FARMWORKER JUSTICE

HEALTH POLICY BULLETIN

Policy in action to promote healthcare access through technology

Health Technology:
An update from DC

Two separate bills were recently signed into law that have the potential to affect rural health care, health centers, and agricultural workers: The 21st Century Cures Act and the Expanding Capacity for Health Outcomes (ECHO) Act.

The 21st Century Cures Act,[1] signed into law on December 13, 2016 is a lengthy bill with a number of provisions ranging from new funding for the National Institutes of Health (NIH) to changes in how pharmaceuticals get approved. This Act covers a broad range of issues related to the delivery of health care and health information technology. One provision establishes a grant program to convene stakeholders, including patient advocates, and acquire information around electronic health record (EHR) interoperability, security, and usability, with a noted interest in rural health care. A separate section focuses on issues around interoperability, and establishes a voluntary exchange framework to facilitate the secure transfer of information across networks. The bill also calls for a Government Accountability Office (GAO) review of existing barriers to patients accessing their records, as well as problems that providers face in providing that access.

The ECHO Act[2] signed into law on December 14, 2016 can potentially increase access to specialty care in rural, underserved communities. It requires the federal government to produce a report outlining challenges and recommendations around establishing collaborations between specialists and primary care physicians who would remotely work together via a technology-enabled platform.

According to 2015 HRSA UDS data, 92.4% of health centers have EHR systems in place for all providers at all locations, but only 64.4% reported exchanging patient information with other key providers.[3] As health information technology continues to advance, this bill and ensuing regulations from HHS have the potential to ensure that all agricultural workers have access to their medical information and that it can be easily and securely shared with all relevant providers. This Health Policy Bulletin touches on the potential of telehealth, in particular, to increase access to specialty care for farmworkers. FJ will monitor regulations related to health information technology and share any important developments with health centers.

Webinar: Applications for Agricultural Worker Health Interventions

Date: 04/26/2017
Time: 2:00 PM EST

This webinar brings together experts with experience in using mobile technology in agricultural worker communities. Panelists will discuss highlights and lessons learned from their research, as well as potential resource challenges. You can register at:

https://attendee.gotowebinar.com/register/4591286061486674945

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[1] H.R. 34 - 21st Century Cures Act   [2] S. 2873 - The ECHO Act [3] https://bphc.hrsa.gov/uds/datacenter.aspx

Using Telehealth to Improve Access to Care for Agricultural Workers

Sarah Downer, JD
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Agricultural workers nurture, harvest, and safeguard our country's food supply. Despite the vital work they perform, many experience difficulty accessing health care. Many workers reside in designated Health Professional Shortage Areas, where primary care providers, dentists, and/or mental health providers are relatively scarce. The distance from a farm or ranch to a clinic can be long, and workers often have difficulty accessing reliable transportation. The cost of health care, lack of cultural competency and shared language among providers, and demanding schedules that do not allow for paid time off present additional challenges. For a mobile population that often resides in rural areas, increased use of telehealth is a promising way to increase access to health care.

The term "telehealth" refers to the use of technology to deliver health care at a distance. Telehealth can be used to deliver primary and specialty health care, health education, and preventive health services to agricultural workers and their families through methods such as video-conferencing, telephone and e-mail consultations between primary care providers and specialists, and remote patient monitoring of clinical indicators such as blood pressure. As technology becomes a bigger part of health care delivery, workers can benefit from the increased ability of primary care providers to handle complex cases under the supervision of remote specialists, being able to see specialists located hundreds of miles away from the comfort of their home clinic, and transmitting information about their health to their providers between appointments for better care in real time.
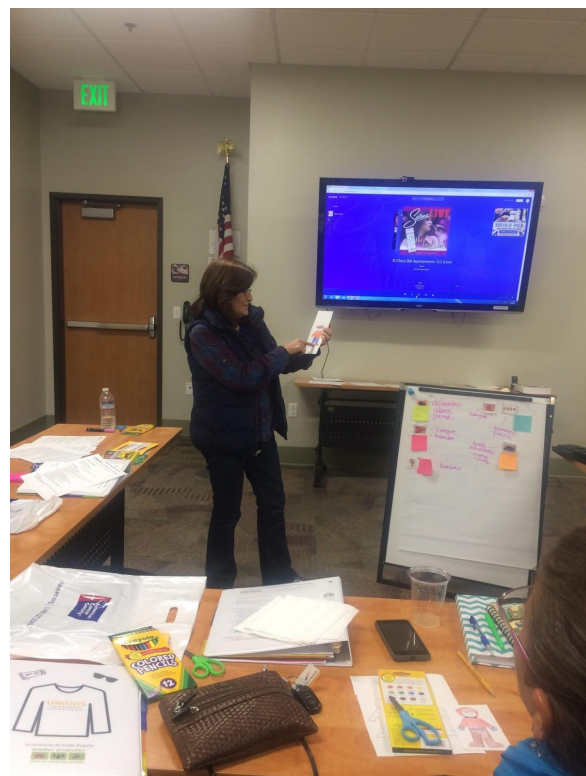
In 2017, Farmworker Justice (FJ), the Center for Health Law and Policy Innovation at Harvard Law School (CHLPI), and Vista Community Clinic (VCC), a community health center in San Diego, California, are exploring ways that clinics that provide health care to farmworkers can integrate telehealth technology into care delivery. This means:

1) Advocating for a legal framework at the state and national level that encourages the implementation and use of telehealth;
2) Building capacity for telehealth by expanding internet broadband access, outfitting non-traditional locations as telehealth care delivery sites, and incentivizing providers to participate in new methods of care delivery; and,
3) Exploring ways to increase funding for telehealth integration through health care payment reform.

Fortunately, increasing access to care through telehealth is a bipartisan priority. In December of 2016, President Obama signed the Expanding Capacity for Health Outcomes (ECHO) Act, which requires the Department of Health and Human Services to investigate telehealth models of care and produce a report that identifies barriers to its use and recommendations to improve adoption and integration of effective telehealth methods. Other bipartisan legislation that expands coverage of telehealth in public insurance programs will likely be introduced or reintroduced this spring.

Many of the fundamental challenges agricultural workers face in accessing health care will not be solved by technology. Lack of insurance coverage, for example, continues to be an enormous barrier to care. However, increased use of technology means that when workers are able to link with a health care provider, they should be able to overcome obstacles that might otherwise prevent them from obtaining the care they need. Telehealth is one way of tailoring the health care that a worker receives and taking that care directly to them in their community. In the coming months, FJ, CHLPI, and VCC look forward to integrating the worker's unique experience of healthcare to develop and release a policy roadmap for telehealth integration. This includes identifying barriers to insurance coverage or provider participation in telehealth, promoting efforts to increase

Infographic courtesy of
www.healthit.gov/patients-families/electronic-health-records-infographic

personnel and technology capacity to engage in telehealth in the healthcare setting, and exploring health care financing models that allow for investment in telehealth. Together we hope to be a strong voice in envisioning and building the holistic system of care that our nation's agricultural workers deserve.

Using Technology to Support *Promotores* Programs

Author's note: This article is adapted from an article written in MHP Salud's La Esperanza Summer 2016 newsletter. MHP Salud is a national organization that supports the implementation of community health worker (CHW) programs to empower underserved Latino communities and promote the CHW model nationally as a culturally appropriate strategy to improve health. More information can be found on their website at www.mhpsalud.org.

For *promotores de salud* (community health workers), incorporating more technology into their day-to-day activities can be a great way to improve how they do their work and to enhance the services they offer.

In 2011, MHP Salud developed a mobile app to improve the data collection and evaluation processes of its *promotor* programs. Before the development of the app, *promotores* used paper forms to collect participant data during community outreach. The paper forms required the *promotores* to spend valuable time performing data entry when they could have been conducting outreach and other programmatic activities. With the goal of simplifying the data collection and analysis processes and improving data quality, MHP Salud partnered with Dimagi, a company that develops software to improve health care in underserved communities. The organizations collaborated to adapt CommCare - a mobile data collection app for health programs - to meet MHP Salud's evaluation needs. One of the greatest benefits of using CommCare has been the reduced time spent on data entry tasks. *Promotores* can now directly collect and submit participant data using smartphones, eliminating the need to make copies of paper forms, turn them in, and have program supervisors input the data into a database. All of the data submitted on the smartphone goes into a web-based database where supervisors can access the data in real time.

In addition, using smartphones has enabled *promotores* to learn new technologies and access digital resources. Many *promotores* use their smartphones to bring resources to community members in real time and diversify their approach to health education, like using online audio-visuals, to better provide information to the community.

Sharing information and knowledge with community members is a key part of a *promotor's* job. Today, many health education materials are accessible online and information on community resources, such as business hours and location, can be found with a simple internet search. With technology in their hands, *promotores* can connect the community to health information and resources in real-time. This avoids the need to go back to the office, gather information, and then track down and follow up with community members. In addition to supporting community education, technology can also support a *promotor's* own learning.
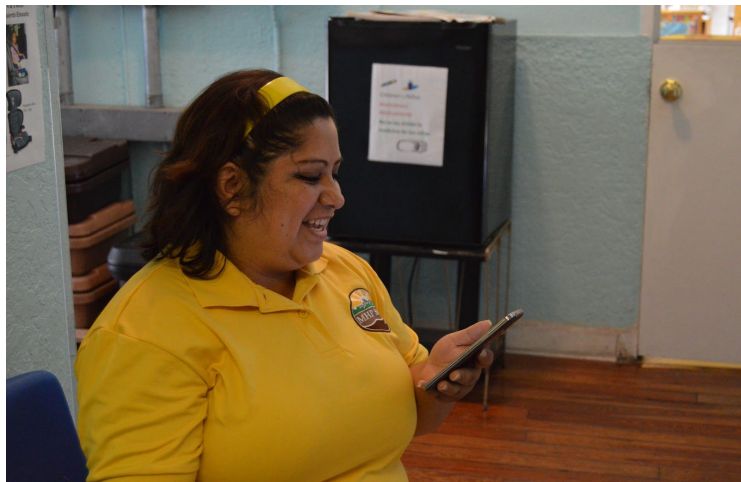
Courtesy of MHP Salud

It is not always possible for agencies to send their staff to trainings and conferences, or for *promotores* to take time out of their schedules to attend in-person events. Online presentations, trainings, or webinars can be a more accessible option for *promotores* to build their skills and knowledge. They allow *promotores* to learn about different subjects, from specific health topics to developing professional skills, without the need to travel or leave the office or the community. Also, online learning can bring together people from different locations and experience levels. Therefore, *promotores* may be able to interact with and learn from peers that they may not have been able to meet before.

Special Considerations for Using Technology

While technology can support the work that *promotores* are doing, there are a few things to keep in mind when using it. First, there is a lot of information online, especially about health, and a lot of it is not reliable. It is important to use trustworthy sources of health information, such as governmental agencies like the Centers for Disease Control and Prevention (CDC) or organizations that are experts in their field. Also, when accessing information online, check that it is recent (within the past few years) or that it has been updated recently. If there is any uncertainty about a source or questions about where to find reliable information, *promotores* should refer to their supervisors. It is also important to remember that there are many resources available online for free. Before paying for a material, try looking to see if there is a free one that you can find. While many organizations are supporting the use of technology with *promotores* and are equipping them with the appropriate tools, it is essential that *promotores* are familiar with their organization's policies on technology use. For example, some agencies may restrict the use of social media by employees for work purposes, or they may have specific policies about maintaining the confidentiality of community members while using technology. Understanding these policies will ensure that *promotores* are incorporating technology in their work in the most responsible and effective way.

Screenshot of MHP Salud's Commcare app

MHP Salud is committed to providing *promotores* with the most useful technology to help them reach more program participants, serve them better, and offer a more complete range of resources. To learn more about the mobile app, including taking a tour of the app, visit MHP Salud's website: http://mhpsalud.org/commcare.

Mobile and Traditional Modes of Communication Among Male Latino Farmworkers: Implications for Health Communication and Dissemination

Authors: J. Sandberg, C. Spears Johnson, H. Nguyen, J. Talton, S. Quandt, H. Chen, P. Summers, T. Arcury

Source: Journal of Immigrant Minority Health (2016) 18: 522-531

In the United States, the vast majority of individuals have access to either a smartphone or cell phone of some kind. Recently, studies have found that a higher proportion of Latinos in the U.S. own smartphones than the general population. However, not as much is known about ownership and usage of cell phones or smartphones among agricultural workers. The authors of this study sought to address four questions: first, the rate of cell phone and smartphone ownership among agricultural workers; second, whether or not workers maintain a consistent phone number; third, what mobile or other technologies workers use inside and outside of the U.S.; and fourth, how workers prefer to receive research study results.

For this study, the authors used an existing longitudinal study that examined neurological outcomes of pesticide exposure to create their sample. The broader study, conducted in North Carolina in 2012 and 2013, consisted of 235 male, Latino agricultural workers with at least 3 years of agricultural experience. For the purposes of this analysis, researchers received 165 and 102 responses to their telecommunications questionnaire in 2012 and 2013, respectively. Trained interviewers fluent in Spanish administered the questionnaire and asked workers about mobile phone ownership, whether they had the same number as one year ago, if they had someone take phone messages for them, types of communication (email, text, Facebook, etc.) that they use to talk with family and friends, and formats that they would find acceptable to receive results of the broader study.

For 2012, the authors found that 86% of participants owned a cell phone of any kind, while 26% had a smart phone. In 2013, 97% had a cell phone, while 37% had a smart phone. Interestingly, the authors found no statistically significant relationship between cell phone ownership and any individual characteristics of interest (age, income, education, marital status, reads English well, reads Spanish well, H-2A status, etc.).

Among agricultural workers who did own a cell phone, a very small proportion kept their number consistent for at least a year - 38% in 2012 and 17% in 2013. In 2012, 28% of all the workers had someone take phone messages for them, with 27% in 2013. Within the U.S., the majority of workers had spoken on a cell phone (81%, 86%) or read a text message (66%, 68%) for both 2012 and 2013, respectively. On the other hand, very few workers used Skype (3%, 3%), email (9%, 2%), or Facebook (14%, 12%) in 2012 and 2013, respectively. When they were out of the U.S., workers were much more likely to use a landline phone.

Regarding the acceptability of various formats for delivering study results, the participating workers were more inclined to support low-tech methods in both 2012 and 2013: in-person conversation (96%, 95%), a typed letter (77%, 84%), or calling a toll-free number (66%, 70%). Most workers reported that it would be unacceptable to receive group study results through text messages. This held true even among smartphone owners. Overall, only 4% of workers found a smartphone app and 3% of workers a website acceptable in 2013. The authors suggest that the low acceptance of these formats may be influenced, in part, by limited literacy and associated costs to receive text messages and phone calls on their cell phones.

The authors note that there is not much research on the dissemination of study findings to research participants but that this study stands in contrast to another which found that Latinos in an urban setting were interested in receiving HIV test results via text message. One limitation of this study is that almost all of the participants were H-2A workers and all of their participants were male, and thus not representative of the general agricultural worker population. Also, workers younger than 30 were not included in the study. Younger workers may have more experience using smartphones, and thus be more willing to receive important communication via multiple methods.

Additional research is needed to understand how workers are using different technologies and how they may be used effectively to provide health information and study results to Latino agricultural workers. The authors recommend that future research have larger sample sizes to assess for independent associations. They also recommend that studies recruit workers from different regions of the U.S. and solicit information about participants' cell phone plans and why they may frequently change phone numbers.

Overall, the study raises interesting questions about agricultural worker access to available technologies and their potential use in health programs and interventions. The authors emphasize the importance of understanding the agricultural worker population, and using tools for health promotion that they perceive to be useful and accessible.

EYE ON FARMWORKER HEALTH

Eye on Farmworker Health is a summary of important recent developments in research on issues affecting the health and safety of agricultural workers.

User Perceptions of ¡Protéjase!: An Intervention Designed to Increase Protective Equipment Use Among Mexican Immigrant and Mexican American Farmworkers

Authors: S. Snipes, F. Montiel-Ishino, J. Smyth, D. Murphy, P. Miranda, L. Davis
Source: JMIR mHealth and uHealth 2016; 4(2):e28

Despite the importance of personal protective equipment (PPE) in reducing exposure to pesticides, many agricultural workers do not use PPE as recommended. The authors recognized that a number of factors influence this decision, ranging from discomfort and fit to efficiency and loss of dexterity. They turned to a mobile health platform (referred to as mHealth) to track daily PPE habits and provide health information as feedback. Broadly defined, mHealth is the use of mobile and wireless devices to improve health, health services, and health research. Their specific aims were to test both PPE itself and the mHealth intervention, named ¡Protéjase! (Protect Yourself!), that tracked and motivated PPE usage.

The ¡Protéjase! Intervention was developed in six steps with workers in the Lower Rio Grande region of Texas. The first two steps were ethnographic observations of PPE use of around 100 agricultural workers during three periods in 2009, 2010, and 2011. Then, they interviewed 74 agricultural workers about why they did or did not use PPE. They found that those workers who self-described their bodies as "delicate" or "weak" were more likely to use PPE. A main concern of all the interviewed workers was that PPE slowed them down. Those who viewed themselves as strong would avoid PPE for this reason. In the second step, the authors picked multiple types of gloves, shirts, and safety glasses for the workers to choose from. They also developed over 300 messages that could be delivered to each individual in response to their daily PPE habits.

The third step involved five focus groups among 50 agricultural workers (10 workers per focus group). The focus group participants provided feedback on types of PPE as well as the intervention messages, evaluating and ranking those messages that had the most potential impact to motivate increased PPE use. In step 4, the authors used their feedback to narrow the choices of PPE from 22 to 7 types that workers believed could be feasibly worn throughout the workday. They also picked 209 messages by eliminating those that workers identified as too long or not convincing enough.

In step 5, the authors piloted the intervention to a new sample of 55 agricultural workers recruited through the same means as the ethnographic study. For purposes of the study, each participating worker was provided with a mobile phone as well as the PPE. They were given instructions on basic phone use and were taught how to use the ¡Protésaje! mHealth app, including how to respond to daily surveys. Each participating worker filled out a short survey after work every day for 30 days with information about their work hours, the

type of work performed and crop harvested, pesticide application, PPE use, reasons why PPE was worn or not worn, and their perception of work safety. After completing the survey, workers received individually tailored messages based on their survey responses. The messages were designed to be responsive to all possible combinations of PPE use scenarios, risk beliefs, and work tasks. The app contained five different messages per potential scenario to prevent repetition. The workers' answers were matched to a motivational message that included reminders to wear PPE, information about the health risks of pesticides, and helpful tips to use PPE effectively.

Finally, in step 6, quantitative and qualitative data were gathered from those who finished the full 30 days to evaluate the feasibility and preliminary effectiveness of ¡Protéjase! The authors assessed the change in PPE use among participants who participated in the mHealth intervention. They also assessed the comprehension of the mHealth messages, survey and message delivery time and frequency, and ease or difficulty of mobile phone use.

Overall, 41 agricultural workers completed the study. The authors report that the overwhelming majority of participants found the PPE itself to be acceptable. There were some issues with sizing, as well as certain tasks that required such a degree of dexterity that the gloves were not workable. The authors report that certain workers harvesting cilantro wore the gloves with some fingertips cut off, whereas previously they would not have worn gloves at all.

Regarding the health messages, the workers reported health effects about pesticides (44%) and risks for their family (22%) to be the most useful type of information. A slight majority (51%) of farmworkers reported that the messages either caused a big or small increase in their use of PPE. The majority (54%) liked the messages and reported no need for changes, while 73% reported no barriers to using the app. A sizeable portion of workers (39%) felt that some minor changes in language were needed to simplify and clarify the messages. There were three workers (7%) who reported that all the messages were difficult to read or understand.

EYE ON FARMWORKER HEALTH

Eye on Farmworker Health is a summary of important recent developments in research on issues affecting the health and safety of agricultural workers.

Mental Health and Mobile ICTs in Indigenous Transnational Communities

Authors: Maximo M. Matus Ruiz, R. Ramirez Autran, E. Castillo Baldera, G. Cariño Huerta

Source: Frontera Norte, Vol.28, Num. 56 (2016), pp. 135-163

(This article was originally published in Spanish)

Information communication technologies (ICTs) offer great potential for serving the mental health needs of transnational indigenous communities. The provision of health services via mobile technology, known as telemedicine, may be particularly suited to the unique challenges posed by transnational migration. In this article, the authors explore both the mental health challenges faced by indigenous transnational communities and these communities' access to and use of mobile technologies.

The authors center their research on an indigenous community in San Miguel, Oaxaca, Mexico, whose members frequently travel between Mexico and the U.S., with an estimated third of the population living in the U.S., mainly in the state of California. Based on surveys conducted throughout the community in 2007, 2010 and 2014, the authors analyze the community's mental health profile in both countries and identify a high incidence of conditions such as post-traumatic stress, depression, anxiety and alcohol and drug abuse, all of which are often triggered or exacerbated by the migratory experience. Gender also has a disparate impact, as women in the community are more prone to symptoms of depression, particularly if their husbands and/or children have migrated to the U.S.

In addition to detailing the mental health needs of the community, the authors discuss the community's access to health services in both Mexico and the United States. One common difficulty in the provision of medical services is that personal clinical data is often kept in physical files, while transnational populations move between different locations throughout the year. Some other factors hindering the utilization of health services by workers, particularly in the U.S., include high costs, lack of health insurance, transportation challenges, long wait times, rude treatment and lack of familiarity with different health care systems. Additionally, indigenous populations face increased barriers to accessing health services in both Mexico and the U.S., due to factors such as high poverty rates, language barriers, geographical isolation, and cultural views regarding health treatment, particularly mental health treatment, which often has a stigma associated with it. Some indigenous patients are also wary of modern medicine based on their strong spiritual beliefs about healing.

Members of the indigenous transnational community who reside in the U.S. sometimes utilize the services of community health centers. Another common practice is returning to Mexico for medical treatment, at times even for treatment by the local community healer. Others may use cell phones to call their local doctor or healer in Mexico, purchasing any recommended medication and/or natural remedy afterwards.

In contrast to the aforementioned limits in accessing health care, the authors cite various studies showing that access to cellphones is relatively high among indigenous transnational communities. Cell phone use has increased dramatically across all age groups and genders. The majority of existing mobile health applications uses either text or SMS based systems, such as 3G or 4G, unstructured supplementary service data (USSD), or a combination of both. These systems are commonly found in smartphones; therefore necessary health information could easily be transmitted to patients via text, voice, or multimedia.

The treatment of mental health conditions through ICTs is less complicated than the treatment of physical symptoms, as necessary solutions can be easily delivered via text, voice, or multimedia platforms. As mentioned, many transnational individuals suffer traumatic experiences when crossing the border, yet they often do not discuss these experiences. This unresolved trauma then affects their daily life and can lead to other mental health issues, such as alcohol and drug abuse. Being able to talk about these experiences early on may prevent patients from spiraling out of control. Furthermore, treatment could be remote and anonymous, thereby helping to overcome some of the cultural barriers for addressing mental health issues.

Given that the necessary infrastructure is already in place, the authors conclude that the missing link for the provision of mobile mental health services is the development of apps capable of transmitting information between health professionals and transnational indigenous patients in a way that is sensitive to the particular needs of this community, taking into consideration cultural traits such as language, ethnicity, and spiritual views.

The primary limitation identified by the authors seems to be message accessibility for low-literacy workers. Although the intervention language was created at a 5th grade level, the participating workers recommended tailoring the intervention so it is more accessible for low-literacy workers. Most of the workers who had trouble understanding the messages got help from a family member to respond, but that may not be possible for everyone. The authors caution that due to the small sample size and specific location (Texas), the findings may not be generalizable to all workers.

Ultimately, the intervention and mHealth approach was well-received by the participating workers. The authors see ¡Protéjase! as an innovative approach to promote PPE use and pesticide protection among workers as well as collect data on pesticide safety. It can also serve as a model to address other health issues among agricultural workers through dynamically tailored messages that are specific to their daily needs.