How Three Communities in Puerto Rico Mobilized to Prepare for the Next Big Disaster

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



wo years ago, Hurricane Maria slammed into Puerto Rico, dismantling basic infrastructure. Must of the island was left without water, food, power, transportation, or communication for weeks, and in many cases, months. Almost 3,000

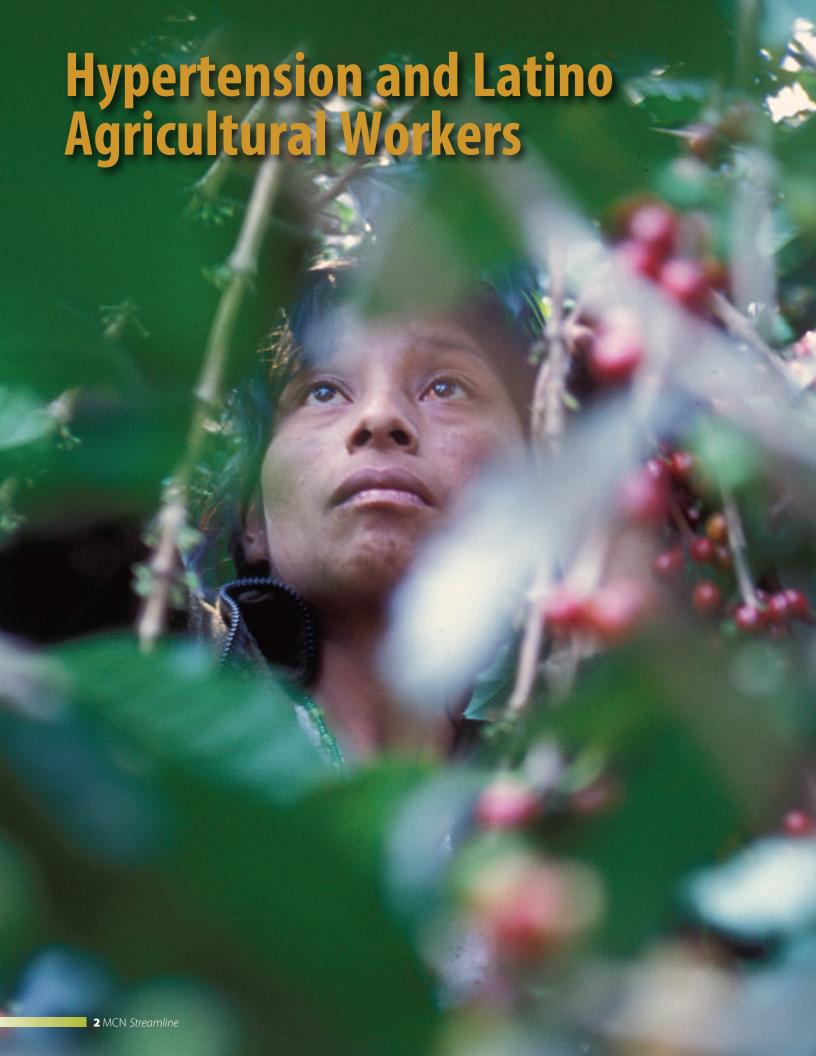
people died.^{1,2} Fused into the mourning is the stark reality that another storm of such magnitude and destruction can happen again. In the aftermath of the hurricane and to encourage public preparedness for future hurricanes, the Puerto Rican government

launched a campaign that runs on television, radio, and social media, recommending that residents have ten days' worth of food and water on hand. Marysel Pagán Santana, MS, DrPH, Program Manager for Migrant Clinicians Network based in San Juan, recognizes that such a store of food and water is unattainable and not sustainable for many Puerto Ricans.

"For many people, their first need is to eat," and, with limited income, they may be

¹ Milken Institute School of Public Health, George Washington University. Project Report: Ascertainment of the Estimated Excess Mortality From Hurricane Maria in Puerto Rico. 2018. Available at: https://prstudy.publichealth.gwu.edu/.

² Santos-Burgoa C, Sandberg J, Suárez E, et al. Differential and persistent risk of excess mortality from Hurricane Maria in Puerto Rico: a time-series analysis. Lancet Planetary Health. 2018;2(11). doi:10.1016/s2542-5196(18)30209-2.



atino agricultural workers across the US are at a higher risk of high blood pressure. Addressing the onset of hypertension in newly arrived immigrant patients is important, as chronic conditions may worsen, the longer the individual is in the US and adopts American lifestyle habits. While data specific to Latino agricultural workers is lacking, the Latino population as a whole has an increased risk. While Latinos are just as likely as whites to have high blood pressure, Latinos have 24 percent more poorly controlled high blood pressure compared to whites. Several factors may increase a Latino agricultural worker's risk:

- Cultural and Linguistic Differences:
 Health care practices and beliefs, and dietary norms may differ, both from the general US population and among different cultures and Latino subgroups.
- Medical Knowledge and Awareness:
 Latinos have a similar incidence of high
 blood pressure, but, in addition to lower
 levels of treatment and control, Latinos
 also had lower levels of awareness compared to non-Hispanic whites. Among
 Latinos, the lowest levels of awareness,
 treatment, and control were among those
 without health insurance.³
- Social Determinants: Poverty, unreliable transportation, lack of insurance and prescription coverage, inability to buy services and supplies or to modify diets, and substandard housing that may lack refrigeration, privacy, or adequate bath facilities are some of the determinants that contribute to an unhealthy environment that may compromise well-being.
- Mobility: Many agricultural workers still move for work. Mobility causes discontinuity of care and leaves patients in unfamiliar health care systems.
- Gender: Men have higher rates of hypertension-related mortality than women.⁴

• Work Environments:

- Many workplaces do not include benefits, supports, and protections, such as disability coverage or worker's compensation.
- Excessive and prolonged exposure to heat, lack of time for rest, and inability to stay hydrated affect health. (See sidebar on chronic kidney disease.)

Each patient may fall into one or more category of increased risk factors – or none. The

term "Latino" masks the diversity among patient populations. Indigenous groups in Mexico may have different cultural beliefs, diets, and languages than non-indegenous communities from the same region. Smoking is a risk factor for high blood pressure; 66% more Puerto Ricans smoke than Mexicans.² An urban Latino population may walk less on a daily basis than a rural one, and incur a higher risk of acquiring hypertension due to lack of exercise.

For any patient suffering from hypertension who intends to move, continuity of care is essential. MCN's Health Network provides personal case management of chronic conditions like hypertension. Health Network Associates contact patients, help them find an appointment in their next location, transfer medical records, and more. To learn more about Health Network or to schedule a training for your clinic on how to use Health Network, contact Theressa Lyons-Clampitt,

MCN's Senior Program Manager and Training and Technical Assistance Coordinator, at tlyons@migrantclinician.org.

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CKDu: Why Catching Hypertension Is Critical for Young Latino Agricultural Workers

Hypertension among young Latinos may be an early sign of chronic kidney disease of unknown ideation (CKDu). Over a period of ten years, over 20,000 young men mostly agricultural workers - died in Nicaragua from CKDu; Sri Lanka has also documented 20,000 deaths from the disease. Early data suggest a link between kidney disease and regular exposure to extreme heat and dehydration. Meanwhile, increases in CKDu have been documented among agricultural worker populations throughout Central America, in Brazil, Qatar, India, Egypt, and many other countries with warm climates around the globe. As climate change progresses, this epidemic may travel northward or intensify. As migration continues apace, many young, seemingly healthy agricultural workers already working in communities around the United States may have early-stage CKDu. With few signs presenting in the early stages, many affected young adults may continue to work day after day in conditions that will only exacerbate their declining kidney function. It is important for clinicians to question their patients about their work conditions and counsel rehydration and attention to symptoms such as: swelling in the feet and ankles, dark urine, decreased mental alertness, and reduced urine output.

For more information: La Isla Network is dedicated to ending chronic kidney disease of undetermined causes (CKDu) among workers and their communities worldwide. Visit their website for more on CKDu, the latest research, and country-by-country maps of CKDu incidence: www.laislanetwork.org.

The Worker Health and Efficiency (WE) Program, a collaboration between La Isla Network, the Occupational Safety and Health Administration, and health experts, aims to end the CKDu epidemic. Their interventions that promote rest, shade, and water for outdoor workers and efficiency trainings have shown promising early results, including a decline in reports of heat stress symptoms; a 100% drop in heat stroke; a stabilization of declining kidney function among workers; and increased worker productivity. Learn more about their interventions at: www.weprogram.org/

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unable to stock up on water for the future when they need their money to pay for basics now, she said. Additionally, some Puerto Ricans with chronic diseases may struggle to find shelf-stable foods that will meet their dietary needs. "If you have chronic kidney disease or diabetes, it's not as easy as 'buy food and put it on the shelf,"" Dr. Pagán Santana said. A recognition of the complexities of emergency preparedness, and a community-built and -informed plan to address them, are at the center of MCN's "Mobilizing Communities in Puerto Rico to Meet the Needs of Vulnerable Populations Before, During, and After a Natural Disaster," which launched projects in three Puerto Rican rural communities one year ago under a two-year grant from the Bristol-Myers Squibb Foundation. Each community has since risen to the challenge, and the initial results of their projects were presented during a plenary session at the East Coast Stream Forum in October in San Juan. The results, says Dr. Pagán Santana, are specific to and tailored for the community, but include applicable lessons in community mobilization.

"The three projects are being molded by both what the community needs and what the community can make work, because each community works differently," Dr. Pagán Santana said. Each community drafted plans and maps to respond to identified community vulnerabilities, and include the participation of various actors in the community and the local community health center. For this project, MCN identified three communities within the service areas of community health centers and longtime MCN partners Corporación de Servicios Médicos (CSM) and Hospital General Castañer. Corporación de Servicios Médicos, a large community health center serving several rural communities, was the health center partner for Parcelas Ángel Vélez and Comunidad Manuel Candelaria, two small communities within the town of Bayoan in the Hatillo municipality. The third community, Castañer, partnered with their health center, Hospital General Castañer.

Parcelas Ángel Vélez

The residents of Parcelas Ángel Vélez, a northern coastal village, already had developed a community program around security, one that involved a cross-section of community leaders including local police. Consequently, when leaders came together to envision how to begin their community mobilization plan, the security council was designated to be the driver of the new project. The council, which already had office facilities and buy-in from the

community, could pivot their attention toward training their team on emergency preparedness and activate pre-existing partnerships, like with local government leaders, on issues around disasters. This already-established community infrastructure gave Parcelas Ángel Vélez a head start, says Dr. Pagán Santana. "They worked fast on mapping where the flooding streets would be, who lives there, and how they're going to address the floods," Dr. Pagán Santana said. They partnered with CSM to determine where their most vulnerable community members are in relation to the flood maps, including patients that cannot easily leave their houses and patients with chronic illnesses, to map out where resources and medical supplies needed to go.

"They were already a team, so they were used to meeting monthly, they were already engaged, and they had already identified themselves as leaders in the community, so they were willing to take on the responsibility of sustaining the plan," Dr. Pagán Santana reflected. "They know it's a long-term project."

For each of the health centers, MCN provided training and technical assistance. As they engaged in the community, MCN extended to the health centers targeted technical assistance based on project activities. When the team in Parcelas Ángel Vélez determined part of their emergency plan would include a warehouse to accept supplies, for example, MCN stepped up to provide a training on supplies management, a skill with which none on the team had previous experience. "When you're in charge of supplies and dispatching them, you need to be careful how you organize it. You don't want to provide the wrong medicine or spoiled food," Dr. Pagán Santana noted. The final results include an extensive community mobilization plan, community vulnerability maps, strengthened partnerships with the health center, and a dedicated team of community members to review the plan on an annual basis.

Comunidad Manuel Candelaria

In neighboring Comunidad Manuel Candelaria, also served by CSM, community leaders were less organized, and also less inclined to identify as leaders, which led to early organizational hiccups. "The community leaders do activities for the community like a Christmas tree lighting, but they're not incorporated, and they don't identify as a team," said Dr. Pagán Santana. "When Maria happened, people were reaching out to them," reflecting the community's recognition of their status as leaders, but the leaders were reticent to

define themselves as such. Part of the process was to help those leaders accept their leadership and the responsibilities that come with it, or abnegate it and allow someone else to step up. "Many of them were willing to serve. But there was resistance to being appointed to have the responsibility to carry out [an emergency] plan," Dr. Pagán Santana found. As a result, the health center stepped up to provide the long-term structure, where community leaders can fill in, rather than asking the community leaders to be the head of the plan, with the health center as a support. Under the plans, CSM will restructure one of its health fairs each year to focus on emergency preparedness, including door-to-door visits to update maps on patients who may be more vulnerable after a hurricane. With CSM fully on board, and a structure in place, community leaders were willing to step up and lend their part as organizers and point-people in the community. "There was more willingness to commit when the community health center was backing it," Dr. Pagán Santana concluded, and the team was able to move forward with developing the nuts and bolts of the plan. "The community health center will help sustain the plan, even though they're not running it."

Castañer

Each community ran into different barriers. In Castañer, the barriers were significant. At the onset of the project, outreach workers from Hospital General Castañer began knocking door-to-door to determine the level of preparedness that residents already had, to begin developing maps of patients who would need help immediately after an emergency. Instead, they found patients needing immediate help now. They met elderly residents living in homes with damaged roofs, patched with blue tarps, and unable to get government assistance. Numerous households had family members struggling with mental and chronic illnesses that had gone unaddressed or undiagnosed. Some families didn't have sufficient access

"This community had more difficulty because it presented barriers unrelated to team organization: emergency response and services hadn't reached the community" before, during, and after Hurricane Maria, Dr. Pagán Santana said. As a result, many community members face tremendous overlapping health concerns that have been unaddressed. Additionally, community members are "used to not expecting anything," Dr. Pagán Santana found, and frequently don't have access to services that they pay for like running water, power, or



even an ambulance when needed.

"How can you get prepared for an emergency, if you [currently] don't have enough food in your house to eat? If your school is closed, and you have to travel two hours from your home to get to a school --how do you prepare?" Dr. Pagán Santana questioned. The health center team felt overwhelmed and frustrated, so the team regrouped to determine the best next steps for the community.

"We decided to work on getting resources," Dr. Pagán Santana said. MCN provided a training on community mobilization for advocacy, which case workers could use to encourage community members to advocate by identifying the community's needs and talking with local legislators. They also began resourcemapping government and private resources available to the community, for basic services beyond emergency assistance.

Finally, they mobilized the hospital's case workers and social workers to prepare

for an influx of new cases. Now, when the health team goes into the community, they are armed with resources and nextsteps for people who exhibit concerns outside of emergency preparedness which may be more urgent, allowing an avenue to address current needs while anticipating and documenting future post-disaster needs.

"It's not just about the plan; it's about how you build around it to make it sustainable, and what else you can address that may have an impact in disaster preparedness," noted Dr. Pagán Santana. "You think it's all about making a plan or buying supplies -- but not everyone can prepare in the same way." For Castañer, the health team needed to step back before they could move forward.

Stream Forum Plenary and Next Steps

With the three community's plans completed and presented to the communities, the next step is to implement them. Dr. Pagán

Santana will facilitate meetings with community health center staff and managers to finalize implementation into workflows to sustain the project into the future. In October, Dr. Pagán Santana and MCN's partner health centers presented their initial findings, outlined the process they went through, and indicated ways to use this community mobilization framework for other concerns beyond emergency preparedness at the plenary session at the East Coast Migrant Stream Forum in San Juan.

For the project's second year, four more communities will develop plans and maps. CSM plans to complete the process a third time, with a different community in its service area. MCN hopes to extend the project to more communities in Puerto Rico and beyond.

Contact Marysel Pagán Santana, MS, DrPh, for more on this project: mpagan@migrantclinician.org.

Creative Corner



Editor's note...

Stress is a daily part of a clinician's life. Many clinicians work through some of the tough issues they encounter in the clinics in a creative way. Here, Tom Himelick, PA-C, MMSc from New Mexico shares his poem. If you'd like to contribute a poem, short personal essay, or story about your work, please share it with us.

SUBMISSIONS

Email Claire Hutkins Seda, managing editor, at chutkins-seda@migrantclinician.org.

He thought it was Science

By Tom Himelick

He thought it was Science.
Cells, lots of chemistry, a merciful taste of physics.
Dutifully, he memorized, suffered exams
auscultated lungs, thumped abdomens
dull note versus tympani
If this, then that
reflexively his mind jumped from A to B
it was all logical it was all science
The white coat gave him answers,
the power to heal, yet
not always.

He cured those needing no cure, but could not save those reaching for a hand their lives measured out in refills, finally without renewal.

He had not learned to separate pain from Pain, sick from Sick. Gradually he began to understand.
He had assumed Death was the foe vanquished by fourth generation antibiotics, antiretrovirals, bypasses and the hiss and tick of machines.
Yet sometimes Death won.
With no cure, he had not learned to ask

What do you want? What do you hope for?

For the most part he kept moving and so did his patients.

Hearts did not fail, lungs crackled, but filled again, and again, and again.

Viruses without cure were held quiescent, hidden. Lives virtually normal where 20 years ago most died. Yet other patients faced Darkness and understood. They said, It's bad, isn't it? They saw the end.

They saw the end.

Then he knew too much yet too little.

The dream of a key just out of his reach came back, again, and again.

Where was the Science, the Miracle?

The dragon slain by heroics?

Strangers suffered and he could not save them.

Even family were beyond his reach and misery won again.

He thought it was Science and learned otherwise.
Yet again he rose the stethoscope around his neck to dance awkwardly to search for words to share the pain to share the illness

and to share a hand on the shoulder when nothing else will help.

Pregnant and Without Health Care:

Dr. Adrian Billings on New Public Charge Rule

[Editor's Note: In October, a US district court blocked the Department of Homeland Security from implementing the proposed public charge rule. As a result, the rule did not go into effect. Nonetheless, the proposal of the rule has, for many months, caused a "chilling effect" among immigrant patients with legal status, and threatens to continue to prompt legal immigrants to discontinue the health coverage for which they are eligible. Here, we speak with one physician about the chilling effect he has seen at his health center. A version of this article was first published on MCN's blog. Subscribe to the blog by visiting: https://www.migrantclinician.org/community/bloq.html.]

his summer, a woman who was four months pregnant discontinued her Medicaid health care, despite being legally eligible for the coverage, and planned to pay out of pocket for prenatal care, childbirth, and postpartum care – thousands of dollars in total. Her clinician, Adrian Billings, MD, PhD, FAAFP, a cradle-to-grave doctor and Chief Medical Officer at Preventative Health Care Services, a community health center in border town Presidio, Texas, was rattled.

"She was being advised by an immigration attorney... to not accept any public [assistance], for fear of public charge, that will penalize immigrants if they accept any form of public assistance," he recalled. According to Protecting Immigrant Families , federal public charge determinations seek to identify people who may depend on the government as their main source of support. If the government determines that a person is likely to become a "public charge," it can deny that person admission to the US or lawful permanent residence. In other words, a legal alien resident may decide to disenroll from Medicaid health care coverage, even if she is eligible for the benefit, out of fear of jeopardizing her ability to get a green card later on.

The Trump Administration threatened a change in the rule early in 2019, which caused many patients, like Dr. Billings' pregnant patient, to drop coverage before the final rule language was even announced. When the final text of the rule was released in August, it was clarified that prenatal care will be an exception; a legal resident utilizing Medicaid for prenatal services would not jeopardize her immigration status under the new public charge rule. But fear, confusion, and uncertainty are driving pregnant patients to disenroll anyway. "Women are still going

to avoid Medicaid, despite assurances by the government that this will not affect their immigration status. The fear has been spread," Dr. Billings believes.

October's court injunction holds off the implementation until the court battle is settled, but providers have already witnessed dangerous repercussions across the country, and last month's injunction does not reinstate the health insurance of hundreds of legal immigrants who are eligible for coverage, who, out of fear or caution, have terminated their coverage. A Kaiser Family Foundation survey found that "nearly half (47 percent) of health centers reported that many or some immigrant patients declined to enroll themselves in Medicaid in the past year."

"Immigrants may have all the right documentation, and the new public charge rule may be held up in court, but immigrants' concerns over possible future ramifications will prevent them from seeking care in a timely way," said Laszlo Madaras, MD, MPH, Chief Medical Officer of Migrant Clinicians Network, who works in an emergency room as a family doctor in Pennsylvania. He fears that patients will avoid getting preventative or early care, leading to less effective and more expensive emergency room visits further down the road. Discouraging immigrants with legal status from utilizing their health care is "an inhumane way to treat people," he added.

By mid-summer, months before the final rule language was released, two of Dr. Billings' pregnant patients, who could have been covered by Medicaid, had dropped out of insurance coverage on the advice of their two separate attorneys.

"The big concerns for me as a physician are: for the health of my patient, who legally has the right to apply for Medicaid; for her unborn child, who can't make the decision for their own health; and for her other children, who wouldn't be able to access Medicaid [either]," Dr. Billings said. "I'm worried about the direct consequences, of not getting the health care they need, and not being able to afford the health care they need."

But, should the rule make its way out of the courts, he's also concerned about the indirect consequences, like the financial strain it puts on systems like Federally Qualified Health Centers, rural clinics, and critical access hospitals that already have a narrow profit margin. "If [the new rule on public charge] reduces the number of patients that have coverage, that may tip the balance of financial viability," he noted.

"It also produces stress and strain on providers like me, who are taking care of this population but who can't get the labs they need," because patients paying out of pocket may choose to forgo labs that don't appear essential, Dr. Billings said. "For those two pregnant women, a patient panel is several hundred dollars; an ultrasound is several hundred dollars," he said, and other tests and labs pile on more bills, all which leads patients to ask providers which are the most important. "There's a standard of care in obstetrics where, for a prenatal panel, they're all important." When a patient forgoes certain tests or labs, "this puts stress on the provider, because they're taking care of a patient that doesn't have adequate care," Dr. Billings emphasized. He also added that it may increase liability concerns of providers who are wary of caring for a patient without a full understanding of their health. "That'll make providers who are risk-averse think, 'I'm going to move away from the border,' or 'I'm not going to deliver babies anymore," he worried. "It makes it even harder to recruit and retain providers."

Fortunately, Dr. Billings' health system was able to absorb the costs of care for the two women, paying for the needed prenatal care, including labs. "But it's just two patients. If two were to become 200, we couldn't afford to do that," he said. For health systems with high immigrant patient populations, the new public charge rule "will exacerbate the financial strain. The costs are going to be borne by the patient, or the local health systems that take care of the patient." Even before its implementation, the rule had already had significant implications in the health coverage of many immigrants – and that is sure to continue.

Resources:

While the new public charge rule has not gone into effect, continuing patient education efforts will reduce confusion and temper the chilling effect that the rule has already had on patients around the country. Here are some resources to help with patient communication around the rule.

Protecting Immigrant Families has extensive resources on the impact of the new public charge rule: https://protectingimmigrantfamilies.org/
State Public Benefits Charts: https://bit.ly/2Pfeu0g
Interactive Map of Benefits Eligibility:

Interactive Map of Benefits Eligibility http://map.niwap.org/

The California Primary Care Association's resources on public charge include modules for service providers: https://bit.ly/2pKwjtn.



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