To address this disparity, we decided to implement SDOH screening for our type 1 and type 2 diabetes patients based on a set of specific criteria. Our goal was to screen 10% of type 1 and type 2 diabetes patients and offer resources and/or referrals to those who screened positive from June 2023 to August 2023.

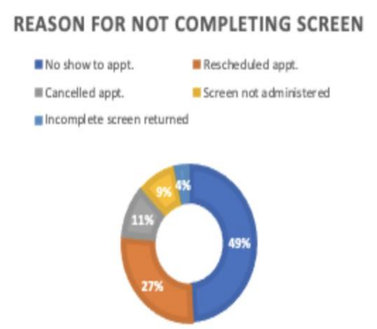
Methods

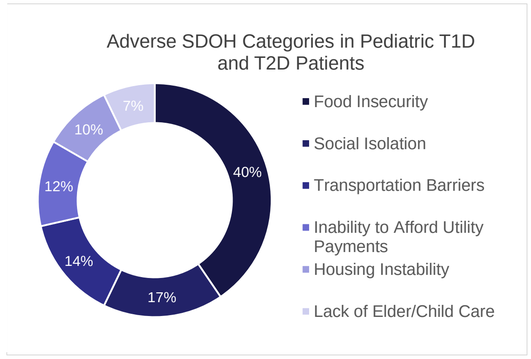
- We met bimonthly with a multidisciplinary team to establish the following screening parameters: type 1 and type 2 diabetes patients with a diagnosis of greater than 6 months who had an A1C of 9.5% or greater, had not been seen in the clinic for 6 months or longer, or were within a 3-month window of the anniversary of their diagnosis date. We also partnered with the University of Michigan and utilized their "Partners in Care" survey.
- In the first PDSA cycle, patients were offered a referral to the clinic's medical social worker through a written question featured at the end of the screen.
- In the second PDSA cycle, the question at the end of the screen was removed, and practitioners verbally offered referrals to patients who screened positive without standardization.
- In the third PDSA cycle, a question was added to the survey that asked patients to rate the urgency of their needs. Written resources were also made available for practitioners to offer patients who screened positive. Lastly, in order to standardize the process, a section was added to the end of the screen for practitioners to record if resources and/or a referral were verbally offered.
- In the fourth and final PDSA cycle, practitioners and clinic staff were re-educated on implementation of the methods introduced in the previous cycle. We also added a list of available resources to the end of the survey for families.











Results

- Through this project, we successfully increased our clinic's SDOH screening rate from 0% to approximately 4.3%. Of the patients that were eligible for screening, 51.6% completed screens. 38.5% of the completed screens were positive, and 84.0% of the patients that screened positive were offered social work referrals and/or appropriate resources.
- On average, patients screening positive for adverse SDOH had higher A1C levels as well as well as more hospitalizations and emergency room visits in the last six months than the patients who screened negative. Additionally, acceptance of referrals was impacted by the method in which the referral was offered. In the first PDSA cycle, 0% of the patients who screened positive accepted a referral when the referral was offered through a written method. In the final PDSA cycle, 66.7% of patients who screened positive accepted a referral when the referral was offered verbally.
- The percentage of patients utilizing diabetes technology was lower with patients that screened positive.

Conclusion

- We did see an improvement in our percentage of PWD being screened for SDOH, however we haven't reached our goal of 10%.
- Increased A1C levels may be an indicator for adverse SDOH; however, more research should be done examining this relationship.
- Lastly, patients screening positive for SDOH seemed to be more open to receiving assistance when asked verbally versus through written communication, suggesting that social work referrals should be offered verbally to diabetic patients rather than through written communication as a standard of care.
- While we are waiting for a different EMR that will ease giving the survey annually we will focus on screening patient's with A1c over 9.5%.

References

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