

One Year after the Storms: Recovery and Health Care in Puerto Rico and the U.S. Virgin Islands

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One year after Hurricanes Irma and Maria made landfall, Puerto Rico and the U.S. Virgin Islands (USVI) are still feeling the storms' effects. Drawing on key stakeholder interviews and public reports, this brief provides an overview of recovery status and preparation efforts for the current hurricane season one year after the storms, with a focus on the territories' health care systems. It finds:

Recovery has progressed, but it has been slow and uneven, and challenges remain. Although power has been largely restored to the territories, Puerto Rico still experiences power instability, and its two offshore islands are still not connected to the electrical grid. In both territories, economic recovery and home repair progress are moving slowly. Heading into a new school year, many children continue to face disrupted school schedules due to delays in repair and construction of temporary classrooms. Post-hurricane outmigration has left a disproportionately elderly, disabled, and economically disadvantaged population in the territories as they cope with recovery.

One year later, mental health remains a crisis in both territories. Puerto Rico has experienced an increase in both deaths from suicide and calls to the central suicide hotline over the nine months following the hurricanes. Residents also continue to deal with physical health challenges exacerbated by the storms, such as management of diabetes and other chronic conditions.

The territories' health care systems have seen progress with recovery, but serious gaps remain. Providers in both territories have restored access to some services limited by hurricane damage, while other services remain closed as providers await damage assessment and rebuilding. Provider shortages in mental health, nursing, and certain subspecialties present challenges to service delivery in both territories. Recovery of the health care system in Puerto Rico's offshore islands and rural areas lags behind the rest of the territory. In USVI, hospitals and clinics remain damaged and function well below needed levels of service delivery and inpatient capacity.

Federal financing has been critical to recovery, but stakeholders report barriers to accessing federal recovery funds and are concerned about the expiration of temporary Medicaid financing support at the end of September 2019. Territory health officials have used additional Medicaid funds from the February 2018 budget bill to support coverage and increase reimbursement rates, but they worry about long-term financing. Officials cited complex rules, extensive paperwork, rotating FEMA staff, and poor communication as key barriers to accessing the array of federal recovery funds. Health care

providers have found support from nongovernmental organizations (NGOs) and philanthropy helpful in moving recovery forward with less bureaucracy.

The territories are moving forward with broader health system changes, including significant spending cuts in Puerto Rico. The Financial Oversight and Management Board, created by Congress to oversee broader debt restructuring in Puerto Rico, approved the territory's May 2018 fiscal plan that calls for \$9.5 billion in spending cuts over the next six years. Health care system changes outlined in the plan may complicate the territory's recovery from the hurricanes, as implementation of major changes is set for the fall of 2018. At the same time, USVI's broad delivery system efforts that began before the hurricanes are moving forward alongside the territory's work on hurricane recovery and preparation.

In the midst of recovery from the 2017 hurricanes, territory officials and health care providers are preparing for the 2018 hurricane season. Top priorities include development of alternative energy sources, such as solar power and back-up generators, as well as improved processes to identify and track patients that may need medical transfers or special care considerations. Some officials reported that they have improved procedures for the periods immediately before and after a hurricane, while others reported that drills and early storm events reveal continued gaps in preparations for another storm. These officials expressed particular concern about areas that are still suffering the most from last years' storms.

Both Puerto Rico and USVI have released comprehensive recovery plans, but these plans call for major capital investments. Questions remain about both the availability of additional federal financing to continue recovery efforts and the possibility of long-term changes to Medicaid financing before the expiration of temporary Medicaid funds at the end of September 2019. Looking ahead, the territories are focused on making it through the 2018 hurricane season and continuing toward full recovery and fiscal stability in the future.

Introduction

This brief provides an overview of the status of the recovery in Puerto Rico and USVI one year after the storms, with a focus on the progress of recovery and the preparedness for the current hurricane season as it relates to the health care systems and health needs of residents. It draws on public reports and key phone interviews conducted between July and September 2018 with the territories' government and health officials and providers. The brief builds on earlier work that examined [how the territories were faring six months after the storm](#) and [additional work on post-hurricane public health and resident challenges in the territories](#).

Background

Prior to the storms, [Puerto Rico](#) and [USVI](#) faced fiscal challenges, including high rates of debt, poverty, and unemployment, as well as a range of health disparities. In Puerto Rico, the population had higher rates of fair/poor health, heart attack/heart disease, diabetes, depression, disability, low-birthweight infants, and infant mortality than both USVI and the United States overall. The share of uninsured in USVI (30%) was much higher than in Puerto Rico (7%) and the rest of the United States (12%). In addition, Puerto Rico and USVI suffered from poor health infrastructure and a shrinking health care workforce.

Unlike states, Puerto Rico and USVI receive capped federal Medicaid funds and a fixed federal Medicaid match rate that is lower than the rate they would receive if they were states. The 50 states and D.C. receive federal Medicaid funding on an open-ended basis, with a federal match rate that varies based on state per capita income. In contrast, annual federal Medicaid funding for the territories is subject to a statutory cap, with a fixed federal match rate of 55%. This match rate is lower than the rate the territories would receive if it were based on per capita income like the states. Prior to the storms, Puerto Rico was also anticipating a large financial gap as funds provided under the Affordable Care Act (ACA) were running out.

Status of Recovery One Year after the Storms

Recent data show dramatic scope of storm impacts

Hurricane Maria made landfall in Puerto Rico and USVI on September 20, 2017, two weeks after Hurricane Irma hit on September 6, resulting in severe economic and health consequences. The storms caused significant physical damage to the territories' infrastructure and health care systems and exacerbated residents' health care needs, particularly with regard to mental health.

Studies and polls continue to show the widespread impact of the storms. A July 2018 FEMA report notes that Hurricane Irma affected 85% of the combined populations of Florida, Puerto Rico, and USVI, while Hurricane Maria affected 100% of the USVI and Puerto Rico populations.¹ A [recent Washington Post/Kaiser Family Foundation Survey of Puerto Rico Residents](#) finds that eight in ten people residing in Puerto Rico had home or vehicle damage or employment or health setbacks due to the storms.

After additional analysis, Puerto Rico's death toll from Hurricane Maria increased to more than 46 times the original official count. Several months after the hurricanes, Puerto Rico's official death toll from Hurricane Maria stood at 64.² A study commissioned by the Governor and released on August 29, 2018, finds total excess mortality of 2,975 deaths in the six months after Hurricane Maria, accounting for post-hurricane outmigration and population decline.³ In light of these findings, Puerto Rico's governor revised the official death count to 2,975 while calling the number an estimate.⁴ Five deaths are directly attributed to Hurricanes Irma and Maria in USVI.⁵

Slow and uneven progress of recovery, with challenges remaining

Although power has been largely restored to the territories, Puerto Rico still experiences power instability, and its remote areas are still not connected to the electrical grid. In mid-August 2018, Puerto Rico's Electric Power Authority (PREPA) announced that it had restored power to the final remaining customers who had lost electricity in Hurricane Maria.⁶ However, Vieques and Culebra, Puerto Rico's two offshore islands, remain disconnected from the territory's main electrical grid due to damage to underwater power lines. These areas are receiving power via large generators, an arrangement expected to continue for two years until permanent repairs are complete. Rural municipalities in Puerto Rico, which are also still facing power instability, rely on large generators as backup to grid power, or they are using internet or satellite connections. A July/August [Washington Post/Kaiser Family Foundation Survey of Puerto Rico Residents](#) reveals that 77 percent of Puerto Rico residents had lost power for an hour or more at least once in the month before the survey, and 31 percent had experienced such an outage at least four times in the last month. These frequent outages were particularly common for residents in the north-central and western parts of the island. In USVI, all electricity customers had their power restored by March 9, 2018,⁷ and power is generally stable.

In both territories, economic recovery is slow. In Puerto Rico, local leaders report that the level of job creation has not sufficiently jumpstarted the economy, although some residents have taken up temporary work in post-hurricane construction. Some territory reports suggest that negative media coverage of Puerto Rico's conditions have hampered efforts to promote tourism, despite the territory's ability to welcome tourists and the improvement of its most popular areas.⁸ Total lodgings registered with the Puerto Rico Tourism Company in April 2018 were down over 47% from April 2017, with the decline even greater in non-metropolitan areas.⁹ As of February 27, 2018 (the latest available data), 85% of hotels were operating.¹⁰ Economic progress in USVI is mixed. Although restoration of the territory's beaches, airports, seaports, and other infrastructure is complete, only about half of its lodging options are open, and flights to the territory are at 70% of pre-hurricane levels.¹¹ The total estimated economic impact of the storms on USVI was \$1.54 billion, or nearly 40% of the territory's annual gross territorial product.¹² Six of the territory's 10 largest private employers remain closed until at least 2019.¹³

Many residents still have major damage to their homes, with repairs progressing slowly. Territory officials in Puerto Rico and USVI cited several factors for the slow repairs, including increased construction material costs, labor shortages, and bureaucracy tied to federal funds. Residents applying for federal relief funds to rebuild their homes continue to face challenges with proof of home ownership and appeals processes. According to FEMA, as of August 23, 2018, 1,045 Puerto Rican families were still living in hotels in 27 states and Puerto Rico through the Temporary Shelter Assistance (TSA) program. FEMA and the courts extended this temporary sheltering program five times total, and it expired on September 14, 2018, after assisting over 7,000 families with stays in hotel rooms in 40 states and Puerto Rico.¹⁴ USVI did not request TSA support after Hurricanes Irma and Maria since there was only one hotel operating in the territory.¹⁵ Among other rebuilding programs, USVI has participated in FEMA's Sheltering and Temporary Essential Power (STEP) program, which funds emergency home repairs for qualifying privately owned homes with more than \$33,300 of damage. As of June 2, 2018, FEMA and its USVI partner agency had approved 4,762 out of 9,967 STEP applications and completed construction on 1,328 homes.¹⁶

Schools remain disrupted at the start of the new academic year. In Puerto Rico, 805 schools will serve 298,000 students during the 2018-2019 school year, down from 1,110 schools serving 346,000 students in August 2017.¹⁷ In USVI, over 200 mobile facilities will replace damaged schools for the 2018-2019 school year.¹⁸ After USVI students from multiple schools shared space and attended half-days of instruction during the 2017-2018 school year, the territory's Department of Education announced that all students will attend school full-time in the new academic year, with some at the temporary facilities. While 15 K-12 schools opened as scheduled on September 4, schools using temporary modular classrooms face delayed openings due to ongoing construction.¹⁹

Outmigration and demographic shifts in the population continue to present a challenge to Puerto Rico. In its draft recovery plan published in July 2018, the Puerto Rican government estimated that outmigration tied to Hurricanes Irma and Maria in the two years after the storms could match the previous

decade's level of 14% population loss from 2006 to 2016, although the final recovery plan removes this estimate.^{20,21} As another indicator of outmigration, the number of domestic air passengers leaving the island in the 12 months ending in March 2018 was roughly 125,000 people above trend.²² Due to demographic shifts in outmigration, officials reported that the remaining residents in both territories are disproportionately elderly, disabled, and economically disadvantaged.

Residents' mental and physical health challenges worse after hurricanes

One year after the hurricanes, mental health remains a crisis in both territories. Territory officials and health care providers described high levels of anxiety, depression, and post-traumatic stress disorder (PTSD) among residents. In Puerto Rico, ongoing challenges such as the loss of homes and jobs and delayed repairs contribute to poor mental health, while disruptions in power generation and water trigger PTSD. Anxiety about the next hurricane season has also increased mental health needs. A recent [Washington Post/Kaiser Family Foundation Survey of Puerto Rico Residents](#) shows that 22% of Puerto Rico residents reported that they or a family member either received or needed mental health services following Hurricane Maria, and 13% of those surveyed reported starting new or higher-dose prescription medication for emotional problems since the storm. Suicide rates in Puerto Rico also remain high compared to one year ago. In the nine-month period after the hurricanes, Puerto Rico saw a nearly 18% increase in cases of suicide and a 13% increase in total calls to the territory's main suicide hotline compared to the same period of the previous year.²³ In USVI, officials noted that provider shortages have exacerbated mental health issues. In addition to the loss of Juan Luis Hospital's behavioral health unit to storm damage, the first responder therapists who served patients immediately after the storms have largely left the territory. One official noted that most of USVI's homeless population is struggling with mental health issues.

There are ongoing challenges addressing physical health needs. One year after the storms, health care providers are still seeing increased health care needs related to chronic conditions and medication adherence, particularly for diabetes. Access to dialysis treatment in USVI and on Vieques in Puerto Rico remains limited due to ongoing infrastructure challenges created by the storm. The elderly, people with disabilities, and other special needs populations remain the most vulnerable and need the most support accessing medical services. Among Puerto Rico residents who have a debilitating chronic condition or disability or have a household member who does, [41% of those surveyed in the Washington Post/Kaiser Family Foundation Survey of Puerto Rico Residents said](#) that a health condition had appeared or worsened because of Hurricane Maria. Mental and physical health issues also intersect for some residents. For example, one clinic in Puerto Rico reported high appointment no-show rates, particularly for pediatric immunizations and women's health appointments such as cervical cancer screenings, which could reflect the increased economic challenges facing patients as well as mental health issues. In one instance, a clinic social worker went to check on a mother who missed three pediatric immunization appointments and found that the woman had been in bed suffering from severe depression.

Storms exacerbated territories' health care delivery system and provider challenges

Health care staff shortages present an ongoing challenge in both territories. Officials in both territories reported that the hurricanes have exacerbated infrastructure limitations and an inability to offer competitive salaries, which have been longstanding barriers to recruiting and retaining staff. Both territories cited problems with staff shortages in certain subspecialties or geographic areas. Across USVI, widespread provider shortages have created a major burden on the remaining staff. Schneider Regional Medical Center continues work to address the loss of 175 nurses following the hurricanes. Schneider has offered more competitive salaries, increased recruiting activities, and reengaged contract nursing agencies to address shortages in the emergency rooms, intensive care units, and operating rooms. Still, recruitment efforts have faced the hurdle of a nursing board overwhelmed by demand. Other facilities with staff shortages have reached the point at which overburdened workers have staged walkouts in protest.

In Puerto Rico, historical provider shortages and physician outmigration have continued to strain the health care system following the hurricanes. Patients must sometimes wait six to nine months for specialist appointments following referrals. Puerto Rico's government has offered tax incentives and other strategies to try to fill provider gaps, but provider reimbursement rates in the continental U.S. continue to outpace those in the territories. Some community health clinics reported a 3-5% uptick in patients due to the loss of private providers from the island.

Lack of capacity to handle mental health needs puts additional pressure on hospitals and clinics. Increasing mental health needs and limited outpatient capacity to meet demand result in more people seeking mental health services at hospitals and clinics that may not be best suited to address these needs. Hospital emergency rooms can stabilize patients but may lack the outpatient care required for treatment after hospital discharge. Capacity to address mental health needs is particularly limited on Vieques. The clinic there reported hiring a new psychiatrist to fly to Vieques every two weeks, starting in mid-August 2018, to provide mental health services.

Health care system changes outlined in Puerto Rico's fiscal plan complicate the territory's recovery from the hurricanes. The certified fiscal plan calls for an \$841 million reduction in health care spending by FY2023.²⁴ As part of the plan, managed care organizations (MCOs) will shift from operating in eight regions to one territory-wide region. This change, currently pushed one month later to take effect on November 1, 2018, has caused considerable uncertainty and anxiety among Puerto Rico's health care providers. While some officials expect that the changes could expand networks and patients' access to care, others are concerned about which providers will be included in the new MCO networks. Exclusion from the networks would be a major challenge for some clinics. At the same time, implementation of the MCO changes could complicate the territory's ongoing recovery and preparation efforts.

USVI's broad delivery system efforts that began before the hurricanes are moving forward at the same time that work continues on hurricane recovery and preparation. A number of stakeholders in the USVI are collaborating on delivery system reform via workgroups on topics such as environmental

health, care management, and workforce support. At the same time, officials and providers continue to focus their delivery system efforts on hurricane-related needs, such as increased support for telehealth to meet the demand for mental health services.

Damaged health care facilities continue to seek permanent solutions, particularly in USVI

Recovery of health care infrastructure in Puerto Rico's offshore islands and rural areas lags behind the rest of the territory. While all of Puerto Rico's community health centers on the main island are connected to the electrical grid, the clinics on the two offshore islands of Vieques and Culebra continue to rely on large generators while their underwater power lines are repaired. Dialysis patients on Vieques must still travel to the main island to receive treatment. One clinic director, who reported losing two dialysis patients in this process, has identified a new facility on Vieques to expand dialysis and other services available to patients there, but she is waiting for federal funding to conduct repairs and offer these services. The same clinic director reported interest in opening a home health program on Vieques to serve the needs of the roughly 200 homebound patients who live there. Vieques also still lacks licensing for a vaccine program, causing patients to travel by plane or ferry to the main island for immunizations.

Schneider Regional Medical Center, the hospital on St. Thomas that also serves St. John in USVI, has resumed operations for most services. Schneider is able to provide surgery, emergency, and ancillary services such as pharmacy, occupational and physical therapy, nutritional services, and radiology. However, hurricane damage keeps the hospital's 51-bed inpatient unit and its cancer center closed, limiting both inpatient bed capacity and oncological services. The hospital is delivering chemotherapy on an outpatient basis but transporting patients needing radiation to Puerto Rico for treatment. As of late July 2018, all 49 hemodialysis patients who had been medically evacuated from St. Thomas had returned to the island.

Juan F. Luis Hospital on St. Croix in USVI has two functional operating rooms, down from six, and is able to provide only emergency surgical services a year after the hurricanes. The hospital is in the process of preparing three donated trailers to serve as additional operating units. Due to this limited surgical capacity, non-emergency surgical patients must be transferred to St. Thomas or the continental U.S. for elective procedures. Juan Luis had also evacuated its dialysis patients to the continental U.S. following the storms. As of early September 2018, 21 of these medical evacuees have returned to the island and are receiving treatment from a private provider, while 37 evacuees remain in Atlanta, Georgia. Temporary trailers for dialysis services have faced construction delays but now target a completion date of October 2018.

Both Schneider and Juan Luis hospitals are awaiting the outcome of FEMA's assessment of their facilities for either repair or replacement. In the February 2018 Bipartisan Budget Act (BBA),²⁵ the territories received statutory permission to rebuild "critical services," including hospitals, regardless of their pre-hurricane condition. Under the BBA permission, the USVI hospitals may be able to rebuild to a

higher standard than their pre-hurricane facilities if the FEMA assessments call for complete replacement. However, since rebuilding can only commence after a final assessment from FEMA that a facility cannot be repaired, the USVI hospitals have employed short-term mitigation efforts to support delivery of services while they await permanent solutions.

USVI's clinics vary in operability and capacity. Myrah Keating Smith Community Health Center on St. John, part of the same health system as Schneider Regional Medical Center, was still closed as of July 2018 as it awaits federal assessment of its damage. Patients are receiving services from temporary trailers, although capacity is limited. Frederiksted Health Care, a nonprofit primary care clinic on St. Croix, has resumed delivery of all of its health care services but operates with a smaller staff, particularly for behavioral health and dental services. The clinic reported an increase in overall patients due to the limited capacity of Juan Luis and the outmigration of some private providers. More broadly, the USVI Department of Health has faced challenges delivering public health services such as immunizations, dialysis, and emergency care due to shortages in staff and functional facilities. The Department is continuing work to acquire hard-sided modules as a temporary solution to expand capacity.

Federal funds integral to recovery but difficult to access

Key stakeholders in both territories noted that federal funding has been essential to recovery efforts, but that bureaucracy has posed a barrier to access available funds. Officials cited complex rules, extensive paperwork, rotating FEMA staff, and poor communication with federal partners as key barriers to accessing federal recovery funds. These barriers have slowed the ability to pay staff, obtain resources, and participate in federal programs. For example, FEMA announced that it has worked with Puerto Rico legal aid groups to develop a “Sworn Declaration” as a tool to verify home ownership for hurricane survivors who may lack formal documents.²⁶ Still, the level of documentation for FEMA programs has overwhelmed one municipality’s residents, who have begun trying to rebuild with their own resources. USVI officials reported use of FEMA Community Disaster Loans (CDLs) and Community Development Block Grants for expenditures such as hospital staff salaries and benefits but described challenges meeting the federal requirements attached to the CDL loans. Other barriers to rebuilding include the high cost of construction materials and insufficient numbers of construction workers. One official noted that federal partners have good intentions but that the scope of damage is too large, and there is competition for resources.

Health care providers described support from nongovernmental organizations (NGOs) and philanthropies as critical in moving recovery forward. Philanthropic donations in Puerto Rico have gone to needs such as mental health staff and health education, support for federally qualified health centers (FQHCs), and construction of a health care facility on Vieques. Some officials have said that access to these funds has helped to address essential needs while awaiting federal resources, since NGO funding often involves less complex bureaucracy and paperwork.

Increased Medicaid financing vital for territories, with major concerns about fund expiration

The February 2018 federal budget bill provided crucial financial support for the territories' Medicaid programs. The budget bill increased the federal caps for Puerto Rico (\$4.8 billion) and USVI (approximately \$142.5 million) and provided Medicaid funds at 100% federal match (FMAP) from January 2018 through September 2019.²⁷ Officials in USVI and Puerto Rico noted that the 100% federal match rate provides needed relief on territory fiscal pressures by eliminating the territory share of Medicaid financing required to draw down federal funds. Puerto Rico officials noted that they have used enhanced Medicaid funds to increase Medicaid provider reimbursement rates to Medicare rates as an effort to compete with the continental U.S. reimbursement levels and help maintain and recruit physicians. After the hurricanes, Puerto Rico delayed Medicaid renewals for 12 months, and USVI for six months. Despite continued outmigration of the population, the territories have seen relatively stable Medicaid enrollment due to the support of additional funds, delayed renewals, and additional outreach in USVI to enroll eligible individuals.

The territories fear a financial cliff when the Medicaid financing support expires at the end of September 2019. Territory leaders are continuing to lobby Congress for an increase in the FMAP from the 55% rate that is scheduled to return in October 2019. The increase in the capped amount is also set to expire, along with additional dollars provided through the ACA. Some officials reported that discussions with the federal government are underway, but real consideration at the federal level of these issues is likely to occur after the November 2018 midterm elections. One official in Puerto Rico said that, without additional support, the uninsured population could increase from about 500,000 to over 1 million people.

The Financial Oversight and Management Board (FOMB), created by Congress to oversee broader debt restructuring in Puerto Rico, adopted a fiscal plan in May 2018 that called for significant cuts in spending. Under the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA) of 2016, Congress created the FOMB to oversee Puerto Rico's budget and fiscal policies and debt restructuring. The FOMB adopted a fiscal plan in March 2017; however, after accounting for the impact of the hurricanes and expected relief aid, the FOMB adopted a new plan in April 2018. With some minor changes, an amended fiscal plan was certified on May 30, 2018.²⁸ The certified fiscal plan calls for spending cuts of \$9.5 billion (2.2% of GNP) over the next six years, with education and health care receiving the sharpest budget cuts.²⁹ However, tension of shared authority between Puerto Rico's government and the FOMB led Puerto Rico to file a lawsuit in July over the FOMB's authority to impose policy changes in Puerto Rico as part of its powers over the territory's fiscal plans. A federal court ruled in favor of the FOMB on August 7, 2018. The ruling held that the FOMB has the power to make policy choices for Puerto Rico as part of the budgetary process, but it does not have the authority to change legislation.³⁰

Preparedness for Current Hurricane Season and Beyond

In the midst of recovery from the 2017 hurricanes, territory officials and health care providers are addressing their top priorities for 2018 hurricane season preparation. One top priority for providers is the establishment of alternative energy sources to maintain services and communication in the event of hurricane-related outages. Puerto Rico's primary care association has overseen the installation of donated solar panels and batteries in at least 20 clinics to support power for emergency rooms and refrigeration of medications and vaccines. Clinics have also purchased new generators and extra diesel capacity for backup generators. The territory received satellite dishes to provide consistent access to communication for health care providers and residents in the event of power loss. They expect that this access to communication will support residents' mental health in a hurricane's aftermath. One clinic in Puerto Rico is also addressing mental health by starting an educational campaign to support teenagers and children with stress management and other hurricane-related emotional challenges. In USVI, health care leaders described plans for alternative energy sources but no significant implementation; they have reportedly requested solar panels from the federal government but have not yet received them.

The territories have prioritized improved patient identification and tracking processes. Providers in both territories reported enhancements in their processes of identifying and evacuating patients with critical medical needs. One clinic in Puerto Rico ran a census of its patients to identify those with chronic conditions and their care needs. The clinic is using this information to develop a disaster plan for patients in vulnerable parts of the territory. In USVI, Schneider Regional Medical Center has worked with HHS to develop a day-by-day hurricane response, including a controlled medical evacuation plan. Their plan will identify critical patients based on condition acuity and begin evacuation as soon as a declaration of emergency is declared, regardless of patient financial status. In 2017, financial considerations for patient evacuation reportedly led to a less controlled disaster response. Both Schneider and Juan Luis Hospital also now have access to a military tracking system that will improve their ability to track medically transferred patients.

Territory officials and providers had mixed views on overall preparedness for another major hurricane. One USVI provider reported that all territory agency heads, FEMA, HHS, and other federal partners participated in hurricane readiness drills in July 2018. The federal government assisted the provider in reexamining patient evacuation and off-island migration as part of its planned response. Other providers in USVI described a territory-wide tabletop exercise to test their response to a potential hurricane. Although USVI officials reported improved hurricane response plans, the exercise revealed that the territory was not ready for another hurricane due to factors such as ongoing building damage and insufficient health care infrastructure. Tropical Storm Beryl also brought wind and rain to the territories in early July 2018, causing flooding in USVI that revealed gaps in recovery. Providers in Puerto Rico also expressed trepidation regarding the level of preparation for the current hurricane season. One clinic noted that there is no official plan for protection of Vieques residents in the event of a hurricane and that they have not received information from the territorial government. At the same time, the clinic reported significant financial and logistical support from NGOs for hurricane preparation activities such as mental health education and infrastructure.

Acknowledging the importance of Centers for Medicare and Medicaid Services (CMS) programs in times of disaster response and recovery, CMS developed a “Disaster Preparedness Toolkit” to help territory officials prepare for future natural disasters. The Toolkit summarizes the flexibilities and strategies available under Medicaid and CHIP to support the programs in times of crisis.³¹ Highlighted strategies include streamlined eligibility and enrollment processes during power outages, optional benefits targeted at disaster-related public health needs, and guidance on legal tools available to modify Medicaid programs. The Toolkit also emphasizes the importance of Medicaid agencies’ own preparation for natural disaster and provides CMS contacts to support this preparation.

Over the summer, the governments of Puerto Rico and USVI released reports with plans for continued recovery. The Economic and Disaster Recovery Plan for Puerto Rico³² calls for \$139 billion in capital investments and strategic initiatives across sectors from 2018 to 2028. This total includes federal funds that the territory expects to receive as part of FEMA disaster recovery support. The plan’s short-term priorities focus on reestablishing “lifeline systems” such as reliable energy, water, communications, and transportation; repairing or rebuilding approximately 166,000 homes; improving emergency preparedness; and clarifying ownership and responsibility for infrastructure and services to facilitate efficient rebuilding. Longer-term priorities include stemming outmigration to encourage economic growth, revitalizing urban centers, meeting social service needs, rebuilding infrastructure, and modernizing methods of information sharing.³³ In a similar plan,³⁴ the USVI Hurricane Recovery and Resilience Task Force calls for four major strategies to help with rebuilding: strengthening physical infrastructure, rebuilding systems to better deliver services, strengthening governance, and enhancing preparedness for future storms.

Conclusion

In September 2017, Hurricanes Irma and Maria created historic damage to Puerto Rico and USVI, exacerbating preexisting economic and health issues. At the one-year anniversary of the storms, recovery of the economy, housing, and schools continues at a slow and uneven pace. Individuals are continuing to experience physical and mental health care issues that worsened after last year’s storms. The territories face particular challenges where recovery to the health care infrastructure has been slower and in areas of health care professional shortages. Federal financing has been critical for recovery, but stakeholders reported challenges accessing federal funds and concerns about expiration of federal Medicaid financing support at the end of September 2019. In addition, major spending cuts certified by the fiscal oversight board in Puerto Rico could impede some recovery efforts. While improvements and preparations are in place for another storm, many feel unprepared for another major hurricane given the current status of recovery efforts. Both Puerto Rico and USVI have released longer-term recovery plans that call for additional investments in infrastructure and focus on economic recovery. While some of these initiatives are underway with current resources, it is unclear if or how many additional resources will be available to carry out these plans.

Endnotes

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