Practitioner Perspectives on After Action Reports for Cross-Organizational Emergency Preparedness Learning

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Abstract

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After action reports (AARs) are retrospective reviews intended to summarize perceived strengths and areas of improvements of an organization's response to an emergency incident, event or exercise. Despite their role in capturing and evaluating response strategies and interventions employed by response agencies, very little is known about the role in which AARs can serve to more generally identify and evaluate effective approaches that can be used across the field more broadly, in other words as cross-organizational learning tools. The majority of the limited studies that have been completed in this area of research are content analyses which have explored potential similarities and themes that exist across AARs. These studies have concluded that inadequate report standardization (Davies et al., 2019), difficulty locating and accessing relevant reports (Sundnes, 2014), and insufficient objectivity of findings (Barnett et al., 2021) pose significant challenges to the value and utility of AARs as tools for cross-organizational learning. In order to gain a better understanding of the perceived challenges, strengths, and limitations of their use as cross-organizational learning tools, interview data collected through interviews with 12 emergency management professionals in Seattle, WA, USA, was analyzed and synthesized using the rapid qualitative data analysis method. Study findings indicate that differences in perceived purpose and intention of AARs, staffing and budget deficiencies, and overcomplexity of templated guidance impact AARs' application as a cross-organizational learning tool to capture and disseminate effective approaches to emergency preparedness and response.

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Background and Significance

Identifying effective approaches to preparedness and response is an integral part of improving emergency management capabilities. In practice, jurisdictions frequently use after action reports (AARs) and improvement plans (IP) to evaluate their response to incidents and exercises and make corresponding improvements. AARs are retrospective reviews which summarize perceived strengths and areas of improvements of jurisdictional or organizational-level response to an incident, event or exercise. These reports are intended to capture event information (timelines, responding agencies, etc.) as well as strengths and potential areas of improvement in incident response, frequently serving as a tool for both quality improvement and organizational accountability (Savoia et al., 2013). This process allows for the structured observation of how a particular preparedness system/s performed during the response to an exercise or real-world event, facilitating the identification of potential gaps and/or shortfalls within emergency preparedness and response systems (Stoto et al., 2019). These reports are intended to identify jurisdiction- or organization-specific lessons learned about the success of evidence-based planning and response approaches before and during an event (Knox, 2021). After their approval, AAR findings are often used to inform the drafting of a corresponding Improvement Plan (IP), a dynamic continuous improvement document which ensures the monitoring and implementation of corrective actions to improve preparedness (FEMA, 2020).

The Homeland Security Evaluation and Exercise Program (HSEEP) is widely recognized as the premiere source for AAR guidance, resources and training. This program, maintained by the Federal Emergency Management Agency (FEMA), is intended to provide "a set of fundamental principles for exercise programs, as well as a common approach to program management, design and development, conduct, evaluation and improvement planning" (FEMA, 2020). This program is largely focused on connecting exercise performance to response "capability targets," objectives which are generally predetermined by jurisdictions/organizations through historic and anticipated response needs (FEMA, 2020). HSEEP offers a Preparedness Toolkit with a number of templated materials and continuous improvement guidance including; AAR/IP templates, exercise evaluation guides, and presentations on

process and methodology (FEMA, 2020). While AARs are not specifically required through FEMA, in order to receive national accreditation through the Emergency Management Accreditation Program (EMAP), programs must evaluate, document and share information pertaining to various elements of their response program including post-incident reports, lessons learned, and exercise evaluations (EMAP, 2022).

Additionally, the Centers for Disease Control and Prevention (CDC) Division of State and Local Readiness (DSLR) administers the Public Health Emergency Preparedness (PHEP) Cooperative Agreement to support emergency preparedness and response efforts undertaken by state and local public health agencies. In 2011, the CDC published the guidance document, *Public Health Emergency Preparedness and Response Capabilities- National Standards for State, Local, Tribal, and Territorial Public Health*, which outlined 15 core preparedness and response capabilities (CDC, 2024). This guidance document was updated in 2019, reflecting new knowledge that has been garnered through public health emergency and disaster research (CDC, 2024). AARs and HSEEP are directly mentioned throughout this document as tools and training resources that "should be" developed and implemented by health agencies to help best evaluate capabilities (CDC, 2019). Consequently, public health agencies frequently use AARs as a qualitative evaluation tool to satisfy these recommendations.

Given the pervasiveness of the use of AARs by government agencies to evaluate their responses to incidents and exercises, the research community has long been interested in their ability to help identify effective strategies and interventions across contexts and communities. Recent studies evaluating AARs have identified common themes across reports (Naik et al., 2023) and have suggested that standardized approaches to their evaluation could yield valuable information into key components of AARs, as well as effective emergency preparedness and response strategies (Knox, 2021). For example, an inductive qualitative analysis of 14 randomly selected AARs (four exercises and 10 real-world incidents) identified six common themes across all documents: Communications, Coordination, Resource Distribution, Unified Planning, Surveillance, and Knowledge (Naik et al., 2023), suggesting similarities in the composition of reports that have the potential to lead to valuable learnings across events and jurisdictions.

However, given concerns regarding their consistency, quality and value of data captured through AARs, their value to cross-organizational learning about the effectiveness of various preparedness and response practices remains unclear (Barnett et al., 2021; Naik et al., 2023). The AAR drafting and approval processes can look very different from jurisdiction to jurisdiction. This can range from a more rigorous review process, requiring multiple rounds of review and approval by various working groups, to a much less intensive process where the drafting organization has the final decision on its readiness to be published. In an assessment of 16 AARs developed for hurricane-related incidents between 2005 and 2017, Barnett et al. (2021) concluded that a lack of objective data, formatting inconsistencies, uneven content distribution, and lack of adherence to any framework diminished the value of using AARs as a tool for quality improvement in emergency management. This inconsistency can also be seen in a lack of common terminology within and across the interdisciplinary fields which interact with emergency preparedness and response, often using "different definitions for the same terms" (Sundnes, 2014).

Moreover, systematically identifying AARs can be challenging, limiting their application for cross-organizational learning purposes. Information on emergency response and preparedness, often captured in the form of AARs developed by or for government agencies, are "widely dispersed" across various hosts and data repositories and fall into the category of "grey literature," creating additional accessibility challenges for those looking to find and engage with these reports (Sundnes, 2014). This can prompt challenges in locating and accessing AARs for academic purposes due to inadequate tracking, collection and indexing. While prior studies such as Savoia et al. (2012) and Barnett et al. (2021) have used national emergency preparedness and response information management systems such as the Homeland Security Digital Library (formerly "Lessons Learned Information Sharing"), to gather AARs, it is still unclear as to how comprehensive and accessible these systems are to upload and or locate documentation and information such as AARs.

Given these challenges, it is not surprising that AARs, in their current form, continue to be primarily utilized for organizational or jurisdictional-level learning, limiting the overall systematic impact of these documents and leaving unanswered questions as to their potential role as a cross-organizational

emergency preparedness and response learning tool (Savoia et al., 2012). Emergency preparedness and response professionals have recognized the opportunity to improve the ability of AARs to support rigorous evaluations. For example, research involving public health and emergency responders has suggested formats that match objectives with measurable capabilities, indexing reports, development and application of appraisal tools to enhance reporting, and separating the accountability and quality improvement duality of AARs into two distinct documents with differing methodology to better capture each appropriately (Davies et al., 2019; Savoia et al., 2013; Stoto et al., 2013). However, there are few recommendations as to how agencies can enhance the ways in which AARs are written or organized to promote the identification and evaluation of effectiveness of preparedness and response approaches that can be shared beyond their organization.

In response, this study seeks to identify opportunities to improve the value of AARs as a tool to identify and share effective strategies and interventions in emergency preparedness and response across organizations. Through key informant interviews with public health and emergency management professionals, working across various government agencies and partner response organizations that serve the city of Seattle, WA, USA, we describe the perceived strengths and weaknesses of AARs in supporting the identification and evaluation of effective practices that can be shared with other jurisdictions, and propose recommendations on ways to better conduct and structure AARs to more effectively support cross-organizational learning opportunities. We seek to provide insight on opportunities to augment current approaches to AAR development or content to improve their ability to promote cross-organizational learning about what works, in what context, and why. Focusing our study within a single-jurisdiction approach offers the opportunity to better understand how agencies within the same system interact with and learn from one another and from other jurisdictions across the country.

Methods

We conducted key informant interviews with local emergency managers and public health emergency preparedness coordinators employed by local government agencies and partner organizations that serve Seattle, WA, USA.

A non-random purposive sampling approach was employed to select representatives from a minimum of eight different city and regional organizations responsible for the oversight of emergency preparedness and response. In alignment with study aims and objectives, inclusion of practitioners from different agencies/sectors (e.g., transportation, utilities, healthcare, etc.) was prioritized, enabling a diverse set of responses to be captured given the unique characteristics of their role in the jurisdiction-wide response (Campbell et al., 2020).

Using publicly available contact information gathered through professional networks and organizational staff directories, a recruitment email was sent to thirteen individuals who are highly familiar with, and/or facilitate, the AAR process on behalf of their respective organization. Based on other previous professional experiences working with AARs, as well as varying roles in their organization's internal versus external AAR process, three organizations had two representatives interviewed as part of the study.

The recruitment email provided a general overview of the study including its purpose, interview duration and location (online via Zoom), information regarding confidentiality, and how to participate if interested. Interview questions (Appendix I) broadly explored various aspects of the AAR process to establish a better understanding of practitioner perspectives on AAR use for the evaluation and identification of effective preparedness and response strategies within and across their respective organizations and the broader city-wide network. Practitioners were also asked to share their perspectives on challenges, best practices and potential recommendations (e.g., supplementary training, increased administrative support) to reform the structure, content and use of AARs as a tool to better evaluate and promote cross-organizational learning in emergency preparedness and response planning.

One person contacted did not respond to multiple recruitment attempts; a total of 12 virtual

one-on-one interviews were conducted. A sample size of 12 interviews was determined based on prior research to be sufficient to satisfy the data saturation requirements necessary for the identification and extraction of high level themes across interviews (Guest et al., 2006). Prior to beginning each interview, participants were reminded that their participation is entirely voluntary, and verbal consent for the interview and for its recording was obtained. Each interview lasted roughly 35 minutes. All interviews were conducted between March 17th and April 25th 2025. The Zoom virtual meeting platform's automatic transcription feature was used to develop interview transcripts. Transcripts were reviewed for accuracy by the interviewer (PB).

The rapid qualitative analysis approach was used to organize and analyze interview data (Hamilton, 2020). First, a domain template, including 17 unique domains, was developed using an approach that combined deductive (i.e., derived from the interview guide content) and inductive (i.e., derived from interviewee responses) elements to identify key elements of each interview. Next, individual summaries of each interviewee's responses related to each respective domain were developed. These summaries were subsequently entered into a matrix, visually displaying these domain-level summaries by interview for all interviews (Appendix II). The matrix was then used to compare and contrast responses gathered from each respective interview, identifying and synthesizing key themes and counterpoints that emerged across interviews (Averill, 2002; Clarke & Braun, 2017).

Results

A total of 12 representatives from local government agencies and partner organizations serving the city of Seattle, WA, USA participated, representing the fields of public health, healthcare, emergency management, human services, human resources, utilities, higher education and transportation. Interviewees identified challenges and opportunities for AARs to support the identification and evaluation of effective emergency preparedness and response strategies and interventions that could be shared across organizations. These insights lent to the suggestion of recommendations on ways to better conduct and

structure AARs to more deliberately support cross-organizational learning surrounding effective approaches to preparedness and response.

Challenges:

Robustness and complexity of standard HSEEP template and methodology

The vast majority of interviewees cited the HSEEP program as the main source of AAR guidance and basis for training within the field, and expressed that the guidance is useful for complex and large scale activations and exercises. However, a number of the same interviewees also noted that the HSEEP materials and templates are too detailed, and ultimately impractical, for use following smaller scale incidents and discussion-based exercises, or for use to evaluate preparedness or response actions undertaken by any individual organization.

Given that AARs developed by each organization are specific to the roles and responsibilities of their agencies, modifications of the HSEEP template have proven necessary in order to retain relevance to the roles and responsibilities of their organization as well as to maintain a high engagement-level amongst their staff and executive leadership throughout the process. A number of interviewees referred to the AARs generated using the HSEEP template as “clunky,” “100-page” documents that end up “sitting on the shelf collecting dust.” The resultant requirement to continuously tailor reports, based on the demands of each activity, limits standardization of AARs and creates uncertainty as to whether reports drafted by different agencies will capture the same key components, providing limitations to their cross-organizational learning value.

Insufficient program staffing and budget deficiencies

Insufficient budgets and staffing were reported to have a negative impact on AAR development and dissemination. Indeed, interviewees described an industry standard of wearing “many hats,” limiting ability to produce AARs to desired standard, frequency, and timeliness. This effect was reported to reverberate beyond the individual/s directly responsible for report development; others needed to engage

and provide feedback in the process may also have competing priorities. This can present challenges to using the reports to identify and evaluate effective preparedness and response approaches due to the resource demands (e.g., time, personnel, equipment, etc.) required to implement standardized approaches to collect relevant data, synthesize findings, and disseminate amongst key partners.

Interviewees frequently discussed insufficient leadership buy-in to the AAR process; they noted that budgetary restrictions and shortfalls can be mitigated through the engagement and backing of leadership with the discretion to make relevant changes.

Despite the negative impact of limited staffing described by most interviewees, one interviewee noted the size of their team enhanced their nimbleness and provided their organization with an "innate ability to move things quickly."

Disagreement between the cross-organizational value of AARs

Interviewees expressed contradictory opinions surrounding the perceived cross-organizational value of AARs, frequently citing that they did not believe that their organizational-level reports would be of value to other organizations. At the same time, interviewees noted they often found value and meaning in reading reports generated by other organizations. However, the examples provided were often reports generated at a city- or state-level, capturing various perspectives of local responding agencies, as opposed to individual organizational-level reports that are produced by many of the interviewees organizations.

Opportunities:

Demystification and normalization of AAR processes

Interviewees commonly cited the frequency and informality of their AAR process as facilitating their ability to productively carry out relevant activities. This can make the AAR process more approachable and allow facilitators to gather more earnest feedback and insights necessary to identify gaps and challenges associated with an incident response.

Level of staff familiarity and comfort with the overarching intent, procedures, and program benefits of the AAR can affect the quality of data collected. Staff infrequently engaged in AAR data collection processes (e.g., hot washes) may be unfamiliar with the type of information being collected and why, hindering the quality or usefulness of their responses. One interviewee stated that they shared examples of feedback so that participants would know how to frame their comments most effectively for the content of the AAR.

In addition, establishing a "no fault" culture and environment was described as beneficial to supporting candor of participant contributions, including openly admitting mistakes and not withholding information. It was frequently emphasized that AARs should not serve as punitive processes, but rather be solutions-focused and prevent something that went wrong from happening again. This demystification and normalization of AAR processes in everyday workflow provides opportunities for AARs produced to most accurately depict what occurred during an incident response without fear of disciplinary repercussions, helping to inform better future planning and response approaches.

Meeting facilitation, writing ability, and other "soft skills"

Interviewees frequently cited "soft skills" as conducive to effectively engaging response personnel in AARs. They also recommended this as an opportunity for future skills development through the addition and/or requirement of supplementary training. Given the emotionally charged nature of an incident response, facilitation skills were described as necessary to elicit answers to sensitive questions. Ensuring accuracy and transparency in collecting data throughout the AAR process can promote collection of valid data for subsequent integration into final reports.

Moreover, strong writing skills were described as necessary to clearly convey intent and preclude misinterpretation. One interviewee stated that inadequate writing ability can lead to the report "inadvertently saying something that actually just gives incorrect information just by how it's worded." Due to AARs lacking industry minimal reporting standards and procedures, it is important that the

individual responsible for the drafting of their organization's AAR be an effective written communicator to strengthen the utility of AARs in disseminating lessons learned beyond their own organization.

Differences between the perceived purpose and intended audience of AARs

Interviewees expressed disparate perspectives on the intended audience, external utility of produced reports, and publicization of generated reports. Whereas some agencies indicated that reports serve largely in an accountability capacity, promoting the engagement of executive leadership, others indicated that produced reports are intended to serve as internal-facing documents to evaluate and improve emergency planning and response processes. Due in part to these differences, interviewees expressed varying comfort and agreement with the publication of their reports, noting that redactions are necessary in some circumstances and that issues can arise as a result of making their organizational vulnerabilities publicly known. These differences were described as minimizing the cross-organizational value of AARs due to their unique framing and organizational specifications. Further emphasizing this notion, one interviewee stated that when an AAR intended as an internal document is shared externally, it "loses its contextualization," diminishing its value to other organizations seeking to learn under their unique response framework.

Interviewees reported that jurisdiction-level, versus organizational-level, AARs were better suited for public consumption because they more holistically captured the details and dynamics of an exercise or incident response. Setting clear expectations on why the report is being generated and for whom can help better discern whether it may contain generalizable knowledge that can be applied across organizations.

Executive leadership buy-in

The role of executive leadership was commonly described to affect the completion, dissemination, and perceived importance of the AAR process and its resulting products. Low executive buy-in and feedback was reported to create additional challenges in both the AAR and improvement planning processes due to the lack of discussion and consensus on which items should be prioritized for

improvement and the associated approach. Conversely, strong executive support more easily enables a timely and effective closure of improvement items in addition to having the potential to "trickle down" and increase overall staff-wide buy-in.

However, one interviewee cautioned that organizational, not jurisdictional, leadership should be the ones engaged. . This ultimately helps reduce the potential for the report to lose important context and value as an improvement tool within the respective organizations. Moreover, tailoring generated reports to fit the perceived priorities of those in external leadership positions may diminish the cross-organizational value of information captured.

Discussion

This research contributes to knowledge about strengths, weaknesses, and gaps related to the use of AARs as a document to support cross-organizational learning, by sharing what worked and why during an incident response or exercise in a particular organization or jurisdiction. Findings can provide relevant government agencies (e.g., local, regional and/or federal) overseeing the implementation of AARs with actionable feedback and potential next steps as to how AARs can be better structured, drafted, analyzed and disseminated to best inform communities across the country of demonstrated approaches to preparedness and response that can be used in future emergencies.

The City of Seattle, being one of the most hazard prone areas in the country, offers a unique geographic case study. Due to the city-wide infrastructural impacts which may result from the most prominent hazards (e.g., pluvial and fluvial flooding, earthquakes, landslides), all city agencies are required to create and carry out emergency plans in alignment with the Seattle Disaster and Readiness Response Plan (SDRRP) (Seattle OEM, 2012). For this reason, many organizations have hired dedicated internal emergency management specialists to stay prepared and involved in city-wide response planning efforts.

As reflected in the study results, these interorganizational practitioners identified a number of factors that influence successful implementation of AARs. Moreover, themes identified across interviews helped shed light on some of the commonly perceived and experienced challenges associated with AAR

design and dissemination to support their use as a data source to learn about what works or does not work and why.

FEMA's HSEEP AAR/IP (FEMA, 2020) was overwhelmingly cited by interviewees as being the most predominant AAR resource available to practitioners. However, many of the same interviewees also noted limitations and challenges that arise when looking to apply this framework to smaller scale incidents and exercises that are inherently less complex. In many instances, interviewees discussed their own customization and simplification of templates to develop reports more reflective of their organization's needs. These organization-specific report modifications introduce additional variance and decrease comparability across generated AARs. This notion is supported by the findings of both Naik et al. (2023) and Davies et al. (2019), who concluded that differences in methodological approaches result in significant heterogeneity across reports. This heterogeneity introduces increased challenges to researchers looking to conduct meta-analysis of AARs. FEMA should explore development of scalable templates and training to help address this identified gap.

Savoia et al. (2013) discussed some of the complications that arise as a result of the duality of AAR serving as both a tool for accountability and quality improvement. This sentiment can be seen in the findings of this study with interviewees citing differing intended purposes of AAR within their organization, stemming primarily from areas of accountability and quality improvement. These contrasting reporting intentions can potentially further explain previously observed differences across reports (Barnett et al., 2021) and our interviewee's willingness and perceived value of making their reports, in their entirety, publicly available.

Despite mixed perspectives regarding perceived benefits of sharing AARs generated by their own organization, a majority of interviewees noted a perceived benefit in reviewing AARs generated by other organizations/jurisdictions and reported actively seeking out such documents. This finding further supports the value of these documents for cross-organizational learning, and potential benefits to increasing the accessibility of AARs through repositories or other information management systems such as the Lessons Learned Information Sharing (LLIS.gov) database (FEMA, 2011). According to the FEMA

(2015) Q&A report, the LLIS system which had previously been managed by FEMA, was consolidated with the Naval Postgraduate School's Homeland Security Digital Library (HDSL.org) beginning in 2015, and was intended to "allow the homeland security and emergency management communities to find relevant information in one place" (FEMA, 2015). The HSDL was utilized in the Barnett et al. (2021) study as a source during their AAR search; however, study researchers did not include an evaluation of its value and utility as an information management system in emergency preparedness and response.

Implication of Findings

Based on the results from our interviews, we propose several recommendations. These recommendations were developed based directly on information provided by interviewees, or through our own interpretation of interview data. Specifically, we propose:

1. Establishing and/or bolstering executive leadership buy-in and support for jurisdiction-wide and/or organizational-level AAR processes and dissemination practices (e.g., setting up recurring meetings with leadership, AAR advocacy within leadership groups, socialization of findings with leadership).
2. Development of informational aids (e.g., videos, training) that expose and educate response staff with the terminology, concepts, and approaches to the development (e.g., hotwashes) of AARs to better enable them to effectively contribute to their development and subsequently digest their content and findings.
3. Integrating aspects of the AAR process within routine operations to help normalize and develop a "continuous improvement mindset" within the organization**.**

Limitations and Future Research

Qualitative data collected was limited to practitioners from various organizations and departments serving the City of Seattle, potentially limiting the generalizability of study findings to organization types not included in the sample and/or other geographic areas that do not have a city-wide plan in place, such

as the SDRRP, which requires the integration of department-specific emergency planning. However, according to the National Risk Index, King County, risk is “Very High” ranking in the 99.65 percentile nationally (FEMA, 2023). Given its broad risk profile, the jurisdiction develops AARs following a variety of incident and exercise scenarios, potentially enhancing the applicability of study findings to different geographies. Additional case studies should be conducted within other jurisdictions with various hazard risks, emergency preparedness and response systems and structures to help shed light on the generalizability of findings from this study as well as to identify key differences which may exist between respective jurisdictions' cross-organizational approach to AAR development.

Because this study incorporated the feedback of practitioners from a variety of professional disciplines, it was not unexpected that the use of and perceived value of AARs varied amongst each respective interviewee due to the differing responsibilities associated with their respective organization’s role in the preparedness and response system (i.e., service/s provided, response priorities, essential support function).

While outside of the scope of this study, interviewees frequently discussed challenges about improvement planning. This included an insufficient ability to enforce and monitor the progress of corrective actions and improvement items delegated to individuals or agencies within the response network. Prior research has indicated that organizations may be slow to make changes to improve upon deficiencies identified through AARs. For example, after reviewing AARs generated by the same organization 12 years apart, it was identified that “many problems persist without a clear path toward accountable solutions” (Barnett et al., 2021). This disconnect and lack of follow through between what is gleaned from the content of AARs and the necessary corrective actions limits their utility as ways to identify and evaluate evidence-based response strategies and interventions. Additional research on the processes involved in the application and realization of improvement planning items derived thorough AAR findings can inform potential improvement opportunities.

Finally, studies looking into the socialization, utility and value of information management systems such as the HSDL as a knowledge management asset could provide additional insight as to how

to best collect, organize and disseminate AARs amongst practitioners and researchers to more efficiently share lessons learned cross-organizationally.

Conclusion

Inadequate standards and systemic challenges related to the content and methods of AARs used by emergency preparedness and response organizations has led to their diminished value as a tool to identify and share effective approaches to preparedness and response across organizations (Barnett et al., 2021; Davies et al., 2019; Sundnes, 2014). Our results highlight some of the challenges resulting in the diminished value of utilizing AARs as tools for cross-organizational learning, including differences in perceived purpose and intention of AARs, overcomplexity of templated guidance materials, and staffing and budget deficiencies. Given the unique nature of the City of Seattle's citywide emergency response system, additional research looking into the cross-organizational dynamics of other jurisdictions can help shed additional light on potential procedural and structural changes that can better position AARs to serve as an effective cross-organizational learning tool that supports the development of generalizable knowledge.

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Appendix I- Interview Questions

1. Could you start by sharing your name, role, and briefly about your primary responsibilities as it relates to after action reporting within your agency?

2. What is the purpose of after action reporting in your agency?
    a. When does your agency participate in AARs, either in a lead or supporting role?
        i. What is the threshold/criteria in which an AAR is created? (i.e., EOC activation, all incidents requiring your department's response/involvement, etc.)
    b. How does your agency benefit from the *processes* (e.g, hot washes, analysis, drafting and refining the report) associated with developing an after action report?
        i. Prompt: This might include concepts such as Stakeholder Accountability, Planning and Response Evaluation and Quality Improvement.
    c. How does your agency apply *findings* from after action reports?
        i. Prompt: Improvement Planning (IP), exercise development, funding prioritization, etc.

3. What do you think are the primary strengths of the way your agency or jurisdiction currently approaches after action reporting?
    a. Please explain what that process looks like for your agency.

4. What do you think are primary drawbacks or challenges of the way your agency or jurisdiction currently approaches after action reporting?
    a. How could after action reporting be improved?

5. Do you think other departments/agencies would benefit from reading after action reports developed by your organization? Why or why not?
    a. Conversely, do you think your agency would benefit from seeing AARs produced by other departments/agencies? Why or why not?

6. Do you think that researchers would benefit from reading after action reports developed by your agency or jurisdiction? Why or why not?

7. Which trainings do you feel are most valuable to people in your position to effectively draft/review AARs?
    a. Are these trainings specific to AARs or other, more general, trainings?
    b. Do you think this training adequately prepares people in your position to effectively draft/review AARs?
    c. What types of additional trainings or resources would support people in your position to better develop after action reports?

8. Has your agency used after action report findings to evaluate strategies for effectiveness using qualitative or quantitative data?

    a. Please provide an example, without specific details (names, events, etc.), if you are able to do so.
    b. Are there ways that the after action reporting process could be improved to evaluate strategies for effectiveness using qualitative or quantitative data?

9. Are there other reports/documents prepared by your agency or your partners that capture and/or evaluate strategies or interventions implemented in emergency preparedness and response?
    a. If so, which reports and why?

10. Is there anything else you'd like to share with us?

Appendix II- Interview Summary Matrix Framework

Interviewer: P.J. Boogard	After Action Report Interview Summary Template											
Prepared By: P.J. Boogard	Notes/Important Quotations											
Domains	*Interview #1*	*Interview #2*	*Interview #3*	*Interview #4*	*Interview #5*	*Interview #6*	*Interview #7*	*Interview #8*	*Interview #9*	*Interview #10*	*Interview #11*	*Interview #12*
Role in AAR Process												
Organizational Purpose of AARs												
Reporting Threshold												
Benefits of AAR Processes												
AAR Finding Applications												
Strengths to AAR Approach												
Challenges/Drawbacks to AAR Approach												
Areas for Potential AAR Improvement												
Inter-Agency Value of Produced Reports												
Intra-Agency Value of Shared Reports												
Research Value of Produced Reports												
Current AAR Trainings												
Supplementary Trainings												
Incorporation of Evaluation Metrics within AARs												
AAR Evaluation Metric Improvements												
Similar Reports/Documentation												
Other Observations/Thoughts												