Transportation is a necessary element of any intervention focusing to improve access to quality care for clients living with HIV. Several studies have reported transportation as a barrier to HIV treatment (Sagrestano, Clay, Finerman, et al., 2014; Wohl, Kuwahara, Javadi, et al., 2017). However, there are few interventions or best practices focused on reducing transportation barriers for people with HIV. It has become increasingly clear interventions need to focus on holistic approaches to improving transportation availability to all populations, including people with HIV.

**BIKE EXCHANGE**

Learn how the City of Kansas City, Missouri Health Department (KCHD) confronted transportation barriers by providing bikes to clients living with HIV. The staff’s simple strategy may be a best practice for future interventions.

**SUMMARY**

This project spotlight profiles the City of Kansas City, Missouri Health Department (KCHD)'s novel intervention to provide clients living with HIV free bikes to travel to doctor’s appointments, medical case management appointments, employment, and to do normal activities of daily living. This project was an effect of the KC Life 360 intervention, part of the larger housing and employment intervention, a project funded for three years (2018-2020) by the Health Resources and Services Administration (HRSA), HIV/AIDS Bureau (HAB), Special Projects of National Significance (SPNS). KC Life 360 employs an inter-sectoral collaboration between KCHD, ReStart, a local housing agency, and Catholic Charities of Kansas City/St. Joseph, a leading employment support agency using navigators to connect people to needed housing, employment, health care, and other services.

Kansas City Health Department is the Ryan White Part A Recipient for the Kansas City Transitional Grant Area (KC-TGA). KCHD seeks to prevent new HIV infections and provide quality, accessible treatment of HIV by collaborating with partner agencies (KC Care Health Centers, University of Kansas Medical Center, Thrive Health Connection, Truman Medical Centers, and others) to focus on the social determinants of health. KCHD HIV Services is funded through many HIV care, treatment, and prevention funding sources including but not limited to: Ryan White (Parts A, B, and F), HUD, DOJ, CDC, and more.
**KEY TIPS & TAKEAWAYS**

- Bikes provide a sense of autonomy and freedom other forms of transportation do not. Clients who have received bikes report feelings of freedom and a willingness to experience new challenges they did not in the past. We think bikes might improve overall self-efficacy to tackle the unique challenges associated with homelessness/housing instability, unemployment/underemployment, and health.

- Providing bikes is a relatively easy solution! Compared to the majority of interventions focused on improving health outcomes for people living with HIV (PLWH), bikes are an inexpensive solution to some of the biggest issues facing clients. Most clients know how to bike and are efficacious enough to ride on the road or sidewalk. We suggest providing basic bike safety knowledge with the bike for clients who do not have experience biking.

- Bikes help solve transportation barriers but are not a complete solution. In Kansas City, all busses have bike racks. Clients in our area often use bikes to extend the realistic range of a trip made originally by bus. Continuing to provide bus passes compliments this program to success.

- Bike locks are essential. At first, we didn't have funding to provide bike locks with the bikes. Several bikes were stolen. Lesson learned. Provide locks.

- Providing helmets is another essential to accompany the bike.

- Bikes may be sold, traded, or lent out to others. All individuals experiencing the challenges of homelessness/housing instability and unemployment/underemployment will make the best decisions for their lives and often juggle competing priorities. This may mean bikes are sold to pay for something more pressing, traded for something of greater or more urgent need, or a client may lend out their bike to a friend and that friend loses it. This is going to happen. Be aware and acknowledge it when you design your intervention. You may need to provide additional bikes.

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**CHALLENGE**

Kansas City is largely auto-oriented, with little access to affordable housing or employment without a car. The sheer volume of roads in the city supports this fact; Kansas City has more miles of highway per capita than any other city in the United States (Federal Highway Administration, 2017). Kansas City is also a large, sprawling geographic area (8,472 square miles). This creates significant barriers to transportation, especially for those living with HIV, suffering from homelessness/housing instability, and/or unemployment/underemployment. Because of the size and lack of density of the city, the bus transit system take a long time to get to outlying areas and often does not have many bus stops in area where jobs are located. As clients report transportation barriers, all these factors coalesce.

Homeless, racial minorities, and low-income populations are disproportionately underrepresented in bicycle research, advocacy, and as recipients of city infrastructure to support bicycling (League of American Bicyclists & Sierra Club, 2016). The sidewalks, streets, land use, and all other built environment characteristics in Kansas City are not equitable. Simply put, poor individuals live in deleterious
environments. Not surprisingly, these same populations have higher rates of obesity and other chronic conditions which create further health issues for PLWH. Figure 1 illustrates the life expectancy by zip code for KCMO. The areas with low life expectancy are also those areas where low-income, marginalized populations reside.

"The bus system alone is insufficient to traverse the distance between where PLWH live and where they likely have work opportunities."

Additionally, according to the Centers for Disease Control and Prevention, in 2001 Hispanic and African-American riders had higher fatalities rates than white riders, 23% and 30% more, respectively (League of American Bicyclists & Sierra Club, 2016). The same disparities are seen at the local level. Bicycle and pedestrian crashes are also highest in the most marginalized parts of Kansas City. Table 1 represents the number of emergency room visits and hospitalizations due to bicycle and pedestrian crashes by council district. Figure 2 and Table 1 illustrate the dramatic differences between the areas of highest and lowest crashes.

Clients who are homeless/unstably housed and/or unemployed/underemployed often report transportation as a significant barrier to going to medical appointments, finding or maintaining earned income, or doing other activities of daily living. The bus system alone is insufficient to traverse the distance between where PLWH live and where they likely have work opportunities.

Table 1

<table>
<thead>
<tr>
<th>District</th>
<th>Emergency Room Visits</th>
<th>Hospitalizations</th>
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<tbody>
<tr>
<td>1</td>
<td>167</td>
<td>19</td>
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<td>5</td>
<td>427</td>
<td>102</td>
</tr>
<tr>
<td>6</td>
<td>283</td>
<td>83</td>
</tr>
</tbody>
</table>

"Indicates zip codes with decreasing life expectancy between 2002-2006 and 2012-2016 time frames"
The strategy to solve transportation problems for our clients exemplifies the quality of providers in our system. This story is not about a brilliant scientist with a novel technique or an administrator pushing a program into a new area. This story is about excellent case managers (medical, housing, employment, peer, etc.) doing everything they can to improve the lives of their clients and reduce reported barriers.

Jessica Gant, Employment Navigator at Catholic Charities of Kansas City/St. Joseph worked with someone from a neighboring town. Jessica’s main job is to help with resumes, interview skills, and job placement. Jessica reports transportation is a main barrier to job placement in Kansas City. This individual’s cousin, Terry Beasley, had bikes to give away for free and, at the time, he had an overabundance of bikes. When bikes were returned to local stores because they were not assembled correctly by customers, or they were missing a peddle or a cable, Terry and his team would fix them and donate them for free. Jessica and Debbie Adams, the Employment Support Specialist at KCHD, seized this opportunity to help shared clients. Debbie called Terry and drove an hour to pick up bikes. When she arrived, she was greeted at a storefront housing 50-60 bikes. This friend-of-a-friend encounter lead to a great relationship!

“Debbie called Terry and drove an hour to pick up bikes. When she arrived, she was greeted at a storefront housing 50-60 bikes”

Debbie couldn’t get the bikes in her car. Luckily, Terry offered to load them in his truck and drive five bikes to the Kansas City, MO Health Department. Terry, a guy who didn’t know anything about HIV case management donated his time, energy, and gas money to help someone he didn’t know.

Debbie started with just a few bikes to see if clients would want them. After all, biking in Kansas City is
tough! Debbie kept them in her small office at the Health Department. When clients came in to receive assistance finding a job the bikes would be there. Clients would occasionally inquire about the bikes; they would say, “What are these bikes in here?” Debbie, being the great sales person that she is, would ask, “Why? Do you want one?” Everyone wanted a bike! Most clients did not have a car and were coming in to get bus passes. This opt-in strategy allowed for those interested to receive bikes. Overall, we gave away 11 bikes from November 2018 to June 2019.

**The story of Jamal:**

Jamal was enrolled in KC Life 360. He had been unemployed for a while and was living at the shelter. After working with Debbie, Jamal got a job at a local warehouse. Unfortunately, it was the middle of January and about a mile off the bus line. Jamal had to walk 30 minutes after riding the bus for 45 minutes. He had a choice: Get up at 5am to make sure he arrived at work by 8:00am, or he could lose his job. One day, Jamal was talking with Debbie during a routine appointment. He noticed the bikes and said it would be nice to have a bike to ride that extra mile between the bus stop and his job. Debbie sent him out the door with a bike. Jamal used that bike to ride the extra mile after his bus ride. He is thankful for the opportunity to get to work. This bike allowed him to be successful. The bike was not about the bike itself but more about the independence most of us take for granted. The bike allowed him to access his job.

**The story of Debbie:**

Debbie is a bike rider, loves fitness, and is getting ready to run a 5k soon! She says, “If I wasn’t a bike rider, I may have thought differently about giving away bikes.” At first, Debbie was apprehensive about giving away bikes. Realistically, Kansas City is not a bike-friendly city. She asked herself, “How many of our clients would actually ride bikes?” In spite of her hesitation, she decided to give it a try. “This is a great opportunity for our clients or for anyone,” she says. Debbie exemplifies taking a leap with an odd idea, and embracing creative and innovative solutions.
OUTCOMES

While there has not been any formal evaluation of this pilot intervention yet, clients and staff have continually reported positive outcomes. Clients report being able to make it to medical case management and doctor’s appointments more often. Staff report a sense of self-sufficiency and independence in the clients who have received bikes. Debbie says, “Clients seem happier!”

The Ryan White system administrators are beginning to think differently about transportation barriers and their impact on health outcomes. This project started with improving employment opportunities for PLWH. That led to deeper analysis of transportation as a determinant for employment. This seemingly small intervention has opened the door to larger, more sustainable interventions to focus on different aspects which impact client’s lives.

NEXT STEPS

This pilot intervention is not over. In the future, Debbie and the team want to increase access to bikes, improve bike education, give locks and helmets, formally evaluate, and make this project sustainable over the long-term. Kansas City needs to be more bike-friendly within the built environment. Clients should be able to bike to work safely and comfortably. The team is currently looking for funding opportunities and partnerships to get more of our clients biking. After all, employment and transportation are determinants of health for all people, including PLWH.

ACKNOWLEDGMENTS

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