

streamline



PRAPARE's Initial Findings:

Serving Communities to Reduce the Negative Impacts of Social Determinants of Health

By Claire Hutkins Seda, Writer, Migrant Clinicians Network, Managing Editor, *Streamline*

It's been over two years since PRAPARE, a national standardized patient risk assessment protocol, was launched. Currently, about 1,000 health center sites in six states are using it to collect standardized information on the myriad social determinants of health that impact patients' lives. PRAPARE — which stands for Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences — promises not just to advance health centers' understanding of how social determinants affect patient health outcomes,

but also to allow health centers to lean on the data to develop the most effective and useful intervention strategies to better the health and health access for patients in their local community.

The effort is headed up by the National Association of Community Health Centers (NACHC), the Association of Asian Pacific Community Health Organizations (AAP-CHO), the Oregon Primary Care Association, and the Institute for Alternative Futures, with support from numerous foundations. It's

free, available in five languages, and integrates with six electronic health record programs. Integration with several more is on the way. (See sidebar for the questions that PRAPARE asks.)

As the data roll in, analyses show that early PRAPARE findings are consistent with recent literature on social determinants of health: high-risk populations — patients with co-morbidities or who are actively working

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Mobile Mexican Workers At Risk for TB in California

By Claire Hutkins Seda, Writer, Migrant Clinicians Network, Managing Editor, *Streamline*

Earlier this year at a National TB Controllers meeting, California Department of Public Health researchers Tessa K. Mochizuki, MPH, Pennan M. Barry, MD, MPH, and Lisa Pascopella, PhD, MPH presented a poster entitled, “Tuberculosis among Migrant Workers in California, 2001-2015.” The analysis presented in the poster compared mobile workers with tuberculosis (TB) to workers with TB in other occupations. The analysis used TB surveillance data and was restricted to those born in Mexico. The data are telling about TB incidence and treatment among mobile workers such as agricultural workers in California, and demonstrate the need for programs like Health Network, the bridge case management program for mobile patients provided by Migrant Clinicians Network (MCN).

Since 1996, MCN’s Health Network has case managed over 12,000 mobile patients; over 2,100 have been cases of active tuberculosis. Health Network Associates have helped these mobile patients maintain continuity of care, not only throughout the United States, but to 110 other countries, with a documented treatment completion rate of over 84 percent.

“This California study confirms what has long been believed by mobile health experts: that mobile agricultural workers are at high risk for tuberculosis and should be actively screened for TB,” said Ed Zuroweste, MD, Co-Chief Medical Officer for MCN. “MCN’s Health Network remains ready to assist any clinician who has a mobile patient with either TB infection or TB disease.”

The California Department of Public Health (CDPH) provided some comment on the contents of the poster, the results of the study, and the implications for clinicians serving mobile populations. The following has been edited for brevity and clarity.

MCN: Why did you decide to study TB among mobile workers in California?

CDPH: Previous literature has suggested that mobile workers are at risk for tuberculosis and may not have consistent access to health care, which could lead to challenges in TB diagnosis and treatment. California reports the largest number of TB cases among mobile workers in the US. In order to ensure effective TB care and TB prevention for all Californians, it is important to understand TB epidemiology in specific populations, like mobile workers.

MCN: What preliminary results can you share with us?

CDPH: Mobile workers differ from other employed TB cases from Mexico. Examples of differences included being more likely to report alcohol use, being more likely to have had contact with an infectious TB patient, and [being] more likely to move during TB treatment. These differences may mean that specialized approaches to identifying TB and supporting mobile workers through treatment may be needed. However, we also found that more mobile workers have completed treatment in recent years such that their completion rates no longer differ from other workers.

MCN: What are the implications of your work for clinicians serving mobile populations, like mobile agricultural workers?

CDPH: There are more than 2,000 cases of TB reported each year in California. When TB is diagnosed in a mobile worker, special care is needed to ensure that workers can complete TB treatment, especially when moving from one location to another. Additionally, TB can be prevented through

testing for and treating latent TB infection. This testing is indicated for persons with close or prolonged contact to an infectious TB case. Additionally, the California Department of Public Health (CDPH) and the United States Preventive Services Task Force recommends testing and treatment for latent tuberculosis infection (LTBI) among all persons born in countries with an elevated rate of TB.

MCN: What should clinicians take away from this?

CDPH: Most cases of tuberculosis in California are a result of progression of LTBI to active TB disease. From this analysis, we found that more than half of the mobile workers with TB had been in the US for at least six years. This means that there could be opportunities to prevent tuberculosis among mobile workers through testing and treatment for LTBI. Once active TB is ruled out, treatment for LTBI should be considered. There are short-course regimens available that may be more feasible for mobile worker patients.

MCN: What are the next steps for this project?

CDPH: We are still considering publication of these results. CDPH will continue to monitor TB cases in mobile workers including treatment completion. ■

Learn more about Health Network, including how clinicians can enroll their own mobile patients for any health concern, at:
<https://www.migrantclinician.org/services/network.html>

The California Department of Public Health’s Tuberculosis Control Branch is at:
<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/TBCB.aspx>

Two Studies Examine Obesity Among Agricultural Worker Children

By Claire Hutkins Seda, Writer, Migrant Clinicians Network, Managing Editor, *Streamline*

Why do children in agricultural worker families have high rates of obesity? Two new research papers seek to examine how mothers' experiences and interactions with their children may impact child obesity. The analyses are the result of the Niños Sanos study, a multi-year longitudinal study of diet and physical activity among Latino children in agricultural worker families in North Carolina, which collected data between 2011 and 2014.

In the first study, published in *Maternal and Child Nutrition*, Marshall, et. al. followed 248 agricultural worker families over two years. The Niños Sanos research team enrolled families with two-year-old children through Head Start and Migrant Head Start programs, migrant education programs, community health centers, a Special Supplemental Nutrition Program for Women, Infants and Children site, and various community partner sites, churches, and stores. Mothers were asked to complete the Center for Epidemiologic Studies Depression Scale nine times over the study period; the team found that two-thirds of mothers experienced at least moderate symptoms of depression at some point during the two years. At the end of the study period, the researchers compared the patterns of maternal depression over the two years with the differences in obesity among their children, and compared feeding styles, physical activity, and other risk factors for obesity.

After controlling for other covariates, the researchers found that children of mothers with severe episodic depressive symptoms and chronic symptoms were significantly more likely to be overweight or obese than children of mothers with few symptoms. The researchers found less responsive feeding styles – in which parents are attending less to a child's hunger cues, where feeding "may be overly indulgent, allowing the child to control selection and intake of food, or overly demanding, in which case the child's own sense of fullness may be disregarded" — among children whose mothers recorded moderate episodic or chronic symptoms, and lower diet quality among children whose mothers reported chronic symptoms.

Feeding styles were further evaluated among the same agricultural worker families



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in a second research paper, "Child Feeding Style and Dietary Outcomes in a Cohort of Latino Farmworker Families," published in the *Journal of the Academy of Nutrition and Dietetics*, wherein Ip, et. al. categorized and examined feeding styles among the same children to determine their relation to childhood obesity. The authors note that feeding style is just one of many factors that may contribute to obesity among children in agricultural worker families, who encounter numerous barriers to healthy food as low-income rural residents, and may be further influenced by cultural cues and beliefs, as well as migration disruptions in food access, such as through local safety net programs.

Participants completed a Caregiver's Feeding Style Questionnaire at baseline, and 12 and 24 months later. The researchers categorized the mothers' feeding styles into four types, separating out the demandingness or authoritativeness of the parent (how "parent-centered" the feeding style is) and the responsiveness to the child (how "child-centered" the feeding style is). Among participants, 28 percent were categorized as low parent-centered/moderate child-centered feeding style; 24 percent as high parent-centered/high child-centered, without physical control; 26 percent as high parent-centered/high child-centered; and 22 percent as moderate parent-centered/moderate child-centered. They then compared the diet quality (using the Revised Children's Diet Quality Index) and

body mass index of children in each group.

The results were consistent with other recent research: children whose parents used low parent-centered feeding, indicating less attention from the parent on the child's feeding pattern, ate a diet of lower quality and had higher mean body mass index percentiles compared to children with high parent-centered feeding. The authors concluded that future research "should account for the unique circumstances of Latino [agricultural worker] families, many of which contend with poverty, lack of education, discrimination, limited access to nutritious food, deficiency of safe play spaces, frequent relocation, and acculturative stress."

Several of the previously published research papers resulting from the Niños Sanos longitudinal study are provided as open access on PubMed. Previous papers from this study cover food security, physical activity of preschool-aged children, and economic hardship and depression among women. Visit pubmed.gov and search *Ninos Sanos*. Copies of all papers can be obtained from the Principal Investigator, Sara A. Quandt, PhD (squandt@wakehealth.edu).

Health Network, MCN's mobile bridge case management system, helps mobile patients with any ongoing condition to access health services, transfer medical records, and more – and it is available for mobile pediatric patients as well. Learn more about Health Network at: <https://www.migrantclinician.org/services/network.html>

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with a chronic disease management team — had a higher social determinant risk score, compared to the low-risk population. In addition to managing their health concerns, these patients must confront overlapping pressures that may be additionally affecting their health including lack of transportation, lower income, insecure housing, low educational levels, and limited English proficiency. (See sidebar on early data results.)

Michelle Jester, NACHC's research manager, says health centers are acting on the data. "In a lot of cases, PRAPARE is identifying new needs that health centers did not realize they had," she said, and cited several examples: at a health center in California, patients indicated via PRAPARE that a lack of childcare was limiting their ability to make and keep appointments, so the health center partnered with daycare facilities and began to rethink onsite childcare. Another health center discovered that transportation was a significant issue, so they increased their transportation services, mobile clinics, and other in-community outreach programs. Several health centers, Jester noted, are combining PRAPARE data with outcome and utilization data to develop patient risk scores. "Some [health centers] are geo-mapping the data, and mapping where there are certain areas with certain needs," identifying food deserts, a lack of transportation, or other barriers. Health centers have been using that data to advocate for more services in those regions, Jester said, for example, by pushing local or regional transportation authorities to expand in an area that lacks transportation.

The PRAPARE data are building a larger picture of patients' needs that is mobilizing health centers to partner with community action agencies, nonprofits, and other community groups to share information and resources to best address patients' needs as a whole community. "Head Start might track truancy, which a health center wouldn't be tracking, and so they have different data sets that can add value in having that full picture of a patient," Jester noted. Health centers serving agricultural workers will have better data on how many agricultural workers or family members attend their clinics. Additional questions around housing and food security are helping health centers adjust their programs for their agricultural workers to better serve their specific needs. In addition, health centers using PRAPARE are now populating a nationwide set of data on the specific barriers that agricultural workers are facing, Jester said. Learn more about PRAPARE, and access implementation tools, webinars, and other resources at NACHC's PRAPARE page: www.nachc.org/prapare.

Health Network and PRAPARE

In 2016, just as PRAPARE was set to launch, Migrant Clinicians Network was beginning to develop its new database to better serve patients enrolled in Health Network, MCN's bridge case management program. Over the course of the following year, MCN configured the new database to allow for the integration of PRAPARE data, in which one health center's PRAPARE data can be transferred to the next health center, as a mobile patient moves.

"When we started thinking about that data and [Health Network] case management work, so much of case management isn't just 'are you taking your medication every day?' It's more about, 'How can I help you access care and manage your health in general?'" explained Anna Gard, RN, who assisted MCN in the development of the new database. "One piece of this is: 'Let me help you find a health center.' But the larger pieces around effective case management are, 'How are you going to get there? Is there public transportation? How are you going to pick up your medications if you live in a hostile community and you're afraid of leaving the house?' PRAPARE gives a structured format to capture [these] data, in a form that's been tested and validated."

As more health centers provide case management and chronic care management to address the social determinants of health, Gard noted, integration of the PRAPARE data with Health Network, a virtual case management, seemed to make sense. Now, the Health Network team is working to fit PRAPARE into their own workflow.

Saul Delgado, Health Network Data Specialist, who has been integral in building and launching Health Network's new case management system, notes that asking such personal questions over the phone, when a patient doesn't have transferrable PRAPARE data from a previous health center, can be challenging. "When we call, the patient doesn't know you. They're very scared to answer these kinds of personal questions, whereas when you go the clinic, you at least see the nurse or case worker face-to-face," he explained. But he recognizes the utility of the data, and has developed the PRAPARE data screens within the database to be easily accessed from the main patient information screen. With drop-down menus, Health Network Associates can populate the information they hear from patients, like how many people live with them in their household, or if they're worried about losing their home. The information, either attained from a previous health center or inputted by a Health Network Associate, will be transferred when the mobile patient gets to his or her next destination, just as the basic medical records do.

"Health centers are doing more to integrate social and behavioral determinants of health, and we're recognizing that all of those things have to be integrated with care management. So we're on the forefront," Gard concluded.

Early Findings of PRAPARE DATA

The data of roughly 7,000 patients were analyzed, grouping patients according to their risk factor (in which a "high-risk" patient is one with co-morbidities or who are actively working with a chronic disease management team) and determining how many barriers to health patients have faced (termed "social determinant risks"). Among high-risk patients, 20 percent said that lack of transportation inhibited their ability to get to medical appointments, work, or other basic important obligations. Other common social determinant risks included limited English proficiency (32 percent), less than a high school education (32 percent), lack of insurance (25 percent), experiencing high to medium-high stress (24 percent) and unemployment (18 percent). The most common social determinant asset was social integration, with upwards of half of patients seeing those they care about five or more times a week.

In line with recent research, the early PRAPARE data indicated that high-risk patients were primarily people of color, with just 38 percent of high-risk patients identifying as white versus 68 percent white patients in the general population.

Seven health centers looked specifically at whether there was a correlation between hypertension and patients facing a higher number of social determinant risks. The conclusion found a "moderately strong relationship," showing that as the score of the number of social determinant risks went up, so did the likelihood of that patient experiencing hypertension. Preliminary analysis has also found that those with stress were far more likely to have uncontrolled hypertension.

The data were limited by not incorporating enabling services and other non-clinical interventions at the health center level that future data analyses will include. The PRAPARE data is now collecting standardized enabling service information through an "enabling services accountability project," wherein each enabling service is categorized. PRAPARE provides an implementation packet that includes a handbook and toolkit to help health centers accurately code their enabling services.

PRAPARE Data

Through PRAPARE, health centers ask standardized questions to determine a patient's social determinant of health risk. Here is an abbreviated list of the 21 questions asked; within the PRAPARE format, each question is followed by a set of multiple-choice answers. Some questions are edited for brevity or clarity.

1. Are you Hispanic or Latino?
2. Which race(s) are you? Check all that apply.
3. At any point in the past two years, has seasonal or migrant farm work been your or your family's main source of income?
4. Have you been discharged from the armed forces of the United States?
5. What languages are you most comfortable speaking?
6. How many family members, including yourself, do you currently live with?
7. What is your housing situation today?
8. Are you worried about losing your housing?
9. What is your current address?
10. What is the highest level of school that you have finished?
11. What is your current work situation?
12. What is your main insurance?
13. During the past year, what was the total combined income for you and the family members you live with?
14. In the past year, have you or any family members you live with been unable to get any of the following when it was really needed? (Answers include food, utilities, medicine or health care, phone, clothing, and child care.)
15. Has lack of transportation kept you from medical appointments, meetings, work, or from getting things you needed for daily living?
16. How often do you see or talk to people that you care about and feel close to?
17. How stressed are you?
18. In the past year, have you spent more than two nights in a row in a jail, prison, detention center, or juvenile correctional facility?
19. Are you a refugee?
20. Do you feel physically and emotionally safe where you currently live?
21. In the past year, have you been afraid of your partner or ex-partner?

The National Association of Community Health Centers (NACHC) website (www.nachc.org/prapare) has the complete list of questions and offers an implementation action toolkit to help health centers prepare to integrate the data collection system into their electronic medical record.

Preparing for the Next Big One Mobilizing the Community in Puerto Rico

By Claire Hutkins Seda, Writer, Migrant Clinicians Network, Managing Editor, *Streamline*



In La Perla, a small neighborhood on the edge of San Juan, many homes still sport blue tarps, while others have no roof at all.

MCN's emergency preparedness initiative in Puerto Rico is supported by the Bristol-Myers Squibb Foundation



Staff from Hospital General Castañer participate in MCN training



Over one year later, Hurricane Maria continues to haunt Puerto Rico. Blue tarps still top homes in villages and towns across the island, as residents struggle to afford the necessary roof and structural repairs. Yet something else hangs on tightly to Puerto Rico since Maria, the opposite of the physical destruction that is still so evident: Puerto Rico's resiliency and determination, which define the post-Maria era.

"These communities were isolated after the hurricane — but there were strong people there, who showed resilience, and who were the key to developing the capabilities to work through [the aftermath]," recalled Marysel Pagán Santana, MS, DrPHc, MCN's Program Manager in Puerto Rico. "Through it, they were protecting the health of the community — and that's something anyone can be proud of."

It's also something important to replicate and advance, to assure health centers will be ready and mobilized, when the next disaster strikes. Migrant Clinicians Network's project, "Mobilizing Communities in Puerto Rico to Meet the Needs of Vulnerable Populations Before, During, and After a Natural Disaster," is a multi-year effort supported by the Bristol-Myers Squibb Foundation that seeks to apply a community mobilization framework to emergency preparedness and to reinforce, replicate, and institutionalize the leadership efforts that community health centers showed after the disaster, in preparation for the next one.

In the first year, MCN is piloting the project with two community health centers in Puerto Rico, Hospital General Castañer and Corporación de Servicios Médicos. Both health centers have partnered with MCN before on several initiatives and programs, including environmental and occupational health, and Zika prevention. Now, the two community health centers will lead the way in this new effort. After the initial pilot year, the project will launch in additional health centers.

"We developed this project in close coordination with our partners in Puerto Rico, in response to requests from frontline clinicians after Hurricane Maria," noted MCN's Amy Liebman, MPA, Director of Environmental and Occupational Health. "We are confident that this Puerto Rican-led effort will further fortify the amazing resiliency that health centers have shown in the event of another disaster."

In November, Pagán Santana joined Liebman and Alma Galván, MCH, Senior Program Manager, to facilitate the first in-person trainings of clinicians from the two partner health centers. The cross-sectional group of clinicians, including outreach workers, gathered to assess their community resources, networks, and skills that they used after Maria, and can further develop in preparation for the next big disaster.

"We look forward to our continued collaboration with our Puerto Rico community health center partners to address emergency preparedness through the lens of community mobilization," Liebman added. "We have so much to learn from their resiliency and leadership."

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February 22-24, 2019

Western Forum for Migrant and Community Health

Portland, OR
www.nwrpca.org

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Caribbean Strong: Building Resilience with Equity

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March 27-31, 2019

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www.nachc.org

May 6-8, 2019

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Albuquerque, NM
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