

# On-site preparticipation sports physicals project and impact on community health



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### 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 overreliance on such events for medical care 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 preparticipation 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 vitals and assist in the filling out of forms. Supplies were acquired to turn three private rooms at Peace Neighborhood Center into clinic rooms.

#### Results 15/16 participants: All participants: Survey Questions: - Have a PCP - Would have seen a doctor this year if this event were Yes No Not sure/Comments Does your child have a primary care provider or pediatrician? not available - Would have been able to participate in sports - Planned to see a doctor this year for a checkup Would your child have seen a doctor this year if this event was not if not for this event outside of this event Are you planning to take your child to see a doctor this year outside of this event? (e.g. for a check up, to make sure their vaccinations are updated, - Have health insurance coverage Does your child have health insurance coverage? - Are up to date on vaccinations Would you be interested in resources or sessions that provide more Is your child up to date on their vaccinations? **Guardian last took child to see provider: Guardian reports child receives:** Does your child's school have a pay-to-play fee for sports? Yearly checkups Did your child participate in the sports physicals in prior years? If so, please This year Would you be interested in attending a sports physical night at Peace Every 2 years Neighborhood Center for fall sports? Within past two What barriers were there to getting your child a sports physical this year? (Check all that apply) Less than every 2 years years ☐ Lack of access to health insurance ■ Within past three ☐ Lack of access to a health care provider Other: "wellchild & years ☐ Unable to schedule an appointment with provider within the time frame (eg. clinic was booked) checkups" ☐ Conflict of your schedule with the provider's schedule (eg. – unable to get off work at a time when your ☐ Issues with transportation Guardians aware that those covered by Guardians aware that there should be no ☐ Other/comments: Medicaid can arrange for non-emergency copays for a child's checkups except if performed at an urgent care transportation to healthcare visits? 2. If you have access to a regular health care provider for your child when was the last time they saw that provider? [ ] Within the past 3 years Yes 3. If you have access to a health care provider for your child how often (on average) do they see that provider? No ☐ For regular check-ups once a year ☐ For check-ups every two years ☐ For check-ups less frequently than every two years ☐ Only when they get sick Most convenient times for off-hour clinics **Barriers to care** 4. If your child's provider were to offer after hours clinic times, what would be the most convenient for you to attend? [ ] Sunday AM Were you aware that those covered by Medicaid can arrange for non-emergency transportation to healthcare visits (by calling the MDHHS county office at 734-481-2000 for Washtenaw county)? (Circle): Y / N 6. Were you aware that their should be no copays for your child's checkups except if performed at an urgent care? Answers to the following questions, if you wish to provide them, will be used to help create and advocate for programs that will help Peace families – they will be recorded for this purpose only: 7. What school does your child attend? 8. Where does your child receive their health care? 9. What other events (if any) would you would be interested in participating in through collaboration between Peace Neighborhood Center and University of Michigan Medical School? (check all that apply) ☐ Information session on scheduling doctors appointments (including information on available clinics, Information sessions on health insurance, or programs to help navigate obtaining health insurance Conflict of Lack of access Inability to Convenience ☐ Information sessions on the prevention or management of common diseases for parents guardian's to health care afford cost Saturday pm Sunday pm ☐ Lessons on the prevention or management of common diseases for kids appointment schedule with provider within time provider's

### Limitations

While this study shows some useful information about the barriers to care in this population and the usefulness of on-site preparticipation sports physicals, the generalizability of this study to other populations is unknown. Barriers to health care are community-dependent, but the data presented here provide a helpful case study of a population.

### **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.

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 of visits 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.

### 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.

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