

Mobile Health: mHealth

Background

- Mobile health (mHealth) means patient-facing mobile devices used for a health-related purpose.
- Wearable devices and self-trackers can motivate people to track their health information.
- Tracking health information using technology can alert about health events.
- mHealth has the potential to reduce barriers to healthcare access and improve health equity, to do so effectively it must be developed in alignment with community values and experiences.



Figure 1 – Mother and son using mobile technology to monitor the son's asthma.

Objective

- To understand opinions about using technology to monitor health among Hispanics/Latinos in rural and urban areas of Washington State.

Methods (What we did)

- People who identify as Hispanics/Latinos were recruited through bilingual flyers (Spanish and English) in western and central Washington through community outreach.
- Eight focus groups with 48 people were conducted in Spanish and English using Zoom.
- Participants were shown vignettes and images on how people use mobile devices to monitor health.
- Discussions covered 1) general thoughts on the utility and burden of using mobile devices to monitor health, 2) benefits and barriers of using technology to monitor health, and 3) recommendations on how to improve technology use for people.

Characteristics of the Focus Group Participants (Table 1)

Categories	Spanish (n=32)	English (n=16)
Mean age in years	49 (SD 13.38)	36 (SD 10.55)
Gender identity		
Woman	29 (90%)	14 (88%)
Birthplace		
Outside of United States	31 (97%)	7 (44%)
Educational attainment		
Elementary school or lower	9 (28%)	0 (0%)
Some high school or degree/GED	18 (56%)	4 (25%)
Any post-high school education	5 (16%)	12 (75%)
Health Insurance		
Employer-sponsored	7 (22%)	9 (56%)
Public	9 (28%)	4 (25%)
None	14 (44%)	2 (13%)
Mobile device/smartphone comfort		
Very or somewhat comfortable	26 (81%)	15 (94%)
Current/prior use of mHealth apps		
Uses or has used mHealth apps	16 (50%)	13 (81%)

- Participants were on average 45 years of age; most were woman (90%); many were born outside of the United States (79%); and some did not have health insurance (33%). Most people said they were somewhat or very comfortable using a mobile device and smartphone (86%); some people use or have used mobile devices to monitor health (60%) (Table 1).

Participants' Thoughts on Mobile Health

- Mobile Health is seen as beneficial for promoting health and peace of mind including preventing serious health events, allowing continuation of regular activities, and promoting peace of mind and feelings of safety.
 - “It would really benefit in preventing people from going really bad to the hospital and flooding the hospital with people. Instead, they can use their devices and go to their doctor.”
- Barriers to using mobile health in daily life are costs/insurance coverage, technology resources (e.g., wifi access, phone capacity, and not having a supportive environment (e.g., school buy-in).
 - “Will the insurance cover ...it?...For those who have more than one person in the family, it will cost a lot of money.”
- Some people need support because they may be unaware of, unfamiliar with, or uncomfortable with technology, especially many elders, who may be uncomfortable with technology, and having personalized tutorials may help for people who needs more support (Figure 2).
 - “I think, especially for Latino families, I think we need more person-to-person support...having that person who can guide you, help you, and get you out of doubt when using new things.”
- Reliance on technology must be balanced with human judgement. Overdependence on technology may undermine self-reliance and impact family relationships. While mHealth allows automatic data collection, manual input may be more trustworthy.
 - “My opinion is that people should not become dependent on electronic devices or technology to either rescue or make them feel safe. I think it’s taken over our humanness or our ability to care for oneself.”
- Data sharing is seen as valuable for improving predictions and emergency treatment, but raises privacy/hacking concerns, especially for sensitive information (location, stigmatized conditions).
 - “As a mother I would feel safer just having my daughter’s location....The activity of coughing..., obviously it does have to be shared, but for me, the location [shouldn’t be shared].”

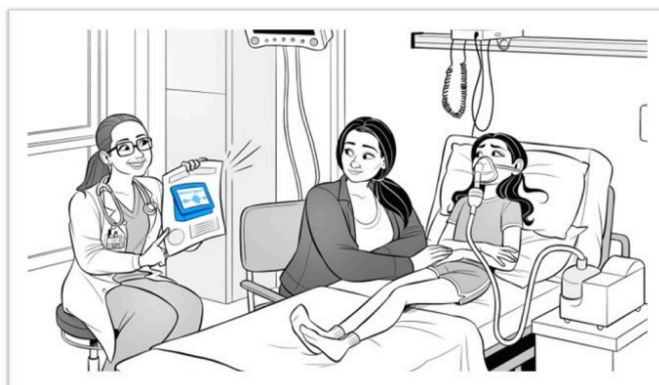


Figure 2- Mother and daughter being guided on how to use a cough monitor.

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