Strengthening Regional Emergency Planning Alliances

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Executive Summary

Abt Associates was contracted by the Agency for Healthcare Research and Quality (AHRQ) to support the development of regional public health and medical regional emergency planning by working with two alliances: Region IV's Unified Planning Coalition (UPC) and the Mid-America Alliance (MAA) in Regions VII/VIII.

This report contains key findings and related, based on interviews with participants in these and other alliances around the country.

Key Findings and Recommendations

Shared threats and the leadership of initial "champions" led to the formation of both
these alliances. The UPC's mission is to plan for and support efficient Emergency
Management Assistance Compact (EMAC) resource activation during public health
emergencies. The MAA's mission focused on non-declared public health
emergencies. (The MAA was officially disbanded in February, 2009.)

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- Alliances led by public health officials do not generally involve emergency management officials; those led by emergency managers do not directly involve public health officials. Ideally, either type of alliance should involve both, to prevent parallel (and possibly conflicting) planning and response.
- DHHS regional boundaries may not always be the best way to assemble States for emergency planning purposes, and may not reflect the most natural alliances.
- The UPC involves not only senior State health department officials, but also those with operational responsibilities. This has contributed to the substantial progress made by a dozen subcommittees. In the MAA and other alliances, only senior leadership participates and there are few active subcommittees.
- A dedicated coordinator (paid or volunteer, part- or full-time) is a key ingredient for a successful planning alliance.
- States in a region may benefit from an online planning website where each member can post information about its organization and operations. Hosting such a website may require the services of a vendor external from any member State's IT infrastructure.
- A single alliance-wide resource inventory may not be possible because State systems are already in place and not interoperable. Instead, alliance members might establish procedures whereby each searches their own State inventory to identify available resources that could be sent to neighboring States during an emergency.

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- Rather than trying to enforce identical data systems, or struggling to make noninteroperable systems communicate, alliance members could collect a core set of uniform data in their disparate systems and create "off line" mechanisms for sharing this information during emergency response.
- It would be helpful for the Federal government to draft "model" language (agreements, statutes, etc.) for States to adapt, addressing sharing of PHI for infectious disease contact tracing, patient evacuation, and other emergency situations.

1. Background and Methods

Abt Associates was contracted by the DHHS Agency for Healthcare Research and Quality (AHRQ) to support the development of public health and medical regional emergency planning alliances. AHRQ identified two alliances as the focus of the project: Region IV's Unified Planning Coalition (UPC) and the Mid-America Alliance (MAA) in Regions VII/VIII. Since the MAA has been re-examining its organizational mission and structure, the project has focused mainly on the UPC. (An accompanying Environmental Scan reviews emergency planning alliances in other regions of the country.)

The first two goals of this project are to:

- 1: Identify aspects of the alliances which have contributed to their success, and could be useful to other regions in their planning.
- 2: Identify potential areas for strengthening the alliances and improving the possibility of replication in other regions.

This report addresses these two goals, based mainly on lessons learned from the UPC.

Interviews were conducted with the regional emergency coordinators (RECs) from Region IV, with the UPC coordinator, and with staff from seven of the eight States (one State was not able to participate due to staff turnover). In addition, Abt staff four UPC meetings: the UPC annual conference in May 2008, the Executive Committee meeting in August 2008, the earthquake planning meeting in October 2008, and a Workgroup meeting in December 2008 that addressed tools for post-impact rapid needs assessments. Numerous UPC documents were reviewed, including monthly progress reports prepared and circulated by the UPC Coordinator.

We interviewed the MAA staff, six HHS Regional Emergency Coordinators (RECs) in Regions VII/VIII, six State Preparedness Directors, and four State Health Officers. We also attended two MAA meetings, one of which was convened for strategic planning purposes. And we interviewed 48 individuals in the other seven regions of the country, including State participants in all the other emergency planning alliances we were able to locate. These interviews added more context – and some counter-examples – to balance the lessons we learned from the UPC.

2. Findings and Recommendations

Through the interviews and meetings described above, we have developed an understanding of the factors that motivate, support and constrain regional public health and medical emergency planning alliances. Some of the findings that follow support clear recommendations for strengthening the work of the UPC and other similar alliances. Some findings do not lead to an obvious recommendation, and in these cases, none are offered at this time.

2.1. Motivation for Regional Emergency Planning Alliances

Years before the UPC was conceived, the RECs and State Emergency Preparedness Directors in the region were frustrated in their attempts to catalog public health and medical resources in each State. Several southeast States formed the South Eastern State Compact in the 1990's after Hurricane Andrew, but continued to experience barriers to establishing working partnerships. In 2005, after hurricanes Katrina, Rita and Wilma, several of the State Emergency Preparedness Directors agreed that each individual State's response and recovery needs exceeded its capacity and that State-based response efforts were both duplicative and inadequate. The sense in the region was that each State would meet its needs better through regional collaboration – taking advantage of the resources of the entire region when the need arises.

The first Region IV meeting in March of 2006 assembled key public health personnel from each State, to discuss mutual aid and response, and how best to take advantage of the Emergency Management Assistance Compact (EMAC) for smooth and rapid sharing of resources. Senior State officials agreed at this meeting that if it made sense for States to respond together, it would make sense for them to plan together as well. Emergency Support Function 8 – Public Health and Medical (ESF8) leaders have continued to meet on a quarterly basis for nearly three years.

The significant West Nile outbreak that swept westward across the U.S. during the late 1990s stretched the epidemiologic and laboratory resources of rural States with large geographic territories and limited public health resources. Spearheaded by the Nebraska Department of Health and Human Services, all ten State Health Officers in Regions VII and VIII agreed in 2003 on the need to develop a regional mutual aid mechanism for public health events that do not rise to the level of being declared a disaster by one or more Governors. The Mid-America Alliance (MAA) was created to meet this need. The 10 State Health Officers have met biannually since, with a few subcommittees (Lab Directors, Legal Officers, Preparedness Directors) also meeting as needed.

2.1.1. Shared Threats

We asked whether the history and risk of shared hurricanes was a key ingredient to the formation of the UPC, and all eight States agreed that this was the case. As one member explained, "One of the initial concerns that brought the UPC together was the notion that they shared similar risk; this is what gave the UPC a purpose." At the same time, having experienced the benefits of the UPC, most participants now feel it would be beneficial even without the predictably regular hurricanes in the region. Borrowing from their positive UPC experiences, some member States also collaborate – less formally – with their neighbors in other regions.

The main threat for Region IV is hurricanes, although there is also a major earthquake fault in the region, and periodic wildfires, tornadoes and floods. To address the major threat, while acknowledging all the others, the UPC designates one of its quarterly meetings each year for hurricane planning, and another meeting is devoted to another hazard (wildfires in 2007, earthquakes in 2008). They also have a dedicated committee working on pandemic influenza planning, which is completing its work in 2009. This all-hazards approach is consistent with guidance from Washington, and also assures that the "inland" States in the region, which face disasters other than hurricanes, are not neglected.

In other regions that do not share frequent, multi-State threats, there appears to be much less motivation for regional planning or an alliance, and the public health issues relate more to disease surveillance (i.e., contact tracing across State lines) than disaster response. Indeed, in some parts of the country there is no regional planning *because* the major risks are not shared (e.g. California and Nevada are in the same region, but one faces an earthquake risk that the other does not).

Recommendation: Focusing on all hazards, either simultaneously or consecutively, builds alliance cohesion by addressing the major hazards/threats facing each member State.

In the MAA, the motivation for a regional alliance was largely that of infectious disease threats: West Nile Virus, pandemic influenza planning, water-borne disease outbreaks, and the like. Similarly, the Great Lakes Border Health Initiative focuses on infectious disease surveillance, as does the Northeast Border Health initiative and several other alliances around the country. These alliances typically do not focus on planning and response to natural disasters; the reverse of the emphasis in the UPC.

2.1.2. Champions

We explored the role of a "champion" – or more than one – in the formation and sustainability of regional planning alliances. In the UPC, the Florida ESF8 lead was the original champion, joined quickly by his counterparts in the other States. The RECs in Region IV also took a more proactive role than have those in other regions. Three years after its inception, there appears to be no "essential" champion on whom the future of the UPC

depends, and the UPC is well positioned to continue, even as individuals retire or change positions. We note, however, that the financial contributions from Florida are critical for the UPC; in the absence of this funding, it is not clear whether the alliance could continue at its present level of engagement.

In some other alliances, the initial champions are critical and the alliances may not survive when those champions move on. In the northwest, for example, two champions – from Washington State and British Columbia – are leaders of the emergency planning alliance. Both these individuals are leaving their posts and others in this international region are concerned that the alliance will lose momentum when they do. In the southwest U.S., one REC has been a champion of the alliance, organizing regular conference calls and meetings, and otherwise striving to bring all States into the process. This individual's role is changing and another REC will be responsible for regional planning; he has already signaled a decline in his ability to support the alliance. State participants in the region envision less leadership and attention devoted to the alliance in the future.

It is possible that some alliances rely too much on one or two leaders, content to let these champions lead the charge. When these individuals depart, there may be no logical succession – no new leader ready to move into position. Any organization which depends so strongly on a single individual risks being unsustainable. It will be important for the UPC and others to work toward alliances that are not dependent on specific individuals for leadership.

Recommendation: Acknowledge the role of initial champions, and plan deliberately for succession.

2.2. Alliance Mission

Among the critical first steps the UPC undertook was to articulate a clear mission statement and vision for the alliance. This was an important early step because without agreement on the fundamental purpose of the organization, differing expectations could prevent a unified approach to regional planning. The UPC mission statement and vision are as follows:

Through collaborative all-hazards planning and the development of partnerships, the Regional Unified Planning Coalition will enhance the member states' abilities to prepare for public health and medical response to incidents or events.

All Region IV ESF8 UPC state, federal and tribal partners will support each other to prepare for and respond to incidents or events through the development of integrated, interoperable and comprehensive all-hazards public health and medical emergency response systems.

Other emergency planning alliances have not always started with agreement about mission, and this can impede progress. For example, the Mid-America Alliance had to re-evaluate its mission statement in 2008, three years after its inception. Although its mission statement was not markedly altered, the process was needed due to staff turnover in the member States – and different opinions of some new members – during the intervening years. The MAA had limited progress, due in part to the absence of a clear and agreed-upon vision for the organization. The cohesion and success of the UPC, and the counter-example of the MAA, lead to the following recommendation:

Recommendation: Reach consensus on a formal mission statement and vision for the alliance.

2.3. Formal Agreements Among Alliance Members

Most of the alliances we located around the country operate without specific legal authority or formal, signed agreements. Each member State covers the expenses of its own participants, paid staff are uncommon, and the relationships are based on goodwill and volunteerism – a sense that "we're all in this together". In 2008, the MAA became a 501C3 non-profit entity, but this is an uncommon approach. At the same time, several alliances, including the UPC and MAA, have attempted to formalize their agreements and many have dedicated time and legal expertise to accomplish this – often without success.

2.3.1. Memoranda of Understanding (MOU)

The UPC, MAA and several other alliances, have identified the potential need for resource sharing during events that are not Governor-declared disasters. In these situations, an MOU could be helpful, so that a "lending" State can be compensated or reimbursed by a "receiving" State. Alliances have also been concerned about sharing personal health information (PHI) across state lines for contact tracing of infectious diseases. A few alliances have devoted considerable legal expertise to creating MOUs that have been signed by all member States (e.g. Pacific Northwest Emergency Management Agreement, International Emergency Management Group). Others, including the UPC, have been unable to complete and sign such an MOU. In some cases, Governors will not permit State representatives to sign such an MOU, because they do not want to commit to financial reimbursement for loaned resources. One State Health Officer in the MAA reported that their Adjutant General sees an MOU as overlapping with EMAC and is not supportive. Moreover, the issues involved in staff sharing without EMAC are substantial (liability, workers compensation, etc.), and not addressed by such an MOU.

The MAA's MOU was signed by most, but not all, of its member States. This is likely to be problematic going forward because the MAA's mission (revised in 2008) is to address "non-declared" events when EMAC would not apply and another mechanism would be needed. The absence of an MOU in such circumstances may impair the very mission of the

organization. Or another way to look at it: if the mission of the MAA requires non-EMAC response, but members are not willing/able to sign an MOU for these situations, the alliance mission may require revision. The absence of an MOU Is not, however, an insurmountable barrier for limited resource sharing: one member State of the MAA sent an epidemiologist to help respond to an incident in another State, despite the lack of a signed MOU.

The UPC drafted an MOU that was signed by half the member States; because the others did not sign the MOU, the decision was made to put it aside and move forward without it. The absence of an MOU does not appear to have had a deleterious affect on the UPC, perhaps because all the recent disasters that required resource sharing have been "declared" and EMAC has been engaged.

Recommendation: An MOU for sharing resources/data in "non-declared" events may be helpful for some alliances, but may be impossible to implement for others. Alliances may need to move forward without an MOU, relying mainly on EMAC.

2.3.2. Emergency Management Assistance Compact (EMAC)

Outside Region IV, we found disagreement about the value of a regional planning alliance, in part because regional emergency response is often viewed as overlapping with EMAC. In two regions, alliances have formed but key States have opted out because they resist the idea of a parallel mechanism addressing the same needs as EMAC.

UPC States have clearly determined that there is a role for their alliance. They see EMAC as necessary but not sufficient for multi-state emergency response – good advance planning, knowledge of each other's resources, and a streamlined process for making/fulfilling EMAC requests are also needed. For example, the UPC created a set of forms for rapidly requesting resources via EMAC, and quickly fulfilling those requests – so that EMAC functions smoothly when needed. In addition, the UPC States share information about key resources likely to be needed during disaster response, so that each knows who holds these scarce resources.

Recommendation: Alliances should clearly delineate their role in ways that support – but do not overlap with – EMAC.

2.4. Alliance Structure

The structure, leadership, composition and REC involvement are all important for regional public health and medical emergency planning alliances.

2.4.1. Alliance Boundaries

Several UPC participants commented that the DHHS regional boundaries do not necessarily create the most logical regions for emergency planning. Alabama and Mississippi commented that their planning could just as effectively include Louisiana, while Tennessee and Kentucky are not directly affected by storms at all, other than to receive evacuees. While other regional boundaries might make more sense for hurricane planning and response, all UPC participants agreed that there is no perfect boundary for regional emergency planning. Kentucky might be more logically grouped with Ohio (to plan for earthquakes), or Mississippi with Louisiana (to plan for hurricanes), and pandemic influenza would have no boundaries. Given that a regional alliance was needed in the southeast, and the DHHS regional boundaries and RECs already existed for other purposes, this array of States makes as much sense to UPC members as would any other. That said, the sense of shared risk for hurricanes and the need for joint response among coastal States in Region IV, is part of the "glue" that binds the UPC together.

We found several examples where States facing little risk from natural disasters were not motivated to collaborate with neighboring States, and saw little to gain from a alliance. Some DHHS regional boundaries group "at risk" States with others facing essentially no disaster risk. When States within a region face very disparate risk, they may lack a shared motivation for collaboration. Many regional planning alliances around the country do not observe the DHHS regional boundaries for this reason; their boundaries reflect shared risk and closer geography. For example, the DHHS region that includes NY, NJ, PR and the USVI does no regional planning because the island territories are inaccessible and face entirely different threats than do NY and NJ.

Some States that abut a regional boundary have chosen to collaborate with others on both sides of that boundary – essentially joining two (or more) alliances. For example, upstate New York participates in disease surveillance planning with at least two alliances, in different regions. We see no reason that this should be problematic, although resources in most states would be stretched by involvement in multiple alliances.

Recommendation: DHHS regional boundaries may not always be the best way to assemble States for emergency planning purposes; other boundaries may better reflect most natural alliances.

2.4.2. Leadership

The UPC is organized with equal participation by all eight States in the region. Even though resources (and disasters) are not equal across the States, all have equal status in alliance leadership. Some States in Region IV have richer resources than others for emergency preparedness. Florida, in particular, enjoys financial and other resources that the other States do not, and Florida funds the position of UPC Coordinator, hosts the large annual UPC conference, purchased dedicated communications equipment for use by the UPC Taskforce, and in general contributes more than the other states in the alliance. This singular

contribution to the UPC on the part of Florida could raise the risk of Florida feeling entitled to "direct" the organization – which would no doubt alienate other members. Florida, however, has the largest population of any State in the region and is more affected by hurricanes than the other UPC States: thus it may require more assistance from its neighbors. Although Florida contributes more than the others financially, it also stands to gain more from regional collaboration. The other seven States in the UPC recognize Florida's greater contribution and greater need, and all credit the Florida ESF8 lead as both a motivating force for the UPC, and a "leader among peers". This prominent role is not reflected in the UPC organizational structure however: each State has equal representation on the Executive Committee, and every State participant we spoke with emphasized leadership equality as key to the cohesion and respectful collaboration of the UPC.

The MAA contains only a few major cities along with vast areas of sparse population. While all States in regions VII and VIII have been invited to participate equally in the MAA, at least one has never attended a meeting, and another took an early leadership role but has since pulled back. The States with major population centers have larger emergency preparedness grants; their percentage contribution to the MAA amounts to a larger absolute dollar amount than the other States in the regions combined. The alliance structure does not specifically favor these States, and assures an equal voice for those contributing less.

The natural imbalances in resources committed to an alliance – and expectations on the part of those who contribute more – may create unavoidable tension. The UPC has managed to turn the imbalance of contributions to its advantage, in large part due to the personal style of its major contributor (Florida); the MAA has experienced more stress related to disparities in contributions.

2.4.3. State Involvement

In each UPC State the senior health officer is aware and supportive of the alliance. Each State assigns 1-3 senior health department staff to serve on the UPC Executive Committee; the Executive Committee determines which Workgroups will be assembled, and who will take the lead on each Workgroup. Each State involves other staff, as needed, to participate in UPC Workgroups. Between six and ten staff from each State are thus involved with the UPC – in one role or another – at any given time. As a result, planning and sharing of best practices takes place at multiple levels, generally on a topic-specific basis, and many State staff become familiar with their counterparts in other States. This deliberate involvement of State staff at multiple levels permeates Region IV and adds to alliance cohesiveness. This is in marked contrast to the MAA, and all other alliances we identified, which usually have participation from just two individuals from each State.

Some UPC member States are able to nominate (assign) State staff, and even County agency staff, to serve on alliance Workgroups. Other States (e.g. Georgia) have a decentralized public health system and the State Emergency Management Coordinator cannot necessarily tap other State or County staff to participate. The UPC has not identified a solution to this

challenge, but the close collaboration and communication among the Executive Committee members has improved awareness of the differences among States that contribute to more/less involvement on Workgroups.

Recommendation: Encourage States to involve both senior leadership and operational staff at relevant levels in alliance subcommittees.

A goal for the UPC, from the beginning, was for each State to learn from its peers: to share best practices, planning processes, etc. To this end, Workgroups were created to address particular disciplines/issues. These workgroups have evolved over the years and each is headed by a member of the Executive Committee. The Workgroups include:

- Asset Typing (especially public health and medical assets that were not included in FEMA's initial asset typing)
- Fatality Management
- Pharmaceutical and Supply Strategies
- System Status Tools (including hospital bed availability systems)
- Pandemic Influenza Planning
- Post-Impact Assessments
- Interoperable Communications
- EMS and Pre-Hospital Planning
- Volunteers and Credentialing
- Patient Movement
- Burn Care
- Long Term Care

We encountered no other alliances with such an ambitious set of Workgroups. Most focus more narrowly on legal issues (usually related to infectious disease contact tracing), professional credentialing, and exercises.

2.4.4. Role of the Regional Emergency Coordinators (RECs)

In the UPC, the RECs have the status of a "9th State" – on an equal footing with the States in terms of decision-making and contributing to the direction of the UPC. Through this prominent role, the RECs are able to function as a liaison between the UPC and various Federal agencies (ASPR, CDC, FEMA, etc.). Because the RECs participate on the Executive Committee, attend all meetings and Workgroups, and work closely with the UPC Coordinator, they are fully engaged and able to serve effectively in this liaison role. The RECs not only raise State-level concerns to Washington, they also help interpret Federal mandates and the language of grant requirements for the States, and provide a sounding board for the States to raise ideas, react to Workgroup topics, etc. Every UPC member we interviewed told us that the RECs are critical members of the alliance. And because the RECs also work directly with each of the member States, they have a broad view of the differences in State structures, systems and processes. For example, the Workgroup on patient

movement included the RECs, who suggested contacts and mechanisms for each State and the alliance to collaborate more effectively with the National Disaster Medical System (NDMS).

As a counter-example, we note that the RECs from Regions VII/VIII have no formal status in the MAA and do not always attend Governance Board meetings. The RECs work more closely with the individual State Emergency Preparedness Directors than with the State Health Officers. Several MAA members told us that they think the REC role could be strengthened – that the RECs could be quite useful to the alliance – but the RECs are still included more as 'observers' than participants in the alliance.

Based on these two examples, it seems that RECs have the potential to contribute substantially to regional emergency planning alliances. We do, however, understand that some alliances may prefer to rely on their RECs in an advisory capacity, rather than involving them in decision making.

Recommendation: Involve RECs as participants in regional emergency planning alliances, including participation on – or at least attendance at – Executive Committee meetings.

2.4.5. Relationship Between Regional Public Health and Emergency Management

The UPC focuses entirely on public health and medical disaster response (ESF8); there are no regular participants from the eight States' departments of Emergency Management (ESF5) and several UPC State representatives see this as a weakness of the alliance. During a disaster, requests/offers of public heath or medical resources must be channeled through Emergency Management and it would be most helpful to have those parties involved in the UPC for planning purposes. We note that in several other emergency management regions around the country the same structural problem exists, but in reverse. That is, the alliance is composed of emergency managers, with little or no involvement/representation from ESF8.

Recommendation: Involve Emergency Management in public health/medical (ESF8) alliances, and vice versa.

2.5. Alliance Resources

Alliances require some limited dedication of resources; a coordinator seems to be one key ingredient for success and in-person meetings are another.

2.5.1. Alliance Coordinator

In conversations with alliances around the country, a dedicated coordinator seems to be a key ingredient for a successful regional alliance. In alliances where there is a dedicated

coordinator, or where a State staff person or REC has voluntarily assumed this role, meetings and planning have been more systematic and regular. Coordinators can arrange for conference space and catering, register attendees, and assist with travel arrangements. A coordinator can also be responsible for contracting with vendors, preparing and circulating meeting minutes, maintaining updated contact lists for members, and generally serving as the "glue" for a alliance. We note that alliances lacking a dedicated coordinator hold few inperson meetings or planning sessions, and appear to have only intermittent communication.

At the same time, a coordinator is no guarantor of success: the MAA employs three (or more) part-time staff and yet the organization had struggled to develop a unified approach to preparedness and planning. We thus believe a coordinator to be another necessary, but not sufficient, ingredient for a successful regional emergency planning alliance.

Recommendation: Identify funding sources/mechanisms for a permanent, dedicated coordinator, or solicit volunteers among members to assume – or rotate – this responsibility.

2.5.2. Regular In-Person Meetings

Both UPC and MAA participants repeatedly emphasized the value of in-person meetings, to form and cement relationships and build trust that each State will support its regional colleagues in times of need. One UPC participant explained that part of the value of the alliance for him is: "Getting to know people who share your same situation, and who will 'have your back' when the next storm strikes". All UPC members we interviewed felt that the same degree of collegiality and trust cannot develop without in-person meetings.

All alliances appear to rely on each member State's funding travel to meetings for its own staff. Travel is far more challenging for some States, and in some regions, than in others. At least four of the UPC States have restrictions (some new) on out-of-state travel, even if Federal or grant funds are available. These restrictions are statewide and cannot be rescinded by a Department. In one UPC State, for example, no more than three individuals from a Department can be out of the State at the same time, even if travel costs are funded. This makes it impossible for anyone but the Executive Committee members from that State to attend UPC conferences or participate in Workgroups meeting. These sorts of restrictions appear to be increasing as State budgets tighten due to the recession.

In the MAA, the two very large regions cover a broad swath of the nation; it is virtually impossible for alliance participants to drive to meetings, and none of the key participants (staff, RECs, State health officers and preparedness directors) are located close enough to meet with each other on a regular basis. The distances involved, coupled with spending cutbacks and other State-imposed travel restrictions, make it increasingly difficult for the MAA to hold alliance-wide meetings. Perhaps for this reason, the MAA membership meets

twice each year, rather than more often and relies on teleconferencing for more frequent meetings.

Recommendation: Encourage State governments to waive or relax constraints on out-of-state travel (when funds are available), for purposes of regional emergency planning and response.

Hosting meetings – especially large gatherings – is a costly and complex activity. In the UPC, the States take turns hosting quarterly meetings, and Florida hosts the largest of these meetings each spring. Without Florida's resources, the large annual UPC conference might not be possible, or "contributions" might be needed from the other States.

The MAA "hosting" the cost of meetings and the salaries of staff are funded by contributions from each State (from their emergency preparedness grants); travel to attend biannual meetings are the responsibility of each State. The MAA was transformed into a 501C3 non-profit organization, in part to enable it to seek grant support and other funding. We have insufficient evidence as to whether this might be a worthwhile approach for other regional alliances.

2.5.3. Regionalized Resources and Funding

There are a few resources (large equipment) that are rarely needed and might best be "held" at the regional level, but since alliances are virtual and have no fixed location, such resources must be located within a member State. A State that agrees to hold such a resource is responsible for contributing it when others need it. For example, North Carolina has invested in mobile hospitals and will soon be acquiring another that is intended to serve as a regional resource. NC staff are trained to work in these mobile hospitals and usually accompany the units when they are deployed to another State, which is a drain on NC resources. For the new regional mobile hospital, NC intends to train staff from the other States, so that they will be prepared to function in the mobile setting with minimal assistance from NC. As another example, Florida has purchased computing and communication equipment for UPC Taskforce situations (see below) and stores them inland; Florida will deliver this equipment to whichever State serves as the Taskforce gathering point in future disasters.

Some alliances may wish to seek funding (grants) jointly – specifically to support regional planning. An alliance with a 501C3 structure (e.g. MAA) can do this in the most straightforward way – by having the organization submit a grant proposal. There are a number of Federal grant programs, however, that are only available for States; a non-profit organization is not eligible to apply. To apply for such grants, or when lacking the 501C3 structure, an alliance's application will need to be filed by a single State. For example, the UPC applied for an interstate "surveillance" grant and the application was submitted (and will be managed) by South Carolina.

Recommendation: Regional alliances may need to work through the auspices of a single State to purchase large equipment, or apply for grants, that serve the entire region.

2.6. Alliance Communication and Data Sharing

A major focus of the UPC has been sharing information – both interpersonally and via a variety of tools – for emergency planning and response. The UPC appears to have progressed farther in this regard than any other emergency planning alliance in the country. Sharing of best practices takes place largely at UPC quarterly meetings and Workgroups. For example, the pandemic influenza planner from each State is involved in a UPC Pan Flu Workgroup. The State plans are shared and common approaches reviewed, and several participants reported that they get good ideas from their peers through this process. The UPC has created other communication and data sharing mechanisms, described below.

2.6.1. Alliance Website

Even with deepening interpersonal connections among participants, the States in the UPC have struggled to understand each other's internal organization and how ESF8 functions are operationalized within each State, whom to contact with questions on various issues, and how to prepare to assist when deployed to a neighboring State during a disaster. The solution suggested by the UPC, and being addressed by the Abt task order, is the creation of an online tool – a planning website for the alliance– where each State can post organizational charts, contact lists, important facts about the population and infrastructure, etc. All of the UPC members are eager for this tool, and over time each State will continue to population its portion of the website with information it wants to share with other members. The MAA also agreed that such a tool would be helpful, but has yet to determine what information the member States would want to share with each other.

The remaining challenge for the UPC will be hosting this website. It will be difficult – if not impossible – to host this website behind a State IT department's firewalls, while granting access to the many regional affiliates who wish to participate. For example, if Florida were to host the website, they would have to oversee user IDs and passwords for dozens of people from other States. This is contrary to established security practices of most State IT departments and another strategy is needed. Most likely the UPC will contract for web hosting services from a vendor; the MAA faced the same issue and arrived at a similar solution. Vendors can also assist alliances by hosting Internet and email services for alliance staff who are not State employees and have no other Internet provider.

Recommendation: States in a region may benefit from an online planning website where each member can post information about its organization and operations. A coordinator can serve as website

administrator, but hosting such a website may require the services of a vendor external from any member State's IT infrastructure.

2.6.2. Resource Inventories

The UPC debated whether or not to establish a single regionwide resource inventory for the most critical resources (dozens at most) that are frequently shared during disaster response. Although the idea has considerable appeal, the Executive Committee decided not to pursue a regionwide resource inventory. Member States did not feel able to dedicate the effort needed to keep such an inventory updated enough to be useful in real-time during an event. In addition, each State already has its own inventory and all agreed that it would be burdensome and duplicative to try to operate their own systems and contribute to a regionwide inventory as well. Instead, the UPC has agreed to activate a Taskforce during emergencies (see section 2.7 below), composed of a member from each State, who will each search their own resource inventories to try to supply resources to a disaster-stricken State.

The MAA also discussed establishing a regional resource inventory, and considered asking all member States to adopt a single resource inventory tool – if all used the same tool, it would be possible to "link" the States during emergencies. The individual States, however, already have their own systems in place. Like the UPC, MAA member States indicated that a regional inventory would be burdensome to maintain; they would also prefer to search their individual resource inventories during an emergency, to assist other States.

Recommendation: A single region-wide resource inventory may not be possible because State systems are already in place and not interoperable. Instead, alliance members might establish procedures whereby each searches their own State inventory to identify available resources that could be sent to neighboring States during an emergency.

2.6.3. Data Sharing: PHI

The UPC struggles with varying State standards regarding sharing of personal health information (PHI). There do not appear to be examples of regionwide "waivers" or HIPAA relationships formalized that allow sharing of PHI among health departments in adjoining States, for purposes such as infectious disease contact tracing or patient evacuation. Other alliances are grappling with this issue, and some (e.g. IEMG) are drafting legal documents to enable sharing of PHI for limited purposes like contact tracing. Each alliance or multi-state region, however, is creating these documents anew because there are no standard guidelines available.

Recommendation: It would be helpful for the Federal government to draft "model" language (agreements, statutes, etc.) for States to adapt,

addressing sharing of PHI for infectious disease contact tracing, patient evacuation, and other emergency situations.

2.6.4. Non-Interoperable Systems (Data Sharing Challenge)

Each UPC State has selected different tools – often proprietary products – for resource inventories, hospital bed availability, disease surveillance, etc. and these systems are not interoperable. The same is true in the MAA, where each State has made independent decisions about data systems. While the UPC has agreed about which data they would like to share during an emergency, the MAA has not yet begun to discuss which data might be shared, with whom, and under what circumstances. Given the financial investment by each State in its own systems, it appears unlikely that any will discard their systems in favor of adopting identical tools across a region. It would therefore be unhelpful for us to recommend one set of tools over another.

Rather than trying to enforce uniform systems across member States, the UPC is focusing on "work arounds" to extract critical information from existing State systems, and share this information during disaster response. For example, each UPC State has selected a hospital bed status tool; most are proprietary products and they are not interoperable. Three States in the region use the SMART system, several use a product from EMSystems, one created the AIMS system, etc.; these systems operated by individual States are unlikely to change. UPC members recognize that these disparate systems hinder data sharing (other than the variables reported through HavBed). To address this problem, Alabama has offered to create a data sharing tool so that States can populate an Excel spreadsheet directly from their individual systems, and share it with each other as needed during an event. A UPC Workgroup is currently exploring which uniform data elements — beyond those reported to HavBed — should be included in this Excel spreadsheet. The Workgroup is also exploring data elements that vary across the States; some States may wish to adopt data elements that their peers collect, or discard data elements that others have found to be unnecessary.

Until late 2008, public health and medical assets had not been categorized ("typed") by FEMA, as had many other sorts of assets. The absence of asset typing left each State to create its own asset categories, and several States in Region IV did so. This created a similar barrier, as the UPC States struggled to share information about assets that each defined differently. (This situation is likely to resolve now that FEMA has issued national guidelines for public health and medical assets.)

These examples demonstrate a key challenge for regional emergency planning: the tension between each State's traditional role in preparing for within-state emergencies, and the desire to share information and resources among alliance members. This tension exists in every region of the country, and is probably a permanent factor with which all alliances will struggle.

Recommendation: Rather than trying to enforce identical data systems, alliance members might focus on collecting a core set of uniform data in their disparate systems and create "off line" mechanisms for sharing this information during emergency response.

2.7. Alliance Emergency Response

As discussed above, there is sensitivity to aligning alliance emergency response with EMAC and State emergency operations centers (EOCs), without adding another layer of bureaucracy or impeding operations. In some of the international alliances (e.g. IEMG) the alliance's emergency response role is mainly as a liaison between the U.S. and Canada. The emergency response role of an alliance like the UPC or MAA needs to be carefully crafted to augment, but not complicate, State activities and EMAC resource sharing.

The MAA sees its role as mainly planning; when a disaster is declared the alliance role would end and EMAC would begin. The UPC sees its emergency response role as enhancing efficient use of EMAC. Each UPC State uses WebEOC¹ (or something similar) for managing emergencies within its borders. When there is a multi-state emergency in the region, Georgia opens its WebEOC to the eight ESF8 leads in the region. This allows communication across the region, at a senior level, so that needs can be expressed and resources identified to meet those needs. The UPC has also created a set of forms for rapid EMAC requests and responses, so that once a need is stated and an offer of resources to meet that need is made via WebEOC, the EMAC transaction can be accomplished as quickly as possible.²

In 2008, the UPC Executive Committee agreed that when there is an emergency within the region that requires resources from other states, and the affected State EOC "stands up", Executive Committee members from each of the other seven States (those unaffected by the disaster) will assemble as a Taskforce, in-person or virtually, outside the disaster zone. This Taskforce will not be responsible for emergency operations or response – that is the role of the affected State's EOC. Rather the UPC Taskforce will meet to support/enable EMAC requests and offers to be processed expeditiously. When the Taskforce assembles, each member will have access to his/her own State resource inventory; requests for resources will flow in from the affected State via WebEOC, and the other seven State members will each search their own inventory to identify available resources to meet that need. This concept has been tested in drills (via video-conference), and in coordination among the States

Crisis Information Management Software. See: http://www.esi911.com/Individual%20Marketing%20Flyer%20Files/WebEOC-Professional%20&%20AT.pdf

These forms may be useful as models for other coalitions, and will be included in the Toolkit assembled under our Task Order.

addressing white-powder incidents in late 2008, but has yet to be field-tested in a large scale emergency.

Conclusion

The findings and recommendations in this report constitute "lessons learned", gleaned from the experiences of the UPC, the MAA and other alliance efforts around the country. The UPC and MAA are still quite new – three years old or less – and are evolving. The MMA in particular has struggled to find its mission and achieve consensus about the future direction of the organization. The focus of alliances varies considerably, from hurricane response to infectious disease outbreaks; the MAA focuses specifically on non-declared public health emergencies and the UPC focuses almost entirely on large-scale declared emergencies. Even with this diversity in focus and mission, however, there are consistent lessons that may be useful both to these two alliances and to others in the future, including:

- Focusing on all hazards, either simultaneously or consecutively, builds alliance cohesion by addressing the major hazards/threats facing each member State.
- While acknowledging the role of initial champions, alliances must plan deliberately for succession.
- Alliances should reach consensus on a formal mission statement and vision for the alliance.
- An MOU for sharing resources/data in "non-declared" events may be helpful for some alliances, but may be impossible to implement for others. Alliances may need to move forward without an MOU, relying mainly on EMAC.
- Alliances should clearly delineate their role in ways that support but do not overlap with EMAC.
- DHHS regional boundaries may not always be the best way to assemble States for emergency planning purposes; other boundaries may better reflect most natural alliances.
- States should work to involve both senior leadership and operational staff at relevant levels in alliance subcommittees
- Alliances should involve RECs as participants in regional emergency planning alliances, including participation on or at least attendance at Executive Committee meetings.
- Emergency Management staff should be involved with in public health/medical (ESF8) alliances, and vice versa.

- Alliances should search for funding sources/mechanisms for a permanent, dedicated coordinator, or solicit volunteers among members to assume – or rotate – this responsibility.
- State governments could be encouraged to waive or relax constraints on out-of-state travel (when funds are available), for purposes of regional emergency planning and response.
- Regional alliances may need to work through the auspices of a single State to purchase large equipment, or apply for grants, that serve the entire region.
- States in a region may benefit from an online planning website where each member can post information about its organization and operations. A coordinator can serve as website administrator, but hosting such a website may require the services of a vendor external from any member State's IT infrastructure.
- A single region-wide resource inventory may not be possible because State systems are
 already in place and not interoperable. Instead, alliance members might establish
 procedures whereby each searches their own State inventory to identify available
 resources that could be sent to neighboring States during an emergency.
- It would be helpful for the Federal government to draft "model" language (agreements, statutes, etc.) for States to adapt, addressing sharing of PHI for infectious disease contact tracing, patient evacuation, and other emergency situations.
- Rather than trying to enforce identical data systems, alliance members might focus on collecting a core set of uniform data in their disparate systems and create "off line" mechanisms for sharing this information during emergency response.