Introduction

This capstone project began during a meeting with Peace Neighborhood Center, an after-school program for underprivileged children in Ann Arbor. Leaders at PNC inquired about the possibility of a sports physical clinic as they noted that they had noticed many students unable to participate in school sports due to guardians not being able to bring them to a clinic for a pre-participation physical. I led the implementation of a free sports physical clinic at PNC with help from medical student and physician volunteers, and carried this over into an annual recurring event with plan-do-study-act cycles for improving the event each year.

Disclosures

None

Background

During a study cycle while looking into the impact of such programs, our team discovered that concerns have been published that free onsite pre-participation sports physical clinics may lead to overlooked medical issues and may not improve the health of the children in vulnerable communities [1]. Based on what we had already learned about the community making use of this event at PNC, we hypothesized that this may not the case for this particular group of students. We strove to make sure that our event addressed these concerns and was beneficial for the community, and we wanted to better characterize the barriers and social determinants of health faced to better meet the needs of the community.

Objectives

- To determine what barriers prevent the population of students attending Peace Neighborhood Center from getting sports physicals.
- To determine whether offering free on-site pre-participation sports physicals is beneficial to this community.
- To discuss methods for addressing the health care barriers faced by this community.

Methods

An IRB was submitted and approved for collecting anonymized survey data from parents and guardians of the children attending this event as part of a formal needs assessment.

For the sports physical clinic, physician volunteers were recruited to perform the physicals and medical student volunteers were recruited to take vital signs and assist in the filling out of forms. Supplies were acquired to turn three private rooms at Peace Neighborhood Center into clinic rooms.

Survey Questions:

1. Would have seen a doctor this year if this event were not available
2. Planned to see a doctor this year for a checkup outside of this event
3. Have health insurance coverage
4. Are up to date on vaccinations

Results

All participants:

- Would have seen a doctor this year if this event were not available
- Planned to see a doctor this year for a checkup outside of this event
- Have health insurance coverage
- Are up to date on vaccinations

Guardians last child to see provider:

- This year
- In past two years
- In past three years

Guardians aware that those covered by Medicaid can arrange for non-emergency transportation to healthcare visits?

- Yes
- No

Guardian reports child receives:

- Others than checkups
- Yearly checkups
- Every 2 years
- Less than every 2 years

Future directions include taking further steps to address the barriers to care described here. Specifically, an educational session for guardians will be added to this year’s clinic to discuss the logistics of scheduling clinic visits for children, including discussion of how far in advance appointments should be scheduled, a list of available clinics in the area and their extended “sports physical” hours if applicable, discussion of options for transportation, and addressing misconceptions about cost and some matters of general health care literacy. I will also discuss the data on preferred times for extended clinic hours in this population with the pediatrics department. Finally, before graduation it will be ensured that appropriate protocol is in place to continue the hand-off of leadership for continuation of this event.

Acknowledgements

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Conclusions and future directions

None of the children involved in the 2019 sports physical clinic were relying on this event as their main source of care – this event appears to merely allow children and guardians more convenience and flexibility. There is room for education in this population with respect to matters of scheduling appointments, frequency of check-ups, availability, and cost – as well as discussion with some of the reported sources of care to see if offering weekday night clinic during busy times may help address this access issue.

Reflection

I have volunteered with Peace Neighborhood Center in the past and it was a real pleasure to work with them again in the context of this project as a medical student. It was a rewarding challenge to work on implementing this project as an answer to a need they had observed. Working with my collaborators to solve the issues we encountered helped me grow as a leader and a team member. I appreciated the opportunity to dive deeper into the context of such events and think critically about the ways in which they can impact communities. I am looking forward to using data presented here to further optimize the way we can serve the community.