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Jackery Power Station: Stockton Shelter for the Homeless

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Overview

The community group, San Joaquin County Mobile Clinic, aims to improve the health outcomes of vulnerable populations by providing low-cost preventative healthcare and treatment options. This includes wound care, vaccinations, and assistance with accessing medical appointments and health insurance. However, research has shown that those without housing do not have adequate access to stable power sources to charge mobile devices to aid healthcare needs and access resources. The Jackery Power Station, which falls under the category of consumer access, priorities, and benefits over the lifespan, will attempt to address this barrier.

Problem Statement

An estimated 2,631 individuals in San Joaquin county are currently experiencing homelessness. Difficulty accessing consistent power sources to charge their phones or other devices limits opportunities for resource access needed for health management. The Jackery Power Station will allow individuals to charge their mobile devices and be able to more readily access phone features. They can then be used for tasks such as note-taking or entering medication reminders to improve health outcomes. This will assist with chronic condition management, preventative care, and health maintenance. Occupational therapists will introduce the Jackery Power Station to the providers and show them how to set it up and educate them about product maintenance to ensure proper function and longevity.

Technological Solution

The Jackery Power Station is being utilized by individuals without stable access to electricity and power, similar to those residing at and around the Stockton Shelter for the Homeless. If utilized by the San Joaquin Mobile Clinic, this technology will allow clients an opportunity to charge their mobile devices, increasing accessibility to features that promote positive health outcomes.

These features include:

- Increased font size for those with vision deficits
- Text to speech for individuals with low health literacy
- The notes application as a memory aid to assist with medication schedules

Cost Impact on Community Group

The San Joaquin Mobile Clinic is apart of a well established and highly funded community health group. San Joaquin Health Center has a strong mission of helping the underserved populations. Although this product is higher in cost, its long lifespan and potential benefits align strongly with the goals of the community group.

Cost

The Jackery Power Station is a power station that can be charged via solar panel or by plugging it into the wall. Prices of the Jackery varies depending on the amount of wattages, types, and amount of solar panels bought. However, it is recommended for the clinic to purchase the Jackery Solar 2000 Pro with one SolarSaga200. This includes one power station that has 2,160Wh capacity and one solar panel that can be fully charged up to 200W.

- **Cost:**
 - \$2,799.00

Low Cost Options

- Utilizing outlets in public libraries to charge mobile devices for free
- Individual power banks
- Chargers for check out in the community rooms at the Stockton Shelter for the Homeless

High Cost Options

- Locker style charging stations
- Computer room at the Stockton Shelter for the Homeless with access to phones as well



Impacts & Implications

Occupational Impact

- Improve health and communication management
- Increase community mobility
- Assist work participation including employment seeking and acquisition

Social Impact

- Increase social connectedness through access to communication features including social media

Community Impact

- Improve technology accessibility
- Rapport building with health professionals
- Increase access to health care
- Improve health outcomes



References

- Adkins, E. C., Zalta, A. K., Boley, R. A., Glover, A., Karnik, N. S., & Schueller, S. M. (2017). Exploring the potential of technology-based mental health services for homeless youth: A qualitative study. *Psychological services, 14*(2), 238–245. <https://doi.org/10.1037/ser0000120>
- Calvo, F., Carbonell, X., Johnsen, S., & Walla, P. (2019). Information and communication technologies, e-Health and homelessness: A bibliometric review. *Cogent Psychology, 6*(1), 1–14. <https://doi.org/10.1080/23311908.2019.1631583>
- Heaslip, V., Richer, S., Simkhada, B., Dogan, H., & Green, S. (2021). Use of technology to promote health and wellbeing of people who are homeless: A systematic review. *International Journal of Environmental Research and Public Health, 18*(13). <https://doi.org/10.3390/ijerph18136845>
- Sala, A., & Mignone, J. (2014). The benefits of information communication technology use by the homeless: A narrative synthesis review. *Journal of social distress and the homeless, 23*(1) 51–67. <https://doi.org/10.1179/1573658X14Y.0000000006>