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# Health Care In New Orleans Before And After Hurricane Katrina

The storm of 2005 exposed problems that had existed for years and made solutions more complex and difficult to obtain.

by Robin Rudowitz, Diane Rowland, and Adele Shartzter

**ABSTRACT:** Before Hurricane Katrina struck in August 2005, New Orleans had a largely poor and African American population with one of the nation's highest uninsurance rates, and many relied on the Charity Hospital system for care. The aftermath of Katrina devastated the New Orleans health care safety net, entirely changing the city's health care landscape and leaving many without access to care a year after the storm. State and local officials face the challenge of rebuilding and improving the city's health care system by assuring health care coverage for the population and promoting broader access to primary care and community-based health services. [*Health Affairs* 25 (2006): w393-w406; 10.1377/hlthaff.25.w393]

WHEN HURRICANE KATRINA HIT THE GULF COAST 29 August 2005, it caused massive devastation to many of the poorest states in the country. The greatest impact, by far, was felt in the city of New Orleans, where flooding forced the evacuation of more than one million people and crippled or destroyed much of the city's infrastructure. A year after Katrina, many hospitals in the New Orleans area are still closed, including the Medical Center of Louisiana at New Orleans run by Louisiana State University (LSU), which consists of Charity and University Hospitals (hereafter referred to collectively as Charity Hospital).

Charity Hospital was the primary provider for the large poor and uninsured population in New Orleans pre-Katrina. As area residents begin to return to the city, state and city officials face the overwhelming challenge of rebuilding the health care infrastructure with much uncertainty about the size and composition of the population that will return. This paper offers a retrospective look at how care was provided to poor residents in New Orleans before Katrina hit, the impact

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of the storm on the availability of health care services in New Orleans, and challenges facing the efforts to rebuild and improve health care services.

## Health Care In New Orleans Pre-Katrina

In July 2005, before Katrina struck, Orleans Parish (the core of New Orleans) had a population of 437,186; another 448,578 people lived in the adjacent Jefferson Parish (Exhibit 1). At that time, about 23 percent of New Orleans residents were living in poverty (\$16,090 for a family of three in 2005). Nearly half (48 percent) of Orleans Parish residents and a third (32 percent) of Jefferson Parish residents were low income (family incomes below 200 percent of the federal poverty level). Along with these high rates of poverty, Louisiana also had some of the poorest health statistics in the country, with high rates of infant mortality, chronic diseases such as heart disease and diabetes, and AIDS cases. There were large disparities in health status for minorities, as the sizable African American population—who represented one-third of all residents in the state and two-thirds of all residents in New Orleans—were more likely than their white counterparts to suffer from heart disease, diabetes, and asthma.<sup>1</sup>

■ **Health care coverage.** Low rates of private coverage, high rates of poverty, and limited public assistance through Medicaid for adults left Louisiana before Katrina with more than one in five, or almost 900,000, residents without health insurance and one of the highest uninsurance rates in the country (21 percent, versus 18 percent of all nonelderly Americans). Low rates of employer-sponsored coverage (54 percent of the nonelderly, compared with 61 percent of all nonelderly Americans) left many people uninsured.<sup>2</sup> The low employer coverage rate was tied to the large number of small businesses in Louisiana (about 95 percent of firms in Louisiana had fifty or fewer workers) with jobs in the service and tourism industries, in which health coverage is less likely to be offered than in other industry sectors.

Public coverage did not fill the gap, especially for adults. In 2003–2004, about 16 percent of the population in Louisiana and 29 percent of Orleans Parish residents had Medicaid coverage.<sup>3</sup> Two-thirds of the nearly one million Medicaid enrollees in Louisiana were living in areas affected by Katrina.<sup>4</sup> At the time Katrina struck, Louisiana had made much progress in expanding coverage to children and pregnant women up to 200 percent of poverty (\$33,200 per year for a family of three in 2006). However, eligibility levels for parents were much lower: \$3,168 per year (20 percent of poverty) for working parents and \$2,088 per year (13 percent of poverty) for nonworking parents. Adults without dependent children do not meet categorical eligibility requirements and are not eligible for Medicaid, regardless of their income, unless they qualify for Medicaid on the basis of disability. The aged and disabled with incomes below \$7,082 per year were eligible based on their eligibility for federal cash assistance. While more than 500,000 people over age sixty-five and some people with severe disabilities relied on Medicare for health coverage, nearly 100,000 depended on Medicaid to supplement Medicare.<sup>5</sup>

**EXHIBIT 1**  
**Selected Characteristics Of The New Orleans Area Before And After Hurricane Katrina**

Characteristic	Pre-Katrina	Post-Katrina	
		Number/amount	Change
Population			
Orleans Parish	437,186	262,200	-40.0%
Jefferson Parish	448,578	363,309	-19.0
Medicaid enrollment			
Aged, blind, and disabled	214,264	198,194	-7.5
Children and parents	724,528	750,673	3.6
Orleans Parish	134,249	122,308	-8.9
St. Bernard Parish	12,214	11,497	-5.9
Plaquemines Parish	5,389	5,170	-4.1
Jefferson Parish	83,101	86,498	4.1
East Baton Rouge Parish	80,711	87,022	7.8
West Baton Rouge Parish	4,151	4,426	6.6
Adult nonelderly uninsured			
Orleans Parish	26%	35-50%	
Jefferson Parish	21	35-50	
Plaquemines Parish	23	35-50	
St. Bernard Parish	22	35-50	
Staffed inpatient bed capacity			
Greater New Orleans area	4,083	1,971	
Orleans Parish	2,269	479	
Regional inpatient psychiatric beds	462	160	
Hospital daily census	2,500	1,877 <sup>a</sup>	
Safety-net clinics	90	19	
Health professionals <sup>b</sup>			
Physicians	4,486	1,200	
Emergency medical services units	15-17	7	
Long-term care services <sup>c</sup>			
Nursing home providers	51	29	
Nursing home beds	4,954	2,735	
Long-term acute care beds	575	97	

**SOURCES:** U.S. Census Bureau, July 2005 Population Estimates; City of New Orleans, January 2006 Rapid Population Estimate Survey Report; Medicaid data from Louisiana Department of Health and Hospitals (DHH), 27 April 2006; Louisiana DHH, *Hurricane Recovery Plan* and presentation, March 2006; Louisiana Public Health Institute, "NOLA Dashboard," 12 July 2006; Louisiana Healthcare Redesign Collaborative, "Region 1 Health Care Profile: A Healthcare Needs Assessment of Orleans, Jefferson, Plaquemines, and St. Bernard Parishes Post-Hurricane Katrina, July 2006" (slide presentation); and PriceWaterhouseCoopers for the Louisiana Recovery Authority Support Foundation, *Report on Louisiana Healthcare Delivery and Financing System*, April 2006, <http://www.lra.louisiana.gov/assets/PwHealthcarereport427061.pdf> (accessed 18 July 2006).

<sup>a</sup> Hospital census on 12 July 2006, including adult and pediatric beds.

<sup>b</sup> Particular shortages have been noted among physicians, dentists, and psychiatrists.

<sup>c</sup> Long-term care data are for DHH Region 1, representing the greater New Orleans area.

■ **Health care system and infrastructure.** Prior to Hurricane Katrina, Orleans Parish was served by nine acute care hospitals providing inpatient and outpatient services; adjacent Jefferson Parish had seven. With nearly four beds per 1,000 people compared with the national average of 2.8 beds per 1,000 in 2004, Louisiana ranked eighth in the nation in available hospital beds.<sup>6</sup> Many of these excess beds were located in the New Orleans area, which had an average occupancy rate of about 56

percent; however, the occupancy rate at Charity Hospital, serving the poor and uninsured, was much higher than the area average.<sup>7</sup>

Louisiana essentially had a “two-tier” health system, in which the insured population (including those with Medicare and Medicaid) had access to a range of community hospitals and physicians, while the poor and uninsured were mostly cared for through the state-run safety-net system of public hospitals. In Louisiana, health care for the indigent is a state rather than local responsibility. The state, through LSU, finances and operates ten state-funded inpatient hospitals and a network of more than 350 clinics that primarily serve uninsured people, fulfilling the state mandate that all residents have access to health care services.

In New Orleans, Charity Hospital was the hub of the LSU system, serving a largely poor, predominantly minority population through inpatient care, a network of outpatient clinics, and one of the busiest emergency departments (EDs) in the country. Nearly three-quarters of its patients were African American, and 85 percent had annual incomes of less than \$20,000. In 2003 more than half of the inpatient care provided by Charity Hospital was for patients without insurance, compared with only 4 percent of inpatient care at other New Orleans hospitals.<sup>8</sup> Charity Hospital accounted for 83 percent of all inpatient and 88 percent of all outpatient uncompensated care costs in the New Orleans area.<sup>9</sup> It was also the dominant provider of substance abuse, psychiatric, and HIV/AIDS care in the New Orleans area and the only Level 1 trauma center on the Gulf Coast; the only other center in the state is more than 300 miles away in Shreveport.

Louisiana historically had very high rates of ED visits, particularly at public hospitals, which is an indication of limited access to primary care and preventive services. In 2004 the state ranked fourth in the nation for high ED use, with 548 visits per 1,000 people; the national average was 383 visits.<sup>10</sup> In addition, a survey of hurricane survivors from New Orleans who were sheltered in Houston immediately after the storm found that 9 percent had no usual source of care before the storm and that two-thirds had a hospital or clinic, as opposed to a doctor's office, as their source of care (62 percent of this group relied on Charity Hospital).<sup>11</sup>

With only two federally qualified health centers (FQHCs) in the New Orleans area, a lack of private providers willing to treat the uninsured, and the use of Medicaid disproportionate-share hospital (DSH) funds to finance inpatient and outpatient care at the state-run hospitals, the clinics at Charity Hospital were a dominant source of ambulatory care for the low income, providing 350,000 outpatient visits at more than 150 primary and specialty care clinics.<sup>12</sup> However, despite its substantial role, the hospital was faced with shrinking public resources, a high burden of uncompensated care, and a lack of capital to make much-needed infrastructure improvements even before Katrina hit. Replacing the poor physical plant with a smaller inpatient facility and primary care clinics located throughout the city was already being considered but had not been funded.

In New Orleans (and the rest of the state), care for the uninsured has been in-

trinsically linked to medical education. Staffed by physicians from the state's two medical schools located in New Orleans, LSU and Tulane, Charity Hospital used medical residents to promote access for the uninsured. The LSU hospitals trained nearly 4,000 nurses and other health professionals, many of them based at Charity Hospital. In 2001 the city boasted 300 physicians per 100,000 people, among the highest in the country. In contrast, nonmetropolitan areas in Louisiana had among the lowest numbers of physicians in the country.

■ **Health care financing.** Medicaid represented not only a system of health care coverage for low-income people in Louisiana but also a mechanism of financing health care for the uninsured. Louisiana has a Medicaid match rate of 70 percent, meaning that for every \$1 spent by the state, it receives \$2.31 in federal revenues.<sup>13</sup> With its heavy reliance on financing care for indigent patients in the state-run safety-net system, Louisiana was a major user of Medicaid DSH funding. In 2004, about 20 percent of all Medicaid spending in Louisiana was for DSH (compared with about 6 percent nationwide).<sup>14</sup>

Most of these DSH dollars were channeled to the LSU system to finance care for the uninsured. Louisiana's use of Medicaid DSH funds in this way created a dependence on institutional hospital care for the poor, rather than outpatient or ambulatory care settings, because states generate DSH dollars through inpatient use. Using Medicaid to expand eligibility to the uninsured population would have allowed Medicaid funds to be directed toward more non-hospital-based care but would have eroded Medicaid funding to support the Charity Hospital system.

Although most other public safety-net hospitals outside Louisiana are very reliant on government financing, their revenue sources are more diverse than that of the LSU hospitals. For members of the National Association of Public Hospitals and Health Systems, state (including Medicaid) and local funding represented just over 50 percent of net revenues in 2003, compared with 88 percent of revenues at LSU hospitals.<sup>15</sup> Based on gross revenues, more than half of the care provided at Charity Hospital was provided to patients without insurance, about one-third to patients with Medicaid, 11 percent to patients covered by Medicare, and only 6 percent to those with commercial insurance.<sup>16</sup> Most patients with private insurance coverage chose to go to other providers.

## Health Care in New Orleans Post-Katrina

One year after Hurricane Katrina, much of the city and its health care infrastructure are still devastated. Plans are being debated, but action is slow, and access to health care continues to suffer. The damage of the storm resulted in more than 1,500 lives lost, 780,000 people displaced, 850 schools damaged, 200,000 homes destroyed, 18,700 businesses destroyed, and 220,000 jobs lost.<sup>17</sup> A survey of evacuees in the Houston shelters conducted 10–12 September 2005 documented the hardship many evacuees face: Most were African American and had extremely low incomes, low educational levels, no bank accounts or available credit cards,



and no transport or savings to facilitate evacuation. Many had chronic health conditions and had relied on Charity Hospital for their health care both because they lacked health coverage and because this was the historic source of care for their families. Immediately following the storm, evacuees reported that they had spent time trapped in homes; living on a street or an overpass; and enduring harrowing and stressful conditions, often lacking food, fresh water, prescriptions, and medical care.<sup>18</sup> How many of these evacuees will be willing or able to return to New Orleans remains an open question as the city seeks to rebuild.

■ **Population returning to the New Orleans area.** By January 2006, the most recent time for which reliable survey data are available, 60 percent of the population appears to have returned to New Orleans and 81 percent, to Jefferson Parish (Exhibit 1).<sup>19</sup> Most of those returning were nonelderly adults, but as schools reopen in the fall, more families are expected to return.<sup>20</sup> A large number of construction workers are now in New Orleans as the rebuilding continues; it is estimated that nearly half of the reconstruction workforce in New Orleans is Latino, of whom 54 percent are undocumented.<sup>21</sup> The population of New Orleans will continue to grow as rebuilding and redevelopment continue, but the size and composition of the future New Orleans population is likely to be smaller and more diverse than it was pre-Katrina.

■ **Impact on health care coverage.** One survey of residents living in Federal Emergency Management Agency (FEMA)–supported housing after Katrina found that 44 percent of caregivers and 10 percent of children lacked insurance, with many respondents indicating that they lost their insurance when they lost their jobs after the storm.<sup>22</sup> Earlier estimates from Blue Cross Blue Shield of Louisiana indicated that 200,000 people could have lost employer-sponsored coverage statewide, pushing up the rate of uninsurance in affected areas.<sup>23</sup> In addition, the workers reconstructing New Orleans lack adequate access to health care despite their potential work-related health hazards. Only 43 percent of them have medical insurance, and only 27 percent of workers reporting health problems sought medical treatment; the statistics are far worse when one looks only at undocumented workers.<sup>24</sup>

Immediately following the storm, people with health care needs who could no longer obtain care at the closed Charity Hospital turned to Medicaid for assistance. After the storm, the eligibility standards for Louisiana Medicaid were not changed; many who met the eligibility criteria were enrolled in the program, but eligibility workers were forced to reject at least a third of all applications for Louisiana Medicaid because without dependent children, they did not meet Medicaid's categorical eligibility requirements.<sup>25</sup> Some situations were critical. For example, a woman who was scheduled for surgery on a brain tumor at Charity Hospital was transferred to Baton Rouge, but the private hospital with capability to perform the surgery would not initially take the case because the woman was uninsured and did not qualify for Medicaid.<sup>26</sup>

More than 86,000 people with Louisiana Medicaid coverage were evacuated to

other states, and many remain on the Louisiana Medicaid rolls even though they have been receiving care in other states. More than half of these people were in Texas, 18 percent were in Georgia, and 14 percent were in Ohio. The U.S. Department of Health and Human Services (HHS) also approved special Medicaid waivers on 16 September 2005 to allow survivors from Louisiana, Mississippi, and Alabama to enroll in temporary coverage in other states as long as they met certain categorical eligibility requirements.

Enrollment figures at the end of April 2006 show that statewide Medicaid enrollment remained fairly constant compared with the situation before the storm; enrollment for the aged and disabled fell about 7.5 percent, while enrollment for children and parents climbed about 3.6 percent (Exhibit 1). Medicaid enrollment dropped by more than 13,000 in the parishes hit hardest by the storm (mostly Orleans), but many relocated nearby to Jefferson and East Baton Rouge Parishes. In March 2006, Louisiana sent out notices to more than 20,000 people who were enrolled in other states' Medicaid programs (about 70 percent were in Texas), informing them that their Louisiana Medicaid coverage would end 30 June 2006. Those who had temporary coverage face becoming uninsured unless they are eligible for and able to enroll in traditional Medicaid in their new state.

■ **Impact on the health care system.** *Hospitals.* The storm devastated the city's health care infrastructure and provider base. After Katrina, Charity Hospital was closed, as were most of the city's other hospitals. Only three of the area's hospitals located in Jefferson Parish, East and West Jefferson Medical Centers and Ochsner Clinic Foundation, operated throughout the hurricane. As of August 2006, only three of Orleans Parish's nine acute care hospitals were operational, and most had only limited capacity.<sup>27</sup> The bed capacity fell from 4,083 beds in the New Orleans metropolitan area to 1,971 as of mid-July 2006 and from 2,269 to 479 in Orleans Parish over the same time frame (Exhibit 1).<sup>28</sup> The average daily census of hospitals in the region fell from 2,500 patients before Katrina to an average of 1,237 patients over the four months following the storm and then climbed to a reported census of 1,877 patients (including pediatric beds) in mid-July 2006.<sup>29</sup> As hospitals reopen their doors, they face enormous financial and staffing challenges.

Although the future of Charity Hospital in New Orleans has become a central point of debate in rebuilding discussions, steps have been taken to respond to the immediate health needs of the low-income population. In Charity's absence, LSU opened a temporary ED and a medical clinic in the Convention Center and then moved to an abandoned department store closer to the now-shuttered Charity Hospital. On 24 April 2006 Charity reopened its trauma center at Elmwood Hospital, a suburban hospital owned by Ochsner Clinic Foundation. Charity's ED and trauma center are expected to relocate to its University Hospital campus when it reopens at the end of the year.

Much of the uncompensated care absorbed by Charity has shifted to other LSU hospitals; volume at Earl K. Long Medical Center in Baton Rouge increased by



*“The devastation to the New Orleans health system puts the future of many residency programs in jeopardy.”*

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more than 50 percent, and other nonstate hospitals in New Orleans have provided a greater-than-historic share of uncompensated care.<sup>30</sup> Charity Hospital's closure limits the ability of the LSU system to generate enough volume to access available federal DSH funds. In response to the fiscal crisis, LSU furloughed a large percentage of its workforce, placing staffing and fiscal strain on its other hospitals.

*Clinics.* About twenty permanent and temporary clinics have provided ambulatory services to the low-income population in New Orleans. Four mobile clinics, including one targeted specifically to Latinos, are seeing patients around the city. The New Orleans Health Department is operating three of its clinics; a handful of other clinics are treating patients with limited staff, supplies, and hours, and some are using out-of-state health care professionals and volunteers. To increase access to ambulatory care, officials are striving to reopen five clinics in Jefferson Parish and four in Orleans Parish. Also, officials within the Department of Education are working with health care providers to open three new school-based health clinics at alternative sites in the future.<sup>31</sup>

*Physicians.* An estimated 4,500 active, patient care physicians were dislocated from three New Orleans area parishes by the storm; many of them were primary care physicians.<sup>32</sup> By March 2006, about a quarter of the area's doctors (1,200 physicians) had returned and were practicing (Exhibit 1).<sup>33</sup> There were also more than 1,270 medical residents training in the three-parish area when Katrina struck.<sup>34</sup> Some hospitals in nearby cities were able to temporarily increase their medical residency program caps to help support training efforts and to meet the increased demand for health care services in these areas.<sup>35</sup> However, the devastation to the New Orleans health system puts the future of these residency programs in jeopardy. Without an adequate number of hospital beds and patients to satisfy residency program accreditation requirements, residents cannot get the training they need, and residency programs cannot be sustained. The residency programs in New Orleans area hospitals have been a critical source of care for the uninsured but also the primary training base for Louisiana's physicians, which poses challenges for developing the state's future health care workforce.

*Long-term care facilities.* Katrina also took a toll on long-term care services in New Orleans. The number of nursing home providers decreased from fifty-one to twenty-nine, resulting in a loss of 2,200 nursing home beds (Exhibit 1). In addition, the number of long-term acute care beds dropped from 575 to 97.<sup>36</sup> Lack of nursing home and other postacute services puts an additional burden on hospitals because patients cannot be discharged to more appropriate settings in a timely manner. This lack of postacute placement options has increased the average length-of-stay at area hospitals from 5.5 days to more than 7 days; a single-day in-

crease in the average stay drives up occupancy rates by about 15 percent.<sup>37</sup>

*Mental health services.* Mental and behavioral health services have also been severely disrupted. Prior to Katrina, there was already a lack of adequate funding and a shortage of providers to address mental health and substance abuse issues. Charity Hospital had been a primary source of both inpatient and outpatient mental health care; the hospital's 100 inpatient mental health beds are now all closed, contributing to a severe shortage of psychiatric beds (462 beds before Katrina versus 160 after the storm). The Metropolitan Human Services District (MHSD) operated eight outpatient mental health clinics before the storm, but five were damaged by Katrina, and now only three are operational in the New Orleans area. The MHSD has also colocated some of its services at two city-operated health clinics and Tulane's Covenant House clinic.<sup>38</sup> Immediate and continuing mental health services needs are critical: The Substance Abuse and Mental Health Services Administration (SAMHSA) projects that 25–30 percent of Katrina survivors in metropolitan areas will experience clinically significant mental health problems and that more than 30 percent will experience mild to moderate depression or post-traumatic stress disorder, or both.<sup>39</sup>

■ **Survivors' perspectives.** Interviews were conducted with low-income hurricane survivors in New Orleans, Houston, and Baton Rouge roughly six months after the storm to gather their stories and to lend survivors' voices to hurricane statistics.<sup>40</sup> These interviews revealed that although survivors often experienced health problems before Katrina, they were now facing even more daunting challenges in obtaining needed health care. Despite suffering emotional and mental trauma from the storm, with many experiencing anxiety, depression, and trouble sleeping and eating, almost none had received formal counseling services for themselves or their children.

Beyond these traumatic impacts, some survivors also experienced problems caring for the physical and mental health problems they had before the hurricane. A number of interviewees had been unable to obtain critically needed care or prescription drugs, even up to six months after the storm. Several bipolar and schizophrenic interviewees endured weeks without their prescriptions, in the worst cases attempting self-inflicted harm while without medication. Survivors expressed difficulty finding pharmacies, reconnecting with former providers or finding new ones, and paying for their care. Access to specialty care was especially challenging; some pregnant women were unable to find prenatal care. Some attributed negative impacts on their or their children's physical or mental health to their lack of care. In the absence of care, some were trying to manage their conditions themselves—for example, trying to control diabetes through diet rather than insulin while living in a FEMA hotel without kitchen facilities.

Even those with private coverage or Medicaid faced challenges obtaining health care. Survivors in Baton Rouge and Houston had difficulty as a result of unfamiliarity with health resources in their new communities as well as lack of transpor-

*“How well people were faring reflected their situation before the storm and their ability to connect with assistance after the storm.”*

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tation. Those who returned to New Orleans had difficulty finding providers because of the loss of hospitals and providers and the closure of Charity Hospital, problems exacerbated by the overcrowding and long waits for care at the hospitals that continued to operate.

Health issues were further complicated by unstable living and financial situations, because some people were having difficulty meeting their basic needs such as housing and food. Overall, how well people were faring reflected both their situation before the storm and their ability to connect with assistance after the storm. Unfortunately, some of the most vulnerable interviewees, including elderly people, appeared to be the most disconnected from assistance. Separated from their family members and established support communities, many were unable to get needed check-ups and prescriptions.

■ **Federal and state responses.** Immediately after Katrina, an array of federal support in addition to support from charities and relief agencies came to the hardest-hit areas. As mentioned earlier, HHS approved a Medicaid waiver initiative designed to assist states in providing temporary Medicaid coverage to survivors from hurricane-affected areas who evacuated to other states. As of March 2006, thirty-two such waivers had been approved, including waivers for Louisiana, Alabama, and Mississippi.<sup>41</sup> Under these waivers, states could receive federal funds for providing up to five months of Medicaid or State Children's Health Insurance Program (SCHIP) coverage to eligible groups of survivors and could also receive authorization to create an uncompensated care pool to reimburse providers for uncompensated care costs. Waiver states could choose to use the income eligibility rules from an evacuee's "home" state (Louisiana, Alabama, or Mississippi) or to follow HHS-suggested guidelines. States were also allowed to choose whether or not to apply a resource test to determine eligibility. The waivers did not allow states to expand coverage for adults without dependent children, regardless of income. Neither did they include any funding to support the temporary coverage or pools, but \$2 billion was later authorized through legislation included in the Deficit Reduction Act (DRA), signed 8 February 2006 after much debate in Congress about how to provide health care-related hurricane relief.

At the end of March 2006, the Centers for Medicare and Medicaid Services (CMS) announced the allocation of \$1.5 billion of that \$2 billion to the states. Louisiana received 51 percent of the initial allocation, of which \$384 million was for the uncompensated care pool to help hospitals that were caring for uninsured patients. The distribution of federal funds came more than six months after Katrina struck and does not appear sufficient to compensate fully for the tremendous health care needs caused by the storm. The fiscal year 2006 Emergency Sup-

plemental Appropriations Act includes \$550 million to rebuild the Veterans Affairs New Orleans Medical Center, but the majority of the \$19.8 billion in hurricane relief funds is devoted to housing and levee repair, not to health care.<sup>42</sup> LSU and the Department of Veterans Affairs (VA) signed a Memorandum of Understanding to coordinate development and operation of replacement hospitals in the New Orleans area, which could lead to a replacement facility for Charity Hospital as part of the new VA complex.<sup>43</sup>

At the state level, on 15 October 2005 Gov. Kathleen Babineaux Blanco established under executive order the Louisiana Recovery Authority (LRA) after Hurricanes Katrina and Rita to coordinate the rebuilding efforts in the aftermath of those storms, which devastated large areas of the state. Working collaboratively with local, state, and federal agencies, the LRA is focused on addressing short-term recovery needs and guiding long-term planning. The Louisiana Department of Health and Hospitals has been working with local organizations and providers to develop parish-based hurricane recovery plans.<sup>44</sup> On 17 July 2006 the Louisiana Health Care Redesign Collaborative, chaired by the secretary of the state's Department of Health and Hospitals, was established with the goal of developing a plan to guide the rebuilding of the health care system in hurricane-affected areas for submission to HHS secretary Michael Leavitt by 20 October 2006.

## Challenges And Options Moving Forward

As Louisiana moves to rebuild its health care infrastructure and meet the needs of its residents in the aftermath of Hurricane Katrina, it faces daunting challenges but also has the opportunity to create an improved health system that focuses on expanded access to primary care, a modernized health information structure, and more extensive health insurance coverage. The health care system in New Orleans was complex before Katrina and has grown only more complicated and politically charged after the storm with the closure of Charity Hospital. The challenge of rebuilding is magnified by the devastation to the overall health care system; the loss of numerous health care providers and staff; questions about the stability of state and local revenues; and the uncertainties around the size, composition, and timing of the population returning to New Orleans. In the short term, ambulatory health care, behavioral health care, inpatient hospital services, and workforce recruitment and retention are the most critical areas of need. Getting these services operational for the returning population needs to be the first priority. Longer-term goals for the area include redesigning and rebuilding the health care infrastructure and safety net; expanding affordable health care coverage; improving health status and outcomes; aligning financial incentives to improve access to care; and securing stable financing for a sustainable system.

Redesigning health services to expand community health centers (especially FQHCs, given the level of poverty in the city) and to provide ambulatory care in the neighborhoods rather than the former hospital-centric system need to be pri-

orities in the recovery blueprint. Expanding public coverage through Medicaid for the predominantly poor and uninsured populations that relied on Charity Hospital for their health care would allow the state to draw down a federal matching rate of 70 percent to help finance coverage and provide financing to support the development of more community-based providers. Maintaining Medicaid coverage for children, raising eligibility levels for parents to match the levels for children at 200 percent of poverty, and obtaining waiver authority to cover poor adults without dependent children would provide coverage for a majority of the working poor. If DSH funds are reallocated and health coverage for the uninsured is expanded via Medicaid, health care financing dollars will follow the patients to the providers who are ready and able to serve them; however, adequate reimbursement levels are important to attract providers into Medicaid, given the shortage of providers in the area.

Efforts to expand health coverage would provide a foundation for the health recovery efforts in Louisiana. In lieu of the historical concentration of funding for uncompensated care within the state hospital system, most notably Charity Hospital, a recovery strategy that focuses primarily on expanding health coverage would provide mobility as the population shifts and would allow resources to be more broadly distributed to areas where the population grows. However, in the absence of full coverage for the population, uncompensated care funds need to be directed to the ambulatory and institutional providers who care for the uninsured.

Assistance also needs to be provided to the thousands who lost their jobs, and thus their health coverage, in the wake of Hurricane Katrina. Exploring ways to shore up the employer market by helping employers rebuild their businesses and provide health coverage to their workers through tax credits or subsidized assistance would also help establish more stable financing for the health system. Together with maintaining and expanding coverage through Medicaid and SCHIP for low-income children and adults, these strategies would broaden access options for health care services and provide needed revenues to the health care institutions struggling to restore services and rebuild the health care infrastructure.

**L**OUISIANA RESIDENTS ON THE EVE OF KATRINA had among the poorest health status in the country and the highest rates of uninsurance and poverty. Recovering from the destruction of Katrina should include efforts to improve the health and well-being of Louisiana's people—with more emphasis on linking people to medical homes and focus on prevention over episodic care to improve access and continuity of care and, it is hoped, health outcomes. Rebuilding the infrastructure and expanding access to primary care services and health insurance coverage along with developing models to better manage care and improve financing will help reform the overall health care system in New Orleans to better meet the needs of the “new” New Orleans.



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