

Wheels for Wellness: A UC Davis Mobile Health Community A Whitepaper for the Campaign Steering Committee

THE VISION

There is growing recognition among healthcare professionals, policymakers, and the general public of the importance of prevention in achieving wellness. The necessity of accelerating this paradigm shift—from illness to wellness—is underscored by the dire public health and chronic disease problems facing society. Chronic diseases such as diabetes, hypertension, heart disease and cancer are the leading global health problem, exceeding communicable disease for the first time in history. These conditions are responsible for 75% of all healthcare costs and threaten quality of life, function and emotional wellbeing.

The health of individuals and communities improves when chronic disease is prevented in the first place and is modified with behavioral health interventions when it occurs. Eating healthier foods and being physically active are two seemingly simple interventions, but many people lack access to nutritious foods, knowledge and skills about making healthy choices, and the resources necessary to include physical activities in their daily lives. UC Davis has the expertise—in nutrition, education, nursing, community health, chronic disease management, mobile health technology and more—to fill this critical void in accessible, culturally appropriate outreach and education. We aim to build upon these strengths to partner with individuals to make wellness a priority and to change the culture of health in our communities.

We have a vision to create a new mobile health program, Wheels for Wellness, to advance the health of underserved communities. A mobile fleet of health and education food trucks will bring nutrition education, cooking demonstrations and health screening kiosks to communities with the highest risk for chronic disease. Health mentoring delivered in-person and via mHealth technologies and platforms will support positive behavioral choices. Scalable and reproducible by design, the Wheels for Wellness program will generate a national model for advancing community health. Under the leadership of the Betty Irene Moore School of Nursing and the Department of Nutrition, we will also establish a first-of-its-kind master's degree program in Community Health and Wellness to build a skilled workforce in this emerging area.

Starting from the premise that health happens everywhere, Wheels for Wellness will work in partnership with the communities and populations it serves. Through engaging communities in a meaningful way, providing the resources needed to make healthy choices, and partnering with agencies that share the same goals, we will improve health at the individual and community levels. The mobile fleet—which will be enhanced food trucks—will leverage the burgeoning popularity of food trucks and the interactive social environment they foster to bring health education directly to places where people already gather because of work, school and other shared bonds. Reinforcing consistent in-person healthy messaging and education will be a targeted online community platform for continued adherence to changing lifestyle and health behaviors.

By intervening in communities with higher rates of chronic disease, Wheels for Wellness will increase the health and quality of life of vulnerable populations, eventually decreasing the cost of health care. This groundbreaking approach, along with the proposed master's degree in Community Health and Wellness, will set UC Davis apart as a leader in the field and set the stage for making an immediate, tangible impact on communities most in need. The Wheels for Wellness program at UC Davis will create a new standard for how a premier academic health system can, in collaboration with the people it serves, shift the conversation around wellness and uplift entire communities.

THE RIGHT TIME AND THE RIGHT PLACE

UC Davis is uniquely positioned to advance the Wheels for Wellness model. The collaboration between nursing and nutrition is a natural partnership. Specifically, the Betty Irene Moore School of Nursing is a

leader in advancing wellness and transforming health care by engaging individuals and communities. With a growing program of research in health and technology focusing on chronic disease, the school is poised to expand outreach at the community level. Likewise, the Department of Nutrition has a long track record of promoting health locally and globally and is recognized for innovations in community and school-based programs in nutrition education and policy.

The Wheels for Wellness program will also leverage a wide array of UC Davis expertise, including in food science and technology, population health and reproduction, human ecology, precision medicine, and engineering, among others. Through a UC Davis-led coalition of regional experts, Wheels for Wellness will engage many additional partners, including Cooperative Extension, UC Agriculture and Natural Resources, the UC CalFresh Nutrition Education Program, the California Department of Public Health, the California Department of Education, industry partners, local food banks, senior centers and other local funding and support agencies.

Wheels for Wellness will establish UC Davis as a credible, reliable resource for community-based methods for increasing wellness and alleviating chronic disease. Prioritizing Sacramento and the Central Valley in its first phase, the program's concepts and framework will be scalable and adoptable in other states throughout the nation.

THE OPPORTUNITY

Imagine a young mother, Sylvia, who can count on the Wheels for Wellness food truck being at her kids' school every Wednesday evening. She picks her kids up from their after-school program and they walk over to the clinic to watch a cooking demonstration on a large screen. With other families from their neighborhood, they learn simple ways to reduce total calories and add more veggies to traditional recipes. Sylvia appreciates that healthy eating doesn't mean her family has to stop eating their favorite foods. After the demonstration, she meets with a weekly support group to share healthy meal plans while her kids have fun with their friends in a Wheels for Wellness-organized Zumba class. Next week, Sylvia will bring her mom to the clinic for a special Diabetes Day, where wellness coaches share strategies to better manage her diabetes and health practitioners evaluate her clinical test results. Connecting with three generations, Wheels for Wellness makes a positive impact on both Sylvia's family and their community's wellness.

A Pioneering Approach to Promoting Wellness

Wheels for Wellness will transform the places people already gather to "one-stop shops" for wellness. Parking on a regular schedule at places like farmer's markets, food banks, senior centers, health clinics and schools, the clinics will make UC Davis a trusted partner for health and nutrition information.

The enhanced food trucks will feature a variety of tools to influence health behaviors, including a demonstration kitchen, a mobile kiosk for health screening, and nutrition education materials ranging from recipes featuring seasonal ingredients to maps designed to help food desert residents find local foodbanks, gardens and farmer's markets. Support group spaces and mHealth technologies, such as personal activity monitoring devices and food intake apps, will also be available. The program will be flexible and can be expanded to incorporate other strategies to promote health at the neighborhood level, such as safe walking paths, consistent healthy-branded messaging at local markets and stores, and menu labeling at restaurants.

Wheels for Wellness will establish online social networks for health mentoring through mHealth technologies and platforms. Creating communities, both online and offline, to which people feel a sense of belonging and peer support will be integral to changing the culture of health care. By incorporating a technology-enabled environment into the program, with online forums for mobile support communities

and other social networks targeted to those with diabetes, heart disease and more, Wheels for Wellness will make it easier for people to take charge of their own wellness.

Training Tomorrow's Leaders

As health care moves to community-based preventive care, healthcare professionals will need more training in health behavior interventions and culturally sensitive approaches to care.

The proposed master's degree in Community Health and Wellness will educate and create a workforce ready to address community health issues. Such a program is greatly needed, as the nutritionists, nurses and other health advocates of tomorrow will require training in wellness education and motivation, community engagement, and community health. Students in the program will participate in service learning within the Wheels for Wellness fleet, develop materials for the public and practice wellness coaching with people in the community.

The program will also provide real-world, applied internship experiences for undergraduate students across a variety of majors.

Partnership and Research to Advance Health

Research will focus on what makes an effective community-based health program. From the results of initial research questions—Is Wheels for Wellness an effective way to deliver health education to communities? In what areas is the program making the greatest impact on health outcomes?—subsequent research questions will be continually generated and answered, furthering the field of community health in traditionally underrepresented populations in California and nationwide.

With the aid of Big Data generated from Wheels for Wellness online platforms, epidemiologists and biostatistics experts will link program data to statistics at the county and zip code levels to evaluate implementation efforts, creating a blueprint for changing a community's health and wellness. UC Davis will serve as a model for how a major public research institution implements that blueprint, changing the way that society views and thinks about wellness and the culture of health overall.

MOVING FORWARD

As a large-scale program with several components, the resources needed for Wheels for Wellness will include both start-up and long-term funding.

The major capital investment is a fleet of up to 12 mobile health and education units, purchased and outfitted for this use. Resources will also be needed for physical activity tracking software development, as well as for technology development for the program's website, social networking site and mobile wellness kiosks.

An endowed professorship will be needed for the program director, as well as funding for the core faculty and several community-based health educators and administrative support staff. Faculty will also need to be engaged across UC Davis to design the new master's degree in Community Health and Wellness. Endowed scholarships will need to be established for the top graduate program applicants.

Marketing and branding expertise will be needed to create a recognizable brand for Wheels for Wellness that will help build trust in UC Davis as a health partner and increase the public's familiarity with the program's resources. Other early steps will include the development and production of materials, including newsletters and recipes, as well as translation services, diagnostic and assessment tools, and supplies and a coordinator for planned community gardens.

The total cost of the program is estimated to be \$20 million.