

Abstract

This community health assessment focuses on Keokuk County, Iowa with the aim of identifying key health needs, resources, and disparities that are affecting community members. Through data analysis, health reports, and interviews with community members/stakeholders this report seeks to provide a comprehensive review of the county's public health landscape. The report highlights several areas like healthcare access, education, and workforce development needs. The areas we identified include limited services to access healthcare, gaps in education related to healthy lifestyles, mental health and affordable housing. Additionally, social determinants such as income and transportation were also identified as contributors to poorer health outcomes across the county. This report is underscored by the role of local public health officials and community- based organizations addressing these challenges. Recommendations to combat these disparities include expanding access through telehealth, increasing education efforts in mental health and healthy lifestyles, and fostering partnerships between healthcare providers and institutions. This assessment hopes to inform future planning and recourse allocation to better meet the needs of Keokuk County and improve health outcomes.

1. Introduction

The purpose of this report is to explore the healthcare needs and the resource gaps within Keokuk County, lowa. In rural areas such as Keokuk County, healthcare access and quality can be limited due to reasons such as remote location, insufficient transportation options, and little to no choices for local providers. Our findings highlight several areas where there is a need for increased support such as mental health, women's health services, and education programs geared towards individuals who aspire to work in healthcare. In this report provide recommendations targeted at improving health outcomes for county residents and increasing partnerships to help bridge gaps in the areas discussed.

2. Gap Analysis: Healthcare Workforce Gaps

2.1 Healthcare Gaps

The county has a need for transportation services especially for the elderly/homebound/ disabled community members. There is often no family to support these individuals, so they are left unable to access healthcare services because they lack transportation. Affordable housing and the cost of living was identified as a top priority by county officials. Many community members are unaware of the resources available to them. Emergency preparedness is an issue for many communities. Residents are largely unprepared for natural disasters and lack basic supplies for their homes. Officials could be overwhelmed easily as there is only one sheriff and four deputies for the county (Keokuk County Public Health, 2023).

Another disparity that was identified was with one specific specialty, obstetrics care and maternal health, which is a huge problem across rural lowa, Keokuk County being no different; unfortunately, they have never had OBGYN care within this county, even with all of the medical facilities and clinics. This means patients who need these services will have to travel to the next county (Mohaska, Wapello, or Powesheik are closest) in order to get the obstetrics care that they need; which could not only cause harm to mom and baby in an emergency, but also may lead to other problems such as missing work, transportation needs, and increased costs (lowa Department of Health and Human Services - Community Access Division – Wellness and Preventive Health, 2024).

Lastly, mental health and substance abuse services were seen as a disparity on the last community health report for Keokuk County in 2023. They saw one of the largest problems, wasn't exactly that there weren't services within the area, but that people either didn't know the resources existed and/or due to the stigma surrounding mental health and substance abuse chose not to seek their help (Keokuk County Public Health, 2023).

2.2 Opportunities

2.2.1 Healthcare Worker Opportunities

- Flexible scheduling for staff Some of the things that the University of Iowa Healthcare does to help with enhancing working conditions is allowing for flexible scheduling and self-scheduling. Occasionally these self- schedules need to be changed by supervisors; however, for the most part people can choose when they want to work other than their required weekends and night/day shift requirements (though on some floors this is flexible). I think something similar could be employed within this hospital to help provide more flexibility.
- Financial compensation/incentives for staff One of the main things Annette Bell talked about during our interview was that Keokuk County Hospitals and Clinics has a hard time competing with the University of Iowa Healthcare as well as travel agencies to retain staff due to the difference in financial compensation (A. Bell, Personal Communication, 9/29/24). If the salaries for staff can't be improved due to the financial restraints of the hospital, maybe they could implement incentive bonuses, spot awards, professional recognition programs, daisy awards, helping hands awards, etc. for going above and beyond their job description. A little recognition can go a long way in terms of job satisfaction.
 - Other financial incentives could be for completing specialized certifications such as CCRN for critical care nurses, CNRN for neuroscience nurses, CV-BC for cardiac nurses, etc.

2.2.2 Educational Opportunities

- Career Development Opportunities for staff There is high encouragement from the University of
 lowa Healthcare to further your education via certificates such as ACLS, CCRN, CNRN, etc. and CEU
 opportunities (typically financially assisted or completely paid for), as well as financial assistance for
 further schooling such as MSN or DNP. I think if the Keokuk County Hospital was able to fundraise
 or collect donations in order to be able to give their staff these opportunities, it would help staff
 feel as though they are able to have some career development.
- Other opportunities for career development may include providing financial assistance for CNAs to go on to nursing school who will then work at the hospital for a certain number of years after graduation may help fill some positions and retain staff who has been working within the facility. Another idea is to create partnerships with either Indian Hills Community College or the University of lowa to have nursing students at their facility as could help with recruiting staff to work there after graduation.
- **Distance Online Learning** There are many schools now such as Purdue Global Nursing program that is made for those who are still working while going to school. This is an online program that allows for the students to live wherever and do their clinicals within the Cedar Rapids/Iowa City area (Purdue Global, 2024. Another opportunity for staff who already have a nursing degree is the online DNP program through the University of Iowa, in which you only have to be on campus a few days a semester (Iowa College of Nursing, 2019). Advising staff on these opportunities to further their education may help with retention within the Keokuk County Hospital.

2.2.3 Patient Opportunities

- Telehealth Opportunities Telehealth has shown that it can help provide services to those that may not have access to a hospital, clinic, rehabilitation services (speech therapy), tele behavioral health, counseling services, etc., whether that be due to transportation, disabilities, and/or another reason. This also may allow for better management of chronic conditions by using remote patient monitoring or m-health (mobile health) to remotely monitor medical devices with health-related information (Rural Health Information Hub, 2024b). The tele behavioral health also gives people an opportunity to get help without the fear of judgement from their peers seeing them go into a therapist office.
- Electronic Health Records Electronic health records (EHR) allow patients to participate more in their own health care now than ever before. Whether that be by looking at test results, speaking to their provider via a chat message, or renewing their own prescriptions. EHR also allows providers to more easily access information about each patient if they don't normally see them faster, such as in an emergency situation (Rural Health Information Hub, 2024b).

2.2.4 Healthcare Access Opportunities

• Implementing a Transportation Service - Limited transportation is one of the leading causes of reduced access to care and care of chronic conditions for those who live in rural areas. One way to reduce this disparity is to set up some kind of transportation program that would allow for those patients to be transported to their appointments. Whether this be through partnerships with rideshare programs, starting a medical transport service, utilizing public health partnerships, etc., in order to help those without rides (Rural Health Information Hub, 2010).

3. Gap Analysis: Healthcare Workforce Development for High School Students

3.1 Opportunities

• Implementation of Career & Workforce Seminars - Implementation of mandatory monthly career & workforce seminars for high school students can lead to the establishment of partnerships with local hospitals, clinics, and other professional occupational settings. Individuals from respective careers can speak with students and may be required to job shadow 3 different careers, emphasizing healthcare to be one specific career path. Collaborations can be fostered with institutions such as Keota Health Care Center and Keokuk County Hospital & Clinics. Students may job shadow specific occupations of their interest to foster a connection with their desired healthcare career.

- Partnering with Local or Regional Colleges Offering dual credit course options may expand
 educational opportunities for students to explore careers in healthcare and bridge their entrance
 into the healthcare workforce. Collaborative efforts can be made with Indian Hills Community
 College to promote programs such as the Associate Deree Nursing (A.A.S.) and the Registered
 Nurse Program.
- College Day Seminars Partnering with local or regional colleges to have a college day seminar for high school students to learn of the vast opportunities offered at college can drive students to enter the higher education setting. Admissions professionals from Indian Hills Community College may come to speak directly to students and provide information on navigating college application and learn first-hand of the programs offered at Indian Hills, including careers in healthcare.
- Offering Hybrid or Online Learning Settings for Students Allowing students the opportunity to
 learn in a hybrid setting or online learning setting can result in an increase of student admission for
 those who have varying work schedules or are unable to physically be present in the classroom.
 Providing flexibility for students in the academic setting can allow them to continue their education
 without having to compromise their work-life and overcome challenges for those enduring
 transportation barriers (Rural Health Information Hub, 2010).

4. Healthy People 2030 Objectives (OR Global Sustainable goal)

- Increase the proportion of pregnant women who receive early and adequate prenatal care This healthy people objective is relevant due to the lack of OBGYN within Keokuk County.
 Unfortunately, this is not a new thing, as there never has been one within the county. Patients currently have to travel to a different county in order to get obstetrics care, the closest being Mohaska, Wapello, or Powesheik counties (Iowa Department of Health and Human Services Community Access Division Wellness and Preventive Health, 2024). If there were closer options, the chance of women receiving adequate prenatal care would likely increase.
- Reduce the proportion of people who can't get medical care when they need it AHS-04 One of the disparities that we have identified within Keokuk County is transportation to healthcare appointments, specifically the elderly, disabled, and homebound residents of the county. Due to this, the risk of people not receiving the medical care they need when they need it may be higher (Keokuk County Public Health, 2023). According to Rural Health Information Hub (2024b), lack of transportation is the cause of most missed or delayed healthcare services or chronic treatments for rural residents, and also increases the risk for poorer health outcomes because of this.

- Increase the proportion of high school graduates in college the October after graduating SDOH-06 Below are the current demographics for educational attainment after graduation within Keokuk County. Though more start college than end with a degree, I still think that there is room to improve in this area. Finding different ways to help high school students get the correct information about different colleges or trade programs will likely help increase the number of students moving on to further schooling.
 - o 44.2% High school diploma or equivalent
 - o 20.3% some college, no degree
 - 12.6% associate's degree
 - o 11.7% bachelor's degree
 - 4.7% graduate/professional degree

5. Develop a population focused Nursing Diagnosis (that is supported by the Healthy People 2030 goal)

Risk for Impaired Health r/t limited access to healthcare due to geographic location, limited transportation, limited services within the area, and not enough providers within the area. As discussed above within the healthcare gaps and Health People 2030 Goals sections, this community has limited access to healthcare due to a variety of reasons. To deem healthcare as accessible it needs to be both available and easily obtained within a reasonable amount of time (Rural Health Information Hub, 2024a). By this definition, there are some disparities within Keokuk County; some of these are due to access such as not having the specialty or enough providers, and some are due to things such as lack of transportation due to being homebound/ disabilities/elderly (Keokuk County Public Health, 2023). This limited access can put them at risk for mismanagement of medications and chronic conditions as well. All of these challenges make it difficult for many people within Keokuk County to be able to access healthcare, thus putting them at risk for impaired health.

- 6. Community Engagement (If more are conducted) N/A
 - 6.1 Summary of Interviews Conducted N/A
 - 6.2 Insights on Healthcare Access N/A
 - 6.3 Insights on Education and Workforce Needs, Insights on Partnerships N/A

7. Evidence-Based Recommendations (Community/Population Intervention)- MDH Intervention Wheel

To address the healthcare workforce shortage in Keokuk County, specifically in nursing, we believe the following interventions align with the MDH intervention wheel emphasizing community outreach, education, and empowerment. These interventions focus on motivating interested high school students and aim to create more accessible pathways to becoming a nurse which will increase the available workforce while simultaneously addressing a disparity in the community.

- Recommendation #1: Increase healthcare access by providing mobile health clinics. Mobile clinics
 are a valuable way to provide a wide range of services to rural populations (Malone, et al., 2020).
 Mobile clinics are often associated with larger health systems but still rely on philanthropy and
 federal funding. Mobile clinics can also be combined with telehealth services for individuals that
 lack access to technology.
- Recommendation #2: Implement Early Warning Indicators (EWIs) to identify students at risk of not
 graduating. EWI systems are data driven and use indicators like attendance, behavior, and course
 performance to identify students and then provide personalized support to address the student's
 individual needs. Examples of interventions include tutoring, counseling, mentorship, and family
 engagement (Allensworth, et al., 2018).
- Recommendation #3: Mentorship partner program with high school and healthcare institutions. Early exposure to nursing has been shown to be an effective strategy for generating interest in the field and encourages young people to pursue healthcare careers by increasing showing them what the profession will entail, building confidence and providing positive role models (National League for Nursing, n.d.). In these programs students can take health related courses and participate in simulations with mentors who can provide insight into the nursing profession.
- Recommendation #4: A work study program to help reduce the need for students interested in
 nursing careers to take on student loans. Federal work study programs are often available to most
 schools for students that qualify for financial aid. Besides the financial benefit students also
 develop more skills and have a greater sense of self confidence (Curtis and Shani, 2002, Robotham,
 2009).

8. Explore Collaboration Opportunities

- Abby Benjamin (Admissions) at Indian Hills Community College Partnering efforts can be made
 to enhance student engagement with students within the Keokuk County area to promote early
 exposure to college- level courses and navigate the process of applying for college courses and
 discussing college curriculum. Admissions may also offer college visits for students to explore the
 Indian Hills Community College Campus, simulation labs, and the classroom setting.
- Dixie Holden (Department Chair of Nursing & Simulation) at Indian Hills Community College The
 Department Chair of Nursing & Simulation can speak with students in Keokuk County and recruit
 graduates from the Indian Hills Community College Nursing Program to speak directly with
 students and share patient-care experience with students to promote their program and the career
 of nursing.
- Allie Helmuth, Director of Public Health in Sigourney, Iowa Collaborations within the department of public health in Keokuk County can result in job internship opportunities for students to enter the area of public health, job shadow specific positions within the department of public health and enhance interest in the career of public health for students in Keokuk County.

9. Conclusion

In conclusion this report identified significant areas where there are gaps in healthcare and education within Keokuk County. Specifically, with limited access to healthcare this includes, mental health services, women health services, limited transportation services and poor access to specialized services. In education and workforce development there are significant gaps regarding limited education pathways, and geographic isolation, as challenges. Addressing these issues requires collaboration between the educational institutions, healthcare providers, and community organizations.

This report discussed the need for strategic interventions like developing pathways for interested high school students to find programs and mentorship in the nursing profession as well as offer flexible workstudy initiatives. Through these types of engagement high school students can explore the nursing profession which can help address workforce shortages and provide skilled providers to Keokuk County. Additionally, interventions like expanding telehealth, implementing mobile clinics, and creating transportation programs can help bridge the gaps for patients in need and ultimately improve health outcomes.

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