DISASTER RECOVERY PLANNING FOR HEALTH AND SOCIAL SERVICES

Summary of March 2015 Workshop Hosted by HHS/ASPR

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National Association of County and City Health Officials & Association of State and Territorial Health Officials
EXECUTIVE SUMMARY

On March 3–4, 2015, the Department of Health and Human Services (HHS) Office of the Assistant Secretary for Preparedness and Response (ASPR) held a Recovery Workshop to engage stakeholders from state, local, territorial, and tribal governments, as well as non-profit, private, foundational, and other non-governmental entities in discussions regarding disaster recovery planning. The purpose of this workshop was to collect feedback, impressions, experiences, challenges, and opportunities from attendees related to this field.

The workshop included plenary sessions during which subject matter experts described first-hand their experiences regarding the critical elements of disaster recovery and working sessions during which attendees discussed a number of disaster recovery topics. Working sessions were organized into four different sub-groups: healthcare; behavioral health; public health and environmental health and safety; and social/human services and early childhood education coordination.

Staff from the National Association of County and City Health Officials (NACCHO) and the Association for State and Territorial Health Officials (ASTHO) analyzed conversations from these working sessions to identify emerging themes and areas of further exploration for disaster recovery. Participants identified the following themes and concepts across all working sessions, warranting further discussion and investigation: recovery funding, communication, healthcare coalitions, non-governmental partnerships, legal authority/regulations, recovery processes, leveraging of existing resources, long-term recovery planning, data collection, and general knowledge among organizations tasked with recovery operations. These themes and concepts can be consolidated into four high-priority areas: recovery funding, recovery organizational structure, recovery data and information collection/dissemination, and recovery education and training.

The 2015 HHS/ASPR Recovery Workshop provided subject matter experts with the opportunity to address several recovery-related issues associated with their specific areas of expertise. During conversation, attendees recognized that while each incident and community is unique, and that it is imperative to identify and address needs appropriately, many of their concerns were fairly consistent across disciplines and locations.

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INTRODUCTION

While disaster planning is not new to the field of public health, past efforts have focused primarily on response capabilities. Recovery planning is becoming an area of greater interest for local, state, and federal partners as real-world events have demonstrated that long-term recovery and community resilience are critical to the population’s post-disaster health and well-being.

On March 3–4, 2015, the Department of Health and Human Services (HHS) Office of the Assistant Secretary for Preparedness and Response (ASPR) held a Recovery Workshop to engage state, local, territorial, and tribal governments and non-profit, private, foundational, and other non-governmental entities in discussions regarding disaster recovery planning. In total, 65 attendees participated in the workshop.

During this workshop, attendees used their experiences and subject-matter expertise to share important feedback, impressions, experiences, challenges, and opportunities that will help to guide the work of the ASPR Recovery Division within the Office of Emergency Management and the development of a national recovery agenda.

This report describes the nature of the workshop, summarizes the important discussions that took place during the event, and presents information that may inform the development of recovery capacities and capabilities across the country.

METHODS

The 2015 HHS/ASPR Recovery Workshop took place over a span of two days. Each day featured two working sessions between opening and closing plenaries, for a total of eight sessions.

Plenary sessions featured subject matter experts who provided either first-hand accounts of field-level recovery experiences or research regarding the critical elements of post-disaster recovery. These presentations were followed by panel sessions during which attendees were able to pose questions to speakers. Through these plenary presentations, workshop participants were provided with foundational knowledge that would inform discussion during the following working sessions.

The following is a listing of each workshop plenary session with their intended objective:

- **Workshop Day 1**
  - Plenary #1: Nuts and Bolts—Overview of National Disaster Recovery Framework (NDRF) and Health and Social Services Recovery Support Function (RSF)
    - **Objective:** Provide attendees with background information on the NDRF and to outline how the RSF fits within this system.
  - Plenary #2: Tales from the Field—Disasters & Recovery
    - **Objective:** To share recovery lessons learned from Hurricane Sandy in New Jersey and Massachusetts, flooding in Alaska, and the SR530 landslide in Washington.

- **Workshop Day 2**
  - Plenary #3: How and Why We Did It—Local/State/Federal Recovery Planning Process
    - **Objective:** Provide resources and examples of how recovery planning is executed at the state, territorial, tribal, and local (STTL) levels.
  - Plenary #4: I Have a Plan—Now What? Exercising Recovery
- **Objective:** Provide high-level information on recovery exercises, showcase real-world examples of these exercises, and present the necessary elements for effective planning and implementation of post-disaster recovery.

Working sessions consisted of about 15–20 individuals participating in conversations focused on core planning processes, key resource supports or needs, functions and services, and topics or opportunities for additional consideration. Working groups addressed session topics from one of four perspectives: healthcare; behavioral health; public health and environmental health and safety; and social/human services and early childhood education coordination. Participants were placed into each of these groups by their expertise and experience. Additionally, working sessions also called for participants to provide their opinions from perspectives that differed from their areas of expertise: experts in healthcare moved to the focus area of behavioral health, behavioral health experts moved to public health and environmental health and safety, public health and environmental health and safety moved to social/human services and early childhood education coordination, and social/human services and early childhood education coordination moved to healthcare.

Representatives from ASPR, the Association of State and Territorial Health Officials (ASTHO), and the National Association of County and City Health Officials (NACCHO) assisted with facilitation during these sessions. After each working group session, facilitators from each perspective shared key impressions, findings, and themes with the rest of the recovery workshop attendees.

The following is a listing of each workshop working session with their intended objective:

- **Working Session #1: Establish Baseline—Partner & Role Identification**
  - **Objective:** Identify potential post-disaster clients and stakeholders, issues or challenges that communities will face while addressing their needs, and perceptions of or assumptions made about responsibilities across all levels of government and non-government entities.

- **Working Session #2: Planning Process—Authorities and Steady-State Platforms for Coordination**
  - **Objective:** Identify key authorities that may factor into recovery and how local communities connect to these authorities and related partners.

- **Working Session #3: Defining a Structure for Coordination and Role of Data in Recovery Planning**
  - **Objective:** Identify a potential structure to ensure connectivity within the broader scope of health and social services recovery, the process for defining priorities, and data sources that justify the structure and priorities.

- **Working Session #4: Plan, Build, Test**
  - **Objective:** Discuss how to monitor outcomes and track accountability, strategies for long-term planning and adjusting of priorities, and how leadership plays a role in the planning process.

Attendee discussions during working sessions provided insight regarding the current status of disaster recovery planning across the nation from the perspective of experts in a number of fields. This insight may be used to inform the next steps in improving disaster recovery.
RESULTS

The following is a summary of the discussions that took place during working sessions at the HHS/ASPR Recovery Workshop. The summaries have been organized chronologically and by different subject-matter perspectives. Analysis of these conversations will follow in the “Discussion” section of this report.

Establish Baseline – Partner and Role Identification

The objective of this working session was to identify potential post-disaster clients and stakeholders, issues or challenges that communities will face while addressing their needs, and perceptions of or assumptions made about responsibilities across all levels of government and non-government entities.

Healthcare Perspective

Participants first identified several clients and stakeholders involved in post-disaster recovery from a healthcare standpoint. Those that were identified included community members (coastal, transient, chronic/acute illness); community health centers; Emergency Medical Services; government agencies; community boards; shelters (pet, medical, general, “pop-up”, etc.), voluntary organizations active in disasters (VOADs); caretakers; service providers; professional associations; and insurance providers.

Those addressing the healthcare perspective were also able to note several challenges associated with the establishment of a baseline measurement including the following:

- Lack of surge-capacity capabilities;
- Lack of understanding regarding complex healthcare systems by clients and stakeholders;
- Unclear roles and responsibilities regarding the coordination of recovery activities among partners;
- Lack of coordination of information and communication;
- Difficulty sharing patient information across agencies due to laws such as the Health Insurance Portability and Accountability Act (HIPAA);
- Transportation issues for clients with mobility-assistance needs;
- Access to durable medical equipment and medication for clients managing chronic illness;
- Potential for political issues at the state and local levels to impact recovery efforts;
- Lack of planning for the local community service and infrastructure’s ability to remain operational during recovery or returning those services as soon as possible; and
- Cumbersome insurance claims processes.

Participants generally agreed that responsibility for leading recovery lies with state and local elected officials. Government organizations responsible for response efforts will have a continuing role throughout the transition to the recovery phase. Furthermore, the government also plays a large role in establishing a structure for non-governmental organizations (NGOs) and the private sector.

Behavioral Health Perspective

While the partners will vary based on the type and magnitude of the event, community needs, and pre-disaster availability of services, it was agreed that local partners (e.g., law enforcement, the justice system, housing, and human/social services) are key to sustaining long-term mental and behavioral health recovery efforts. Federal agencies (e.g., the Substance Abuse and Mental Health Services Administration (SAMHSA), the Health Resources and Services Administration) provide affected
communities with surge staffing and grants; frequently cited was the Crisis Counseling Program, administered by SAMHSA and the Federal Emergency Management Agency (FEMA). Unfortunately, these resources primarily support short-term recovery efforts (i.e., 90 days post-disaster); however, a community’s need may extend for a longer period of time. Additionally, participants identified a broad range of clients and stakeholders that may interact with the mental and behavioral health system, including vulnerable, at-risk, and underserved community members such as children, the homeless, shelter populations, and economically disadvantaged groups.

Developing useful pre-disaster plans for the provision of services is particularly challenging from a behavioral health perspective since symptoms of a mental illness may not be experienced or recognized until many months or years following a disaster. Despite significant strides, stigma also still exists around mental illness and substance abuse, potentially deterring community members and responders from seeking assistance. While addressing this topic, a difference of opinion arose when discerning the responsibility of first responder mental and behavior health needs. Some felt as though this responsibility falls on government-based resources whereas others felt as it was up to the responders’ employers.

Outreach and communications to promote services need to be culturally competent and consistent. Additionally, many communities face chronic shortages of behavioral and mental health service providers. Shortages negatively impact community resilience and the ability to address surges in demand post-event. Sustainability is a concern and maintaining continuity of care can be challenging. Accessing medications and barriers to sharing medical records, particularly with displaced populations and damaged medical facilities, can hinder or halt services.

Public Health and Environmental Health and Safety Perspective
Vulnerable populations, the local health department (LHD) workforce, and the private sector were identified as clients for public health and environmental health and safety during a recovery effort. When asked to identify stakeholders, state, territorial, tribal, and local governments (STTLs), healthcare providers, faith-based organizations, community-based organizations, NGOs, relevant non-profit organizations, and utility companies were acknowledged. It was noted that clients and stakeholders can be fluid groups that vary depending on the situation. There were occasions of disagreement during this discussion as some participants thought that clients and stakeholders should be considered the same entity while others believed that the distinction lay in the fact that stakeholders provided services while clients received those services.

A lack of funding for recovery planning was identified as the overarching challenge facing local communities when considering the public health and environmental health and safety perspective. Communications challenges, such as a lack of infrastructure and systems, could cause coordination and collaboration efforts to suffer. Unidentified points of contact can severely impact recovery efforts and the time it takes to disseminate reliable information in real time.

Social/Human Services and Early Childhood Education Coordination Perspective
Participants identified STTLs and health departments as key stakeholders for social/human services and early childhood education coordination, with service providers, private businesses, non-profits, libraries, and other organizations supporting response and recovery. Participants also identified clients as all residents in a community (e.g., individuals who rely on social services, the school system, and childcare providers).
Challenges to recovery include a lack of mobility of senior citizens and disabled individuals due to diminished access and damage to infrastructure; unknown or unregistered individuals who are self-sustaining and others in the community who do not take advantage of community services; and the potential for disruptions to services. Additionally, participants noted that recovery issues can arise if schools and daycares are not open since that can hinder parents’ ability to return to work. Similarly, if businesses do not reopen after a disaster, families will move out of the community to find jobs and services elsewhere. Another challenge is educating the population on how to access social services during a disaster.

Participants agreed about the importance of facilitating services during a surge for social services in response and recovery but voiced different concerns about community perception. Some felt maintaining services would help assuage individuals who normally access social services but do not always trust government resources. Others spoke about the negative connotation new individuals may have when referring to social services, especially with respect to food and behavioral health services.

**Planning Process – Authorities and Steady-State Platforms for Coordination**

The objective of this working session was to identify key authorities that may factor into recovery and how local communities connect to these authorities and related partners.

**Healthcare Perspective**

Participants developed the following list of key authorities that have regulatory relationships within the spheres of healthcare and recovery: Centers for Medicare & Medicaid Services, Joint Commission, HRSA, state public health and mental health departments, professional licensing bodies, local legislatures, faith-based organizations, the Department of Education, state insurance commissions, the Medical Reserve Corps, VOADs, the Federal Emergency Management Agency, the Emergency Medical Treatment & Labor Act, HIPAA, the Drug Enforcement Administration (DEA), and the Centers for Disease Control and Prevention.

Participants agreed that authorities should connect with community partners through planning committees; trade associations; state office of emergency management; formal agreements between federal and state government; healthcare coalitions; workshops, trainings, and exercises; and emergency response/recovery planning. These collaborations are more likely to occur when organizations identify common challenges and priorities to coordinate their associated actions. Participants also had ideas about how to convene authorities with private entities, which can be made difficult due to the highly regulated nature of those private entities’ industries. One solution would be to use heightened strategic communications.

Participants noted that the healthcare industry can provide services for their own employees and insurance companies often have large behavioral health programs to support triage, counseling, and referral via telemedicine. These services could be integrated into primary care supporting referrals and prescription maintenance. Healthcare coalitions and similar groups help plan, exercise, and coordinate services and resources across partners. To be most effective, the healthcare industry, insurance industry, and coalitions will need to collaborate.

Participants also noted that differences in laws and organizations can cause the aforementioned authorities and relationships to vary by state.
**Behavioral Health Perspective**

Many federal and state authorities influence the recovery process from a behavioral health perspective. Participants considered the Stafford Act as the critical trigger for activating federal grants and services, such as the Crisis Counseling Program and healthcare waivers, and support to behavioral and mental health recovery in communities. Additional laws that make an impact are Section 1135 of the Social Security Act, which allows for waivers of certain regulatory requirements (e.g., programmatic caps, certification, relocations, privacy) for healthcare facilities during disasters and HIPAA, which discerns disaster-recovery requirements for health data. DEA regulations and authorities for controlled substances play a role in regulating the administration of methadone. Furthermore, additional statutes and regulations provide information regarding which entities have authority over certifications, licensure, substance abuse services, counseling programs, grant administration, and the procurement and hiring of surge staff ranging from the local to the federal level.

The governing authorities of participants’ organizations are critical partners that have well-established relationships with these organizations in the steady state. The inclusion of disaster-clause language and iterative performance metrics into state and local contracts is a helpful mechanism for refocusing vendor activities and influencing recovery activities.

Organizations without regulatory authority can also have a role in post-disaster behavioral health recovery. For example, faith-based, advocacy, non-profit, and non-governmental entities often have resources, expertise, and trust within the community. These organizations can provide advice, outreach, and education to community members regarding post-disaster behavioral health impacts and available services. However, relationships with these organizations are usually not well established prior to a disaster. As these groups tend to “self-deploy” to support response and recovery, an unestablished relationship makes it difficult to coordinate efforts.

**Public Health and Environmental Health and Safety Perspective**

Participants expressed that authorities from local to state that oversee the Stafford Act, State Declarations, Local Mutual Aid, and Alternate Care Standards need to be a part of collaborative efforts. Those overseeing environmental regulations, building codes, and zoning laws should also be included. Funding will often determine authority, even if not explicitly agreed upon.

A designated “recovery leader,” similar to an incident commander in an Incident Command System, could prove beneficial for the coordination of efforts. A recovery leader would lend credibility to recovery as an emergency planning function. Additionally, continuity of operations plans should be revisited often and should extend over a period of months or years, not just weeks. However, participants did note that a lack of resources, particularly funding, is a limiting factor for recovery planning. It was recommended that recovery funding be tied to existing grant opportunities, including the Community Development Block Grant Program. Another recommendation was to permit the use of funding allocated to response planning for recovery planning efforts.

Perceived recovery needs can vary depending on who is surveying a community and the parameters being used. For example, post-Sandy levels of impact in New Jersey were based on structural damage, not the number of people affected. As a result, low-income communities with a large number of affected individuals were left off the priority list.
**Social/Human Services and Early Childhood Education Coordination Perspective**

Participants listed a number of authoritative regulations and doctrines that may factor into recovery: the National Disaster Recovery Framework (NDRF); the Emergency Support Functions (ESFs); the Stafford Act; the Post-Katrina Emergency Management Reform Act; the Pandemic and All-Hazards Preparedness Reauthorization Act; the Child Abuse Prevention and Treatment Act; regulations developed by governmental entities responsible for children’s services; Memorandums of Understanding; and authorities granted to programs such as the Women, Infants, and Children (WIC) Program and the Supplemental Nutrition Assistance Program (SNAP).

Participants recognized that connections among authorities and recovery organizations can be strengthened through exercise and planning efforts at the local, state, and federal levels; however, such relationships would be further strengthened through the development of common platforms to prevent silos, enable communications, and ensure all partners have access to information.

**Defining a Structure for Coordination and Role of Data in Recovery Planning**

The objective of this working session was to identify a potential structure to ensure connectivity within the broader scope of health and social services recovery, the process for defining priorities, and data sources that justify the structure and priorities.

**Healthcare Perspective**

Participants noted that while structures exist to ensure connectivity within and across the broader scope of health and social services, they are not focused on recovery. However, it may be possible to extend those structures to recovery after completing a landscape analysis. The following actions would facilitate the creation of such a potential structure:

- Use hospital planning personnel to identify certificates of need for non-profit hospitals;
- Develop ready-state planning commissions that could sit within mayoral offices;
- Incorporate social services, healthcare, and public health as one group;
- Involve managed care organizations;
- Adhere to Department of Housing and Urban Development and FEMA funding levels to determine other partners;
- Include community development partners and emergency management at the state level;
- Build on existing political and financial structures;
- Use 2-1-1 and 3-1-1 systems to identify other partners;
- Include professional organizations, faith-based organizations, utilities, and the public when identifying priorities; and
- Develop a community partner matrix.

The group agreed that local entities should identify priorities with the help of risk assessments. Additionally, clinicians should play an advisory role in the determination of priorities while policy and finance professionals should drive the process.

**Behavioral Health Perspective**

When considering behavioral health and social services, there is no formalized process that leverages organizational structures to carry out recovery activities. If a structure were to be created, participants noted that it should be flexible, scalable, and appropriate to the disaster. Participants also recognized
the importance of ensuring connectivity across the broader scope of a potential behavioral health and social services structure for recovery.

Participants expressed concern about types of and inconsistencies among data sources available to measure and track behavioral health recovery. The group identified a multitude of existing data sources to justify priorities and organizational structure (e.g., Psychological Simple Triage and Rapid Treatment (PsySTART), crisis counseling tracking, behavioral risk factor surveillance, pharmacy prescribing practices, insurance data, crisis and poison control data); the group also discussed the need for “boots-on-the-ground” teams to develop and collect metrics. It was noted that using state statutes to collect data and crisis counseling tracking systems may help streamline the process.

Public Health and Environmental Health and Safety Perspective
Participants noted that developing an established structure, finding reliable data sources, and using data to establish priorities were potentially useful for public health an environmental health and safety. It was suggested that the Metropolitan Medical Response System could serve as a template for a structure, ensuring connectivity across the broader scope of health and social services recovery. Although it is often criticized, participants believe that the system provides the structure LHDs desire. Participants also noted that while coalitions are collaborative entities, they do not hold authority to establish priorities. As a result, coalitions must have support from a wide range of partners to designate priorities.

Participants expressed concerns regarding the collection, cleaning, and analysis of data due to the amount of time and resources required. They also expressed concern about collecting data from a variety of sources since reliability will vary and data may not be compatible. Additionally, it was noted that certain types of data may not be available to all.

Some participants felt that recovery differs from response in that an all-hazards approach will not be beneficial; it may hurt recovery efforts to allocate resources that may be needed elsewhere.

Social/Human Services and Early Childhood Education Coordination Perspective
It was noted that social services should be leveraged and integrated into all aspects of the recovery structure. Participants acknowledged that the recovery structure should hold a level of continuity with other disaster cycle structures and should be modeled after the Incident Command System. The structure should include agencies at the federal, state, and local levels and disaster-specific long-term recovery groups consisting of community organizations (e.g., childcare providers, nursing homes) and VOADs with strong community-based connections. Attendees also remarked on the importance of internal communication and coordination within agencies and external communication and coordination with partners and stakeholders. Participants agreed that funding needs clear objectives. State and local representatives disagreed on leadership for the recovery structure. Some participants believed that either a federal agency (e.g., FEMA) or a state agency should lead, while others noted that if the end goal was to be a resilient community, local agencies should lead recovery.

To help in recovery planning, participants recognized that jurisdictions will want to access existing data collected by other agencies and organizations. Data sources can include social and human service departments, surveillance, census data, Coordinated Assistance Network, the Certification and Survey Provider Enhanced Reporting system, call centers, and 2-1-1 centers. While some participants believed social media could be used to communicate with individuals, collect data, and help identify issues and concerns, others noted that social media cannot trace individuals and that the data cannot be validated.
The objective of this working session was to discuss how to monitor outcomes and track accountability, strategies for long-term planning and adjusting of priorities and explore how leadership plays a role in the planning process.

**Healthcare Perspective**
Participants mentioned a variety of methods to monitor outcomes and track accountability, including information technology, funding, uniform data systems, bed occupancy, wait times, and accounts receivable. Meals-on-Wheels and other pre-disaster systems could be used to provide a baseline for comparison. To be successful in this endeavor, stakeholders would need to leverage all data sources in order to gain a full picture of services useful to recovery. The group noted the benefits to pursuing a strategy keeping health professionals and their supply systems moving, staying financially viable, keeping facilities open, providing guidance for recovery, funding the implementation of that guidance, and developing financial projections based on previous disasters. State leadership could play a role in this process by taking the first actions toward obtaining funding from federal partners through the governor’s office. State leadership can also participate by acting as a liaison, driving policy, appointing staff, dissolving silos, and pushing for an improved community post-recovery.

**Behavioral Health Perspective**
Participants were unsure about how the behavioral health field could monitor outcomes and track accountability during the disaster recovery phase as behavioral health is a distinct field; in the event of a disaster, it would work extensively with public health and VOADs. Reporting systems vary from state to state, but SAMHSA requires tracking for substance abuse data and mental health treatment data that could be helpful. Such data include Treatment Education Disorder data but do not differentiate between steady state and disaster services; epidemiological centers and the Department of Education would be advantageous partners in this initiative. Participants believe that the behavioral health field should leverage licensing requirements and existing systems for tracking accountability and research appropriate measures.

There was also discussion regarding a strategy for long-term planning and adjustment of priorities. Integration of performance-based measures throughout planning should be a priority. Existing recovery groups could conduct a mid-course assessment or quarterly reporting to discuss successes, barriers, adjustments, progress toward deliverables, and reallocation of funding.

While leadership does impact funding and allocation of resources, organizations at the local level must advocate for their community’s needs. Disaster associations, psychological and mental health associations, justice system advocacy groups, and Big City Emergency Managers may be appropriate groups to take on this responsibility. Advocacy could be framed around expanding mitigation funding.

**Public Health and Environmental Health and Safety Perspective**
Discussion among this group focused on how to ensure that valid, measurable outcomes are developed and used to adjust priorities when necessary. Data used to measure outcomes needs to be relatively easy to attain; however, using data for research purposes can present challenges (e.g., Institutional Review Board issues, consent). Obtaining consent prior to data collection can offset other potential challenges.
It was acknowledged that long-term recovery starts during the initial response and may warrant a place in the Incident Command System. A transition phase is necessary as recovery functions will still be in place when the Incident Command System demobilizes.

Elected officials will likely desire an active leadership role and the community will want to hear from these officials. Elected officials and the media need to receive accurate information from agencies. Subject matter experts should be informing the decisions of those leaders, ensuring the timely and accurate translation of data for public consumption.

Variation existed regarding leadership structure depending on the size and reach of the organization. Some communities have very limited resources so officials may have multiple roles.

Social/Human Services and Early Childhood Education Coordination Perspective
Participants agreed that monitoring outcomes and tracking accountability can be challenging. Outcomes that need to be monitored have not been identified and defined by the field, which creates more work for staff who are already overburdened. The actual process of defining outcomes and standardizing metrics may be difficult because they may differ based on the community and the disaster that occurred. STTLs may want the measures to be more impact-focused and less-process focused. Additionally STTLs would not mind providing data to the federal government; however, they would like to be able to identify outcomes and trends with the data.

With respect to long-term planning and adjusting priorities over time, participants acknowledged that jurisdictions that have gone through a number of disaster events may have potential benchmarks that other jurisdictions could use to measure themselves.

Participants also discussed the role of leadership. They agreed that everyone in a leadership role needs to prioritize both planning and recovery, and that senior leadership could also play a convening role in the planning process. It was also noted that leadership roles are not clearly defined during recovery and clarification is needed on who has the authority to make decisions.

Participants agreed that standard metrics should exist for recovery, but they differed on what the unit of measurement should be. Some participants wanted the measurement to be at the community/local level, while others had concerns that the system would group a number of activities into a larger category for metrics.

DISCUSSION

By reviewing discussion topics that encouraged the most conversation across all groups during the HHS/ASPR Recovery Workshop, NACCHO and ASTHO identified various themes related to the current state of disaster recovery within the United States. These themes, as well as potential areas of further exploration described by participants across all working sessions, may be used to identify gaps in the nation’s disaster recovery capabilities that could be used to inform future activities that will have the greatest impact on recovery efforts at the state and local levels. The following themes emerged from discussions during the working sessions.
Funding brings focus: Recovery planning (unlike response planning) has not been well funded and, therefore, has not been an emphasis of post-disaster planning. Increased funding, or tying funding requirements to recovery activities, can have a positive impact on post-disaster planning. Another option is to align recovery objectives with existing (funded) preparedness activities. Similarly, opportunities to explore leveraging existing funding sources such as Social Services Block Grants, for example, to support recovery operations should also be considered. Any funding for disaster recovery activities should also come with guidance or recommendations on how to use that money to effectively improve a community’s recovery capabilities, as well as metrics to measure progress. Funding is directly related to the capacity for recovery planning.

Effective communication is key: Communication and coordination among all levels of government and non-governmental community organizations is important to addressing the needs of all since this coordination helps create a strong support network, prevents the duplication of efforts, and facilitates sharing of best practices and opportunities.

Healthcare coalitions should be involved: In the absence of an overall recovery authority, healthcare coalitions (HCC) could support recovery processes if the coalition members work towards a common goal. A strong HCC may be in a position to coordinate various response efforts, enhance health situational awareness, and share resources among its members when necessary. HCCs can also help establish roles and responsibilities for relevant health and social service providers. Finally, with organizations or agencies that might normally compete for resources working together, recovery activities can occur more efficiently and effectively.

Utilize non-governmental partners: Communities should look towards non-governmental partners prior to a disaster to strengthen their response network and ensure they are able to meet their needs. In particular, recovery planners should consider engaging with non-traditional partners such as pharmaceutical companies, durable medical equipment suppliers, and home health service providers. The use of “recovery volunteers” may also be feasible in some communities, particularly where there is already an established volunteer group, such as a Medical Reserve Corps.

Authority is in the law: Legal authority can exist throughout the spectrum between local and federal jurisdictions. Partnerships between LHDs and their state and federal counterparts often exist due to regulatory connections. When conflicting standards or regulations exist regarding recovery practices, these partnerships can be used to resolve issues, though it seems that this currently happens in an ad hoc manner.

Disaster recovery needs formalized processes and authorities: Recovery is still somewhat of an abstract concept to many communities. Developing a definition of what it means to recover from a disaster and establishing metrics or benchmarks to track progress will help state and local officials begin the recovery planning process. Communities may also benefit from identifying a “recovery leader” that would function like an incident commander within an Incident Command System. Similarly, creating a “recovery emergency support function,” “recovery act,” or “recovery declaration” would provide a formalized process and structure through which recovery activities would occur.

Existing structures for coordination are not focused on recovery: While structures are in place to ensure connectivity among organizations that may participate in disaster recovery, those structures were not created to support recovery activities. One example is an Emergency Operations Center (EOC).
Recovery operations could benefit from a collaborative environment much in the same way that an EOC supports emergency response. As was mentioned previously, this may also be true for a recovery-focused incident command structure. There is a need to further investigate various structural opportunities to identify the best approach for incorporating recovery.

**Improving systems for long-term recovery planning:** Disaster recovery planning may benefit from the use of operational periods that are similar to those for disaster response as part of an incident action plan. This would provide recovery leaders with recovery goals, operational period objectives, and a recovery strategy.

**Use existing data sources:** There are many existing data sources that can be leveraged to enhance the recovery process. If state and local officials are collecting data in real time, they can assess the recovery needs of their communities and act accordingly, improving the recovery process. One example may be to use ASPR’s emPOWER map to identify Medicare beneficiaries reliant on electricity for medical equipment who live in areas impacted by a disaster. Localized data should be tied to outcomes that are community-specific to identify trends and track accountability.

**Develop and maintain institutional knowledge:** As state and local officials improve recovery capabilities in their jurisdictions, an effort should be made to collect information accumulated along the way. Resources such as promising practices, academic research, and effective tools may benefit a number of recovery officials and would provide educational value to other recovery partners as well. Additionally, a recovery research model would standardize the process and data collection methods.

**CONCLUSION**

Recovery is part of the disaster life cycle. While comparisons can be drawn to other phases of the disaster life cycle, the recovery phase comes with its own unique set of considerations and challenges. Communities that consider the health and social service sectors in their recovery planning process will better meet the needs of their members post-disaster. The 2015 HHS/ASPR Recovery Workshop was successful in bringing together subject matter experts from health and social services organizations to address how recovery related issues related to their specific areas of expertise.

While different sectors practices and experiences related to role definition and partnership, planning, and authorities, structure and data sharing and assuring accountability may differ, the identifiable gaps across disciplines were consistent. The four major priority gap areas are as follows:

- **Recovery Funding.** Methods to incentivize communities to prioritize recovery planning can be explored, including adding guidance in existing preparedness-related funding streams and allowing administrative flexibility to use other funding mechanisms.

- **Recovery Organizational Structure.** Development of an organizational framework for recovery should be considered. Recovery efforts would benefit by the develop framework, similar to a response EOC aimed at improving communications and interoperability among potential recovery partners.

- **Recovery Data and Information Collection and Dissemination.** Assuring access to reliable information for informed decision making during the recovery phase is essential. Efforts should be made to examine how information needs during recovery compliment and contrast to those during the planning and response phases.
• **Recovery Education and Training.** There is a need for increased recovery education for disaster preparedness, response, and recovery partners. Among the potential areas to focus upon are the provision of a clear definition of “Disaster Recovery,” the creation of an educational program that teaches state and local partners about recovery related concepts, and the continued investigation of how to translate best practices in response to recovery.

As a nation, our performance in disaster recovery related activity has continually improved. The results of this workshop show that there remains room for improvements that will positively impact the lives of those affected by disasters. By addressing the identified gaps related to the organizational structure of a recovery process, recovery funding, recovery data/information collection and dissemination, and educational opportunities related to the recovery process it may be possible to markedly improve future recovery activities.