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TECHNICAL REPORT

Navigating the Road to Recovery

Assessment of the Coordination, Communication, and Financing of the Disaster Case Management Pilot in Louisiana

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Sponsored by the Louisiana Recovery Authority

RAND HEALTH

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Preface

As the five-year anniversary of Hurricanes Katrina and Rita approaches, thousands of Louisiana residents remain displaced from their homes and continue to struggle to recover in the disaster aftermath. Historically marginalized and vulnerable populations in particular (e.g., elderly, those from low socioeconomic backgrounds) face barriers to recovery and confront difficulties in identifying and accessing the resources essential to recovery. The purpose of this report is to summarize some of the lessons learned by the state of Louisiana as it implemented the Federal Emergency Management Agency (FEMA) Disaster Case Management Pilot (DCMP) from fall 2009 to spring 2010. The DCMP specifically targeted the post-hurricane population who were still in FEMA temporary housing units as of April 27, 2009, in order to connect these individuals with a range of services, including housing, financial counseling, social services benefit restoration, and mental and physical health assistance. This report also offers recommendations for the state of Louisiana and FEMA regarding how to better design and improve implementation of disaster case management in Louisiana and across the nation. In the wake of new disasters, such as the 2010 British Petroleum oil spill in the Gulf of Mexico, other state authorities that are responsible for disaster case management might also be interested in using this document to help inform how states manage and conduct disaster case management for future catastrophic events.

On March 29, 2010, at the request of the Louisiana Recovery Authority (LRA), RAND Corporation researchers began to document how the DCMP in Louisiana was organized and financed; identify the major challenges to communication, coordination, and financing of the pilot; and provide recommendations to the LRA and FEMA about how to improve future implementation of disaster case management. The Louisiana Recovery Authority and FEMA were interested in understanding optimal methods of disaster case management. Thus, the intent of this analysis is to identify implementation barriers and focus on areas for *process* improvement rather than client outcomes. This work was funded by the Louisiana Recovery Authority as part of the FEMA-funded DCMP and builds on earlier efforts (e.g., Chandra and Acosta, 2009) to summarize some of the lessons learned by nongovernmental organizations as they worked through the cycle of emergency response into a lengthy, long-term recovery process that continues today. This effort is consistent with the RAND Corporation's mission to respond to the hurricanes of 2005 by establishing the RAND Gulf States Policy Institute to support research and analysis.

The RAND Gulf States Policy Institute

RAND established the RAND Gulf States Policy Institute in 2005 to support hurricane recovery and long-term economic development in Louisiana, Mississippi, and Alabama. Today, RAND Gulf States provides objective analysis to federal, state, and local leaders in support of evidence-based policymaking and the well-being of individuals throughout the Gulf States region. Supported by a distinguished board of national and regional advisors, RAND Gulf States collaborates with local colleges and universities, community leaders, nonprofit organizations, foundations, and elected officials to build research capacity in the region and address ongoing challenges in areas that include emergency planning, workforce development, housing, health care, education, and energy. RAND Gulf States is a specialized research center that is part of RAND Infrastructure, Safety, and Environment. Read more about RAND Gulf States at www.rand.org/gulf-states/.

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Executive Summary

The impacts of Hurricanes Katrina, Rita, Ike, and Gustav continue to affect the Gulf States region. Thousands remain displaced from their homes and continue to struggle to recover from the trauma and aftermath. Historically marginalized and vulnerable populations in particular—such as individuals with disabilities, the elderly, and those from low socioeconomic backgrounds—confront barriers to recovery that others with more resources are able to resolve without the assistance of social services.

Disaster case management services provide relief to people in both the short and long term after disaster by connecting them with services needed to facilitate recovery. The Disaster Case Management Pilot (DCMP) is the most recent model of disaster case management for Louisiana and other states along the Gulf of Mexico, which was implemented by federal and state authorities in the period following Hurricanes Katrina, Rita, Ike, and Gustav. The Louisiana Recovery Authority (LRA) received funding from the Federal Emergency Management Agency (FEMA) to implement the DCMP (fall 2009–spring 2010) in order to fill gaps in service provision that still remained after earlier case management programs. The DCMP was specifically designed for individuals who still resided in FEMA temporary housing units as of April 27, 2009.

The LRA asked RAND to assess the DCMP. This analysis began in late March 2010 and included documentation of how the DCMP was organized and financed; identification of the major challenges to communication, coordination, and financing of the pilot; and provision of recommendations to the LRA and FEMA about how to improve future implementation of disaster case management in Louisiana. A team of RAND researchers used several methods, including document reviews, individual and group interviews with staff from the federal and state authorities responsible for implementing the pilot, focus groups with case managers and supervisors from the agencies contracted to provide case management, and analyses of case management data, to document DCMP activities and assess the pilot's progress in helping residents of Louisiana obtain recovery services. The LRA and FEMA were interested in understanding optimal methods of disaster case management. Thus, the intent of this analysis is to identify implementation barriers and focus on areas for *process* improvement.

Implementation of the DCMP began in September 2009. During initial intake and triage of the 3,324 on the master list from FEMA, 722 clients were not able to be contacted due to out-of-date contact information, and 518 clients refused services. Between intake and clients being assessed by a permanently assigned case manager, DCMP case managers lost contact

or were refused by another 280 clients. As of April 19, 2010[1]—one month before the pilot ended—Louisiana had approved invoices for less than half (44 percent) of the $9.4 million budgeted for the pilot and opened approximately half (n = 1,804) of the cases FEMA initially estimated. Among cases opened during the pilot period, 45 percent (n = 818) remained open as of April 2010, suggesting that these clients were still in need of case management services. Only 10 percent of the cases opened during the pilot (n = 186) were closed with at least one of the client's primary needs met. An analysis of client characteristics found that most of these clients had multiple vulnerabilities: They were older (median age of 53); 82 percent had no more than a high-school education; more than 50 percent had an annual income of less than $15,000; and more than 75 percent of clients resided in a mandatory evacuation zone and were displaced from their primary residence. Statistical differences between clients with open and closed cases suggest that clients who had a recorded health issue were 41 percent more likely to still have open cases and that those who fell below the poverty line, had no source of income, or were otherwise unable to support themselves were 32 percent more likely to still have open cases. Most clients with open cases needed housing (62 percent), case management (56 percent), or furniture assistance (40 percent). Predisaster, 28 percent (n = 505) of the DCMP participants resided in New Orleans; the remaining were in surrounding areas.

Despite concerted effort by participating agencies, the implementation of the DCMP was fraught with challenges—most notably, difficulties that emerged from the particular vulnerabilities (e.g., age, disability, isolation) of the target population. A major barrier for the pilot was the overall design: The pilot was designed for individuals who were still struggling to move from FEMA trailers nearly five years after Hurricane Katrina, but, due to delays in the application process,[2] the pilot period was only seven months long (September 2009–March 2010). Without significant planning and preparation, this was not a feasible timeline in which to serve this vulnerable population. In addition to timeline challenges for this vulnerable population, the lists of clients provided to states were not complete. This missing contact information presented difficulties in reaching eligible clients. These design challenges and the additional challenges summarized in Table S.1 resulted in delays in services and financial reimbursement, tensions between the LRA and contractors regarding pilot implementation, and discrepancies between the number of cases initially estimated and the number of cases actually opened. As a result, the pilot could not be implemented as intended; now it has ended, leaving the needs of many clients not fully met.

In light of these challenges, we recommend that, before implementing another disaster case management program in Louisiana, the state authorities, in partnership with local case management agencies should do the following:

- Assess the needs of the population and available community resources to inform planning.
- Revise the request-for-proposals (RFP) process used for disaster case management. The RFP for the lead contractor and the third-party evaluator should be released in advance of other RFPs so the contract can be awarded and materials can be prepared in advance of bringing case management agencies on board. The proposal should clearly state mea-

[1] Final data from May 14, 2010, provide a more updated summary of the number of open and closed cases but were not available in time for use in this report.

[2] Appendix A contains a timeline provided by the LRA that details the Louisiana DCMP application process. The application process explains why the DCMP in Louisiana started a full year behind the DCMPs in Texas and Mississippi.

Table S.1
Challenges Experienced During Implementation of the Disaster Case Management Pilot in Louisiana

Aspect of Implementation	Challenge
Structure of the pilot	The list of eligible cases that went to case management organizations from FEMA was out of date, resulting in overestimates of staff needs and poor allocation of resources based on client location.
	The timeline for the pilot was not feasible in terms of start-up, planning, and transition, particularly given the vulnerabilities of the target population.
	Narrow eligibility criteria missed some individuals still in need.
	Lack of clarity on roles and responsibilities between the lead contractor and the LRA might have been exacerbated by the contracting structure and RFP process for the pilot.
	Case managers and case manager supervisors reported minimal training on data entry and management and on the overall operational processes of the DCMP.
	Case management organizations lacked operational capacity (e.g., management structure, phones, computers) to start immediately and lacked time and funds to build the organizational capacity needed.
	There was a lack of community resources for client referrals.
	Understaffing and inappropriate staffing at the LRA and lead contractor agency created challenges to implementing the pilot.
Communication among agencies involved in the pilot	The DCMP objectives for expected benchmarks and progress toward goal and vision were not clearly communicated.
	Communication about the roles and responsibilities of each entity involved in the DCMP was inconsistent.
	There was limited documentation of decisions associated with DCMP processes, and many of these decisions were poorly communicated to local contractors.
	Communication problems resulted in delays in service decisions and financial reimbursement and changes in policies midstream.
Pilot financing	State officials and local case management agencies reported that difficulties emerged due to limited guidance on how to complete financial forms required by FEMA.
	Clarity and timelines for reimbursement presented challenges, particularly for case management agencies. Reimbursement policies also did not align well with case management needs.
	Guidelines for what could be included for indirect costs were confusing and resulted in financial loss for contracting agencies.
	Given the short pilot duration and state regulations, there was no funding for pilot start-up.
Data collection and evaluation of the pilot	The LRA received regular updates of individual level client data, which created duplication in data entry and inefficiencies in tracking.
	Data quality was questionable because case managers had difficulty entering data; quality assurance was also limited.

surable goals and objectives and the roles and responsibilities of each agency. The RFP should also include start-up time to allow case management agencies to hire staff (including a qualified data-entry specialist), equip offices properly, and require ongoing training of case managers.

- Develop state guidance for how to implement these types of grants with attention to financial procedures. A more streamlined process for invoice review that does not require multiple levels of review is also needed.
- Create a common or centralized forum to share disaster case management templates (e.g., client forms, financial forms), guidance (e.g., directions for reimbursement), decisions related to design and implementation, and communication about resource availability (e.g., connecting case managers to identify available community services) for participating agencies to use throughout the program.

To improve development and implementation of a national disaster case management program, we recommend that FEMA take the following steps in designing a national disaster case management program:

- Consider how to best track client information for vulnerable populations affected by disaster, and use predisaster data to identify "vulnerability hot spots."
- Develop a web-based knowledge center at program inception to provide centralized program information on an ongoing basis.
- Create financial templates for state use that accommodate state variation in reimbursement and other contract requirements, and review responsibilities around reimbursement timelines. Financial templates should be revised to ensure that line items account for the needs and requirements of best practices in case management.
- Consider how to best design a support system that can streamline intake and triage of cases and help determine client eligibility for services.
- Target investments to maintain an ongoing infrastructure to support disaster case management, which might improve response time and save start-up costs.
- Coordinate the transition points between individual assistance and disaster case management.

The DCMP also highlighted overarching questions about the processes and underlying principles of disaster case management. Research is needed to answer these questions. Addressing the following questions could help to improve how disaster case management is designed and implemented in the future:

- What is the best way to identify and track the location of clients and client needs?
- How can disaster case management programs be designed to best meet the needs of vulnerable populations in the immediate postdisaster period?
- How can case management services best develop financial literacy among clients to ensure appropriate and responsible use of federal dollars?
- How can state authorities identify, *before* a disaster, the local contractors and case management agencies that are best equipped to handle disaster case management?

Finally, this analysis highlights two themes critical for all recovery efforts. First, the system of identification and location of residents—particularly the populations most at risk due to preexisting and disaster-related events—is limited at best. Without a concerted review of these systems, government and case management agencies are unable to appropriately strategize for adequate service provision, including staffing algorithms, resource allocation, and development

of a robust resource network. Second, the "stop and start" of recovery initiatives at both the federal and state levels might lead to serious discontinuities in client recovery. A single, longer-term recovery initiative that seamlessly acknowledges the stages of human recovery is merited.

Acknowledgments

We would like to thank the organizational leaders, case manager supervisors, and case managers who contributed to the content of this report by participating in the Disaster Case Management Pilot in Louisiana, answering follow-up questions, and providing valuable insight into how future disaster case management programs might be structured.

We extend a special thanks to the Louisiana Recovery Authority for funding this study and working diligently to ensure that we were able to contact the participating agencies through focus groups and interviews. We also thank the Greater New Orleans Disaster Recovery Partnership for providing us with the case management data for our analyses.

This report also benefited from the input of our reviewers, Benjamin Springgate and Sally Sleeper of RAND and Faye Stone of the North Carolina Governor's Office.

Finally, we express our appreciation for the contributions of colleagues at RAND who assisted us in refining the report. Thanks to David Adamson for providing feedback on the structure and content of the report and to Christina Dozier for her administrative support.

Abbreviations

ACF	Administration for Children and Families
CAN	Coordinated Assistance Network
DCMP	Disaster Case Management Pilot
FEMA	Federal Emergency Management Agency
GNODRP	Greater New Orleans Disaster Recovery Partnership
HHS	U.S. Department of Health and Human Services
KAT	Katrina Aid Today
LRA	Louisiana Recovery Authority
OFSS	Office of Finance and Support Services
OMB	Office of Management and Budget
RALLY	Recovery Action Learning Laboratory
RFP	request for proposals
SD	standard deviation
SSBG	Social Services Block Grant
TANF	Temporary Assistance for Needy Families

CHAPTER ONE

Introduction and Background

This report presents an assessment of the Disaster Case Management Pilot (DCMP), a pilot that was implemented in Louisiana four years after the hurricanes of 2005 to provide case management services to individuals who were still living in temporary housing supplied by the Federal Emergency Management Agency (FEMA). The report includes a description of how the pilot was organized and financed, as well as a summary of the major challenges to communication, coordination, and financing of the pilot. It concludes with recommendations for improving future implementation of disaster case management. Recommendations are tailored to the Louisiana state authorities responsible for disaster case management and FEMA, the federal agency responsible for developing and administering a national disaster case management program in the future.

Background

In 2009, the Louisiana state government and FEMA recognized an outstanding and critical need to provide social services to populations that were heavily affected by Hurricanes Katrina and Rita. The DCMP in Louisiana was implemented with the primary aim of assisting individuals who were still living in FEMA temporary housing units to move to permanent and secure housing and to provide a host of other services—financial, legal, and health-care services—as part of comprehensive disaster case management. While Hurricanes Katrina and Rita affected thousands of families and individuals, those who were eligible for this pilot represented particularly vulnerable populations who still required basic assistance four years after the hurricanes struck the Gulf Coast. Vulnerabilities for this population included advanced age, disability, and geographic and social isolation. This particular pilot situates itself within a rich context of disaster case management in the region. The following chapter provides a history on the evolution of similar disaster case management programs and the subsequent motivation for the DCMP.

Disaster Case Management Provides Relief to Affected Populations in Both the Short and Long Terms by Incorporating Sustainable Assistance into the Recovery Process

Disaster case management helps affected families and individuals by identifying and coordinating the services of multiple agencies in the aftermath of a disaster. A unique feature of disaster case management is the development of an individual recovery plan that incorporates sustainable assistance for those facing a long road to recovery. For example, a recovery plan might include providing clients with access to employment services, health care, and housing

(GAO, 2009; COA, undated). Disaster case managers also invest significant time in developing their clients' trust; the diversity in client background necessitates compassion, respect, and a nonjudgmental attitude from caseworkers in order to build a trusting and beneficial relationship between client and caseworker (COA, undated).

A unique intake and closure process distinguishes disaster case management from other social services. Client intake serves as a stepping stone to a triage process in which clients are assigned a case manager and their needs are evaluated. In addition to addressing urgent needs, the initial screening identifies clients who qualify for social services and assists in the restoration of predisaster social service benefits. Upholding or restoring services is also important at the close of case management services. Case managers link their clients to appropriate services that the client can continue to use after case management ends; cases can also be transferred to another agency. In keeping with the spirit of disaster case management, case closure provides a time to affirm the progress made and instill confidence in the client to seek help in the future if needed (COA, undated).

Disaster case management also differs from other individual assistance programs at federal and state levels, such as FEMA's individual assistance program. FEMA individual assistance primarily aids clients financially, but the disaster case management services help clients make better use of those financial resources and ensure that they last longer. Disaster case management also provides more comprehensive referral to services that include health care, transportation assistance, and furniture assistance.

Prior Disaster Case Management Programs and National Policy for Disaster Relief Provide Context for the Disaster Case Management Pilot in Louisiana

FEMA's Federal Response Plan for disaster relief was first tested in August 1992 during Hurricanes Andrew and Iniki in Florida (GAO, 1993a, 1993b). The hurricanes resulted in economic losses of $30 billion, destroyed at least 75,000 homes, and left 160,000 individuals homeless (GAO, 1993a, 1993b). Several implementation issues quickly arose, indicating the need for a more thorough and comprehensive federal plan. One primary barrier to effective response was that agencies involved, such as the American Red Cross and National Guard, were unable to effectively communicate with each other to distribute humanitarian aid, including food or damage assessments. A second obstacle was that the Federal Response Plan at the time (FEMA, 1999) and its subsequent update, the National Response Plan (FEMA, 2004), did not explicitly include a disaster case management plan (GAO, 2009). These critical issues hampered long-term recovery for many Floridians (GAO, 1993a, 1993b).

Although the National Guard provided some immediate aid for these events, such as tents and clean water, the United Methodist Committee on Relief was eventually contracted by FEMA to provide disaster case management. The United Methodist Committee on Relief primarily provided assistance in finding temporary housing, and, as a result, many hurricane victims moved into FEMA trailers. The affected population, residing in Dade County, was disproportionately black and Hispanic and had a low per capita income (Smith and McCarty, 1996). These characteristics are common among historically vulnerable populations, which consistently rely on disaster case management to overcome institutional and societal barriers to long-term recovery in the aftermath of disaster.

In 2006, FEMA began to revise the National Response Plan to include specific instruction regarding disaster case management. The revision amended the Stafford Act (Pub. L. 100-707), which, at the time of the hurricanes in 2005, did not contain explicit direction on how

disaster case management was to be funded or contracted. The resulting National Response Framework (DHS, 2008) replaced the National Response Plan. Broader efforts at the national level continue to focus on improving policy and building disaster management into public health priorities. These new priorities focus on recovery—specifically, incorporating postincident health recovery to improve and promote case management and individual-level assistance across planning and response (HHS, 2009). Health services, provision for medical needs, social reengagement, and rebuilding and restoration of infrastructure and health-care delivery mechanisms are key pillars of the developing policy for disaster preparedness and response (HHS, 2009). Both the National Health Security Strategy (HHS, 2009) and National Disaster Recovery Framework reference disaster case management services specifically (FEMA, 2010).

Despite a national agenda for disaster case management, state differences in how disaster case management is implemented, executed, regulated, and financed pose challenges to providing effective, timely, and comprehensive care, despite unity among goals and mission. Louisiana in particular has specific state requirements that national policy cannot fully address. Moreover, policy regarding disaster case management continues to develop within the context of an ongoing debate concerning the privatization of social services (Calhoun, 2006). Several factors contribute to this debate, including the differences in structure and scope between local and community-level organizations and larger state and federal government bodies.

In the Five Years Following Hurricanes Katrina, Rita, Gustav, and Ike, Federal and State Authorities Implemented Several Disaster Case Management Efforts in Louisiana and Other Gulf States

Table 1.1 maps the various initiatives for disaster case management that were implemented in the wake of the 2005 hurricanes. In the immediate aftermath, FEMA selected the United Methodist Committee on Relief to organize a pilot for disaster relief, later named Katrina Aid Today (KAT). KAT was funded solely by $68 million in international donations. The United Methodist Committee on Relief organized a nine-agency consortium that ultimately served 72,000 clients and spanned 34 states. FEMA did not fund families or case managers directly but served as the conduit and administrating body for the consortium. The consortium was intended to last 24 months but was extended to 30 months.

The Cora Brown Bridge program was established after the conclusion of KAT as the funding for the state-level disaster case management pilots. Under the Cora Brown Bridge program, FEMA distributed funds directly to Louisiana and Mississippi state governments. In Louisiana, the Cora Brown Bridge program was administered by the Louisiana Family Recovery Corps. The Louisiana Family Recovery Corps was originally intended to lead the DCMP as well, although the contract was not secured because the Louisiana Family Recovery Corps felt that the timeline was not feasible. Instead, the Louisiana Family Recovery Corps continued its assistance through funding from two of the U.S. Department of Health and Human Services (HHS) programs: Temporary Assistance for Needy Families (TANF) and Social Services Block Grants (SSBGs), as shown in Table 1.1. The Louisiana Family Recovery Corps continued to provide aid until June 2007.

FEMA then joined with the U.S. Department of Housing and Urban Development to form the Disaster Housing Assistance program. The Disaster Housing Assistance program provided rental assistance and case management from September 1, 2007, to August 1, 2009 (GAO, 2009). In Mississippi, the case management responsibilities of the Disaster Housing Assistance program were later transferred to the Mississippi Case Management Consortium,

Table 1.1
Disaster Case Management Programs Following Hurricanes Katrina, Rita, Gustav, and Ike, 2005–2010

Program Name	Dates Effective	Funding Agency and Amount	Administering Agency	Recipient of Funding	States Active In	Eligible Population	Population Reached
Katrina Aid Today	December 2005–March 2008	$68 million (international donations)	FEMA	United Methodist Committee on Relief, 9-agency consortium	34 states	Individuals affected by Hurricane Katrina	72,000 households
Louisiana Family Recovery Corps	January 2006–June 2007	$32.7 million (TANF/HHS) and $18.5 million (SSBG)	HHS	Louisiana Family Recovery Corps	Louisiana	Low-income households with children (TANF funding) or without (SSBG)	9,500 households
Disaster Housing Assistance	September 2007–August 2009	$585 million (FEMA)	U.S. Department of Housing and Urban Development	Mississippi and Louisiana state governments	Mississippi and Louisiana	Victims of Hurricanes Katrina and Rita	37,000 households
Cora Brown Bridge	April 2008–May 2008	$126,000 (FEMA)	State governments	State governments	Louisiana and Mississippi	Individuals with open KAT cases	3,061 households
DCMP, Texas	August 2008–September 2010	$58.2 million (FEMA)	Texas Health and Human Services Commission	Texas state government	Texas	Individuals affected by Hurricane Ike	16,589 households
DCMP, Mississippi	August 2008–August 2010	$31.8 million (FEMA)	Mississippi Commission for Volunteer Service	Mississippi state government	Mississippi	Households affected by Hurricanes Katrina and Rita still living in temporary housing units	3,595 households
ACF DCMP program	April 2008–March 2010	$22 million (FEMA)	HHS	Catholic Charities USA	Louisiana	Households affected by Hurricanes Gustav and Ike in Louisiana	7,550 households
DCMP, Louisiana	September 2009–March 2010	$9.4 million (FEMA)	LRA	Louisiana state government	Louisiana	Households affected by Hurricanes Katrina and Rita still living in FEMA temporary housing units	1,804 households

SOURCES: Berman and Abe (2007); Catholic Charities USA (undated); GAO (2009); personal communication from FEMA to the lead author (May 3, 2010); the authors' secondary analysis of the Coordinated Assistance Network (CAN) case management data from the Louisiana DCMP; U.S. Department of Housing and Urban Development (2009); Zimmerman (2009).

the 13-agency consortium created by the Mississippi Commission for Volunteer Service—the latter being the same agency that administered Mississippi's DCMP. Of the 8,738 eligible cases in Mississippi, 3,595 were served (see Table 1.1). In Louisiana, these responsibilities were transferred to the Louisiana Recovery Authority (LRA), which later managed the DCMP in that state. A second Disaster Housing Assistance program was later established in Texas in 2008 to assist the 30,000 victims of Hurricane Ike. This assistance program ran parallel to the DCMP in Texas, which served more than 16,000 individuals and was also funded by FEMA.

The most recent case management program was the U.S. Department of Health and Human Services' Administration for Children and Families' (ACF's) DCMP program, piloted under Catholic Charities USA and offered exclusively to residents affected by Hurricanes Gustav and Ike. The program began on April 1, 2008, and was scheduled to end on March 31, 2009. Its services included temporary financial assistance, emergency goods and shelter, transportation aid, legal assistance, employment services, and health care. In support of the progress that ACF made, FEMA extended the pilot program through March 2011 and has provided supplemental funding in excess of $22 million. As of October 2009, a total of 7,507 cases have been opened, with 2,061 of these cases having been closed.

There Is Still a Critical Need for Disaster Case Management in Louisiana to Help People from Disadvantaged Backgrounds Overcome Long-Term Barriers to Recovery

In the post-Katrina period, thousands remain displaced from their homes and continue to struggle to recover. Historically marginalized and vulnerable populations in particular—such as individuals with disabilities, the elderly, and those from socioeconomically disadvantaged backgrounds—face barriers to recovery (Redlener, 2009; GAO, 2009). These populations confront life circumstances (e.g., chronic illness, poverty, geographic isolation, disability, low educational attainment) that compound their challenges in identifying and using resources essential to recovery. Moreover, these factors interact with environmental and institutional barriers to form a complex dynamic of vulnerability that does not always have a clear intervention (Redlener, 2009).

Such interaction between environmental and institutional obstacles following a disaster poses monumental challenges at the federal, state, and local levels for meeting the needs of these populations, specifically in the areas of communication, coordination, and service capacity. Often, the powers that these governments have to assist families are inadequate to surmount these challenges (COA, undated). Moreover, when programs fall short, they tend to fail the vulnerable populations that are most in need (Redlener, 2009). The use of disaster case management can substantially improve access to recovery services for vulnerable populations under these conditions.

The Disaster Case Management Pilot in Louisiana Attempted to Fill Gaps in Service Provision That Lingered in the Wake of Previous Efforts

The DCMP, the focus of this study, was scheduled to begin in Texas, Mississippi, and Louisiana immediately following the Cora Brown Bridge program. However, due to delays in contracting and extended budget negotiations, the pilot did not begin in Texas and Mississippi until two months later (August 2008), as shown in Table 1.1. In Louisiana, the pilot did not start until more than one year later, in September 2009, due to budget negotiations and difficulty in finding a lead contractor to manage the pilot. Louisiana Family Recovery Corps was initially identified as the likely DCMP lead contractor in Louisiana in light of its administra-

tion of the Cora Brown Bridge program two years earlier, but it pulled out of its initial partnership with the LRA because of the short timeline and lack of funding for direct services.

The LRA instead brought in the Greater New Orleans Disaster Recovery Partnership (GNODRP) as the lead contractor. Initially, GNODRP had also pulled out of a partnership with the LRA because of concerns about the short timeline and lack of funding for direct services, but later it competed for and accepted the role as lead contractor awarded through a competitive request for proposals (RFP) process. Appendix A contains a detailed historical timeline, provided by the Louisiana Recovery Authority, documenting the delays in starting Louisiana's DCMP. Despite Louisiana's delay in beginning the pilot, the end date for services (March 2010) remained the same as the end date for services in Texas and Mississippi.

The DCMP began in Louisiana in fall 2009, with the specific purpose of connecting clients with long-term services, including housing, rebuilding support, furniture, appliances, financial counseling and literacy training, utility deposits, social services benefit restoration, job training, mental and physical health assistance, legal assistance, and transportation assistance. The pilot specifically targeted Louisiana households still in FEMA temporary housing units (LRA, 2009a).

Purpose of This Report

As part of its effort to create a national disaster case management program, FEMA required the Texas, Mississippi, and Louisiana DCMPs to commission independent studies of their pilots. At the request of the LRA, RAND began to conduct a focused assessment of three areas in late March 2010: communication, coordination, and financing. Specifically, RAND's assessment addressed the following questions:

- What were the challenges, if any, to administering the DCMP in Louisiana, and at what stage of implementation did they occur? How were these challenges influenced by the structure of the pilot and pilot administration at the federal, state, and local levels?
- Which challenges were specific to Louisiana, and which would affect the DCMP regardless of where it was implemented?
- How was information communicated from FEMA to state and local participants? Was this communication consistent, effective, and ongoing to meet the needs of all partners?
- How did the financing for case management get disbursed (e.g., pathways)? Where were the gaps in financing?
- How did the DCMP coordinate with other recovery efforts in Louisiana?

In the following chapters, we describe our methodology (Chapter Two) and findings from the document review, interviews, focus groups, and analysis of case management data. Document review and analysis of the case management data primarily inform our description of pilot implementation (Chapter Three); in that chapter, we describe how the pilot was organized, the flow of finances from FEMA to the local case management agencies, and the case management model used by Louisiana. Chapter Four summarizes findings from the analysis of the case management data and provides information about the client demographics, indicators of vulnerability among clients, and the geographic distribution of clients. Needs and services provided are also summarized in Chapter Four. Common challenges in coordination,

communication, and financing identified from the interviews and focus groups are presented in Chapter Five. The report then builds on these findings and summarizes recommendations to improve implementation of disaster case management in Louisiana (Chapter Six), as well as recommendations for FEMA (Chapter Seven) for future design of a national disaster case management program.

CHAPTER TWO

Methods

To collect the data needed to answer these research questions, we employed four methodologies: document review, individual and group interviews, focus groups, and analyses of case management data.

Document Review

To help inform this report, we reviewed grant proposals, monthly and weekly reports on the progress of individual participating contractors, budgets and invoices, interim reports from the monitoring and evaluation subcontractor on the progress of the overall pilot, and the DCMP manual and data-entry manuals co-created by GNODRP and the LRA. We reviewed these to gather background information on how the pilot operated, capture challenges that were documented, and determine the flow and amount of financing that was budgeted for the pilot and the amount of funding that was actually spent as of April 2010.

Interviews and Focus Groups

We conducted in-person interviews with four employees from the LRA, including the DCMP manager; five employees of GNODRP; and four subcontractors to GNODRP (the Recovery Action Learning Laboratory [RALLY]), PMOLink, Lutheran Social Services Disaster Response, and Duplantier, Hrapmann, Hogan, and Maher). Interviews were also held via phone with three FEMA employees who helped manage the DCMP; one employee from FEMA's individual assistance program; one employee from Louisiana's Office of Finance and Support Services; and two employees from Louisiana's Office of Community Development.

In-person interviews were held at his or her own agency, lasted between 45 and 60 minutes, and were digitally recorded. Interviews conducted over the phone also lasted between 45 and 60 minutes, and a note taker was present to record the conversation. Interviewees were asked to describe their role in the pilot and asked the following questions:

- What do you perceive as the greatest barriers, if any, to coordination and communication among the agencies involved in the DCMP in Louisiana?
- What recommendations do you have for how to improve the coordination and communication among the agencies involved in the DCMP in Louisiana?

- What do you perceive as the greatest barriers, if any, to accessing resources quickly and spending DCMP dollars wisely?
- What recommendations do you have for improving access to and appropriate use of financing (e.g., new or revised policies, procedures, protocols; changes in pilot organization)?
- What strategic relationships with other state agencies or recovery programs could help disaster case management run more efficiently and effectively in the future?

RAND researchers conducted two focus groups, one with case managers (n = 12) and one with case manager supervisors and organizational directors from participating contractor organizations (n = 12). Representatives from all six organizations that were contracted for case management were present at each focus group. Focus groups were held in a closed conference room of a participating case management agency and lasted two hours each. Two RAND researchers were present to facilitate the focus group and take notes. Focus groups were also digitally recorded.

The two objectives of the focus group were to (1) identify a list of challenges to coordination, communication, and financing of case management services among the agencies involved in Louisiana's DCMP (given the focus of this assessment) and (2) develop recommendations to improve future implementation of disaster case management. Questions posed to the case managers included the following:

- Where are there gaps, breakdowns, or barriers in communication and coordination?
- Where do systems for communication and coordination need to be strengthened?
- What policies, procedures, or protocols related to communication and coordination (e.g., how you communicate within and between agencies) need to be revised? How should they be revised?
- Where, if anywhere, are the existing resources insufficient?
- What factors created any delays in accessing resources, including getting reimbursed?

To help us develop recommendations to improve future implementation of disaster case management in Louisiana, we asked case managers the following questions:

- What changes to policies, procedures, or protocols would improve coordination and communication of disaster case management? With external partners? Between you and your clients?
- What improvements in coordination and communication would have the greatest likelihood to result in long-term success for your clients?
- What changes to policies, procedures, or protocols would help to streamline the existing reimbursement process and enable case managers to access resources quickly?
- What changes to the pilot would provide more or different resources that case managers need to adequately serve clients?

Additionally, we asked case manager supervisors and organizational directors to comment on the following:

- changes to overall pilot organization (i.e., the entities involved and their assigned roles and responsibilities) that would improve coordination and communication

- what the LRA and FEMA could do to improve coordination and communication in future disaster case management
- what needs to be in place to ensure that agencies have a reserve of case managers to deploy rapidly after a disaster and to retain during a disaster
- any misalignments between the DCMP fiscal operations and agencies' fiscal operations.

RAND researchers reviewed the digital recordings and interview notes using a qualitative analysis methodology called constant comparative analysis (Lincoln and Guba, 1985; Denzin and Lincoln, 2000). First, two RAND researchers independently read through the meeting notes and list of challenges (given the focus of this assessment) and identified the themes and ideas that were raised most frequently. Next, each researcher used the resulting list for a consensus-building exercise. To ensure that the two researchers identified the most-salient themes, they reviewed similarities and differences in their lists, resolved inconsistencies, and reached a common set of key themes.

Analysis of Case Management Data

We analyzed data from 1,804 cases opened for the DCMP, which could represent individual clients or households that participated in the DCMP in Louisiana. The data were supplied by GNODRP. Case managers entered these data into an online application called the Coordinated Assistance Network (CAN), and GNODRP checked the data to ensure that they were complete, providing case management agencies guidance on where they had missing data. Once data were exported from CAN, GNODRP cleaned the data for duplicate cases and invalid information (e.g., dates out of the range of the pilot). Much of this analysis focused on demographic variables and client characteristics. If a case covered an entire household, client characteristics were collected for the head of household. Categories for continuous variables, such as age, were created so that results could be compared to findings from other research; specifically, age categories are those used by the U.S. Census Bureau (2006–2008). Income was included in the data analysis as a categorical variable. However, for other variables, such as education, traditional categories were sometimes collapsed to increase the population count in a particular category for ease of analysis and interpretation. Education, for example, was organized into three categories: less than a high-school education, high-school education, or at least some college. Typically, there are differences in the demographics of respondents who completed a four-year college degree program and those who complete some college or a two-year degree; however, these populations make up a relatively small fraction of the client base in DMCP, so these two categories were combined.

Chi Square Tests and Odds Ratios Were Used to Better Understand Case Distribution

To better understand the distribution of case status outcomes, we used a statistical test of significance (a chi square test), where appropriate, to assess whether the distribution of case status was independent of the various demographic, social, and geographic factors. Some statistics are prone to confounding from several observed and unobserved client characteristics, so, where the chi square test was significant, adjusted odds ratios were calculated to further understand which factors ultimately contributed to the client's case status.

Odds ratios were adjusted using categorical variables for age, sex, income, disability status, race/ethnicity, education, and health status (i.e., whether clients reported a chronic illness or mental health need). These characteristics were selected because they represent potential barriers to recovery: Disability, health conditions, low income and education, and older age can make it difficult to identify and take full advantage of the resources available. The multiple vulnerability categories rendered a chi square test not applicable, so only adjusted odds ratios were used. We report adjusted odds ratios that remained significant ($\alpha = 0.05$) after accounting for various client characteristics.

Self-Identified Variables Might Not Be Consistently Reported Among All Clients

Almost all variables are self-identified by the client, including income, health status (chronic illness, mental health, disability), and the geographic and social/cultural isolation variables. Poverty level was determined by the case manager in instances in which the client did not know; in this respect, the data might underestimate the number of clients below the federal poverty line. Inconsistencies between clients' interpretation of self-identified variables might also have created inconsistencies in the data. DCMP case managers were responsible for entering all client information into the CAN database themselves by hand, and many reported technical difficulty using the database. This analysis relies on data gathered as of April 19, 2010. However, data entry on clients continues after the DCMP closure.

Several of the self-identified variables were incorporated into Table 4.1 in Chapter Four, which explores client-level factors that jeopardize a timely and successful recovery or are considered "vulnerabilities." These 11 variables are not mutually exclusive—clients might be described by any number of these, or by none of them. To address this, a vulnerability index was created from the 11 variables highlighted in the table. Variables that identified cases as having "no source of income" or "elderly, disabled and unable to pay rent" were excluded in order to not double count disability and poverty status.

Clients Were Characterized According to the Status of Their Case

Cases were opened and closed by case managers according to the parameters outlined in the DCMP's policy and procedures manual. In order to close a case, a case manager must have met one of the following six conditions: (1) successfully served the client (i.e., the client's long-term recovery plan had been achieved and client housing is sustainable); (2) met the primary needs of the client (even if the client's long-term recovery plan had not been achieved); (3) been unable to resolve the case due to unavailable resources; (4) transferred the client's case out of the DCMP; (5) documented the client's noncompliance or withdrawal of their request for services; or (6) documented another reason the client is unable to participate in the DCMP (e.g., death, imprisonment, relocation). For our analyses, we characterized cases in four ways:

- *Case remained open*: Open cases were identified in the CAN data received from GNODRP. Case status (open/closed) was available for all clients.
- *Case closed (at least one need met)*: Clients were considered to have at least one need met if they reported that at least one of their recorded needs had been met or that their primary need had been met. Because of the low response rate of this variable, the researchers did not use this exclusively to evaluate whether client needs were met.
- *Case closed (no needs met)*: A client was considered for this category if he or she did not have at least one recorded need met. If a client answered that he or she felt that a primary

need had *not* been met (and no recorded needs were met), the client was also included in this category. Because of the low response rate of this variable, the researchers did not use this exclusively to evaluate whether a client's need was met.

- *Case closed (other reason)*: Clients were placed in this category if they had cases listed as closed but for which there was no information about whether needs were met or identified. Clients were also placed in this category if they did not have at least one need fully met because of noncompliance or lack of follow-up on the part of the client. Noncompliant and no-contact status were also abstracted from write-in responses listed in "other reason for case closure." Some clients could not be located because they had moved since they last submitted an address to FEMA, while other clients were participating in the pilot but later had moved or did not follow up with their case manager to continue services. A small number of clients were deceased, found not eligible for the pilot, or had needs that could not be met within the resource provision of the DCMP.

Existing Data Were Supplemented by Categorizing Free-Text Variables

The reason for the case closure and the status of the clients' individual needs were both prone to missing responses. However, there were some qualitative write-in variables that were coded and analyzed in order to gain further inference about the needs of the client. The qualitative needs variable was similarly coded to identify needs that were not already listed. We decided to code based only on the first identified reason or the reason that was most frequently cited within any one write-in response. Other variables were also prone to missing data, and the amount of missing data differed for each variable. Basic demographics, such as race, gender, and age, as well as case status had less than 5 percent missing, while income and education had around 20 percent missing. In the tables, we consider percentages among the portion of the data that was nonmissing ("valid percentages").

Geographic Analysis Used ZIP Codes to Identify Client Distribution Across Cities

Our geographic analysis focused on individual cities, but we considered the isolation variables as an integral part of the geographic analysis in this evaluation. The relatively small number of clients who identified as isolated made further stratification of this variable difficult to interpret. New Orleans and Lake Charles were the cities with the most clients. We also looked at the next ten most client-populated ZIP Codes. More than half of the ZIP Codes contained only one client.

CHAPTER THREE

Disaster Case Management Pilot Implementation

In July 2009, FEMA awarded a $9.4 million grant to the LRA for implementing the DCMP. The LRA is a state-run agency established in October 2005 through executive order by then-governor Kathleen Babineaux Blanco. The LRA is overseen by a 17-member body[1] and acts as the state's single voice on disaster-related issues, activities, and policy. The organizational sunset date of the LRA is July 1, 2010, unless it is further extended by the state legislature. In addition to the DCMP, the LRA runs other housing, infrastructure, and economic recovery programs, such as the Road Home program, which provides eligible homeowners up to $150,000 to rebuild a damaged home or purchase a new home. This chapter presents a brief overview of the implementation of the DCMP and is intended to provide the reader with an understanding of the overall structure of the pilot, including spending and information flows, the model of disaster case management used, and services provided. This summary is not meant to substitute for a more thorough process evaluation of the pilot, but it does provide context for the case management data in Chapter Four and the challenges and recommendations presented in Chapters Five, Six, and Seven.

Structure and Financing of the Pilot

GNODRP was selected through a competitive RFP process[2] as the lead contractor to manage the DCMP. GNODRP was formed in 2005 and "is a coalition of 70 plus member agencies including faith-based, non-profits, government liaisons and long term recovery organizations serving those impacted by the 2005 hurricanes in the Greater New Orleans region" (GNODRP, undated). GNODRP subcontracted several agencies to provide the following:

- Project management was provided by PMOLink, a private consultant.
- Fiscal oversight and training on reimbursement procedures were provided through a subcontract with Duplantier, Hrapmann, Hogan, and Maher, a certified public accounting firm with offices in New Orleans, Slidell, and Houma.

[1] Thirteen members are board members (one from each congressional district) appointed by the governor and confirmed by the Senate. Board members are respected leaders and citizens and serve staggered terms. There are also four ex officio members from state government: the speaker and speaker pro tempore of the state House of Representatives and the president and president pro tempore of the state Senate (LRA, undated).

[2] A multiagency committee selected the lead contractor and case management agencies.

- Monitoring and evaluation[3] of case management agencies (to assess whether they were meeting their contract guidelines) was subcontracted to RALLY, a foundation dedicated to assessing recovery efforts.
- Estimation services were provided through a subcontract with Lutheran Social Services Disaster Response, a faith-based nonprofit organization that supports disaster relief and recovery.

Through a separate RFP process, six agencies were selected to provide case management services:

- Advocacy Center, a nonprofit established in 1978 to protect the rights of individuals with mental or physical disabilities
- International Relief and Development, an international nonprofit established in 1988 that specializes in providing development programs targeted at vulnerable populations
- Louisiana United Methodist Case Management Assistance, Inc.,[4] a faith-based nonprofit organization that operates under the umbrella of the United Methodist Church to provide humanitarian aid to those affected by Hurricane Katrina
- Lower Ninth Ward Neighborhood Empowerment Network Association, a local nonprofit established after Hurricanes Katrina and Rita and dedicated to rebuilding the Lower Ninth Ward
- Recovery Assistance, Inc. Ministries, a nonprofit organization that transitioned from a short-term disaster-relief program to a long-term, sustainable ministry in 2008 to continue to connect volunteers with opportunities to support survivors of Hurricane Katrina
- United Way for the Greater New Orleans Area, a local nonprofit, established in 1924 and part of the larger nationwide United Way network, that currently funds more than 100 programs and 70 partner agencies serving Jefferson, Orleans, Plaquemines, Saint Bernard, Saint Tammany, Tangipahoa, and Washington parishes. To support case management, the United Way subcontracted with local branches of four nonprofits: the Southeast Louisiana Red Cross, Catholic Charities Archdiocese of New Orleans, Rebuilding Together New Orleans, and Boat People S.O.S. New Orleans.

Funding for the pilot went from FEMA directly to the LRA, which issued contracts and disbursed funds to reimburse the lead contractor and each of the six case management agencies. Figure 3.1 displays this overall structure and summarizes the funding originally budgeted for the pilot and the actual amount of funding spent. *Funding spent* refers to the amount, in dollars, that was invoiced and approved—the lead contractor and case management agencies invoiced for $669,513 more than was approved (ranged from $30,190 to $306,830). Total spent may underestimate the actual costs of the program but provides an accurate summary of how much money FEMA invested in the program. Total budget for the DCMP was $9,416,749,

[3] These monitoring and evaluation responsibilities were focused solely on whether case management agencies were meeting their deliverables (e.g., hired appropriate number of staff), whereas RAND was tasked with assessing the overall DCMP, including the roles of the lead contractor, the LRA, and the case management agencies.

[4] The Louisiana Conference of the United Methodist Church Disaster Response (LCUMCDR) was the name of the agency that originally applied for and was awarded the DCMP case management contract. The Louisiana United Methodist Case Management Assistance, Inc., was a 501(c)(3) organization established by LCUMCDR specifically for the DCMP and was the agency that actually provided case management services.

based on 3,183 cases anticipated. Actual spending, as of April 19, 2010, was $4,139,776 on 1,804 cases. Appendix B contains updated budget information that reflects pilot spending through June 18, 2010. Of these 1,804 cases, the United Way for the Greater New Orleans Area managed the most cases, with 28 percent, while the Lower Ninth Ward Neighborhood Empowerment Network Association handled the smallest number of cases (5 percent). Potential reasons for the disparity between estimated and actual budget, and intended and actual number of cases served are covered in Chapter Five.

Communication in the pilot was designed to follow a pattern similar to the funding flow presented in Figure 3.1: from FEMA to the LRA to GNODRP, and down to case management agencies. Within each case management agency, there was a point of contact designated to receive information from GNODRP and share it with the case manager supervisors and case managers. Chapter Five provides more information about communication among agencies involved in the pilot.

Case Management Model Used by Pilot

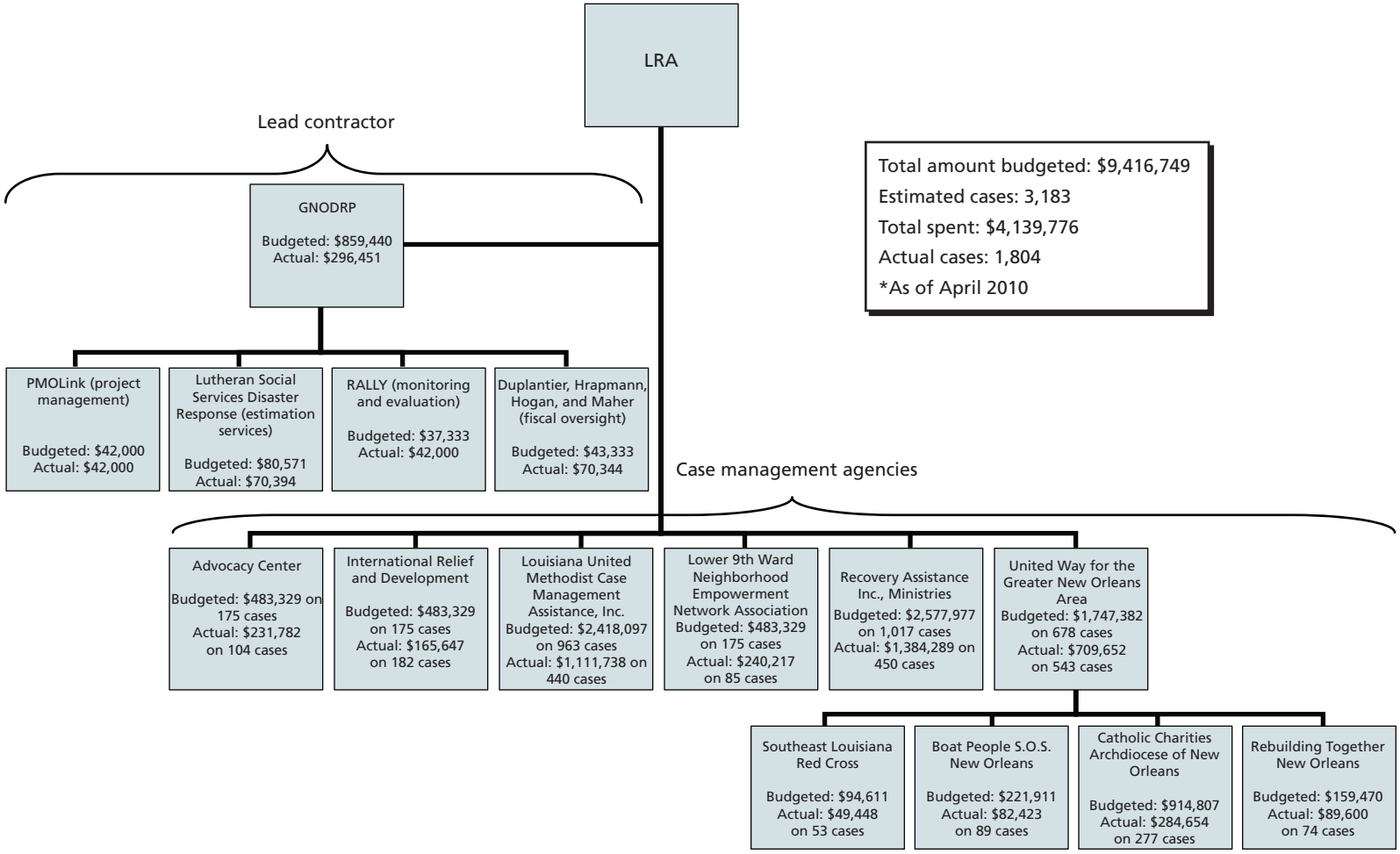
FEMA provided the list of eligible clients to the LRA. Per FEMA's request, the LRA sent the list to the American Red Cross to check the validity of client contact information. The LRA then sent the updated list to GNODRP, and GNODRP assigned cases to case management agencies. All ten case management agencies that participated in the Louisiana DCMP (see Figure 3.1) implemented the same six-step case management model. Data on case management services provided some information about the extent to which case managers engaged in recovery planning, followed the recovery plan, and were successful in closing cases. It is important to note that the DCMP did not have explicit goals or objectives that defined successful implementation of the model (e.g., targets for the number of cases closed, recovery plans developed); therefore, this information is offered as descriptive only, rather than evaluative of pilot success.

Step 1: Intake

Case managers made initial contact with 3,324 clients (in person or via phone, letter, or email) to verify eligibility and triage cases into a tier level based on needs. The tiers reflect client characteristics and service needs and provide some guidance to the case manager on the appropriate contact needed:

- Tier 1: The client is employed or stable and should be monitored every three months.
- Tier 2: The client needs motivation, and, although the client can work, he or she has delayed finding a job while on FEMA assistance. The client should receive monthly contact from the case manager.
- Tier 3: The client has little or no work experience, low literacy, or a history of dependence on public assistance. Client should receive weekly or biweekly contact from the case manager.
- Tier 4: The client lacks capacity, is highly dependent on public assistance and social services, and is not employable due to age, disability, or other limiting factors. Client should receive weekly or biweekly contact from the case manager.

Figure 3.1
Organizational Chart for the Pilot



RAND *TR849-3.1*

If a client's contact information was incorrect, the case manager was required to search CAN to see whether another address was on file, call all phone numbers listed on three different days at different times, conduct a home visit and leave a letter explaining the pilot, and mail a letter to the address listed. Seven hundred twenty-two clients were not able to be contacted because of out-of-date contact information, and an additional 518 refused services. After intake was complete, a GNODRP staff member permanently assigned 2,084 cases to case management agencies to begin services. Case managers indicated that having to intake a client and then transfer the client to another agency for services created confusion among clients as to who was their assigned case manager and that electronically transferring cases was difficult to complete using the CAN database. Between initial intake and the first assessment by permanently assigned case management agencies (ranged from between one to six weeks), an additional 280 clients could not be contacted or refused services, leaving 1,804 cases.

Step 2: Assessment

Once cases were permanently assigned, case managers contacted the 1,804 clients to set up a time for a more thorough assessment of service needs than was done during triage. Two hundred thirty-nine additional clients could not be contacted because of out-of-date contact information, and 317 withdrew their request for services when contacted by their permanently assigned case manager. In developing the client's recovery plan, the assessment focused on needs and client vulnerabilities, including financial requirements, as well as services and benefits the client was already receiving. Vulnerabilities were self-identified by clients and fell into one of four categories: isolation, poverty and income, health status, and impacted by disaster.

Isolation, which includes clients who are socially, culturally, or geographically isolated and clients who lack means of transportation, can hinder clients as they attempt to identify and make use of appropriate resources in the recovery process. These clients might be hard to reach for case managers and other providers and are otherwise left to navigate their recovery process alone.

The poverty and income indices identify clients who live in unstable economic situations. These clients have essentially no financial means to use in their recovery, and their low socioeconomic status leaves them perpetually vulnerable to host of factors, such as mental health problems, that compound the already complex barriers to recovery.

The health indicators identify clients whose health status might jeopardize their recovery. The clients might be especially constrained financially due to higher cost of living, inability to support themselves due to mental illness or disability, or lack of preparation for the difficult emotional journey that ensues in the aftermath of a disaster. Clients who were most affected by the hurricanes are those who faced extensive financial and emotional distress because of the hurricanes' direct impact.

Clients who resided in a mandatory evacuation zone, were displaced from their primary residence, or were underinsured or uninsured might face a more extensive recovery process that can exacerbate barriers already in place at the social, infrastructural, or environmental levels.

Assessments were perceived by case managers as lengthy and created some tensions with clients because clients had already been required to participate in similar assessments for previous case management programs (i.e., KAT and the Cora Brown Bridge program).

Step 3: Recovery Planning

Case managers worked with clients to develop an individualized, goal-oriented recovery plan and began to refer clients to federal, state, and local services. Case managers were able to develop recovery plans for 1,182 households (66 percent of the 1,804 cases opened). Several types of services were offered to clients:

- *Housing repairs and assistance.* Obtain or maintain affordable housing in current area or in relocation location.
- *Furniture procurement.* Obtain furniture or appliances, such as a bed or refrigerator.
- *Financial assistance.* Manage finances while obtaining resources.
- *Employment or job training.* Obtain or maintain employment to sustain income and resources.
- *Utilities.* Obtain, restore, or sustain utilities, such as electric, gas, water and trash, and phone services.
- *Health and well-being.* Obtain medical or mental health care to stabilize and or maintain health and well-being.
- *Food.* Obtain food for the household in the community, including food stamps and school lunch programs.
- *Application assistance.* Obtain assistance in filling out applications and sustaining resources.
- *Aging and disability services.* Help seniors and individuals with disabilities enroll in programs (e.g., food stamps) and obtain appropriate assistance.

Step 4: Working the Recovery Plan

In this step, case managers were required to maintain ongoing contact with clients, maintain accurate and current case files, and monitor clients' progress toward recovery plan goals. Case managers met with 48 percent of households with open cases (n = 1,804) on a weekly or biweekly basis. There was a significant amount of missing information in the CAN data system, which suggests that case managers had difficulty maintaining accurate and current electronic case file information; hard-copy files were not reviewed. Four hundred eight households (22 percent of households with open cases; n = 1,804) completed at least one goal of their recovery plan.

Step 5: Case Closure

When the goals of a recovery plan were achieved and the client was in sustainable housing or the client's primary needs were met, the case was successfully closed. Ten percent of opened cases (n = 186) were closed with at least one of the client's primary needs met. Case managers also closed 27 percent (n = 486) of opened cases in which they did not meet primary needs. Case managers reported great difficulty finding appropriate resources to resolve those cases. Eighteen percent of the opened cases (n = 314) were closed for other reasons, including a client withdrawing the request for service, the client being transferred out of the pilot to another recovery program, or the client relocating outside of Louisiana. Forty-five percent of the opened cases (n = 818) remained open as of April 2010.

Step 6: Evaluation

Part of Louisiana's model was the assessment of client and pilot outcomes. Case managers were responsible for monitoring individual clients' progress on their recovery plan. As previously mentioned, 22 percent of clients made progress on their recovery plan (i.e., achieved at least one goal). GNODRP and RALLY were responsible for monitoring client satisfaction and performing case audits to monitor client outcomes, and they collected data to evaluate pilot outcomes at closure. Final reports from GNODRP and RALLY were pending at the time of this writing.

To support implementation of the pilot, Louisiana also utilized CAN, an online application that supports integration and sharing of data on services during and after a time of disaster. CAN began after September 11, 2001, to provide disaster relief agencies, whether national or local, with a unified way of sharing information. Data entry and export from CAN created a number of challenges for case managers, including technical problems with the web-based CAN interface and confusion with what content should be entered where and at what intervals. CAN challenges are discussed in more detail in Chapter Five.

CHAPTER FOUR

Households Served and Services Provided by the Pilot

This chapter provides more information on the cases referenced in Figure 3.1 in Chapter Three, including whether the case is open or closed, and the characteristics of households with open versus closed cases. Throughout this chapter, *cases* refers holistically to households with which case managers worked and could involve one or more individuals (i.e., head of household and immediate families or anyone residing at the same address). *Clients* refers to the single individual who has been designated the head of the household. While the pilot was designed to serve 3,183 clients, only 1,804 were involved in the DCMP. Our data and analysis are based on the 1,804 cases. Although absence of data on client characteristics and needs was a frequent challenge, case status (open/closed) was available for all 1,804 clients. Please note that additional data tables are provided in Appendixes B–E.

Clients Were Mostly 53 Years and Over, Had a High School or Lower Education, and Had an Annual Household Income of Less Than $15,000

The ethnic composition of the client population included mostly black and white clients, with a median age of 53. The client population generally had low educational attainment: Eighty-two percent had no more than a high-school education, and more than one-fifth of the population had *less* than a high-school education. More than half of the clients who supplied information about their household income reported earning less than $15,000 annually. Income included wages, as well as other sources, such as Social Security benefits. Two-thirds of the population identified themselves as unemployed. One-quarter of the clients were unemployed due to disability and unlikely to reenter the labor market to support their daily needs. The majority of clients lived in a mobile home or trailer with two other members in their household on average. New Orleans (n = 504) and Lake Charles (n = 143) had the highest numbers of clients.

More Than Half of Cases Remained Open at Pilot Closure; the Majority of Clients with Closed Cases Did Not Have Their Needs Fully Met

We categorized cases as either open or closed based on their designation in CAN. Eight hundred eighteen out of 1,804 cases remained open, and 486 cases were closed without clients' needs being fully met. Since there was a lot of variability in the reasons for case closure, we decided to further subdivide closed cases to examine cases that were closed and had at least one

need met, cases that were closed and had no needs met, and cases that were closed for other reasons, such as relocation or lack of contact.

Clients Who Had Low Economic Status, Listed a Health Problem, or Lived in a Trailer Were Significantly More Likely Than Others to Have an Open Case at the End of the Pilot

Most of this population resided in trailer homes; clients who resided in a single-family home or other housing type were less likely to have a case open. Trailers were often supplied by FEMA, and many needed repairs; however, clients living in the trailers often represented a disadvantaged population. The trend persisted after controlling for other available client information: Clients with trailers were 34 percent more likely to have an open case (adjusted odds ratio: 1.34; 95-percent confidence interval: 1.04–1.71).

To gain a clearer understanding of case outcomes, we also examined *vulnerability indicators*—that is, the environmental and social factors that might function as barriers to seeking or receiving support services—and how these indicators related to whether client needs were met.

Clients who fell below the poverty line, had no source of income, and otherwise were unable to support themselves were more likely to have a case open than those who did not have any of these characteristics. This association persisted after adjusting for other client characteristics: Clients who fell into one of these categories were 32 percent more likely to have an open case (adjusted odds ratio: 1.32, 95-percent confidence interval: 1.01–1.73).

Clients who had a recorded health issue also had an increased likelihood of having an open case, compared with clients with no recorded health issue; again, this was somewhat explained by other client characteristics, such as age and education. However, after adjusting, clients who had a mental health need, disability, or chronic illness were 41 percent more likely to have an open case (adjusted odds ratio: 1.41; 95-percent confidence interval: 1.08–1.82).

Clients Represented a Spectrum of Vulnerability Across Social and Economic Indices

Approximately 16 percent of clients were identified as socially, culturally, or geographically isolated or had limited access to transportation, with 3 percent identified as isolated in all three categories (i.e., socially, culturally, and geographically). The questions regarding isolation were asked of the client by the case manager and were subject to variations in client comprehension and experience. Despite this issue, these metrics uniformly reflected vulnerability among the client population. Half of the isolated clients had cases remaining open at the close of the pilot (compared to 43 percent of clients who did not identify as isolated and had an open case); most of the isolated clients who had cases closed did not have a need met recorded by their case manager.

Most Clients Reported Multiple Vulnerability Indicators, Reflecting Complex Barriers at the Client Level to a Timely Recovery

The vulnerability indicators listed in Table 4.1 are not mutually exclusive: A client can have a health issue that compounds his or her isolation and poverty status, for instance, and it can be difficult to identify a population that is not vulnerable from a variety of perspectives. These factors might interact in an additive or multiplicative way. To address the underlying dynamic between various vulnerability indicators, we created a vulnerability score that is the combined sum of the indicators listed in the table. We pursued an additive model because it required fewer assumptions from the researchers, though complex multiplicative interactions undoubtedly contribute to a client's well-being.

Table 4.1
Vulnerability of Population Served

Vulnerability Indicator	Open Cases (%)	Closed Cases with at Least 1 Need Fully Met (%)	Closed Cases with No Needs Fully Met (%)	Closed Cases for Other Reason (%)	Total Count (n)
Total count (n)	818	186	486	314	1,804[a]
Isolation					
Social or cultural	52.3	10.5	26.7	10.5	86
Geographic	51.3	12.0	30.8	6.0	117
Limited access to transportation	61.0	11.6	19.9	7.5	146
Poverty and income					
Below poverty level	56.1	12.4	22.9	8.6	685
Single head of household with dependents and no employment	54.3	12.8	26.6	6.4	94
Health status					
Disability	58.1	12.8	18.5	10.6	584
Mental health need	52.4	13.5	27.0	7.1	126
Chronic illness	54.0	12.2	28.8	5.0	139
Affected by disaster					
Resided in mandatory-evacuation zone	49.1	11.4	26.1	13.3	1,390
Displaced from primary residence	50.8	11.3	25.1	12.9	1,564
Underinsured or uninsured homeowner	52.8	11.8	25.9	9.5	873

NOTE: This table was created using data from April 19, 2010, approximately one month before the pilot ended.
[a] This represents the sum of the total number of opened cases (n = 1,804). Vulnerability variables listed in the table have different rates of missing data, but valid percentages of nonmissing data are represented here.

Clients' scores ranged from 10 to the minimum, 0; no client scored an 11 (the maximum), and 164 out of 1,804 (approximately 9.0 percent) have a vulnerability score of 0. More than 90 percent had a vulnerability score of at least one, and the median score was 3. Vulnerability scores for approximately 75 percent of the clients fell between 2 and 5. There were statistically significant differences (p-value < 0.000) in the vulnerability burden shared among clients with open cases and those with closed cases. Clients with open cases had a mean vulnerability score of 3.7 (standard deviation [SD] = 1.56); clients with closed cases had a vulnerability score of 2.8 (SD = 1.83).

While Case Status Does Not Appear to Vary by the Nature of an Individual's Recovery Needs or Services, Some Needs Were More Often Met Than Others Among Closed and Open Cases

Housing, case management services, and furniture procurement were the top three needs cited. Little variation existed between open and closed cases across the different services provided. Table 4.2 examines the nine most cited needs (i.e., services requested) listed among clients in the CAN database. The table displays the percentage of clients who requested the service and the percentage who received services that met or partially met their need among clients with open and closed cases.

Approximately two-thirds of any given type of service request were from cases that remained open at the conclusion of the pilot. However, there were also high rates of missing information in the database about the service provided for each identified need. Employment services most frequently met or partially met a need. Housing, application assistance, and financial assistance services also frequently met or partially met the needs of clients with closed cases. Among open cases, employment and job training had comparable success to closed cases, while most other needs remained unmet or outstanding.

Table 4.2
Recovery Services, in Descending Order of Request Frequency

Recovery Services	Open Cases (%)	Closed Cases (%)	Total Count (n = 1,804)	Total Clients Who Requested Services (%)
Housing repairs and assistance	62.7	37.3	1,114	61.8
Furniture procurement	64.2	35.8	715	39.6
Financial assistance	63.9	36.1	584	32.4
Employment or job training	61.4	38.6	275	15.2
Utilities	61.8	38.2	262	14.5
Health and well-being	65.9	34.1	220	12.2
Food	68.2	31.8	220	12.2
Application assistance	67.6	32.4	216	12.0
Aging and disability services	61.3	38.7	186	10.3

NOTE: This table was created using data from April 19, 2010, approximately one month before the pilot ended.

CHAPTER FIVE

Challenges to Pilot Implementation

The focus of this DCMP assessment was to identify barriers for pilot implementation in order to improve future disaster case management processes. Therefore, the analysis decidedly emphasized *challenges* in these areas, with the ultimate goal of modifying or streamlining procedures and protocols to enhance disaster case management and improve client outcomes. Themes from the interviews with state agencies, FEMA, and the lead contractor and from focus groups with case management agencies were grouped into four categories: structure of the pilot, communication, financing, and monitoring and evaluation. Challenges to pilot implementation and recommendations relevant to each area are discussed in this chapter. Recommendations in this chapter are focused specifically on ways to address challenges that arose during Louisiana's implementation of the pilot. To the extent that Mississippi and Texas experienced similar challenges, these recommendations might also help inform FEMA's development of a national disaster case management program. Specific recommendations that would more broadly apply to a national disaster case management program are discussed in Chapter Six.

Structure of the Pilot

An examination of the coordination between agencies involved in the pilot, one of the core areas of focus for this report, revealed that features of pilot design and execution created difficulties during implementation. We discuss these in this section. We have divided these into challenges for design and challenges for execution, and we focus on the following seven topics:

- transfer of eligible cases from FEMA to the DCMP
- pilot timeline
- pilot eligibility criteria
- management and structure of the RFP and contract processes
- training of local contractors
- resources and expertise needed to implement the pilot
- adequate and appropriate staffing.

Challenges Created by the Design of the Pilot

Some challenges to the implementation and overall success of the DCMP were created by the initial design of the pilot and would have been present regardless of how well the pilot was implemented.

The list of eligible cases that went to case management organizations from FEMA was out of date, resulting in overestimates of staff needs and poor allocation of resources based on client location. To enable outreach to eligible clients, FEMA provided a list of eligible households to case management organizations. Interviews and focus groups revealed that these lists were often out of date or contained incorrect addresses and phone numbers, creating additional, unanticipated work for case managers to find eligible clients. These lists were used to make decisions about the number of case managers and case management supervisors that should be hired for the pilot. Since these lists were out of date and many households on the lists could not be reached, there were significantly fewer clients to serve than initially estimated.

The list of eligible clients from FEMA might have been out of date because individuals were responsible for updating FEMA of their whereabouts; FEMA did not take responsibility for following up with clients. The lack of integration between the two data systems used to track individuals in need or recipients of FEMA aid might also have resulted in out-of-date information on eligible clients. Even if an individual did update FEMA on his or her whereabouts (new contact information, such as phone and address), that information might not have been fully updated into both data systems and passed on to the LRA. Additionally, FEMA reported that recipients might have been omitted from the databases entirely, as priority was placed on meeting need and distributing trailers rather than keeping appropriate administrative records during periods of high demand.

These out-of-date lists also resulted in overhiring of some case managers. Case management agencies also indicated that the staffing estimation processes from FEMA[1] did not take into account the geographic dispersion of clients, and thus did not plan for the time case managers needed to visit geographically isolated clients. As a result, case managers who served a concentration of geographically isolated clients were often strained, while other case managers did not have enough cases.

The timeline for the pilot was not feasible in terms of start-up, planning, and transition, particularly given the vulnerabilities of the target population. The DCMP was designed for individuals who were still struggling to leave FEMA trailers four years after Hurricane Katrina, but the entire pilot was only seven months long (September 2009–March 2010). The pilot in Louisiana lasted only seven months because of difficulties identifying a lead contractor that delayed Louisiana's application to FEMA;[2] other states had implemented functioning pilots since August 2008. The brevity of the timeline in Louisiana impeded planning for start-up and transition. There was limited start-up time to conduct preplanning on how to mitigate the barriers that prevented these households from taking advantage of the initial disaster case management services. Case management agencies suggested that consultations with agency representatives early in the design of the pilot might have helped the LRA plan for these challenges before implementation.

Case managers perceived that the stop and start of case management services contributed to an increasing sense of mistrust among clients. Specifically, case management agencies indicated that a careful understanding of the population, the population's needs, and the barriers to meeting those needs should be assessed during a designated start-up period and that

[1] FEMA required a standardized staffing ratio across states: one case manager for every 25 clients and one case manager supervisor for every seven case managers.

[2] Appendix A provides a detailed timeline that outlines the application process and provides information on the difficulties the LRA faced securing a lead contractor.

case management should be designed based on this informed perspective. The short timeline also impeded development of a clearly defined transition plan for the population after DCMP closure.

Narrow eligibility criteria missed some individuals still in need. FEMA developed eligibility criteria that placed priority on those in FEMA trailers; however, case management agencies reported that serving this group after the official date of eviction from the trailers led them to miss a significant population in need. Individuals and families who left trailers without a permanent housing solution were not eligible to receive case management services from the DCMP.

Lack of clarity on roles and responsibilities between the lead contractor and the LRA might have been exacerbated by the contracting structure and RFP process for the pilot. Interviews revealed that there was considerable confusion about the roles and responsibilities of the lead contractor and the LRA. The LRA assumed direct oversight over case management agencies, rather than allowing the lead contractor to autonomously manage case management agencies, because it perceived that the lead contractor was not providing high-quality oversight of case management agencies, a critical function for a pilot with such a short timeline. Instead of functioning in the role of a lead contractor and assuming leadership responsibilities for the pilot, the lead contractor argued that it ultimately functioned as a support agency to the LRA, which primarily drove the direction of the pilot and oversaw case management agencies. Several case managers indicated that the LRA pilot manager also provided direct consultation to individual case managers on particularly problematic cases, a role that was not identified for the manager at the outset of the pilot and that case managers felt was an inappropriate use of the pilot managers' time. In addition, the LRA had only one full-time staff person on the pilot, who was stretched increasingly thin with these multiple responsibilities.

Simultaneously releasing the RFP for the lead contractor and case management agencies did not allow sufficient start-up time for the lead contractor to prepare for pilot implementation, which also might have exacerbated confusion about who was responsible for developing the materials needed for the pilot. The lead contractor reported having one and a half weeks to prepare the training; the Louisiana Recovery Authority reported that the lead contractor had three weeks to develop the training and materials for the pilot (e.g., manual, forms). Improvements to the clarity and concreteness of the scope of work would have improved the clarity of the roles and responsibilities of the lead contractor versus those of the LRA.

Challenges with Executing the Pilot

There were also challenges related to training, resource availability, and staffing that arose during the implementation of the pilot. These difficulties were attributed to DCMP execution rather than simply design.

Case managers and case manager supervisors reported minimal training on data entry and management and on the overall operational processes of the DCMP. Case management agencies reported that the initial training provided on September 9–11, 2009, was not sufficient preparation for successful implementation of the DCMP. Although the LRA reported that it required all case management program staff to complete web-based CAN training within the first two weeks of the pilot, this training was insufficient. Additional training on how to enter and export data from CAN and on fiscal procedures was needed to ensure that the pilot ran smoothly. Additionally, case management agencies reported that the short timeline of the project limited the pool of qualified case managers. Surveys conducted by RALLY found that

more than 20 percent of case managers had less than one year of experience. Additional training in disaster case management might have helped these relatively new professionals to better address client resistance. Although the DCMP's policy and procedure manual (developed by GNODRP) provided tips for case managers, such as "offering intrinsic incentives to show how clients' anxiety, fear, anger, sleeplessness, physical distress, etc. might be better served if they were willing to let case managers help them" (LRA, 2009a, p. 15), case managers reported that these tips were insufficient to provide the skills needed to develop a relationship with this particularly vulnerable population.

Case management organizations lacked operational capacity (e.g., management structure, phones, computers) to start immediately and lacked time and funds to build the organizational capacity needed. There was no existing pool of disaster case managers that could be activated by case management organizations when needed. Consequently, case management agencies were required to add new staff to their organization in support of this pilot. Office equipment, such as copiers, phone lines, and computers with Internet access (for CAN), was needed to accommodate new staff. Support staff at case management agencies also had to complete hiring processes to bring the new staff on board, including advertising for the position, interviewing, conducting background checks and drug testing, and activating payroll and benefits for new staff. In addition to these requirements, organizations were mandated to keep both hard-copy case files and electronic case files on CAN. Most case managers reported difficulties with using CAN, which, as previously mentioned, might have been related to a lack of training on how to input and export data from CAN. The lead contractor and case management agencies reported that this duplication of information, compounded by difficulties with CAN, detracted from the time case managers had to provide needed services and created perception that the pilot was more focused on client data than on client needs.

There was a lack of community resources for client referrals. Case management agencies consistently reported that the pilot did not provide the needed services to clients because they could not locate available resources in their community. Many clients still had primary needs, such as housing and employment, that were still unaddressed at the end of the pilot.

The ongoing shortage of available housing and high housing costs in affected areas of Louisiana might have compounded the difficulties case managers encountered as they tried to assist clients in transition to sustainable housing. Additionally, the Nonprofit Rebuilding Pilot Program (also administered by the LRA) was supposed to be implemented in tandem with the DCMP; however, contract problems delayed the implementation, so there was no designated housing support available to clients. If the rebuilding pilot had been implemented on schedule, more resources might have been available to case managers.

Understaffing and inappropriate staffing at the LRA and lead contractor agency created challenges to implementing the pilot. In the initial proposal, the LRA estimated that four full-time staff members would be needed to implement the DCMP. However, the LRA argued that it initially altered its staffing plan to coordinate with the lead contractor's unique structure. While additional staff was approved by FEMA later in the program, the LRA was not able to fully staff its role in the pilot. Thus, only one full-time staff person was available for much of the time the pilot was being implemented. The organizational structure put this staff member in the position to oversee both fiscal processes and case management services. Additional staff was hired for the last three months of the pilot to help review invoices; however, the lead contractor and case management agencies indicated that delays in communication and reimbursement persisted throughout the pilot.

The lead contractor was not able to obtain the full staff complement needed to support pilot implementation. This staffing issue might have created inefficiencies in assigning and conducting tasks. For example, no standard procedure was used to assign cases to case management agencies, and the assignment was done ad hoc by a data analyst. Additionally, estimation services were limited to New Orleans because only one part-time estimator was available to the DCMP; the lead contractor reported that hiring of additional estimation staff was put on hold because of delayed reimbursements from the state.

Communication Among Agencies Involved in the Pilot

One of the key aims of this analysis was to document how information about the DCMP was communicated from FEMA to the state to case management agencies and to determine whether this communication was consistent, appropriate, and effective to meet the needs of all partners. In summary, communication among FEMA, the LRA, the lead contractor, and the case management agencies presented significant challenges. Although there were continuous efforts to relay information about pilot progress among all entities, communication difficulties were evident in all relationships, including between FEMA and the LRA, as well as between the LRA, the lead contractor, and case management agencies. The communication difficulties centered on four areas:

- communication around the DCMP's progress and expected benchmarks
- communication processes, including clear articulation of roles and responsibilities
- documentation of correspondence and resulting decisions
- response delays for reimbursement and other service decisions.

In the next sections, we describe the issues in these four areas, with attention to the involvement and perspectives of federal, state, and local entities.

The Pilot's Objectives for Expected Benchmarks and Progress Toward Goal and Vision Were Not Clearly Communicated

While the overarching vision for the DCMP and the ultimate goal of the pilot were written down in the pilot manual, interviews and focus groups with state agencies and local case management agencies revealed that there was limited clarity on the vision and goals and how they were to be well integrated into daily implementation of the pilot to meet expectations. There was confusion among both state and local case management agencies in terms of what the DCMP ultimately intended to achieve, how many clients needed to be served, and what constituted success given the relatively short timeline of the pilot. Specifically, a plan for whether this was a pilot to improve the *processes* of disaster case management or a pilot that results in specific client *outcomes* was not fully defined or communicated. The LRA leaders shared that it would have been useful to have clearly communicated guidance on how the pilot should be designed to comply with the DCMP vision and goal and ultimately FEMA expectations. A lack of early communication between the state and FEMA to establish a well-defined set of measurable objectives created a problematic and disjointed communication pattern, which was carried throughout the implementation of the pilot.

From the perspective of the lead contractor and case management agencies, this lack of clarity trickled down to the local level and hindered communication with state agencies. The lead contractor and case management agencies argued that the ambiguity about pilot objectives resulted in problems of daily functioning, such as burdensome and often changing data reporting requirements without a clear rationale for how these data would address the overall DCMP goal.

Communication About the Roles and Responsibilities of Each Entity Involved in the Pilot Was Inconsistent

The lead contractor and case management agencies argued that communication to establish consistent roles and responsibilities of each of the partners involved in the DCMP was rare. In particular, there was significant confusion between the state and the lead contractor regarding who should assume leadership roles for various activities. For example, the lead contractor was charged with the task of developing the DCMP training manual, yet this was not assigned to the lead contractor but rather the state in the initial grant application.[3] Further, the lead contractor and case management agencies reported that there was never a clearly communicated chain of command established or followed. These entities described how the LRA often communicated directly with case managers rather than agency leadership, even though the procedure manual outlines a communication process that entailed information dissemination via agency leadership and through case manager supervisors.

In addition to these communication challenges, case managers described how the lack of communication early in the design of the pilot resulted in service problems for their clients. They shared that, if there had been more efforts that involved their perspective or partnership, they would have been able to communicate some of the "on the ground" issues to leadership at the LRA, potentially allowing for more midcourse corrections. As described earlier, a lack of resources with which to connect clients hindered case management. Case managers argued that early and ongoing communication about the available resource networks could have shaped and improved the implementation of the DCMP.

There Was Limited Documentation of Decisions Associated with Pilot Processes, and Many of These Decisions Were Poorly Communicated to Local Contractors

The state, lead contractor, and case management agencies all observed that a lack of written communication was an issue. The LRA shared that much of its correspondence with FEMA about the DCMP was oral rather than written. This lack of a paper trail created confusion in cases when decisions about pilot direction were subsequently reversed. The lead contractor and case management agencies identified several instances over the course of the DCMP when the LRA either shared a decision that it later did not support or communicated a policy that was not written into actual guidance. Although minutes detailing the decisions made during regularly scheduled conference calls were distributed by the lead contractor, case management agencies reported that many decisions were frequently made outside of regularly scheduled

[3] The lead contractor's scope of work indicated that the "Contractor shall provide all program case management staff ongoing training related to the Program Policy and Procedures Manual and training materials." During the RFP question and answer period, the LRA was asked whether there were "any training regulations for contractors or if they were left up to the lead" contractor and responded "The State will provide and pay for initial training. The Lead [contractor] will provide ongoing training." The lead contractor interpreted this to mean that the LRA would develop the training.

meetings (e.g., through telephone calls) and that pilot materials were not regularly updated to reflect decisions that affect program policies or procedures. Further, the lead contractor observed that there was no communication template with which decisions could be documented and consistently implemented. This created an environment in which the lead contractor and case management agencies began to lose trust in communication from the LRA. Finally, the lead contractor reported that it had had limited communication with FEMA. Absent clear guidance or well-documented decisions by FEMA or the state, the lead contractor received information orally and third-hand. Although the LRA reported that FEMA participated in regularly scheduled conference calls with the lead contractor and case management agencies, this information might have been subject to incorrect interpretation.

Case management agencies also suggested that the lack of a centralized location for accessing guidance, forms, and related templates fostered more confusion. If there had been a centralized space or knowledge center for case managers to communicate about available client resources, it would have facilitated serving clients more efficiently and effectively.

Communication Problems Resulted in Delays in Service Decisions and Financial Reimbursement and Changes in Policies Midstream

Many of the challenges that emerged from a lack of clear guidance on the DCMP or documented decisions during pilot implementation also led to delays and inconsistencies in other areas. The lead contractor and case management agencies indicated that having a single person at the state as the sole path for all communication resulted in bottlenecks and delays in responses (particularly related to financial issues). While these agencies shared that the state point of contact worked diligently to respond to requests and inquiries, having a single contact proved to be an inefficient approach for addressing a wide range of questions, including details about financial reimbursement, data monitoring, and day-to-day issues. Midway through the DCMP, the lead contractor developed a web-based forum where the lead contractor could post information and case managers could post questions; however, case management agencies did not report accessing this tool, and the lead contractor indicated that the forum was not regularly utilized. Regular meetings were scheduled by the LRA, but, according to the lead contractor and case management agencies, these meetings were not regularly held and were often rescheduled, which further contributed to communication problems.

Pilot Financing

Another component of this analysis was to describe how well the financing processes of the DCMP worked and where opportunities for improvement in the future might exist. Earlier, we provided an overview of how the pilot was funded. This section focuses on stakeholder perspectives regarding where challenges existed in the following areas:

- guidance on financial forms
- reimbursement processes and timelines
- provision for indirect costs
- funding for the start-up phase.

State Officials and Local Case Management Agencies Reported That Difficulties Emerged Due to Limited Guidance on How to Complete Financial Forms Required by FEMA

State financial officials, as well as the lead contractor and case management agencies, identified difficulties with completing the required FEMA financial forms. State officials reported that, while they had considerable experience with managing federal grants and contracts and completing standard reimbursement forms, the financial documents required for the DCMP were unique, and there was little written information from FEMA on how states were expected to complete and submit invoices for reimbursement. Further, while FEMA was responsive to inquiries regarding submitting invoices, there were some cases in which decisions were not consistently upheld partly because there was no designated point of contact to provide clear answers regarding finances specifically.

According to the LRA, the lead contractor was responsible for developing the invoice forms to be used by the case management agencies. However, from the perspective of the subcontractor hired by the lead contractor to handle DCMP accounting procedures, there was limited guidance from the federal or state entities regarding how to submit invoices for reimbursement on behalf of the case management agencies, which ultimately had an impact on design of the invoice forms. The subcontractor had limited experience with federal or state contracts, which could explain some of the difficulties processing invoices. Yet, there was still confusion about what constituted an indirect expense and what qualified as reimbursable. Further, state officials' concerns about inconsistency of decisions also affected local case management agencies.

The subcontractor led a training effort on financial processes during the DCMP "kick-off" period; however, the state financial officials had limited input on the training documents. Given the inadequate experience that the subcontractor had with these types of contracts and confusion expressed by the lead contractor, this lack of state oversight on initial financial training presented an obstacle that factored into later invoicing protocols. Despite attempts to provide an overview on reimbursement procedures at this initial training and offer additional points of contact at the state level to address financial issues midway through the pilot, there was ultimately considerable confusion among the case management agencies about completion of financial forms.

Clarity and Timelines for Reimbursement Presented Challenges, Particularly for Case Management Agencies

Reimbursement policies also did not align well with case management needs. State officials and local case management agencies perceived considerable challenges with reimbursement processes. Similar to the general concerns regarding limited budget guidance, state financial officials shared that reimbursement processes were not well articulated. Specifically, directions were not clear regarding what type of supporting documentation was required with invoice forms, including salary justifications and rental and utility bills. There was also confusion about allowable travel expenses, and many case management agencies overran this ceiling amount. The lead contractor and case management agencies emphasized that this confusion placed a financial burden on their agencies, particularly because there were some expenses that

were necessary but not allowable. For example, case management agencies could not obtain reimbursement for advertising disaster case management positions.

There also were challenges regarding the timeline for reimbursement.[4] As previously mentioned, the lead contractor hired a subcontractor to review invoices from case management agencies before passing them to the LRA. Once the invoices went to the LRA, two separate state offices reviewed the invoices. Then the invoices were passed to FEMA for review and approval. If errors in the invoices were found during any step of the review process, these invoices would be sent back to the case management agency for revision and resubmission. These layers of review, compounded with confusion about what could be reimbursed, created significant delays in payment. Even though the pilot began operating on September 9, 2009, most case management agencies were not paid for the first invoice until December 23, 2009, with one case management agency not getting paid until March 3, 2010. Payment on the lead contractor's first invoice was also delayed until February 3, 2010. Contractors indicated that these delays in payment placed significant economic burden on their agencies, which were required to front significant capital for the start-up and ongoing maintenance of the pilot.

Guidelines for What Could Be Included for Indirect Costs Were Confusing and Resulted in Financial Loss for Contracting Agencies

The issue of indirect costs was a common theme in interviews with state officials and case management agencies. According to the state, case management agencies did not comprehend how indirect costs were addressed in these types of contracts and often incorrectly placed indirect costs in direct-cost line items and vice versa. According to state officials, the subcontractor tasked with fiscal oversight did not realize that the indirect-cost plan should have been in place at the start of the contract period. On the other hand, case management agencies argued that their initial contract allowed for 12 percent indirect costs to be reimbursed, which, from their perspective, was defined as 12 percent of the direct costs. However, the indirect costs were ultimately handled quite differently and required receipts or other documentation. As a result, the case management agencies were still trying to recoup these expenditures at the time of this writing. It should be noted that the indirect-cost regulations were based on Office of Management and Budget (OMB) circulars A-87 (OMB, 1997) and A-133 (OMB, 2003), as well as the U.S. Department of Homeland Security, Preparedness Directorate, Office of Grants and Training Financial Management Guide (2006).

Given the Short Pilot Duration and State Regulations, There Was No Funding for Pilot Start-Up

The DCMP was executed in a short time period. As such, there was limited time allocated to pilot start-up, including the development and implementation of training and the activities

[4] According to the LRA,

> Timeline for reimbursement was established by CPA [certified public accountant]. The 3 first Case Management invoices were received by the state on September 30, 2009, but the contracts had not been yet processed. The LRA did not receive all information needed from the providers to process these contracts until October 19 and they were submitted to Office of Contract Review on October 20, 2009. A meeting on November 16, 2009 to review each agency's invoices with CPA was conducted. The first batch of 7 invoices was submitted to OFSS [Office of Finance and Support Services] on November 17, and to FEMA on December 4, 2009. We had to resubmit to FEMA for various reasons because of issues that FEMA had on format which were not provided in writing. Payment for these first invoices was made from the State General Fund since FEMA had not made payment.

required for successful initiation, such as identifying the list of eligible participants, eligibility screening, and advertising of case manager positions. In addition, given the state of Louisiana's regulations prohibiting the acceptance of "upfront" funding for these types of programs, there were no resources available for this start-up period even if the truncated timeline accounted for it. According to state officials, Louisiana is not allowed to collect federal funds in advance or it must pay interest or other penalties.

Data Collection and Evaluation of the Pilot

Although not a specific focus of this assessment, evaluation and data collection also emerged as challenges during pilot implementation. This section focuses primarily on stakeholder perspectives regarding challenges with evaluation and data collection in two areas: access to individual-level data and quality of data.

The Louisiana Recovery Authority Received Regular Updates of Individual-Level Client Data, Which Created Duplication in Data Entry and Inefficiencies in Tracking

Due to its role facilitating direct services and concerns that clients were not receiving appropriate services, the LRA wanted access to individual-level data on clients so that it could continue to connect clients with services after the end of the pilot. Neither FEMA nor state agencies, such as the LRA, can access data in CAN. As a result, FEMA, the LRA, and the case management agencies could not share data, which created inefficiencies in intake procedures and duplication of efforts. For example, the LRA was not able to use existing intake data from clients to streamline application processes for its other programs. To be able to connect open cases to additional services once the DCMP was over, the LRA created a parallel tracking system that contained detailed client-level data and required regular upkeep. The lead contractor extracted client-level data from CAN and regularly produced a spreadsheet for the LRA, which took a significant amount of effort to create and maintain. In the initial scope of services, the monitoring and evaluation requirements were focused on holding "program service provider agencies accountable for all deliverables"—this type of monitoring and evaluation utilized aggregate reporting of client-level outcomes and pilot processes. Although the lead contractor's scope of work indicated that the lead contractor would "allow the LRA access to all eligible household information related to the DCMP Program," there was no mention of the need to create a parallel tracking system for use by the LRA. The lead contractor indicated that it interpreted this statement to mean that the LRA would be able to see data from CAN, as needed—not receive regular updates. The LRA reported that it was clear from the scope of work that it would receive regular updates of individual and aggregate data. This duplication of effort could have been prevented by using a data system that the state could access. It should be noted that states that do not have a role facilitating direct services might not face these same challenges because FEMA does not specifically require states to track outcomes at the individual client level.

Data Quality Was Questionable Because Case Managers Had Difficulty Entering Data; Quality Assurance Was Also Limited

As mentioned previously, case managers experienced significant challenges entering data into CAN. Case manager supervisors were tasked with quality assurance, but the process did not

run smoothly, in part because training on CAN was insufficient. There was not a CAN representative who participated regularly in the pilot to answer questions about the platform, and many case managers and their supervisors were unfamiliar with the technology or experienced technological problems using CAN (e.g., bandwidth was not large enough and the network connection would time out, causing case managers to lose their data). Because of the high number of errors appearing in the data, the lead contractor assumed a quality-assurance role, ensuring that data were entered completely for all cases and noting individual-level mistakes in data entry. This added process meant that quality *control* at a higher level was suspended until quality *assurance* was complete. During an interview, the DCMP manager indicated that data were still being consolidated to complete entries in CAN. As a result, quality *control* was never fully implemented.

CHAPTER SIX

Recommendations to Improve Future Implementation of Disaster Case Management in Louisiana

We developed the following recommendations for the Louisiana state authorities that will implement future disaster case management programs. Following the analysis of case management data and the challenges described in Chapter Five, we organized recommendations into four categories: structure of the pilot, communication, financing, and data collection and evaluation.

Recommendations to Address Challenges Associated with the Structure of the Pilot

The pilot was designed using the FEMA guidance, and policy and procedures were communicated through a supporting manual and training. Challenges created by the design of the pilot transferred to the implementation of the pilot. The outdated list of cases from FEMA created significant challenges to pilot start-up and limited the number of overall clients served; a recommendation for FEMA on this challenge is included in Chapter Seven. The overall structure of contracting relationships created confusion about roles and responsibilities of the LRA versus the lead contractor. The sequencing and timing of the RFP process did not leave sufficient time for the lead contractor to prepare or for case management agencies to complete hiring processes and purchase office equipment for the additional staff they hired. Understaffing and inappropriate staffing at the LRA and the lead contractor created challenges to managing the overall pilot. These challenges suggest a few key recommendations that would improve future implementation of disaster case management and other comparable programs with involvement from federal, state, and several local contracting agencies:

- Assess the needs of the target population to assist in designing the program, and solicit feedback on the design of the program from participating case management agencies.
- Assess community resources available for clients, and create a centralized list for case managers to access.
- Screen clients before deciding how many case managers to hire. A single centralized agency responsible for screening and triage might help to resolve challenges encountered when one case manager builds a client relationship through screening and then transfers the client to another case manager.
- Release the RFP for the lead contractor in advance of other RFPs so the contract can be awarded and materials can be prepared in advance of enlisting case management agencies.
- Fully staff all lead agencies before beginning implementation.

- Provide ongoing training to case managers to build capacity in new areas (e.g., using CAN) and to provide strategies for engaging clients in services tailored to the target population (e.g., frail and elderly).
- Improve clarity of the scope of work for the lead contractor, to remove any ambiguities about roles, responsibilities, and reporting.
- Include time and funding to build organizational capacity (e.g., staff, office equipment) needed to implement the program.

Recommendations to Address Communication Challenges

Significant efforts were made to communicate decisions to relevant entities in the Louisiana DCMP. However, the lack of planned and structured communication to clearly document goals of the pilot, stakeholder roles and responsibilities, and ongoing policy decisions created a challenging environment for successful DCMP implementation. Given the short timeline of the DCMP and high expectations for the LRA and local contractors, seamless communication was critical. These challenges suggest a few key recommendations that would improve future communication among federal, state, and local contracting agencies:

- Clearly articulate objectives for expected benchmarks and progress toward the goal and vision.
- Schedule and maintain standing meetings between the state agency and lead contractor for discussing program design and implementation. Include periodic meetings with all entities, including the relevant federal agency.
- Document all communication using a standard template for decision rules concerning program design and implementation.
- Clearly communicate roles and responsibilities of involved entities, and adhere to those assignments or boundaries unless change is absolutely necessary.
- Create a common or centralized location for templates (e.g., client forms, financial forms), guidance (e.g., directions for reimbursement), and communication about resource availability (e.g., connecting case managers to available community services).

Recommendations to Address Financial Challenges

The financial challenges associated with the DCMP focused primarily on lack of guidance for reimbursement and a lack of clarity regarding which expenses, including indirect costs, could be reimbursed. FEMA has already begun to address this problem by redesigning the future disaster case management program as a direct-grant program. Other recommendations to facilitate financial processes in future DCMP implementation include the following:

- Develop state guidance for how to implement these types of grants with attention to financial procedures.
- Allow significant lag time to ensure that programs receive dollars for start-up costs prior to beginning service delivery.

- Design a more streamlined process for invoice review that does not require multiple reviews.
- Ensure that training includes discussion of financial processes, with a significant role for state leaders to inform training materials.
- Include decisions regarding financial processes in a centralized forum (or knowledge centers), also described in the communication recommendations.

Recommendations to Address Challenges Associated with Evaluation and Metrics

Data collection and evaluation were explicit steps in the DCMP case management model. Concerns about data duplication and quality emerged in this assessment. The lead contractor was required to duplicate CAN data for the LRA to facilitate direct service delivery. Quality of data in CAN was questionable given the amount of missing information and the significant challenges with data entry. Recommendations to facilitate data collection and evaluation in future DCMP implementation include the following:

- Incorporate a CAN representative as a consistent team member to provide clarity on questions related to data entry and export.
- Hire skilled data-entry specialists to reduce burden for case managers. Having knowledgeable data-entry specialists would allow for quality assurance to happen more effectively, since errors due to technological problems would be diminished.
- Use a tracking system that allows case management agencies and the state to share information directly.
- Begin evaluation activities at the time of program start-up. This would require releasing an RFP for an evaluation contract at the same time the RFP for case management agencies is released.

CHAPTER SEVEN

Recommendations for FEMA's National Disaster Case Management Program

The experience of the Louisiana DCMP offers recommendations that can be implemented in future iterations of disaster case management and comparable federally funded programs. We summarize these policy and program recommendations in this chapter.

Consider How to Best Track Client Information for Vulnerable Populations Affected by Disaster, and Use Predisaster Data to Identify "Vulnerability Hot Spots"

Up-to-date client information would improve the ability to identify and locate clients for case management services and might have reduced the number of "no contacts" that case management agencies reported in the DCMP. These at-risk or vulnerable populations are often the most isolated or disconnected from services predisaster. Local organizations that serve these populations may be helpful as part of preparedness efforts to organize potential client information predisaster. Reconciling their data with FEMA data might help to improve the accuracy of client contact information.

In addition to improving client tracking information before a disaster, it will be important to identify vulnerability hot spots in a community. For example, documenting where there are residents with more than one vulnerability (see Chapter Four) could be useful for determining where disaster case management services are needed, in what volume, and for how long postdisaster, given the level of challenges.

Develop a Web-Based Knowledge Center at Program Inception to Provide Centralized Program Information on an Ongoing Basis

A centralized forum or online knowledge center could help overcome the difficulties in communication among federal, state, and local entities. A web-based knowledge center would allow for posting of new program information and provide a space for online forms. For example, a knowledge center should include all relevant data forms and templates for the program, especially organizational charts and guidance regarding financial processes and other grant requirements. The knowledge center could also offer a centralized list of resources for case management agencies. A chief concern among case managers was that they had limited visibility into what resources were available for client referrals. The list could be updated by the lead contractor or case management agencies in order to remain dynamic to changes in resource

availability at the local level. Finally, pending review of relevant data protections, a knowledge center could be linked to the client information database, such as CAN, to afford case managers an opportunity to connect client resource needs to actual community resources in real time.

Create Financial Templates for State Use That Acknowledge Best Practices in Case Management and Accommodate State Variation in Reimbursement and Other Contract Requirements

The lack of clarity in financial processes for reimbursement and invoice review was a central challenge for the DCMP. A common financial template that is appropriately flexible to variations in state requirements for these procedures is needed for successful implementation. While Louisiana has some unique restrictions in how funds are accepted and processed for local contractors, a common template that can be used across all participating states provides clear structure and boundaries within which state leaders can plan.

Case management agencies also indicated that the budget requirements were not sufficient to cover the costs associated with disaster case management. Standards for disaster case management have been developed by the Council on Accreditation (2010). FEMA should carefully review these or other disaster case management standards to make sure their budget requirements include line items to account for all the needs and requirements associated with best-practices disaster case management. Items relating to start-up costs, such as advertising for case managers, background checks, and routine drug tests, should be considered.

Review Responsibilities Around Reimbursement Timelines

In addition to common financial templates, federal and state leaders should jointly consider what types of policies must be in place in order to limit delays on reimbursement. While FEMA will now consider, for future disaster case management, a direct-grant program model rather than reimbursement, it is still important to review these policies for comparable programs that might employ similar procedures. Some states have created protections for case management agencies to ensure that there is a cap on reimbursement time (e.g., reimbursement must be provided within 30 days). This policy review would address the significant financial challenges that many of the Louisiana case management agencies continue to confront in order to maintain financial solvency while waiting on payments for the DCMP.

Consider How to Best Design a Support System That Can Streamline Intake and Triage of Cases and Help Determine Client Eligibility for Services

A centralized system (e.g., an electronic database) that would allow one point of intake would ensure that clients are asked to share sensitive background data at only one time. Once clients are in the disaster case management system, the data would be available for all future disasters. The system could be designed to help determine client eligibility for recovery and permanent programs, revealing where there might be gaps in programming for clients who are not eligible

for any needed services. A centralized system would also allow for a common screening of eligible cases and assignment of clients to tiers based on triage criteria.

FEMA could also consider whether to invest in linking its disaster case management system to pull information on clients enrolled in other FEMA programs (e.g., individual assistance) so that case managers have access to client history. Additionally, FEMA should consider whether information on disaster case management should be linked with data on clients who routinely receive social services. Linking these systems would make it easier to transition clients from disaster case management back to routine social services and would provide valuable background information to disaster case managers.

We recognize that sharing of data presents issues with confidentiality and might require an amendment to the current Privacy Act (5 U.S.C. §552a, 1974).[1] Alabama is currently in the process of integrating its health and human services data infrastructure. The Camellia project is an information technology initiative to improve the integration, coordination, and collaboration among health and human services agencies across Alabama. Camellia uses a shared technology infrastructure that provides a common client view across agencies, supports performance management, connects case managers, and simplifies intake and access to services. Alabama undertook this initiative to provide quality services while stretching limited funding and complying with stringent federal, state, and local mandates. Camellia might be a useful model for FEMA to consider when thinking about a system to support national disaster case management.

Targeted Investments to Maintain an Ongoing Infrastructure to Support Disaster Case Management Might Improve Response Time and Save on Start-Up Costs

To minimize start-up time, FEMA could dedicate a small amount of continuous resources to build capacity and ensure that operational processes are in place and that states know how to access them before a disaster occurs. For example, a national disaster case management coordinator could help create tools and resources and disseminate information to states about disaster case management before a disaster. A standardized training curriculum for disaster case managers could be developed and disseminated. Additionally, FEMA could consider developing a cohort of case managers that could be activated when a disaster occurs. This cohort of disaster case managers would arrive immediately after a disaster to provide services and then act as trainers for local case managers as they transition disaster victims to local case managers. FEMA uses a similar consultant-based model for several of its other programs and could apply expertise gained from developing and managing this type of model to the cohort.

[1] The Privacy Act

> prohibits the disclosure of information from a system of records absent the written consent of the subject individual, unless the disclosure is pursuant to one of twelve statutory exceptions [e.g., court order, Debt Collection Act]. The Act also provides individuals with a means by which to seek access to and amendment of their records, and sets forth various agency record-keeping requirements. (U.S. Department of Justice, 2010)

Coordinate the Transition Points Between Individual Assistance and Disaster Case Management

FEMA could consider developing guidance to ensure that roles and responsibilities during transition of clients from individual assistance to disaster case management are clear and that trigger points (when someone goes from individual assistance to DCMP) are well defined. As mentioned earlier, FEMA should also consider how client-level data between DCMP and individual assistance should be coordinated. Having one staff member dedicated to this coordination might not be the best long-term strategy to approach coordination, especially given the varying size of disaster case management programs. As mentioned previously, designing a system that allows for seamless transition of information or sharing of client information might be useful to facilitate this coordination.

CHAPTER EIGHT

Unanswered Questions and Next Steps

While the DCMP experience in Louisiana identified clear areas for program improvement, the past year of implementation also highlighted overarching questions about the processes and underlying principles of disaster case management. We detail critical, unanswered questions that were revealed in this analysis and for which research is needed in order to improve how disaster case management is designed and conducted in the future.

Consider the Processes of Serving Vulnerable Populations in the Immediate Postevent Period

The DCMP focused primarily on the most vulnerable households, those that had ongoing recovery needs nearly five years after Hurricane Katrina. This population was difficult to serve given the number of vulnerabilities, including advanced age, disability, and social and geographic isolation. Many of the DCMP clients either were not contacted because the client list from FEMA was outdated or did not have their needs fully met at the time of pilot closure, suggesting that the number of difficulties for this population and the structure and availability of services are simply inadequate. As such, it is critical to consider current processes of identifying, targeting, and serving this "frail" subgroup before, during, and immediately after a disaster to ensure that this population does not arrive at this fragile state. Further, there were problems with the initial client list for the DCMP in terms of fully capturing the population and locating clients. This suggests that an in-depth review of how federal and state leaders track eligible clients and share data with local agencies is needed as well.

Use Vulnerability Mapping to Identify Location and Needs of These Populations Predisaster

As described in Chapter Seven, it will be important to use tools, such as geographic mapping, to identify neighborhoods in which there is a particular concentration of residents with one or more vulnerabilities. This type of mapping could help local planners consider the resource needs of these populations during and after a disaster. Moreover, mapping could help planners manage expectations for the length and outcomes of recovery for particular populations and work with federal and state leaders to identify necessary financing and other supports for facilitating recovery. Developing a robust and reliable vulnerability index (as described in

Chapter Four) that appropriately captures these predisaster needs will be an important direction for further inquiry and analysis.

Use Case Management to Develop Financial Literacy Among Clients and to Ensure Appropriate and Responsible Use of Federal Dollars

Another challenge for this type of disaster case management is the extent to which clients, particularly the most vulnerable clients, can use funds to navigate the complex resource environment after disaster. Many of the case managers in this analysis reported that clients did not always have the skills and experience to translate a significant lump amount into services that would help them recover. While case management is intended to serve this advocacy role for clients, including referrals and connections to services, the level of need revealed in this DCMP assessment indicates that more effort should be afforded to ongoing skill development in financial literacy. This type of community investment, which could be implemented in an ongoing manner by service agencies, as well during a case management period, could mitigate disaster vulnerabilities and facilitate recovery by ensuring that residents have at least some common understanding of how to use federal funds to repair their homes and obtain health and social services.

Examine the Response Reliability of Local Contractors and Case Management Agencies Predisaster

Given the challenges of working with local contractors identified by the state, there is a need to identify a standard set of criteria to determine which agencies are best positioned to lead response or recovery efforts, to use government dollars effectively, and to handle surge in the event of a major disaster. Rather than waiting to assess these characteristics after an event, this organizational "audit," or response reliability analysis (Jackson, 2008), would review the capabilities and resources that agencies possess to conduct disaster case management successfully. This type of preplanning would also ensure that there is seamless transition from acute response to recovery, especially for particularly vulnerable populations (Chandra and Acosta, 2009).

CHAPTER NINE

Conclusion

Although it has been nearly five years since the devastation of Hurricanes Katrina and Rita, federal, state, and local leaders continue to address the recovery needs of the most vulnerable residents affected by the disaster. This assessment of Louisiana's DCMP provides critical insights into how disaster case management should be designed and implemented in the future, with attention to seamless coordination among levels of government, clear communication regarding case management agency roles and responsibilities, and facile processes for financing client services. Identifying the best models for serving this population includes a thorough analysis of disaster case management and the relevant challenges confronting this type of program when multiple stakeholders and agencies are involved. Further, there are critical considerations for serving a particularly vulnerable population, and those should be assessed before the next implementation of disaster case management. Specifically, outdated client lists and abbreviated timelines present significant challenges when the target population already has one or more vulnerabilities extending from advanced age, disability, and other social stressors. An overall examination of disaster case management that summarizes these key considerations must be incorporated into any new federal, state, and local planning for long-term community recovery and restoration. This analysis also must be reviewed in the current national discourse on community resilience, which emphasizes the development of community plans for mitigating vulnerabilities predisaster.

Two overarching themes emerged from this assessment, which encapsulate the difficulties in timing, organization, and delivery of this type of program. First, the system of identification and location of residents—particularly the populations most at risk due to preexisting and disaster-related events—is limited at best. Federal, state, and local leaders should pursue improvements in data systems and other methods to track constituents. Without a concerted review of these systems, government and case management agencies are unable to appropriately strategize for adequate service provision, including staffing algorithms, resource allocation, and development of a robust resource network. In addition, communities must plan for the reality of client information gaps in their existing preparedness efforts and examine opportunities to mitigate vulnerabilities predisaster. Second, the "stop and start" of recovery initiatives at both the federal and state levels might lead to serious discontinuities in client recovery. Thus, one longer-term recovery initiative that seamlessly acknowledges the stages of human recovery is merited. The lessons learned from the past five years recommend a new direction for how recovery planning is conceived, including which agencies are convened and formalized into these plans with appropriate funding.

There are two important study limitations that must be acknowledged in this analysis. The quality of the client data provides useful planning information but is plagued by prob-

lems of completeness and coding consistency. The assessment also did not allow for a review of activities during actual pilot implementation but, rather, afforded only a retrospective analysis. While this "look back" was conducted close to pilot conclusion, it did not provide a platform for real-time analysis of stakeholder perspectives.

Despite these limitations, this assessment offers useful recommendations for future implementation of comparable disaster case management programs. In light of the nature and frequency of disasters in the past several years, the study also provides information about coordination, communication, and financing that can be applied to a range of recovery efforts.

APPENDIX A

Louisiana Disaster Case Management Pilot Historical Timeline

The timeline in Table A.1 was provided to RAND by the LRA. The key dates and activities relate to the application process for the DCMP. The agencies referenced in this timeline include the LRA, the Louisiana Family Recovery Corps, and GNODRP.

Table A.1
Louisiana Disaster Case Management Pilot Historical Timeline

Date	Activity
May 27, 2008	FEMA released DCMP program guidance.
June 17, 2008	LRA applied with Louisiana Family Recovery Corps to FEMA for DCMP.
June 20, 2008	FEMA requested budget amendments.
June 25, 2008	State resubmitted application.
June 26, 2008	FEMA requested further budget amendments and clarification, in addition to detailed subgrantee budgets.
July 25, 2008	State submitted revised proposal reflecting shared management structure between Louisiana Family Recovery Corps and GNODRP.
October 6, 2008	FEMA issued conditional award letter.
November 22, 2008	GNODRP dropped out due to stated program end date and a lack of direct service dollars to accompany its contract.
November 25, 2008	FEMA requested that state revise and resubmit proposal.
December 10, 2008	LRA reapplied to FEMA with Louisiana Family Recovery Corps.
January 6, 2009	Legislation passed that allowed Mississippi and Louisiana to continue disaster case management.
February 11, 2009	FEMA issued conditional award letter.
April 2, 2009	Louisiana Family Recovery Corps dropped out due to time frame and a lack of direct service dollars to accompany the program.
June 10, 2009	LRA submitted proposal to FEMA for DCMP, including plan to conduct RFP, and began development of RFP and contracts for service providers and lead program contractor.
July 16, 2009	LRA released RFP for service providers.
July 17–October 4, 2009	LRA worked with FEMA and American Red Cross to clean data in CAN and update contact information where possible.
July 27, 2009	LRA released RFP for lead contractor.
July 31–August 7, 2009	Multiagency committee reviewed service-provider proposals.

Table A.1—Continued

Date	Activity
August 10–17, 2009	Multiagency committee reviewed lead-contractor proposals.
August 17, 2009	LRA awarded subgrants to service providers and lead contractor and began contracting.

APPENDIX B

Louisiana Disaster Case Management Pilot Budget Estimates from September 1, 2009, to June 18, 2010

As of June 18, 2010, $6.2 million had been spent on the DCMP and more than $800,000 had been invoiced but was not approved for reimbursement. Table B.1 contains details.

Table B.1
Total Amounts Invoiced and Approved

Agency	Invoiced ($)	Approved ($)
LRA	92,704.21	110,135.04
GNODRP	604,500.70	491,035.18
Advocacy Center	359,003.63	306,779.96
International Relief and Development	391,539.08	314,278.36
Louisiana United Methodist Case Management Assistance, Inc.	1,541,315.48	1,451,622.48
Lower Ninth Ward Neighborhood Empowerment Network Association	373,646.56	318,204.32
Recovery Assistance, Inc. Ministries	2,571,131.95	2,172,064.06
United Way for the Greater New Orleans Area	1,159,088.68	1,047,641.61
Total	7,092,930.08	6,211,761.01

APPENDIX C

Demographics of the Population Served

Table C.1
Demographics of the Population Served

Demographics	Open Cases (%)	Closed Cases with at Least 1 Need Fully Met (%)	Closed Cases with No Needs Fully Met (%)	Closed Cases for Other Reason (%)	Total Count (n)
Total count (n)	818	186	486	314	1,804[a]
Race or ethnicity					
White	46.1	11.6	28.3	14.1	701
Black	50.1	10.3	26.4	13.1	870
Other	42.0	9.2	29.0	19.9	131
Gender					
Female	46.6	10.5	26.1	16.8	899
Male	44.1	10.2	27.8	17.9	902
Age[b]					
Under 25 years	3.1	3.1	40.6	53.1	32
Ages 25 to 44	38.9	9.7	32.3	19.1	424
Ages 45 to 54	47.4	10.3	26.7	15.7	536
Ages 55 to 64	47.9	11.2	26.9	14.1	484
Ages 65 to 74	54.2	10.2	19.0	16.6	205
Age 75+	48.7	12.4	20.4	18.6	113
Education[b]					
Less than high school	60.7	13.6	20.1	5.6	323
High school	52.1	10.9	29.2	7.6	890
Associate's degree or higher	55.4	13.2	27.5	3.9	258

Table C.1—Continued

Demographics	Open Cases (%)	Closed Cases with at Least 1 Need Fully Met (%)	Closed Cases with No Needs Fully Met (%)	Closed Cases for Other Reason (%)	Total Count (n)
Household income					
Under $15,000	58.4	11.9	24.6	5.1	748
$15,000–$30,000	57.6	14.3	24.5	3.6	420
$30,000–$45,000	53.6	12.3	31.2	2.9	138
$45,000+	53.4	9.6	32.9	4.1	73
Employment[b]					
Employed	47.3	11.5	31.8	9.5	592
Unemployed due to disability	60.6	16.5	18.8	4.1	388
Other unemployment or retired	55.8	9.6	25.6	9.0	520
Current type of housing[b]					
Mobile home/trailer	51.2	11.4	24.2	13.2	1,014
Single-family dwelling	44.7	10.5	31.0	13.9	497
Other	46.8	9.1	33.1	11.0	154
Persons living in household (mean no.)	2.2	2.2	2.2	2.1	1,667

NOTE: This table was created using data from April 19, 2010, approximately one month before the pilot ended.

[a] Represents the sum of the total number of opened cases. Demographic variables listed in the table have different rates of missing data.

[b] $p < 0.05$ for chi square test of independence.

APPENDIX D

Recovery Services Listed in Descending Order by Frequency of Request

Table D.1 lists, in descending order of frequency of request, the recovery services provided by the DCMP.

Table D.1
Recovery Services, in Descending Order of Frequency of Request

	Requested Services (%)		Open Cases (%)		Closed Cases (%)			
Recovery Services	Open Cases	Closed Cases	Received Services That Met or Partially Met Need	No Information on Services[a]	Received Services That Met or Partially Met Need	No Information on Services[a]	Total Count (n)	Total Clients Who Requested Services (%)
Housing repairs and assistance	62.7	37.3	9.0	89.2	22.1	68.1	1,114	61.8
Furniture procurement	64.2	35.8	3.5	93.4	12.5	76.2	715	39.6
Financial assistance	63.9	36.1	15.6	83.9	19.9	68.2	584	32.4
Employment or job training	61.4	38.6	34.3	64.5	34.9	40.5	275	15.2
Utilities	61.8	38.2	5.6	92.0	11.0	69.0	262	14.5
Health and well-being	65.9	34.1	8.3	91.7	10.7	64.0	220	12.2
Food	68.2	31.8	12.0	87.3	15.7	58.8	220	12.2
Application assistance	67.6	32.4	11.64	88.4	28.6	42.9	216	12.0
Aging and disability services	61.3	38.7	11.4	88.6	11.1	61.5	186	10.3

NOTE: This table was created using data from April 19, 2010, approximately one month before the pilot ended.

[a] The percentage of cases that were closed with no recorded needs met was omitted here.

APPENDIX E

Recovery Service Indicators

The distribution of clients across tier levels indicates that the majority of clients faced challenges that jeopardized their full recovery and necessitated a close partnership with the case manager (see Table E.1). Roughly two-thirds of the clients fell evenly into tier 1 or 4, with the other third distributed across tiers 2 and 3. The level of client contact was not always consistent with the tier guidelines; however, the reason for this discrepancy was unclear.

Those with open cases had greater needs than those with closed cases. While cases in tiers 1 and 2 less frequently remained open, they more frequently were closed with no information about the status of needs recorded. The poor quality of data might be underestimating the needs of the population.

About half the clients received weekly or biweekly contact from their case managers. Clients with less contact more often had a case closed by the end of the pilot than those with higher frequency of contact between client and case manager, although this pattern does not exist among the percentage of each population that had their case closed with at least one recorded need met. Those clients who were contacted as needed had cases closed with no recorded need met more frequently than other clients (for which there was information on the level of client contact). There are a variety of client-level factors that might influence communication between client and case manager.

Most clients received some funds as part of other assistance programs, such as a small-business loan, funds from the Nonprofit Rebuilding Pilot Program for housing assistance, or assistance from a FEMA program, such as its individual assistance program. Clients whose cases were closed without at least one recorded need met received less funding from the Nonprofit Rebuilding Pilot Program, although they received more money from small-business loans.

Table E.1
Service Indicators

Service Indicator	Open Cases	Closed Cases with at Least 1 Need Fully Met	Closed Cases with No Needs Fully Met	Closed Cases for Other Reason	Total Count (n)
Tier Level[a]	(n = 818)	(n = 186)	(n = 486)	(n = 314)	(n = 1,804[b])
Tier 1	36.1%	8.9%	31.1%	23.9%	662
Tier 2	47.4%	12.5%	28.6%	11.6%	329
Tier 3	53.2%	10.7%	26.9%	9.3%	216
Tier 4	56.2%	11.5%	22.2%	10.1%	546
Average cash assistance received per person					
FEMA	$342	$339	$294	$278	1,051
Road Home	$48,231	$48,705	$48,012	$40,000	758
SBA loan	$19,654	$15,166	$27,271	—[c]	355
Level of client contact[a]					
Weekly or biweekly	58.0%	11.5%	22.6%	7.9%	879
Monthly	49.3%	11.9%	26.7%	12.1%	505
As needed	24.9%	9.3%	44.4%	21.5%	205
Mean number of recovery needs identified at intake	3.6	3.2	2.2	—[d]	

NOTE: SBA = Small Business Administration. This table was created using data from April 19, 2010, approximately one month before the pilot ended.

[a] $p < 0.05$ for chi square test of independence.

[b] Represents the sum of the total number of cases that were opened. Variables listed in the table have different rates of missing data.

[c] No respondents who had a case closed for another reason are recorded to have received financial assistance from this program.

[d] Clients in this column are those for which there is no information available about their needs, so it is not possible to identify the number of needs accurately. The poor quality of data might cause underestimation of population needs.

APPENDIX F

Geographic Distribution of Open and Closed Cases

Most clients lived in New Orleans and Lake Charles, but there was a wide distribution of clients across the state of Louisiana. We examined how client outcomes varied geographically across Louisiana. Table F.1 represents the geographic distribution across the two cities with the highest number of clients—New Orleans and Lake Charles—as well as across the ten cities with the next-highest numbers of clients in Louisiana. In New Orleans, 54 percent of cases were closed, the majority without a recorded need that was fully met or closed for another reason. Noncompliance with case management services and lack of contact by the client were the most often named reasons among the cases closed without a recorded need fully met.

The other ten cities here reflect mostly cities in the southern coastal region of Louisiana, many surrounding New Orleans, although case management services did extend farther north to Baton Rouge and more than 200 other cities. The cities listed here reflect different distributions of cases open and closed; underlying this pattern is a complex web of social and institutional factors and barriers that might contribute to the case status. Further research is needed to more fully understand these complex processes. While geographic patterns might be hard to

Table F.1
Geographic Distribution of Open and Closed Cases, Top Ten ZIP Codes

City Name	Open Cases	Closed Cases with at Least 1 Need Fully Met	Closed Cases with No Needs Fully Met	Closed Cases for Other Reason	Total Count
New Orleans	232	44	126	102	504
Lake Charles	48	33	58	4	143
Slidell	32	5	13	11	61
Port Sulphur	24	9	15	6	54
Buras	32	4	2	4	42
New Iberia	15	3	17	3	38
Chalmette	12	5	8	4	29
Violet	11	1	10	6	28
Pearl River	14	0	9	2	25
St. Bernard	12	3	5	4	24
Sulphur	10	4	5	2	21

NOTE: This table was created using data from April 19, 2010, approximately one month before the pilot ended.

interpret and understand in a simple bivariate analysis, they do indicate where future services might be needed.

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