

Immunize Milwaukee Coalition Community Needs and Capacity Assessment

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Abstract

OBJECTIVE: To assess barriers, resources, and opportunities surrounding immunization in the City of Milwaukee, and utilize this information to inform a multidisciplinary immunization coalition on its next steps.

DESIGN: A phone interview delivered to 25 stakeholders in the city of Milwaukee between June and August 2011.

RESULTS: Parental lack of knowledge and limited access to healthcare were the two most often cited factors that contributed to low immunization rates in the City of Milwaukee (52% and 36%, respectively). In terms of barriers to an intervention to increase immunization rates, funding (32%) and missed opportunities to immunize at various points in the healthcare system, especially in Emergency Departments (16%) were most often mentioned. Educational efforts (24%) and routine checks of the Wisconsin Immunization Registry (WIR) (20%) were the two most common strategies used to increase immunization rates. The most mentioned strategy to increase immunization rates was to meet the community members in their own communities to get children immunized (32%). Raising provider awareness and physician involvement (16%), choosing respected community members to lead the effort (16%), and launching a community-wide campaign were the second most mentioned strategies (16%).

CONCLUSION: Interview results confirmed what is presented in the literature. They reaffirmed that lack of knowledge about immunization leads to low immunization rates and that provider

recommendation is influential in parent decisions to immunize. Also, parental refusal of vaccinations for personal conviction or religious reasons is not a major factor in the City of Milwaukee. The interviews provided clear direction for the coalition in its beginning stages.

Introduction

Control of vaccine-preventable disease through immunization is one of the 10 biggest successes in the field of public health according to the Centers for Disease Control and Prevention.¹ Recommended immunizations from infancy through adolescence prevent diseases such as measles, pertussis, bacterial meningitis, human papillomavirus (HPV), and Hepatitis B.² Childhood immunization rates in the City of Milwaukee are below average compared with those in the rest of the state. In 2005, 45% of Milwaukee Public School District's students had received all the immunization required for school attendance as compared with 89% for students in the rest of Wisconsin.² To address this problem, the City of Milwaukee Health Department (MHD), Milwaukee Public Schools (MPS), the Wisconsin Division of Public Health (DPH), the Boys and Girls Club of Greater Milwaukee (B&G), and the District Attorney's Office (DA) created the School Immunization Task Force (SITF).³

A task force is a group brought together to address a specific short-term project. A task force format was adequate to address the issue of immunizations in schools because it was a relatively small population. A coalition, however, is defined as an interdisciplinary group that addresses longer-term issues in an ecological fashion, and therefore, is better suited to address the immunization status of the entire child and adolescent population of the City of Milwaukee.² While a task force was the appropriate organization format for an effort targeted

at students in the City of Milwaukee, a coalition is better suited to a campaign targeting all children and adolescents in the City of Milwaukee. Further, an inter-disciplinary, ecologically-minded group is essential to a successful effort to increase immunization rates, because organizations who work with the target population serve overlapping populations. For instance, many of the children attending programming at the B&G could also be affected by programs led by neighborhood associations. Hence, members of the SITF reached a consensus that in order to increase immunization rates in all people in the greater Milwaukee area, a diverse coalition of community organization would be needed.

After 6 years of efforts by members of the SITF the school immunization compliance rate for the City of Milwaukee increased to 86% by the 2011-2012 school year. This was accomplished through a variety of projects such as working to develop consistent policies to follow-up with parents of children who were non-compliant with school immunization requirements, conducting site visits to schools to identify variables related to disparities in school immunization rates, offering immunizations in schools, and reconciling school immunization records with those of the Wisconsin Immunization Registry (WIR).⁴ Despite increased immunization rates in MPS students, there is still room for improvement. For instance, to give a more comprehensive report of immunization coverage these rates should reflect new immunizations, recommended for adolescents by national medical guidelines, but not required by Wisconsin statutes. This includes immunizations for HPV and meningococcal disease. In 2010 immunization rates for these diseases in the City of Milwaukee were less than 50%.² Additionally, the scope of an intervention to increase immunization rates in the City of Milwaukee needs to be broadened to all children and adolescents, not just students The need

for this broadened goal is evidenced by the fact that in early 2010 39% of 24 month olds in the City of Milwaukee had received all of their medically recommended immunizations, including those that prevent polio, measles, mumps, rubella, tetanus, and pertussis.² These immunization rates are particularly alarming since immunization rates over 90% are generally necessary to prevent disease outbreaks of most vaccine preventable diseases in a population.²

Literature Review

Much of the literature surrounding low rates of immunization is centered around parental determinants. There are a few themes throughout these studies that may help to explain why more children are not up to date on their immunizations, and, more importantly, assist in creating ways to increase immunization rates in children. Published articles address race and ethnicity of the parents, parental education level, parental perception of immunization, and parental objection to immunization because of personal conviction or religious reasons are all aspects dealt with in the literature. An unpublished parental survey conducted by MHD in 2008 addressed these same issues.⁵

A recurring theme in the literature was parental race/ethnicity. The studies conducted by the MHD and Smith, Chu, and Barker suggested that children of Black and Hispanic parents are more likely to be behind on their immunizations than children of non-Hispanic Whites.^{3,6} Another demographic characteristic addressed in these two studies was the parents' educational level. Parents with a high school education or less were more likely to have children that were not up to date on their immunizations than those who had college-level education.^{4,5} Gust and colleagues also found that parents with less than a 12th grade

education were four times more likely to say that they did not have enough information about immunization than those with a graduate school education.⁵

The next general issue was parental perception of immunizations. A study by Fredrickson, Davis, Arnold, and Kennan, and the MHD study both found that the majority of parents thought that immunizations were important and that they would follow their physicians' instructions regarding immunization, but they had some concerns about whether there were ingredients in the immunizations that could be harmful to their children.^{3,6} This type of distrust of immunizations could lead to unwillingness to immunize. Similarly, parents who have adequate information about immunization and understand how important immunizations are to the health of their child(ren) are more likely to get their child(ren) immunized.^{5,6,7} Therefore, education about immunization is very important to the maintenance and expansion of immunization coverage.^{5,6,7}

The literature presented mixed findings on whether religious reasons factored into parents' decision to immunize. The MHD survey found that none of the respondents cited religious reasons for immunization refusal, while Fredrickson et al had a little over a quarter of the "refusers" cite religious reasons for doing so.^{3,6} The difference could be due to different populations, sample size or geographical differences. This is the only place that the literature differed from the survey results found in Milwaukee.

Design

The first step the SITF took toward creating a coalition was to conduct a community needs and capacity assessment around childhood immunization. The goals of the assessment were to determine what stakeholders thought were the barriers to immunization that existed in the community, what organizations were currently doing to address the issue, what resources they could offer the coalition in their efforts, what they thought should be done about the issue, and whether the perspectives of the SITF and the stakeholders were in alignment. This assessment would also gauge which organizations were interested in being active in the coalition's efforts. The members of the SITF decided that the best way to obtain this information was to conduct interviews of stakeholders. Since this interview was designed to prioritize issues true qualitative research methods, such as Grounded Theory, were not utilized.

Participants

This project was determined to be IRB exempt because (reason) SITF members collaboratively selected representative members of community stakeholders to be invited to be interviewed. The group was chosen to include members from community, government, and private sector organizations. The SITF wanted to make sure that the stakeholder list included people from organizations who dealt with a variety of populations in the City of Milwaukee in order to provide the most comprehensive assessment possible. Thirty-six stakeholder organizations were contacted to participate in interviews. A total of 25 interviews were completed for a response rate of 69%.

Interview

The interview questions used for the community needs and capacity assessment were based on the Minnesota Department of Health's Community Opinion Survey Tool. The general tool was used as the basis of the questions and was tailored specifically toward immunizations. There were 12 questions that covered a variety of issues dealing with immunization, including what the stakeholders thought was the biggest health issue in the City of Milwaukee, what factors they saw leading to low rates of immunization in the City of Milwaukee, what barriers they saw to an intervention to increase immunizations and how to overcome them. The interview questionnaire also asked what the organization was currently doing to address immunization rates and what resources they could offer or what they would be willing to do to help. It finished by asking for general suggestions from the stakeholders. (See Appendix 1).

The interviews were conducted from June to August 2011, administered by phone, and lasted between 15 and 30 minutes. All interviews were conducted by one interviewer. Answers were recorded by hand during interviews and later transcribed into Microsoft Word documents. The results were then coded by the interviewer. Quotations were pulled out of the interview transcripts and grouped in table format to identify major themes in the stakeholders' answers. The interviewer also ranked the themes by frequency of mention during the interview process to assess which of themes were most prevalent.

Results

The interview questions that resulted in the most relevant information centered around factors that contribute to low immunization rates in the City of Milwaukee, barriers to an intervention to increase immunizations in Milwaukee, what the stakeholder organizations were

currently doing to address the issue, what should be done to address the issue, and how the organizations were willing to help. (See Table 1).

When asked what factors contribute to the low immunization rates in the City of Milwaukee 52% cited a general lack of parental knowledge while 36% indicated that access to immunizations was an issue. Stakeholders also expressed the concern that immunization is not a high enough priority in Milwaukee for everyone from healthcare providers to policy makers (20%) and that the high mobility of families in Milwaukee accounted for some of the issue (16%).

The interviews served to identify barriers to interventions to increase immunization that exist in Milwaukee. The most common barrier identified by stakeholders was funding (32%), followed by missed opportunities to immunize along the healthcare spectrum (16%). For instance, during primary care visits physicians should check immunization status and give immunizations when necessary. Stakeholders cited the need for people on all levels to understand that immunizing the city's children is everyone's responsibility. Twelve percent of stakeholders also mentioned that there are misconceptions about immunizations in the community that could pose a barrier to such interventions. These misconceptions ranged from the view that immunizations were not necessary to keep a healthy child healthy to the perception that immunizations were not safe.

Organizations were involved in a variety of immunization promotion activities. Their efforts fell into four major categories. First, 24% of key stakeholders indicated that their organization did some type of education about immunizations and how important they were to

the health of children. Second, 20% said their organization was performing routine checks of WIR at each patient visit. Third, 16% replied that their organization made referrals to the City of Milwaukee Health Department clinics when a patient was in need of free immunization. Fourth, 12% of stakeholders said that their organization participated in a reminder/recall program.

The question of what should be done about the low immunization rate in the City of Milwaukee yielded a diverse group of answers. The most mentioned strategy was to meet the community members in their own communities to get children immunized (32%). Stakeholders suggested specific strategies such as holding clinics at off hours and bringing mobile immunization clinics into the communities to make it easier for parents to access immunizations for their children. Raising provider awareness and physician involvement, choosing the appropriate leadership for any type of initiative or intervention, and launching a far-reaching community outreach campaign were the next most mentioned strategies (16%). Appropriate leadership was defined by many as a respected community member who was knowledgeable on the topic and would be able to foster trust and motivation in the community. Forming a multi-disciplinary coalition (12%) and a media campaign to deliver accurate information and raise awareness about the importance of immunization (8%) were also suggested. Finally, 8% of stakeholders stressed the need for a consistent WIR protocol to increase the accuracy of immunization rate records across the state and in the City of Milwaukee. Stakeholders expressed that a protocol was an important part of the success of the coalition, because its use would decrease missed opportunities in the Emergency Room and other places people access healthcare. The use of a consistent WIR protocol would decrease

missed opportunities by identifying and immunizing those who accessed these places and were not up to date on their immunizations. They also stressed that this would give a more accurate estimate of immunization rates, since some physicians and other healthcare providers did not currently use WIR consistently, if at all.

Organizations were willing to help in a number of different ways. The most common stakeholder response (36%) was that they would be willing to do some type of education, ranging from running a full-fledged information campaign to distributing pamphlets or handouts generated by the coalition. Sixteen percent of stakeholders said they would be willing to serve on the coalition as a member and the same number were willing to participate in coalition initiatives. Finally, 12% said they were willing to contribute funds to the coalition.

Discussion

The results of the interview echo the literature about parental determinants of their children's immunization status and the SITF's tentative plans for the coalition. Knowledge about immunizations was one area where the literature and interviews agreed. This could be for a variety of reasons, such as the possibility that those with higher education have a more advanced biological knowledge base. It could also be that parents with less than a high school education are less likely to know how to pose questions about immunizations. Another possibility is that, since they have less of a biological knowledge base, less well-educated parents are ill equipped to understand the information about immunizations that is presented by their children's physicians. Additionally, as discussed previously, parents who have adequate information about immunization, and realize how important immunization is to their children's

health, are more likely to have children who are up to date on their immunizations.^{5, 6, 7}

Therefore, the suggested educational campaign is an essential part of an effective effort to increase immunization rates in children and adolescents in the City of Milwaukee.

Additionally, as shown in the 2008 MHD parental survey, the view that parents are likely to trust their doctors when they recommend immunization is consistent with stakeholders' assertions that physicians need to be more focused when it comes to not missing opportunities for immunization.^{3, 6} Many of the stakeholders also said that raising provider awareness and involvement with immunization was a key to increasing the immunization rate in the City of Milwaukee. Thus, physician involvement will be integral to increasing immunization rates in the City of Milwaukee.

Immunization refusal because of personal conviction or religious reasons was not considered a major issue in the City of Milwaukee by the stakeholders interviewed. While Fredrickson et al. cited immunization refusal as an important cause of low immunization rates, both the interviews conducted in this assessment and the MHD parental survey conducted in 2008 showed that this was not a concern in the City of Milwaukee.^{3, 6} An intervention in Milwaukee will have to be different from those in other areas of the country where immunization refusal because of personal conviction or religious reasons is more of an issue. It is also possible that there are some sectors of the population the MHD survey did not reach that include people who refuse immunization for religious or personal reasons.

The interviews provide clear direction for the coalition. The next step in coalition development is to create a cohesive group of committed members. After that, the coalition

should come to a consensus on their mission and goals moving forward. Then the coalition will begin to design actual interventions to increase immunization rates. This is where the community needs and capacity assessment will be extremely helpful. The knowledge of what barriers the coalition faces will help them to anticipate problems that they may encounter along the way. Similarly, the assessment of the stakeholders' resources and willingness to participate give task force members an idea of what types of interventions are feasible. Additionally, stakeholders' thoughts about what should be done to address low immunization rates will undoubtedly inform the type of interventions the coalition designs.

Looking forward, a provider intervention is essential to the effort to increase immunization in the City of Milwaukee. This should include education about true contraindications to immunization, strategies on how to approach the subject with patients, and an overview of WIR protocol. Although two of the stakeholder's mentioned creating a consistent WIR protocol, neither of them detailed what such a protocol would look like. It is the coalition's job, then, to decide that such a protocol should entail. One possible component that should be considered is requiring updates of demographic information at each patient visit for more accurate documentation. Another possible component for consideration is a registry that populates from electronic medical records, so that immunization data only needs to be entered once. Exactly how to implement and promote such a protocol is something that the coalition needs to delve deeper into.

The most often mentioned aspect of an effort to increase immunization was a wide-reaching media and outreach campaign with community leaders at the forefront. Stakeholders

did not sources of funding for this type of campaign, but did make it clear in their interviews that choosing the appropriate community leaders is very important to a successful effort. Some of these community leaders would no doubt include physicians in the community, possibly those involved in the physician intervention, who could set an example for their neighbors and colleagues. This intervention could include television, radio, and billboard ads, mobile clinics that go out into the community, and educational events throughout neighborhoods. A community-wide effort such as this would address the assertion from stakeholders that an intervention needs to meet the community where they live. It would also alleviate issues of access to, and misconceptions about, immunizations.

Conclusion

The interviews shed light on alignment of perspectives between the SITF and stakeholders on how to address the barriers to increasing immunization in the City of Milwaukee. Perceived barriers ranged from missed opportunities to immunize in clinical settings to misconceptions about immunization on the community level. The interviews also provided some insight into efforts to immunize children in Milwaukee. The lessons learned through interviewing stakeholders will inform the coalition's practice going forward and increase the chance of improving rate of immunizations in the City of Milwaukee.

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Table 1: Interview Results		
	N (of 25)	%
Factors Contributing to Low Immunization Rates		
Lack of Parental Knowledge	13	52
Lack of Access to Immunizations	9	36
Not a priority	5	20
High Mobility	4	16
Barriers to an Intervention to Increase Immunization Rates		
Funding	8	32
Missed Opportunities	4	16
Community Misconceptions about Immunization	3	12
Current Organization Activities		
Education	6	24
WIR Checks	5	20
Referral to MD/MHD	4	16
Reminder/Recall	3	12
Interventions That Should be Implemented		
Bring Immunizations/ Interventions to the People	8	32
Raise Provider Awareness/Physician Involvement	4	16
Appropriate Leadership	4	16
Broad Community Campaign	4	16
Coalition	2	8
Media Campaign	2	8
Consistent WIR Protocol	2	8
Resources Organizations are Willing to Commit		
Education	9	36
Serve on Coalition	4	16
Participate in Initiatives	4	16
Funding	3	12

Appendix 1

Immunize Milwaukee Coalition Stakeholder Survey

The Immunize Milwaukee Coalition is committed to increasing the immunization rates of children and adolescents in the city of Milwaukee. Immunization rates above 90% are needed to prevent outbreaks in our childcare centers and schools. The City of Milwaukee Health Department is partnering with several influential stakeholders in an effort to eliminate health disparities and develop a program to address the urban underserved population. Currently, the Immunize Milwaukee Coalition is in the process of conducting a community analysis, which is why we'd like to interview you. By identifying where gaps exist and what resources are needed, we may begin to determine how to proceed in achieving our goal.

Name: _____

Title: _____

Address: _____

Phone: _____

Interview Date: _____

Demographic information (confidential)

Sex: M F _____

Race: White Black Asian or Pacific Islander Native American Other: _____

Ethnicity: Hispanic _____ Non-Hispanic _____

Age: _____

Affiliation: _____ Years with Organization: _____

1. What specific health care and health education services are most needed in our community?
2. In your opinion, what factors contribute to the low rate of immunization in Milwaukee?
3. What do you think should be done to address the low rate of vaccination?
4. What activities is your organization currently undertaking to improve low rates of immunization?
5. What barriers, if any, do you see to implementing a project to increase immunization rates in Milwaukee? (If none, skip to Q7.)

6. What strategies would you suggest for overcoming these barriers?
7. Would you be interested in being a coalition member? Would you be interested in being involved in our strategic planning?
8. What role could you play to help us implement this project in our community?
(Do not read choices below; use them as suggestions and as a guide for recording responses)
 - a) Serve on a coalition
 - b) Serve on a task force or committee
 - c) Public endorsement/testimonial
 - d) Appoint a person to work on the project
 - e) Donate resources (meeting space, funds, advertising, personnel, etc.)
9. Could you suggest other organizations/groups in our community who could take part in this project?
10. Who in our community would you consider critical to the success of this project?
11. Are there any other suggestions or ideas that you can give us as we prepare to start this project?
12. Are there any questions you would like to ask me?

Thank you for your time and support. I will be in touch with you again to let you know how this project is progressing and how you can best help to ensure the project's success.