

Abstract:

This article describes the National Children's Disaster Mental Health Concept of Operations ("CONOPS") model (Schreiber et al, *Acad Emerg Med*. 2011;18:s59; Schreiber et al, *Disaster Med Pub Health Prep*. 2012;6:174-181) as a method to address discrepancies between research advances that have been made and the typical methods of providing mental health services to children after disasters. Three key CONOPS strategies are described: (1) the PsySTART Disaster Mental Health Triage System, (2) a child-focused Incident Action Plan (IAP), and (3) a continuum of risk stepped-care model that matches the level of evidence-based treatment interventions with the level of identified risk using a stepped-care framework (Zatzick et al, *Ann Surg*. 2013;257:390-399). Together, these strategies provide an integrated "disaster systems of care" (Schreiber, *On the Ground After September 11: Mental Health Responses and Practical Knowledge Gained*. New York, NY: Hayworth Press, 2005, 605-609.) method for the needs of children. With the goal to strengthen the resilience of children, the CONOPS provides clear operational strategies to facilitate mental health care addressing the full continuum of risk and resilience in the child population. Adapting this tool to health care systems is a vital step to improving mental health services and resilience outcomes for children after a disaster.

Keywords:

disaster; mental health; child; CONOPS; emergency physicians; rapid triage

Code Triage: Integrating the National Children's Disaster Mental Health Concept of Operations Across Health Care Systems

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Accumulating research has identified the public health risk of disasters (manmade and natural) and highlights the particularly pernicious effects on the mental health of children.¹⁻⁷ Although research documents effective strategies for identifying high mental health risk^{8,9} and for treating child traumatic stress and depression after disasters,^{10,11}

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a striking gap exists in real-world practice. Timely, systematic child mental health screening and seamless referral to the appropriate level of evidence-based care occur only rarely in standard disaster response for children. Meanwhile, the literature has highlighted the need to identify disaster victims at risk of developing serious mental health disorders early, along with the need for definitive treatment for some. Currently, the connection between these two concepts is lacking. A study that looked at children exposed to Hurricane Katrina two years after the event found that there was still a substantial need for treatment resources to be distributed among those who were identified to be at risk.¹² There are a few studies that have looked prospectively at mental health by examining a cohort before and after exposure to a disaster. An examination of a well-studied birth cohort with members exposed to the Canterbury, New Zealand earthquakes in 2010-2011 had mental health disorders at a rate of 1.4 times higher than those not exposed.¹³

To address this critical gap, the National Children's Disaster Mental Health (NCDMH) Concept of Operations (CONOPS; Figure 1) was initiated to develop discrete, operationalized tactics for com-

munities to use before, during, and after disasters that specifically focus on the psychosocial needs of children.^{1,2} The CONOPS includes the development of an Incident Action Plan (IAP; Figures 2 and 3) that includes child-focused incident disaster response goals that must be accomplished within an "operational period" (usually a 24-hour cycle), along with response tactics that specify how these goals will be achieved using identified resources. (The IAP is a tool that is commonly used by emergency managers and responders across most sectors.) Including child-focused elements in the IAP ensures that the needs of children are included in the overall "common operating picture" and provides a shared understanding among responders regarding disaster impact and response strategies. The CONOPS also illustrates how PsySTART Disaster Mental Health Triage and the continuum of risk and stepped-care intervention models discussed further in this article are used to help decision makers coordinate the provision of evidence-based mental health interventions and apply those resources in a timely and ethical manner to those children most in need. This article examines how the strategies presented in CONOPS can be incorporated across health care systems and community disaster response partnerships to optimize children's disaster mental health outcomes.

THE CHALLENGE OF MEETING CHILDREN'S NEEDS IN DISASTERS

Children Are at High Risk of Adverse Mental Health Effects After Disasters

On the basis of available evidence, all-hazards events (including disasters, terrorism, school and community violence, as well as traumatic injuries) pose a range of risks to children.⁶ Viewed at the population level, these impacts occur along a continuum, ranging from short-term distress and resilience⁷ to newly emerging mental health disorders, such as posttraumatic stress disorder (PTSD) or depression, with or without comorbidities. The Fifth Edition of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* recognizes the unique developmental manifestations of PTSD in children 6 years and younger. A recent meta-analysis of 96 studies related to children's disaster response found that the pre-existing needs of the child, the context of the disaster itself, and the child's own exposure to the disaster all influenced the risk for the development of child's post-disaster PTSD symptoms.⁵ Some disaster-

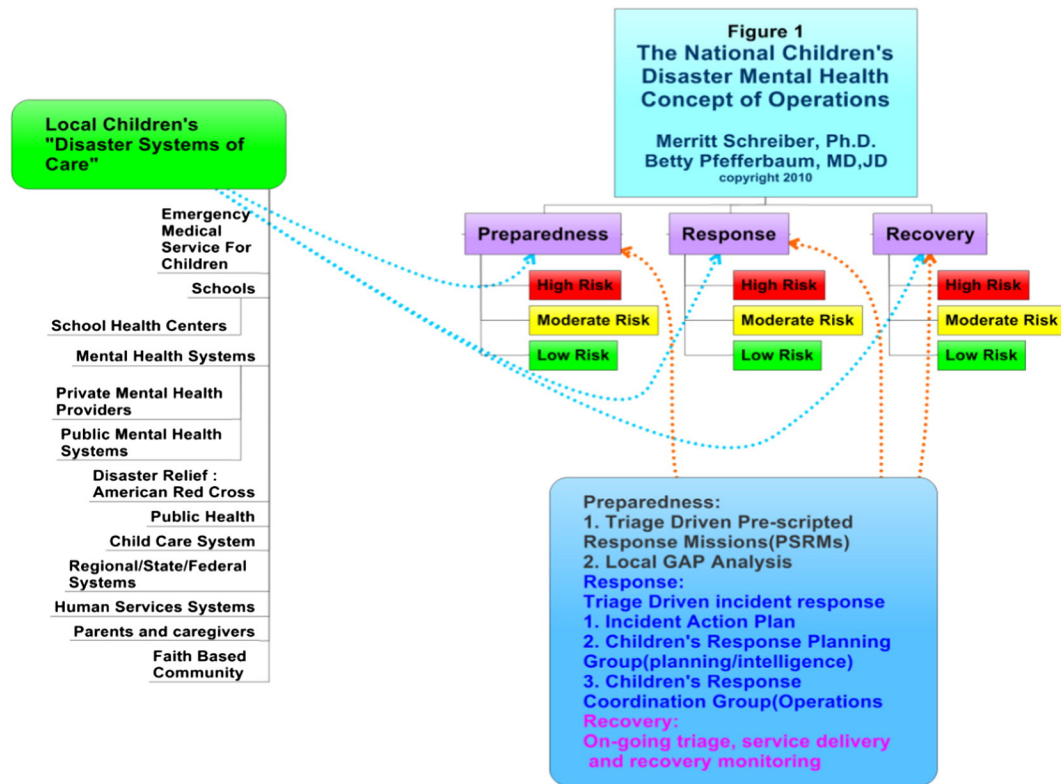


Figure 1 Overview of the NCDMH CONOPS model. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

specific aspects were positively correlated with the risk for the development of PTSD and posttraumatic stress symptoms, including the mass casualty death toll, the child's perceived threat to self, peritraumatic symptoms at the time of the disaster, and proximity (exposure) to the event. The traumatic loss of a loved one also increased the risk of PTSD in children. Among longitudinal studies on the impact of disasters on children, one focused on survivors of a shipping disaster. This study revealed that approximately one half developed incident-related PTSD in the succeeding 5 to 8 years after the disaster, with PTSD beginning within 6 months of the disaster for most and endured for over 5 years, and one fourth of those went on to develop the disorder.¹⁴ More than one third of the survivors also developed clinical major depression.¹⁵ Additional studies provide evidence that children with subsyndromal symptoms also experience significant functional impairments.¹⁶

Only a Minority of High Risk Children Receive Appropriate Mental Health Care After a Disaster

Findings from the terrorist attacks of September 11th and Hurricane Katrina have consistently demonstrated that only a few of high-risk (highly exposed to

the disaster) or very symptomatic children received evidence-based mental health care after these events. For example, after the terrorist attacks of September 11 in New York City, only 27% of children with severe or very severe reactions received any counseling services up to 5 months after the disaster.¹⁷ Longitudinal evidence from Hurricane Katrina reveals that approximately 4 years post-event, 40.8% of parents in Louisiana and 49.1% of parents in Mississippi reported that their children still had mental health disorders as a result of the hurricane.¹⁸ This evidence suggests that certain features of all-hazards events represent a clear danger to the well-being of the nation's children and that available opportunities to alter this negative trajectory of risk are clearly being missed by the systems, including health care providers, that serve the needs of children after disaster.

The Delivery of Disaster Mental Health Services Remains Focused on Single Practitioners Using "One Size Fits All" Interventions Focused on the Acute Phase of the Response

Although the science of disaster and children's responses to them has advanced, the practice of disaster mental health has failed to evolve from either

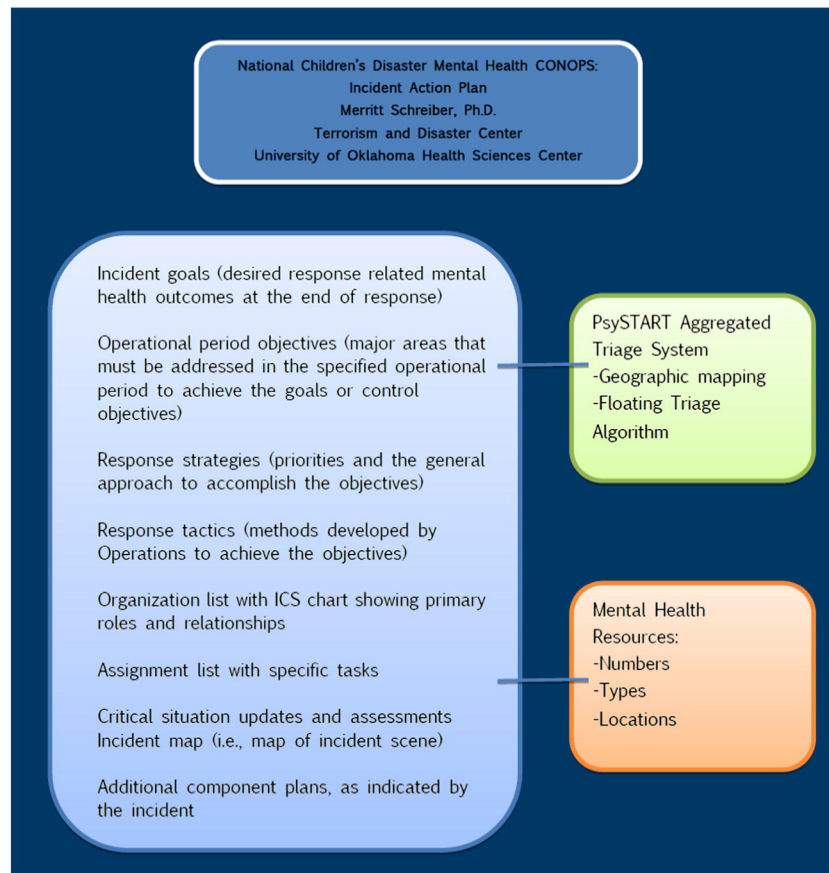


Figure 2 NCDMH CONOPS IAP overview. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

a singular focus on psychopathological outcomes or simple “normal reactions to abnormal events” strategies. This is occurring even though recent findings suggest a more complex representation of risk and resilience.¹⁹ There is now evidence, primarily with adults,²⁰ but also promising early evidence for children,²¹ that evidence-based treatment protocols can reduce or prevent the emergence of clinical PTSD when provided in the first few weeks after a disaster. This early “acute care” provides a potential pathway toward resilience for children at higher risk and for whom natural resilience is unlikely. Therefore, communities, via their emergency management and health care systems, must more fully integrate risk-based disaster mental health practices based on current research of the continuum of risk and resilience to better meets the needs of children after disasters.

Disaster Mental Health Is Not Routinely Integrated Into Health Care Systems

Hospitals and health care facilities still lack well-developed plans, methods, and strategies that inte-

grate mental health, including meeting the mental health needs of children after disasters. Gold, Montano, and Shields et al.²² provided an overview and recommendations for integrating mental health considerations into pediatric disaster preparedness and response in the medical setting including triage, tracking, and the prioritization of children at high risk of the mental health impact of disasters. This lack of integration is also seen in other systems that serve children. For example, in some of the recent school shootings, the local Department of Public Health and Department of Education have been thrust into the role of leading all of the community's disaster response for the incident often with little or no experience in the delivery of evidence-based or evidence-supported disaster mental health services.

Significant Strides Have Been Made, But Not Routinely Integrated Into the Systems That Serve Children After Disasters

Crucial developments in pediatric disaster mental health have been made, but not fully integrated into

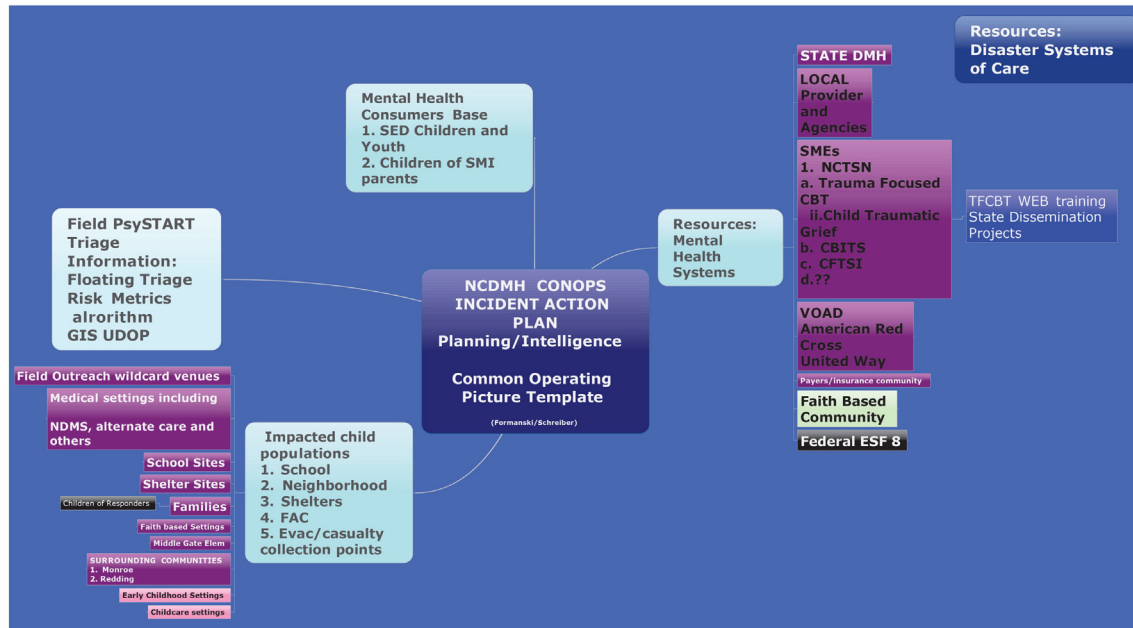


Figure 3 NCDMH CONOPS IAP template. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

the systems responsible for the well-being of children. Understanding and treating the effects of traumatic stress in disasters using a range of school- and clinic-based approaches was highlighted by key researchers in the field.^{11,16} A first ever, evidence-based rapid mental health triage system was developed.^{8,9} Practice parameters for the treatment of PTSD in children have been developed.²³ An alternative algorithm for PTSD in young children was identified, which also suggests higher PTSD rates for younger children in disasters and other traumatic events.²⁴ The first national disaster concept of operations model specific to the needs of children was developed² and is the foundational concept in this article. Yet, despite these clinical and tactical advances, pediatric disaster mental health needs are not yet routinely integrated into the disaster response systems in the United States.

CONOPS—THREE KEY CONCEPTS

To address these challenges and the population-level psychological risk from the disasters, the CONOPS leverages existing national best practices in disaster medicine²⁵ by matching the “continuum of risk” to a corresponding continuum of timely, evidence-based care. The CONOPS provides a continuum of scalable, evidence-based disaster mental health strategies that can be used to integrate all potential providers of “pediatric

disaster systems of care” in the community. Public health entities, medical providers, social services, and education systems can all contribute to disaster preparedness and resilience-building efforts by using a common approach to mental health triage for children. The CONOPS (Figure 1) includes 3 key concepts.

Concept 1—PsySTART Rapid Mental Health Triage System

Medical services use medical triage to determine priorities on the level of care patients will receive according to their level of injury. Likewise, mental health triage is used to determine what level of mental health interventions should be used based on level of exposure to the traumatic aspects of a disaster and other factors. Just as with medical triage, mental health triage should be initiated as early in the response as possible. The CONOPS is founded on the use of a rapid mental health triage-driven tool known as the PsySTART Rapid Mental Health Triage and Incident Management System. The PsySTART system collects evidence-based, rapid individual triage data obtained across key disaster systems of care “touch points” where it is used, including hospitals, clinics, schools, American Red Cross shelters, and other disaster relief settings providing services to children. Some emergency medical services agencies (including LA County,

District of Columbia, North Central Texas Trauma Regional Advisory Council, Public Health of Seattle and King County, State of Minnesota) and other disaster response organizations (such as the American Red Cross) are also training their staff to use PsySTART. PsySTART includes evidence-based risk markers including rapid screening for such factors as severe and extreme traumatic exposure, traumatic loss, disaster injury or illness, peritraumatic panic, ongoing persistent stressors, and the presence of prior mental health and disaster history (Figure 4). The system also identifies children currently unaccompanied by family or caregiver. Once the triage information has been entered into the on-line, Web-based system, it can provide a real-time aggregation of individual-level triage data by geo-coded or mapped location. A summary of this information can then be shared so that a “picture of risk” for children in an entire community can be determined. This information can be used as a decision support tool to manage the mental health response by discrete sites and by impacted population, using PsySTART triage information to determine level, types, and location of children's acute and long-term mental health needs. The “situational awareness” information can then be used to develop response strategies tailored to the unique needs of the children being served by location and available resources. Most importantly, using geo-coded risk information helps to better identify groups needing services in a more timely manner, as well as prevents groups of children being “left out” of services and systems because their needs were not identified. Another strategy included in PsySTART is the ability to align limited resources in situations where the needs of children outstrip the mental health response capabilities of a community. This strategy, called the “floating triage algorithm,” permits the rational allocation of limited resources to those most in need by using flexible prioritization. For example, based on available resources, those with a greater number of PsySTART risk factors are prioritized for early acute interventions.^{26,27} Using the floating algorithm prioritizes ethical resource allocation among subpopulations of higher risk children in accord with recent “crisis standards of care” guidelines.²⁵ Using a common method such as PsySTART to identify risk also supports communication, partnerships, and collaborative disaster response and recovery strategies for children among organizations responding and serving children after disaster (eg, hospitals, schools, child care, the American Red Cross, and disaster mental health sources). The ability to communicate using a common understanding/language of mental

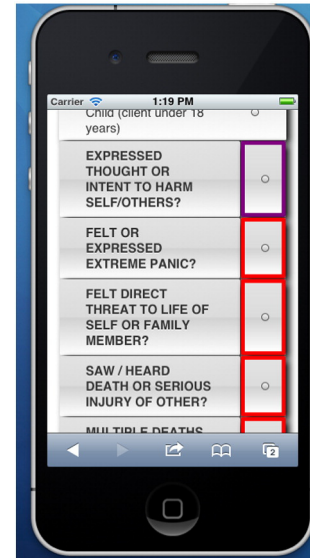


Figure 4 PsySTART mental health triage system (phone application version). (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

health risk and “common operating picture” is in alignment with other emergency operations functions and provides a way to better integrate disaster mental health for children into existing disaster management systems.

Concept 2—Child-Focused Incident Action Planning

The CONOPS IAP (Figures 2 and 3) is designed to replace the more typical, reactive, clinician-driven response to “chase tears”²⁸ with one in which evidence-based risk metrics drive individual- and population-level response strategies within the disaster management systems that care for children. When relative risk acuity determines ethical and timely mental health resource allocation as described above, and these resources are dedicated to evidence-based “stepped-care” collaborative care models,²⁹ then optimal outcomes for children after disasters are enhanced. The IAP provides a tool that child-serving organizations and systems can use after disasters to formulate and implement discrete child-specific disaster mental health strategies. The IAP is a means to understand the evolving situation, develop common objectives across settings, develop a common plan to meet the objectives, execute the plan, monitor progress, and revise the plan at regular intervals as needed.

Using the IAP to identify child-specific elements is not a method that is commonly used by disaster responders in health and social service settings currently, but is a key component of the CONOPS

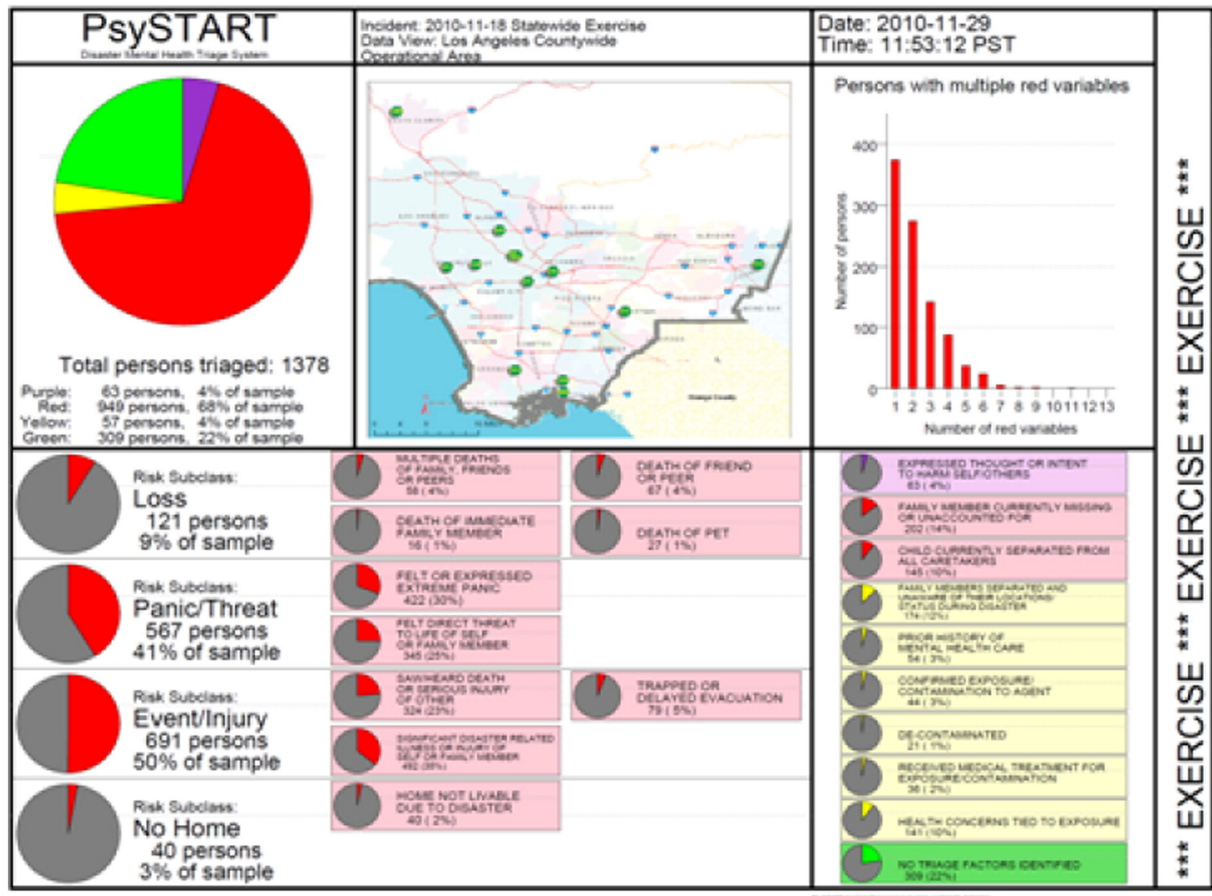


Figure 5 Example of near real-time situational awareness of disaster mental health risk for adults and children: Los Angeles County Emergency Medical Services Agency Countywide PsySTART Triage Statewide Disaster Medical Exercise. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

and represents an important change in national practice. The CONOPS also recommends that organizations collaborate to create a unified Children's Response Planning Group within their emergency management structure that is responsible for collecting, evaluating, and disseminating operational information specific to the mental health needs of children. The group should be composed of local child mental health providers with access to national experts in child traumatic stress, and health care planners. Representatives from other community partners such as the American Red Cross can also be included, when appropriate. The Children's Response Planning Group would use the IAP and aggregated PsySTART triage information as a dynamic tool to assess and identify impacted groups, determine the best community-based strategies to provide care, coordinate the targeted dissemination of psychoeducational resources (such as Listen, Protect, and Connect psychological first aid, Substance Abuse and Mental Health Services Administration, American Red

Cross, and so on), determine the clinical skill set and interventions needed to provide services, and identify where clinical services are most needed.

Concept 3: Continuum of Risk and Stepped-Care Intervention Models

The evidence reflects a continuum of risk ranging from short-term distress to complex new incidence comorbid disorders with an extended trajectory of risk. Current evidence-based approaches include the following spectrum of supportive, preventive, and treatment interventions: (1) psychological first aid provided in the immediate aftermath (first several days) by non-mental health professionals using the Listen, Protect, and Connect model²⁹; (2) acute preventive strategies provided by mental health professionals in the first month after exposure, such as Child Family Focused Traumatic Stress Intervention²¹; and (3) stepped-care treatment, based on severity of symptoms and/or availability of resources, for example, for subsyndromal trauma or

depressive symptoms, brief (~4 session) coping skills such as Trauma Focused–Cognitive Behavioral Therapy (TF-CBT) Stabilization Skills¹⁰; for moderate trauma or depressive symptoms, group intervention such as Cognitive Behavioral Intervention for Trauma in Schools; and for more severe PTSD, depression, and/or comorbid problems, individual child and parent Trauma Focused CBT(TF-CBT).^{10,11} There is substantial evidence suggesting the effectiveness of these psychological therapies, particularly for CBT for PTSD in children and adolescents.^{31,32} In real-world response, the continuum of risk model can be integrated into the practice of matching evidence-based interventions to the needs of children along this continuum, instead of using the current practice of a single “one-size-fits-all” intervention based on the assumption that “all children are resilient.” The continuum of mental health risk for children can effectively be addressed using a stepped-care interventions model. The stepped-care intervention model starts with strategies with shorter duration and/or lower intensity such a psychoeducation or group treatments for most children, and then “stepping up” care for the smaller group of children who will need more services to higher levels of interventions and follow-up care. The stepped-care and continuum of risk models result in customizable, evidence-based intervention strategies that are the most appropriate for a specific “pattern of risk” in populations of children in the impacted area and also allows for the better allocation of limited resources in post-disaster community settings.

Operational Example

The elements of the PsySTART system can be seen in this example from a large terrorism exercise in Los Angeles County (Figure 5). This presents the aggregated and geo-coded mental health triage information for 1378 adult and pediatric scenario patients at 44 hospitals in Los Angeles during a 6-hour simulated mass casualty, terrorism incident involving multiple improvised explosive devices. The PsySTART triage system shown in the figure displays an overall population-level risk distribution (top left of figure), cluster analyses of specific contributing factors (loss of loved ones) to overall triage status (bottom left), as well as distribution of each PsySTART risk factor by cluster factors, including children currently unaccompanied. The system also includes the number of individuals with 1, 2, 3 or more discrete PsySTART risk factors enabling ethical prioritization of follow on resources. (In an actual event, those with a greater number of risk factors would be prioritized for

secondary follow-up assessment and early acute treatment such as crisis intervention using the IAP “floating triage algorithm” and continuum of risk and stepped-care models described in the three key concepts above.) In this exercise, triage accuracy by non-mental health emergency department staff approached 90% compared to the scenario gold standard of expert mental health triage,¹ suggesting rapid mental health triage of adults and children by non-mental health providers is effective and practical in a large-scale event.

IMPLEMENTING THE CONOPS IN THE HOSPITAL AND HEALTH CARE SETTING

This section includes recommendations specifically for hospitals and health care coalitions to implement the 3 key concepts of the CONOPS as part of their disaster preparedness, response, and recovery activities. A key assumption is that hospitals and health care coalitions will seek to collaborate with all appropriate disaster response partners so that these recommendations can be implemented across all sectors that serve the needs of children after disasters.

Preparedness

Preparedness recommendations based on the CONOPS include the following:

1. The hospital disaster planning committee should review the key concepts in the CONOPS to determine how they can be implemented. This includes meeting with key disaster partners including the local health care coalition, local government emergency managers, schools, local mental health and public health departments, and the American Red Cross to determine who is currently collecting PsySTART Rapid Mental Health Triage system data and how it can be used and shared during a disaster to achieve a “common operating picture” in the jurisdiction.
2. The hospital disaster planning committee, health care coalition, and partners from all potential responding agencies should study the current disaster management system that is used during a disaster to determine how the Children's Response Planning Group can be implemented within their emergency management structure. Nationally, many hospitals use Hospital Incident Command System (HICS),³³ which currently includes a “Behavioral Health Unit Leader” function. A Children's Response Planning team could be

added under this unit to coordinate the inclusion of child mental health strategies into the IAP function during a disaster.

3. The hospital disaster planning committee should include the new child-focused concepts into the regular exercise program and whenever HICS is activated for smaller emergencies so that key concepts of the CONOPS can be further integrated, practiced, and improved. In addition to providing the opportunity to practice, this practical approach allows for the preselection of facility staff appropriate for HICS mental health functions—including members of the Children's Response Planning Group. It would also provide for the identification of the best method to collect the PsySTART data within the facility and by whom.
4. The hospital disaster planning committee should work within its facility and with all community partners to identify sources of qualified mental health responders that can participate in the rapid referral and follow-up of high-risk children after disasters.
5. The hospital disaster planning committee should work within its facility and with communities to identify strategies for children based on the three CONOPS strategies and how these concepts can best be implemented using the sources of evidence-informed interventions available in the community to facilitate stepped-care. For example, communities can implement strategies that range from providing disaster mental health education and Psychological First Aid for those children and their families at low risk, to providing secondary assessment and preventive intervention such as Child Family Focused Traumatic Stress Intervention for those at intermediate risk, to providing addition of referrals for longer term care such as TF-CBT Stabilization Skills for children with subsyndromal symptoms, to facilitating the referral to Cognitive Behavioral Intervention for Trauma in Schools or TF-CBT or other evidence-based interventions for those children who were highly exposed to the disaster and thus at the greatest risk of developing PTSD, depression, or other mental illnesses. A key goal of the stepped-care strategy is also to determine which of these services can realistically be provided within the hospital setting, and what must be accomplished via referral to outside providers and other disaster partners.

6. Proactively identifying and addressing the community's needs for training child mental health therapists in evidence-based and evidence-supported practices *before disasters occur* is essential for building capacity for the community to provide stepped-care collaborative interventions. Hospitals or other health care organizations should identify potential providers in their community who are fully trained in the above evidence-based practices, and their capacity to provide services in the event of a disaster. If the capacity is not adequate, community providers should be trained in at least some of these interventions.³⁰ Many of these interventions is available through the Substance Abuse and Mental Health Services Administration-funded National Child Traumatic Stress Network (www.nctsn.org).

Response

Response recommendations based on the CONOPS include the following:

1. After a disaster or other emergency, hospitals, health care coalitions, and other collaborating partners should implement the key operational elements of the CONOPS including bringing up the HICS disaster management components identified in the preparedness phase.
2. The Children's Response Planning team in the facility and health care coalition should use the collected PsySTART Rapid Disaster Mental Health system information collected at the facility or by others in the health care coalition or by community partners to maintain "situational awareness" of the disaster-created mental health needs of children, both at hospitals and in the community.
3. The hospital in coordination with the Children's Response Planning team and other collaborating response partners should use PsySTART Triage to manage the identification of children in need of disaster mental health follow-up based on risk and implement the strategies identified as part of the preparedness step above.
4. The Children's Response Planning team should use the PsySTART triage information to include child mental health-focused strategies and tactics in the IAP.
5. The Children's Response Planning team should use the PsySTART triage information

including the identification of children at risk to coordinate the timely referral of children for evidence-informed follow-up based on risk level.

Recovery

1. As the research cited above indicates, the onset of new disorders can be delayed. Therefore, health care facilities should continue to use the key elements of the CONOPS throughout the recovery phase to continue to monitor and identify children at risk. This could include the decision to continue to use PsySTART with all pediatric patients for a period of time after the disaster to identify children at risk who did not present in the acute phase of the disaster.

Meeting the Needs of Those who Care for Children

In addition to planning for the mental health needs of children, health care facilities should also plan to address the mental health needs of the health care staff. Although not currently included in the CONOPS, the authors felt it was important to recommend that health care providers recognize that caring for critically ill children and experiencing death of children is taxing for providers every day and even more so during disasters when the increased number of child casualties prompts a shift from usual care to a "crisis standards of care."²⁵ Therefore, disaster planning for children should also involve robust strategies for providing disaster mental health support to staff. For example, the PsySTART triage has recently been adapted to staff self-triage using a combination of patient care and direct impact risk factors.³⁴

CONCLUSION

Substantial gaps in meeting the mental health needs of children and families across the continuum of disaster phases (ie, preparedness, response, and recovery) endure and constitute a national challenge. Both the National Advisory Committee on Children and Terrorism (and the National Commission on Children and Disasters) have concluded that more must be done to specifically address the mental health needs of children in the context of disasters and terrorism. This article describes one effort to address the issues children face and to reduce the gaps that exist through the integration of the first comprehensive CONOPS into the hospital and health care setting by implanting three key concepts: (1) PsySTART Disaster Mental Health Triage; (2) child-focused IAP; and (3) continuum of

risk and stepped-care collaborative intervention models. These key elements of the CONOPS enhance the ability of hospitals, health care coalitions, local, state, federal, and other child-focused disaster partners with tactical operational capability by addressing the continuum of children's disaster mental health needs in an all-hazards framework with a goal to facilitate resilience. This strategy also ensures that a unified command strategy highlighting the needs of children is achieved by all potential responding agencies during the emergency management planning, preparedness, response, and recovery phases of a disaster.

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REFERENCES

1. Schreiber M, Koenig K, Schultz C, et al. PsySTART rapid disaster mental health triage system: performance during a full scale exercise. *Acad Emerg Med* 2011;18:s59.
2. Schreiber M, Pfefferbaum B, Sayegh L. Toward the way forward: the National Children's Disaster Mental Health Concept of Operations. *Disaster Med Public Health Prep* 2012;6:174–81.
3. Zatzick D, Jurkovich G, Rivara FP, et al. A randomized stepped care intervention trial targeting posttraumatic stress disorder for surgically hospitalized injury survivors. *Ann Surg* 2013;257:390–9.
4. Schreiber M. Learning from 9/11: toward a national model for children and families in mass casualty terrorism. In: Daneli Y, Dingman R, editors. *On the ground after September 11: mental health responses and practical knowledge gained*. New York, NY: Hayworth Press; 2005. p. 605–9.
5. Furr JM, Comer JS, Edmunds JM, et al. Disasters and youth: a meta-analytic examination of posttraumatic stress. *J Consult Clin Psychol* 2010;78:765–80.
6. Neria Y, Nandi A, Galea S. Post-traumatic stress disorder following disasters: a systematic review. *Psychol Med* 2008;38:467–80.
7. Norris F, Friedman M, Watson P, et al. 60,000 Disaster victims speak: part I. An empirical review of the empirical literature, 1981–2001. *Psychiatry* 2002;65:207–39.

8. Thienkrue W, Cardozo BL, Chakkraband MLS, et al. Symptoms of posttraumatic stress disorder and depression among children in tsunami-affected areas in southern Thailand. *JAMA* 2006;296:549–59.
9. King ME, Schreiber MD, Formanski SE, et al. A brief report of surveillance of traumatic experiences and exposures after the earthquake-tsunami in American Samoa 2009. *Disaster Med Public Health Prep* 2012;7:327–31.
10. CATS Consortium: Implementation of CBT for youth affected by the World Trade Center Disaster: matching need to treatment intensity and reducing trauma symptoms. *J Trauma Stress* 2010;23:699–707.
11. Jaycox LH, Cohen JA, Manarino AP. Children's mental health care following Hurricane Katrina: a field trial of trauma-focused psychotherapies. *J Trauma Stress* 2010;23:223–31.
12. McLaughlin KA, Fairbank JA, Gruber MJ, et al. Serious emotional disturbance among youths exposed to Hurricane Katrina 2 years postdisaster. *J Am Acad Child Adolesc Psychiatry* 2009;48:1069–78.
13. Fergusson DM, Horwood LJ, Boden JM, et al. Impact of a major disaster on the mental health of a well-studied cohort. *JAMA Psychiatr* 2014;48:597–9.
14. Yule W, Bolton D, Udwin O, et al. The long-term psychological effects of a disaster experienced in adolescence: I: the incidence and course of PTSD. *Am Acad Child Adolesc Psychiatry* 2000;41:503–11.
15. Bolton D, O'Ryan D, Udwin O, et al. The long-term psychological effects of a disaster experiences in adolescence: II: general psychopathology. *Am Acad Child Adolesc Psychiatry* 2000;41:513–23.
16. Cohen J, Bukstein O, Walter H, et al. AACAP Work Group on Quality Issues—practice parameter for the assessment and treatment of children and adolescents with posttraumatic stress disorder. *J Am Acad Child Adolesc Psychiatry* 2010;49:414–30.
17. Fairbrother G, Stuber J, Galea S, et al. Unmet need for counseling services by children in New York City after the September 11th attacks on the World Trade Center: implications for pediatricians. *Pediatrics* 2004;113:1367–74.
18. Abramson D, Park Y, Stehling-Ariza, et al. Children as bellwethers of recovery: dysfunctional systems and the effects of parents, households, and neighborhoods on serious emotional disturbance in children after Hurricane Katrina. *Disaster Med Public Health Prep* 2010;4:E1-11.
19. Norris FH, Tracy M, Galea S. Looking for resilience: understanding the longitudinal trajectories of responses to stress. *Soc Sci Med* 2009;68:2190–8.
20. Roberts NP, Kitchiner NJ, Kenardy J, et al. Systematic review and meta-analysis of multiple-session early interventions following traumatic events. *Am J Psychiatry* 2009;166:293–301.
21. Berkowitz SJ, Stover CS, Marans SR. The child and family traumatic stress intervention: secondary prevention for youth at risk of developing PTSD. *J Child Psychol Psychiatry* 2011;52:676–85.
22. Gold JI, Montañó Z, Shields S, et al. Pediatric disaster preparedness in the medical setting: integrating mental health. *Am J Disaster Med* 2009;4:137–46.
23. Cohen J, Jaycox L, Walker D, et al. Treating traumatized children after Hurricane Katrina: Project Fleur-de Lis. *Clin Child Fam Psychol Rev* 2009;12:55–64.
24. Scheeringa MS, Myers L, Putnam FW, et al. Diagnosing PTSD in early childhood: an empirical assessment of four approaches. *J Trauma Stress* 2012;25:359–67.
25. Institute of Medicine. Crisis standards of care: a systems framework for catastrophic disaster response. Washington, DC: The National Academies Press; 2012.
26. Gurwitsch R, Kees M, Becker SM, et al. When disaster strikes: responding to the needs of children. *Prehosp Disaster Med* 2004;19:21–8.
27. Mace S, Sharieff G, Bern A, et al. Pediatric issues in disaster management, Part 3: special healthcare needs of patients and mental health issues. *Am J Disaster Med* 2010;5:261–74.
28. Yin Robert. Letter to the author; 2009 [Author Personal Communication].
29. Kearns MC, Ressler KJ, Zatzick D, et al. Early interventions for PTSD: a review. *Depress Anxiety* 2010;29:833–42.
30. Kataoka S, Langley AK, Wong M, et al. Responding to students with posttraumatic stress disorder in schools. *Child Adolesc Psychiatr Clin* 2012;21:119–33.
31. Gillies D, Taylor F, Gray C, et al. Psychological therapies for the treatment of post-traumatic stress disorder in children and adolescents. *Cochrane Database Syst Rev* 2012;12:CD006726. <http://dx.doi.org/10.1002/14651858.CD006726.pub2>.
32. Kenardy J, Cobham V, Nixon RD, et al. Protocol for a randomised controlled trial of risk screening and early intervention comparing child- and family-focused cognitive-behavioural therapy for PTSD in children following accidental injury. *BMC Psychiatry* 2010;10:92–7.
33. California Emergency Medical Services Authority. Hospital Incident Command System (HICS) 2014. Available at: www.emsa.ca.gov/disaster_medical_services_division_hospital_incident_command_system.
34. Schreiber M, Pithia N, Sims L, et al. PsySTART responder self triage: surveys from the urban shield 2013 disaster training exercises. NCDMPH Learning in Disaster Health Conference Presentation; 2014 [in-press].