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Implementing School-Based Primary Healthcare Clinic in Adams County

Public Health 780: Evidence-Based Decision-Making
University of Wisconsin-Madison

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School-Based Primary Healthcare Clinic in Adams County

Adams County Health and Human Services Department

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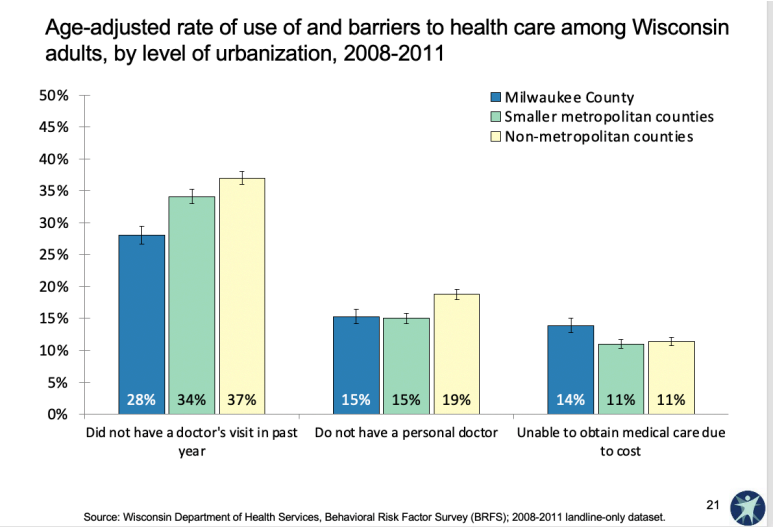
SUMMARY

In the most recent Community Health Improvement Plan, Adams County (2017) identified access to healthcare as one of the major issues facing the community. The lack of resources and education surrounding healthcare in this 100% rural county has negatively affected the overall health of its citizens. Lack of access to healthcare and funding poses barriers to creating a more equitable healthcare environment in Adams County. This proposal outlines school-based primary care clinics as an option to help improve access to, and equitability of, healthcare in the community. An evidence-based initiative will be created for schools, to include physicians, nurses, and other providers in healthcare support roles, in an effort to improve upon this issue for the students in Adams County. Intervention strategies will be used to address the larger issues that are facing Adams County (Adams County, 2017).

PUBLIC HEALTH ISSUE

Lack of access to healthcare is a nationwide problem, especially in rural communities. The World Health Organization identified the use of tobacco and alcohol, obesity, high blood pressure, and elevated cholesterol as the five most important health risk factors contributing to disease burden and premature mortality. It was found that rural residents have higher rates of tobacco use, obesity, physical inactivity, and lower rates of fruit and vegetable consumption than their urban counterparts. (Harris et al., 2016). Rural health care systems lack the ability to serve all residents due to several factors including: long travel times and few public transportation options available to those residents; employment and family responsibilities; and sociocultural influences (Harris et al., 2016). Adams County is a rural, non-metropolitan county that faces those barriers. As seen in the following chart, the age-adjusted rate of use of, and barriers to, health care among Wisconsin adults, by level of urbanization for 2008-2011 had a negative effect on Adams County.



According to the 2018 County Health Rankings (2020), 25% of children in Adams County are living in poverty, compared to the state average of 16%. This high poverty rate decreases the opportunity for children to live longer and healthier lives. Our project will create an evidence-based initiative that effectively incorporates and implements a primary care clinic in schools in Adams County. This initiative will help to combat larger community issues, including lack of access to healthcare, primary and secondary interventions, and healthcare education in the community. Average household income in Adams County is $14,400 less than the state average. Economically disadvantaged high school graduates from Adams County were 22% less likely to enroll in post-secondary education (Adams County, 2017).

EVIDENCE-BASED STRATEGIES AND IMPLEMENTATION

School-based Primary Care Evidence

The American Academy of Pediatrics recommends school-based health centers for uninsured, underinsured, or special populations who do not have access to healthcare (Arenson et al, 2019). Barriers to healthcare access, especially in rural communities, include lack of transportation, parental unavailability, and missed appointments. School-based health centers (SBHC) increase access for students, which can ultimately lead to positive short-term and long-term health outcomes for themselves and the community (Arenson et al, 2019). With young people spending a majority of their time in school, having access to medical, mental health, dental, and vision care in that setting can maximize their opportunity to continue to learn and develop successfully (Arenson et al, 2019). A study conducted from 2013-2015 in 168 Oregon public schools, 14 of which had SBHCs, showed that students who had access to one of the SBHCs were less likely to report depressive episodes, suicidal ideations, and suicide attempts compared with all other schools in the study (Arenson et al, 2019). Not only do SBHCs improve access and mental health outcomes, but these clinics also have an impact on chronic disease (Anderson et al, 2018). For example, if a student comes to the school-based clinic with asthma concerns, this student can be educated on asthma, as well as prescribed medications or inhalers that may be necessary. Another way to see a positive impact on chronic disease is getting students early healthcare education to understand what they can do to combat diseases with preventive measure, such as increasing physical activity to avoid obesity.

With access to high-quality health care being a crucial social determinant of health (Riley et al., 2016), expanding medical access within the school setting can create many positive impacts. When a primary care clinic was partnered with a school-based health center, there was a higher likelihood of receiving quality services compared to patients seen in a traditional clinic setting (Riley et al., 2016). While a combination of traditional clinics, and in-school care was the most beneficial, many students in a rural, high-poverty community, do not receive any care at all. The school-based primary care clinic can help to bridge this gap. In the “expanded medical home” study, many medical directors and providers were supportive of partnering and meeting regularly to review the implementation (Riley et al., 2016).

Within school-based clinics, there must be collaboration between doctors and nurses. With this collaboration, there is an increase in access to care and improving quality and continuity of care. Nurses can take on expanded roles, especially in health promotion, prevention, and health education in school-based clinics. The reallocation of services from physicians/PAs to nurses can increase access to healthcare providers in places where doctors are limited (Karimi-Shahanjarini, 2019). It has also been shown that patient education can be improved when delivered by nurses. A study that looked at the health of schoolchildren from the school nurse perspective found that nurses have an important role in health promotion. Nurses working in high-risk areas, which include rural, high-poverty areas, judged the physical and mental health of their students as worse than school nurses employed in low-risk areas (Ellertsson, 2016, p. 6). This shows that increased support and resources are needed in higher-risk communities.

The following interventions are recommended for improving the overall health and well-being of students in Adams County:

1. Full-time in-school healthcare clinic staffed with physicians and/or physician assistants (PA) and nurses
2. In-school healthcare clinic staffed with part-time physicians or physician assistants and full-time nurses
3. Primary Care curriculum and education for staff and students

Full- time in-school healthcare clinic with physicians and/or PAs and nurses

Students will have access to a healthcare clinic located in their school. Clinics will operate as primary care clinics that include a physician and/or PA and nurses, along with psychologists, social workers, and other health professionals. Clinics will focus on primary, secondary, and tertiary prevention. Medical practitioners from Aspirus or Gunderson will have a full-time presence in the schools during school hours. Healthcare education will also be incorporated into the classroom. Teachers and administrators will be trained and educated on both the basics of healthcare *and* will learn where to direct students for access to healthcare and healthcare related resources.

Based on the strong evidence of school-based primary care clinics, we recommend the implementation of these clinics in Adams County. The implementation process would begin by designating a space in each school for the clinic. This clinic will, preferably, have access of entry from inside the building, as well as from the outside. The multiple entrances and exits can provide an additional way for privacy and confidentiality to be maintained. Students will be able to make the decision about where they enter and exit. This clinic will support at least one full-time physician or physician assistant (PA) along with at least two nurses, as well as other supportive staff (i.e. psychologists, social workers, counselors). Students will be able to schedule an appointment Monday through Friday, during the school day, for primary care,

mental health resources, or other health concerns that require that student to receive medical care. If students have an outside primary care provider (PCP), ongoing communication will be maintained between the school physician/PA and the PCP to ensure the best possible care for the individual patient. For students who are uninsured, underinsured, or have special situations, the physician/PA provider in the school will be able to serve as that student's PCP.

In-school healthcare clinic with part-time physicians or physician assistants and full-time nurses

Students will have part-time access to health care in the schools from a physician or PA, with full-time access to nurses who will provide care and case management. Clinics will operate as primary care clinics that include a physician and/or PA and nurses. Facilities will be located in or near schools. Clinics will focus on primary, secondary, and tertiary prevention. Medical practitioners from Aspirus or Gunderson will work in the school to serve as the part-time health clinicians. Healthcare education will be incorporated into the classroom. Teachers and administrators will be trained and educated on the basics of healthcare and will learn where to direct students for access to healthcare and related resources.

The healthcare delivery of part-time, in-school healthcare clinics will be a combined effort between the part-time physicians/PAs and full-time nurses. The implementation process would begin by designating a space in each school for the clinic. This clinic will, preferably, have access of entry from inside the building, as well as from the outside. The multiple entrances and exits can provide an additional way for patient confidentiality to be maintained. Students will be able to make the decision about where they enter and exit. This clinic will support a part-time physician or physician assistant (PA) along with at least two full-time nurses, as well as other supportive staff (i.e. psychologists, social workers, counselors). Students will be able to schedule an appointment with a nurse Monday through Friday, during the school day. Appointments with a physician/PA would also be available depending on the physician/PA schedule. For example, if a physician worked at the school-based clinic on Monday and Friday from 10:00 am to 4:00 pm, a student could schedule an appointment with them during that time. Nurses will be able to help students determine if their visit requires a nurse and physician/PA or nurse only.

Primary Care curriculum and education for staff and students

School health refers to the physical, cognitive, and emotional needs of a child that impact classroom performance and overall development (Anderson et al., 2018). Healthcare education can help to prevent many diseases in an individual's life. While the central role of school is teaching, it also offers a unique opportunity to promote health and development for students, teachers, and the larger community as a whole. The World Health Organization supports and recommends the development of school health policies at national and regional levels (Jourdan

et al., 2010) These policies should include health education in order to improve an individual's overall health now and in the future.

The CHAMPIONS NETWork model in Chicago seeks to advance health equity by empowering high school students to become health advocates in their communities (Heinert et al., 2019). This program is a summer course, and the curriculum includes didactic and enrichment topics and activities (Heinert et al., 2019). Parts of the curriculum can be implemented into schools as part of the core curriculum for health education. While this specific intervention is not recommending this summer course, it is recommending continual health education throughout the school year. The didactic topics include a health module subsection, including education on determinants of health, health disparities, access to health care, among others. These would all be part of the healthcare education curriculum. Speakers and mentors from the healthcare system would be included as part of the enrichment portion of the program in order to improve communication and trust between patients and providers (Heinert et al., 2019).

Implementation for this strategy will include building a healthcare education curriculum and incorporating this education into the school day. Classroom teachers will be trained to teach certain parts of the healthcare curriculum, while physicians and nurses will teach the rest. This curriculum will be used to help students understand health practices, access, resources, and the healthcare system as a whole. These sessions will take place on a monthly basis in the classroom. Each grade will have a specified curriculum created by physicians, nurses, and teachers in collaboration. For example, kindergarteners would learn how to properly wash their hands, understand and deal with mental health problems, and properly put a seatbelt on. Middle schoolers would learn about establishing boundaries and advocacy, reproductive health, and cyber-safety. High schoolers would learn about health insurance, rights and privacy in the healthcare system, and access to healthcare after 12^{th} grade. There will be a focus on the communication between students, staff, teachers, and healthcare providers in order to create a welcoming environment where open conversations can occur surrounding public health and healthcare education.

The remaining components will hold true for all three of the interventions that Adams County will choose from.

PARTNERSHIPS

The same or similar partnerships are required to implement any of the three interventions presented. A partnership with Adams County Health and Human Services Department has already been initiated and would need to continue throughout the implementation of the interventions. The partnership with The Adams County Health and Human Services Department will help with potential funding needs, as well as evaluating the intervention strategy in terms of the CHIP that has been completed.

A partnership with either Gunderson Health or Aspirus Health Care will need to be developed and enhanced. In order to create some flexibility, this proposal has left open the option for either of these healthcare systems to partner with Adams County Schools.

Another beneficial partnership that could be developed is with The Central Wisconsin Community Action Council (CWCAC). CWCAC is a private not-for-profit corporation that assists low-income families to become self-sufficient and help to grow the community (CWCAC, 2020). This partnership could combine school and community focuses on health equity.

Community engagement is critical for these interventions to work. In order for this plan to continue long-term, community input and support will be required to maintain, update, or change the interventions that are implemented. A survey has been created for students, teachers, administrators, and families to create an open conversation within the community when implementing healthcare in schools (Appendix A).

IMPACTS

These interventions will improve the health of students in Adams County, our target population, by providing primary care and preventive healthcare services. Gaining knowledge and understanding of the healthcare system, its resources and where to obtain them, and developing a greater familiarity with healthcare providers will also have an important impact on the students.

When looking at the impact of these interventions on health disparities and health equity, many positive outcomes can be seen: increased access to healthcare in a low-income, all rural community; preventive care will avoid downstream healthcare associated costs; care for pediatric populations that are potentially uninsured, underinsured, or that represent special populations who do not have access to healthcare will be utilized; students will be able to use learned knowledge to improve decision making about current and future healthcare. These interventions also allow for students to learn about primary, secondary, and tertiary prevention in order to positively impact their future health and the health of people around them.

EVALUATION STRATEGIES

Regardless of which intervention strategy is used, the evaluation process will be the same. These processes will include a formative evaluation, process evaluation, impact evaluation, and outcome evaluation. Assessment during implementation is critical in understanding community needs, gaps, priorities, challenges, and assets (Bors et al., 2012). The formative evaluation will come from the survey that is sent to students, staff, and families (Appendix A). Once results are obtained from that survey, all of the intervention strategies can be adjusted accordingly. The process evaluation will be a continued open communication plan between students, staff, and

healthcare providers to ensure the best possible outcomes. Once the intervention strategy is put into place, surveys will be sent out once a year to check-in with students, staff, and families as part of the impact evaluation (Appendix B). This survey will allow community engagement to remain a part of the intervention in order to create long-lasting results. The outcome evaluation will also be seen when the intervention is in place by reaching the implementation goals of access to healthcare, primary and secondary interventions, and healthcare education.

RESOURCES AND FUNDING

Resources that are already in place: the space in schools for healthcare clinics, teachers, school nurses, minimal medical equipment. Additional resources that will be needed: physicians and/or physician assistants, an increased number of school nurses, an increase in medical equipment.

Funding sources include Adams County Health and Human Services Department and either Gunderson Health or Aspirus Heath Care. Another funding source can include CWCAC as part of the partnership formed.

CONCLUSION

All of these initiative strategies will help to combat larger community issues within Adams County, including access to healthcare, primary and secondary interventions, and community healthcare education. Developing a SBPC will help to combat larger community issues within Adams County, including access to healthcare, primary and secondary interventions, and community healthcare education. By implementing a SBPC clinic, Adams County residents, including students and their families, will improve their overall health and well-being.

Program: School-Based Primary Care Clinic Logic Model
Intended audience: Adams County Health and Human Services Department and Schools
Scope of Intervention: Primary/Secondary Prevention

Inputs	Outputs		Outcomes -- Impact		
	Activities	*Participation*	*Short*	*Medium*	*Long*
What resources are available to support the intervention? What other resources (finances, training, space, materials, etc) are needed? **Resources Available:** Space at the school, teachers, non-teaching staff, school nurse, tables and chairs, storage, minimal medical supplies **Resources Needed:** A partnership with either Aspiras or Gunderson healthcare to provide healthcare providers Funding for additional healthcare practitioners Training of teachers and administrators to be able to educate and/or refer students to health resources Additional supplies to create and maintain the healthcare clinic	Based on an evidence review, what action strategies will you take to reach your objectives? What will you do? **Individual Level** Provide primary, mental preventative and oral healthcare services Enhance relationship with project partners Send a survey to students, staff, and community members **Interpersonal/ Social Level** Focus on forming relationships between healthcare providers (social workers, physicians, nurses, etc.) and students by incorporating healthcare and healthcare education in a school setting **Gov't/ Organizational Level** Partner with either Aspiras or Gunderson healthcare to provide practitioners and education Utilization of full time in-school primary healthcare clinic with full time physicians and/or PAs and nurses for students	Whom will you reach with the intervention? **Individual Level** Students **Interpersonal/ Social Level** Healthcare providers (social workers, physicians, nurses, etc.) Families of students **Gov't/ Organizational Level** Aspiras or Gunderson Healthcare facilities Adams County schools Adams County Public Health and Human Services Department	These are based on what the evidence suggests regarding shorter-term changes (e.g., knowledge, attitudes, beliefs, etc.) that will contribute to longer- term objectives. (They will be the result of your activities). **Individual Level** Students will obtain knowledge about and access to healthcare resources **Interpersonal/ Social Level** Improve the community's knowledge about health care services and resources in Adams county. Decrease the stigma of obtaining healthcare in the school setting through targeted health messaging. **Gov't/ Org Level** Engage Aspiras and Gunderson to implement school health programming Advance policy related to school health programming in Adams county. Seek funding to support school health programming in the Adams county.	These are based on what the evidence says about determinants (e.g., changes in behavior, practice, policy etc.) that will contribute to the goal in the long term. (They will result from your shorter/ intermediate-term objectives). **Individual Level** Students will have access to healthcare and understand the way in which the healthcare system works. Healthcare providers will understand the healthcare and mental health needs of rural students living in poverty. **Interpersonal/ Social Level** Community members will Increased their knowledge of local health care resource and services in Adams county schools. **Gov't/ Organizational Level** Serve as model for the other rural communities, counties, states, or global entities.	What is the ultimate health, quality of life, social outcome the intervention is designed to achieve? Overall, this initiative will help to combat larger community issues in Adams County including access to healthcare, primary and secondary interventions, and healthcare education of the community Improve overall health and well-being of students and eventually families and the community of Adams County as a whole

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APPENDIX A: Pre-implementation Survey

School-Based Healthcare in Adams County

* 1. Would you like to see healthcare clinics in schools in Adams County?

- [ ] Yes
- [ ] No
- [ ] Unsure (please specify)

2. What healthcare resources would you like to see in schools? (Check all that apply)

- [ ] Mental Health
- [ ] Vaccine Clinics
- [ ] Reproductive Health
- [ ] Healthcare for Student's Families
- [ ] Primary Care (i.e. physicals, yearly check-ups, prescriptions, etc.)
- [ ] Healthcare Education
- [ ] Other (please specify)

3. If there was a healthcare clinic in the school, would you (or your family member) utilize those resources?

- [ ] Yes
- [ ] No (please specify why)

4. What concerns would you have if healthcare clinics are put in schools in Adams County?

5. Please provide any other feedback you may have regarding healthcare clinics in Adams County schools

Done

APPENDIX B: Yearly survey after implementation

School-Based Healthcare in Adams County

1. Have you utilized the healthcare resources provided in the school?

- ◯ Yes
- ◯ No (please specify why)

2. What resources would you like to see in schools that are not there?

3. Please provide any other feedback you may have regarding healthcare clinics in Adams County schools

Done

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UniverCity Year is a three-phase partnership between UW-Madison and one community in Wisconsin. The concept is simple. The community partner identifies projects that would benefit from UW-Madison expertise. Faculty from across the university incorporate these projects into their courses, and UniverCity Year staff provide administrative support to ensure the collaboration's success. The results are powerful. Partners receive big ideas and feasible recommendations that spark momentum towards a more sustainable, livable, and resilient future. Join us as we create better places together.

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