Attachment—Additional Questions for the Record

Subcommittee on Health
Hearing on
"Investing in Public Health: Legislation to Support Patients, Workers, and Research"
June 29, 2022

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The Honorable Frank Pallone, Jr. (D-NJ)

1. Trauma accounts for millions of emergency room visits and hospital admissions across the country each year. Trauma centers can literally mean the difference between life and death for severely injured patients. Trauma can happen to anyone, anytime and anywhere. Getting the severely injured to a Level I or II trauma center within the first "golden hour" is paramount. Yet, trauma centers struggle to keep their doors open and recent events show how public health emergencies can further stress and threaten our trauma system capacities. Access to trauma care is at risk due to the high cost of treating severely injured patients, as well as a growing shortage of adequately trained workforce.

a. What are some of the barriers to responding to emergency events when trauma centers, and especially rural emergency departments, become stretched and no longer have the capacity to treat patients?

RESPONSE: A major barrier for rural emergency departments is the ability to access tertiary care services for patients needing transfer to definitive care. This is true for trauma but also for a variety of other patient types. As tertiary care centers surge, rural emergency departments struggle to find transfer acceptance for time-sensitive injuries. The more critical the patient, the more resources the patient consumes. Resources are already at a premium in rural centers. This is a continuous cycle that ultimately limits a rural center's ability to accept, treat and manage additional patients.

It is also important to differentiate between "emergency departments" and trauma centers. Trauma centers are designated facilities equipped to care for the most severely injured. Rural trauma centers (usually Level 3 or Level 4 centers) will stabilize severely injured trauma patients and transfer them to a higher level of care trauma center such as a Level 1 or 2 center. Rural trauma centers can become overwhelmed quickly during mass casualty events as they are not typically resourced (staffing, equipment, specialty physicians) to treat larger volumes of patients at the same time. Responding to emergency events requires a vast array of resources (e.g., blood products, multiple operating suites, specialized equipment, experienced and specialty trained staff, etc.). Rural trauma centers are limited in their resources, and rural emergency departments

are even less well-equipped to deal with life-and-death trauma injuries. Coordinating and communicating with pre-hospital responders to identify facilities that can treat the severely injured trauma patient is critical. When a trauma facility is at capacity, there needs to be a plan to reroute EMS to another appropriate facility. For rural response, this is even more difficult without a structured and tested plan.

A recent study published in the Journal of the American Medical Association (*JAMA*. 2022;328(4):391-393. doi:10.1001/jama.2022.8097) states that access to trauma care has improved nationally. However, it notes that over 30 million people in the United States still lack access to an American College of Surgeons (ACS) verified trauma center within the "golden hour." Rural areas, in particular, are highlighted as areas in need of coverage.

Other key barriers include:

- Arbitrary geographic lines that reduce the ability to share staff and resources. For example, Regional Healthcare Coalitions have been built based on state and county lines that mostly do not reflect patient flow. Additionally, facilities near state lines encounter issues with different credentialling requirements for staff. Local emergencies do not change state credentialling requirements and a state declaration of an emergency does not always address this staff-sharing barrier.
- Lack of paid EMS staff in rural areas is a barrier to quick and prolonged response. Rural areas frequently utilize volunteer ambulance staff and are not able to marshal additional resources quickly.
- Financial pressures limit opportunities to provide cross training for rural staff with other higher acuity care sites.
- Emergency response planning is not a priority at small locations due to staffing constraints and limited understanding of emergency management concepts.

b. How can we capture and implement all the lessons-learned from the response to COVID-19 and ensure our public health system is stronger and better-equipped to deal with the next public health crisis?

RESPONSE: COVID-19 caught the public health system off guard; most hospitals and trauma centers regularly operate at capacity or near capacity daily. COVID brought an onslaught of critically ill patients, many of whom required extensive resources – resources that were quickly depleted nationwide. Supply and staffing shortages, combined with lack of bed availability, had a significant, negative impact on trauma care. Moreover, as the pandemic surged throughout the country, routine health screenings, surgeries, and wellness appointments were halted so that facilities could care for COVID patients and limit patient exposure. It remains to be determined how the delay of care for chronically compromised patients will impact outcomes.

Though COVID death rates are decreasing, infections are still prevalent; trauma centers remain at or near maximum capacity and critical staffing levels persist. As we prepare for future public health emergencies, it is critical that our public health system be proactive – not reactive. We

must ensure that we plan meticulously, improve production processes, avoid supply chain shortages, and provide adequate funding for nurse education and medical training.

The pandemic also highlighted, and in many ways exacerbated, sociodemographic health disparities. Communities of color, particularly those with lower incomes, experienced greater rates of COVID-related illness and mortality. COVID-19 mortality rates are more than twice as high in Black, Latinx, and Indigenous populations as in White populations, and the data reveal a strong socioeconomic gradient. Greater investment in hospitals and clinics that serve marginalized communities is sorely needed, though clinical care alone cannot compensate for a lifetime of accumulated disadvantage, nor will it dismantle the structures that perpetrate health inequities. Nevertheless, ensuring that health care delivery systems in disadvantaged communities are adequately funded represents a critical first step toward disrupting the predictable pattern of who is harmed first and worst during future public health emergencies.

c. Why is surge capacity and regional and state coordination important?

RESPONSE: Surge capacity is a critical function of a hospital's ability to respond to disasters and mass casualty events. Surge capacity is often misunderstood and commonly thought of as a large-scale event – e.g., a chemical, biological, radiological, or natural disaster with a high volume of casualties. However, for a small hospital, such as a critical access hospital, a mass casualty could be three or four critical patients that can quickly overwhelm a hospital's ability to provide care for that level of injury. Hospitals lack situational awareness of capacity, personnel, and equipment issues from a regional and statewide perspective. As a result, hospitals often operate in a vacuum; in many states, there is no interfacility communication infrastructure to advise of regional and statewide needs or asset availability. The ability to have this infrastructure in place can make the system flexible in responding to patient and hospital needs.

Regional and state coordination is essential to redirect patients to the available facilities that can treat them during large-scale disasters; or when local facilities are unable to handle the critically injured. Fewer standby resources are necessary if systems are in place to maximize the abilities of existing operational resources. Moreover, the integration of additional resources (whether standby, mutual aid, state, or federal aid) is exceptionally difficult without adequate management systems. Without a centralized means of equitable distribution and access to care, rural and community hospitals would need to dedicate staff and resources to calling and pleading for access to care at referral centers (often across multiple states) that are already severely strained and over capacity. Thus, regional and state coordination provides a mechanism for unaffiliated rural hospitals, transport systems, and post-acute care facilities to have patients' needs addressed along with those of larger health care systems.

d. What kind of activities are needed to maintain our trauma care systems? Can you speak to issues of infrastructure, communication, training, technology, data collection, and other uncompensated costs associated with maintaining a 24-hour state of readiness and response?

RESPONSE: Injury prevention education and training are key requirements for trauma centers – and with good reason. The more the public is made aware of the causes of trauma, the more

likely subsequent injuries will be minimized. Helmets, seat belts, falls prevention, pedestrian safety, car seats, and pediatric injury prevention, etc., all contribute to protect the public; but the costs for educating the public on these issues are not reimbursed. Education is also essential at the pre-hospital level for first responders as well as for the health care providers within the facilities hosting trauma centers. Further, the ability to educate the staff on caring for the critically injured patient, as well as providing a support system for patients and their families after their initial treatments, are critical needs that are not reimbursed.

Trauma programs need infrastructure support to continue to validate data, conduct research, share injury prevention strategies, continually train staff, and provide care for their patients based on evidence-based guidelines. Trauma programs need specially trained registry staff to input data into their system that is forwarded to a national system. This data is analyzed on a hospital level, regional level, and national level to introduce changes in best practice. Registries are critical, of course, to identify trends and to design prevention programs to limit traumatic events. However, these are not covered under any reimbursement mechanism.

Hospitals require sufficient staffing to care for trauma patients. Not only those who immediately act to save the patient, but also the necessary staff needed for the patient's physical and mental rehabilitation following the trauma. Each trauma center needs to have access to mental health providers to support its patients for post-traumatic stress disorder (PTSD). Mental health is key to allow patients to continue to be active within their community; and to minimize the potential for subsequent trauma. However, social workers, psychiatric support services, and inpatient rehabilitation are frequently unavailable in Level 3 and 4 trauma centers, which are found principally in rural areas. The TCAA's recent *Ask TraumaCare Survey Report* from February identifies these shortcomings, especially in inpatient rehabilitation. The Survey focused on extended stays (greater than 30 days) and highlighted the problem that Level 3 centers experience when transferring patients to other facilities once the initial trauma has been addressed. These extended stays are not due to complications or acute trauma needs but to placement for the next phase of care. Some centers have no home health programs available, undocumented patients requiring rehabilitation, underinsured patients seeking rehabilitation, insurance denials, and the reluctance of home health agencies to go into known gun violence neighborhoods.

Similarly, mental health programs for health care workers are critical. The COVID-19 pandemic has introduced additional elements of fatigue, strain, stress, loss, and grief for healthcare workers. Many healthcare workers experienced increased workload in the face of short staffing and shortages in critical personal protective equipment. This led to increasing anxiety and the risk of personal harm. Some healthcare workers report symptoms consistent with post-traumatic stress disorder related to the pandemic. Some also reported residual symptoms due to personal infection with COVID-19. This isn't just limited to COVID, however; trauma care providers often experience post-traumatic stress due to the nature of their work and the severity of injuries they treat.

The Honorable Richard Hudson (R-NC)

1. Based on the discussion during the hearing, I would like to further emphasize the importance of aligned care coordination across health and social services and between community partners. The Leveraging Integrated Networks in Communities (LINC) to Address Social Needs Act (H.R. 6072/S. 509) is a bipartisan, bicameral bill that would enhance and support cross-sector efforts to coordinate and address health-related social needs. The bill would create a new and unprecedented ability to coordinate care and measure the impact of social care interventions on health, healthcare spending, and community wellbeing. This infrastructure will help leverage technology and increase capacity of the health and social services sectors to improve coordination and overall health outcomes.

   North Carolina has been a leader in leveraging the Medicaid program and other federal and state programs to advance a cross-sector, innovative strategy to address social determinants and improve health outcomes through its NCCARE360 program. NCCARE360 is the first statewide coordinated care network to electronically connect those with identified needs to community resources and allow for a feedback loop on the outcome of that connection for the patient. This public-private partnership connects community partners with a shared technology platform to enable referrals, communicate between providers, and track patient outcomes; a community repository to integrate statewide resources; a robust statewide resource directory with a call center and dedicated navigators; and a community engagement team that coordinates with community-based organizations, social services agencies, health systems, independent providers, and other stakeholders. All of these resources work together to better connect individuals with local services and resources. The LINC to Address Social Needs Act would build on the success of initiatives such as NCCARE360 by connecting providers and patients with needed technology and resources to enable a coordinated, community-oriented, person-centered approach for delivering care and improving outcomes.

a. Are there case studies from your work or otherwise that demonstrate how such alignment of health and social services improves health outcomes and public health while efficiently using health care dollars? How would increased funding and support for such public-private partnership initiatives contribute to their success of enabling more coordinated care and improving health care outcomes?

RESPONSE: I understand from our TCAA member health systems and trauma centers in North Carolina that NCCARE360 has been a first-of-its-kind successful and dynamic integrated network that has leveraged and encouraged the development of public-private partnerships across the state to meet individual needs in support of better, targeted community health outcomes.

Among the community efforts that have utilized models similar to that of NCCARE360 is the Latinx Advocacy Team & Interdisciplinary Network for COVID-19 (LATIN-19), a multi-sector group of over 500 participants representing academic institutions, healthcare systems, public health departments, public school systems, community-based organizations, government, faith communities, and other stakeholders. The coalition was established in Durham, NC by clinicians at TCAA-member Duke University Hospital to address health disparities within the Latinx

community because of the COVID-19 pandemic. The initiative's areas of focus include: COVID-19 outreach and education, COVID-19 testing and vaccination, food insecurity, health advocacy, housing, immigration, training, education, stress, and resilience. LATIN-19 has been able to utilize resources from the U.S. Department of Health and Human Services Office of Minority Health and private funding sources to bridge the health equity gap among Latinx communities by linking community engagement and empowerment to policy and by addressing the immediate social needs that community members have experienced during the pandemic.

The Leveraging Integrated Networks in Communities (LINC) to Address Social Needs Act (H.R. 6072/S. 509) recognizes that improving access to healthcare alone is not sufficient to addressing or improving social determinants of health challenges among diverse and disparate populations. Federal resources to support states creating or enhancing public-private partnerships to coordinate health and social services would provide localized opportunities to place increased emphasis on prevention, early diagnosis, as well as social, economic, and educational barriers to access that will ultimately drive down long-term costs to our nation's healthcare system.