



Original research

Threat, access and survivability: a comparative analysis of medical responses to civilian terrorism incidents in Australia, the United States and the United Kingdom/ Europe

Matthew RichardsonEmail matthewrichardson5@bigpond.com**Abstract**

Terrorism-related mass casualty incidents challenge conventional prehospital doctrine because clinical need, scene access and responder safety are contested simultaneously. In these incidents, the critical determinant of outcome is often not simply clinical capability, but whether casualties can be reached early enough for lifesaving interventions to occur. Tactical Emergency Casualty Care (TECC) provides a structured framework for civilian high-threat medical response by aligning treatment priorities with the operational environment and defining care by direct threat, indirect threat and evacuation phases. Current TECC guidance emphasises that civilian casualty care must be threat-adapted, dynamic and integrated with rescue and law-enforcement operations rather than treated as an extension of routine trauma practice.¹⁻³

This paper compares three broad approaches to medical response in civilian terrorism events: the United States model, which has strongly influenced early warm-zone care and layered hemorrhage-control practice; the United Kingdom and selected European interoperability model, which has historically placed greater emphasis on coordinated multi-agency command and structured risk management; and the Australian setting, which has robust national security guidance but a less explicit public doctrine for high-threat medical access. The central argument is that the most important comparative variable is not attack type alone, but how each system interprets and operationalises threat. That interpretation governs whether hemorrhage control, airway support, triage and extraction occur early or late and, therefore, materially affects survivability.^{1,4}

The paper argues that Australian preparedness would benefit from a clearer medical-response framework for terrorism and other high-threat incidents. Although Australia has strong crowded-place and counter-terrorism policy guidance, its publicly visible medical response architecture remains more fragmented than TECC-led models in the United States and less explicitly developed than post-incident learning in the United Kingdom and France. The paper concludes that Australian preparedness should evolve toward a more explicit doctrine of threat-adapted casualty access, supported by interagency training, medical after-action review, hospital surge planning and public hemorrhage-control capability.⁵⁻⁷

Keywords terrorism medicine, TECC, prehospital care, mass casualty incidents, survivability, Australia, interoperability.**For referencing** Richardson M. Threat, access and survivability: a comparative analysis of medical response to civilian terrorism incidents in Australia, the United States and the United Kingdom/Europe. *JHTAM*. 2026;8(1):13-19.**DOI** <https://doi.org/10.33235/JHTAM.8.1.13-19>*Submitted 26 April 2026, Accepted 28 April 2026***Introduction**

The medical response to terrorism differs from conventional emergency care because access to the patient is itself a contested operational problem. In routine trauma systems, the response sequence assumes that emergency medical services can approach, assess and treat casualties once dispatched. In terrorism incidents, that assumption often fails. Active armed offenders, explosive threats, secondary devices, fire, chemical hazards or unresolved tactical uncertainty may delay entry, fragment casualty distribution and force responders to prioritise

threat suppression, concealment, extraction corridors and command integration before conventional medical workflows can begin. As a result, preventable death in terrorism events is shaped as much by operational access as by clinical competence.

Tactical Emergency Casualty Care (TECC) emerged to address this problem in civilian settings. The current C-TECC guidelines describe TECC as best-practice recommendations for casualty management during civilian tactical and rescue operations, derived from but distinct from military Tactical Combat Casualty Care. The framework recognises that treatment must be tailored

to the threat environment and available tactical protection, with minimal interventions in direct threat conditions, more focused lifesaving care in indirect threat conditions, and more complete resuscitation and packaging once a secure environment is achieved. Warm-zone priorities include immediate hemorrhage control, basic airway support within operational limits, rapid preparation for evacuation and consideration of casualty collection points.

The difficulty is that TECC is a framework, not a uniform global operating model. Jurisdictions differ in law, risk tolerance, responder role delineation, police-medical integration, personal protective equipment, command structures, trauma-system maturity and historical experience. These differences affect whether medical teams enter escorted warm zones, whether police perform the earliest lifesaving interventions, how triage is modified under active threat and how quickly casualties move from point of wounding to definitive trauma care.^{4,8}

This paper therefore asks a single comparative question: how do different interpretations of threat shape medical access and survivability in civilian terrorism incidents? That question also frames the recommendations that follow: a clearer Australian doctrine for protected casualty access; routine interagency exercising; formal terrorism-medicine education; stronger hospital surge integration; expanded public hemorrhage-control capability; and systematic medical after-action review.

A medical framework for terrorism response

From a medical perspective, terrorism response can be understood through four linked problems: access, intervention, extraction and system absorption. First, responders must determine whether and how casualties can be reached without creating additional victims. Second, they must prioritise interventions that are both feasible and lifesaving in a hostile or uncertain environment, particularly extremity hemorrhage control, airway opening within scope, chest injury recognition, and expedited movement. Third, they must extract or move patients through contested terrain to safer treatment areas. Fourth, the broader health system must absorb a sudden surge of self-presenting and transported patients while preserving surgery, blood supply, imaging, decontamination and critical care capability. Terrorism medicine therefore spans prehospital, tactical and hospital domains rather than belonging to any single agency alone.^{9,11}

Mass-violence incidents expose the limits of conventional mass-casualty triage. The Assistant Secretary for Preparedness and Response's Technical Resources, Assistance Center, and Information Exchange (ASPR TRACIE) notes that no-notice trauma incidents can overwhelm local resources temporarily, generate incomplete situational awareness, and challenge standard triage and distribution models because scenes remain insecure, casualty numbers are uncertain and many patients self-evacuate.⁹ This problem is intensified in terrorism incidents

because the first medically meaningful decision may be whether any intervention is possible at all in the current threat phase. The early survivability burden, therefore, falls heavily on immediate hemorrhage control, dynamic reassessment and rapid extraction planning.^{1,9}

A further complicating factor is mixed-mechanism injury. Even a single terrorism incident may produce penetrating trauma, blast injury, burns, crush patterns, inhalational injury and severe psychological shock. In crowded-place incidents, responders must also account for family separation, fragmented scene geography, self-presenters and the possibility of secondary attacks or contamination. For that reason, terrorism response cannot be reduced to a single trauma algorithm; it is a system function requiring tactical protection, command coherence, transport discipline and hospital readiness alongside clinical proficiency.¹²⁻¹³

The United States Model: Early Casualty Access and Warm-Zone Care

The contemporary United States model has been shaped by repeated active shooter and intentional mass-violence events, producing a strong emphasis on early casualty access and the reduction of preventable death. Within this model, TECC-informed practice seeks to move medical capability closer to the point of wounding once law enforcement has established a degree of tactical protection. Although implementation varies across jurisdictions, the central principle is consistent: selected lifesaving interventions should be brought forward into managed warm-zone conditions rather than deferred until full scene sterilisation is achieved.^{1,2}

This approach is clinically selective, not clinically comprehensive. The objective is not full resuscitation in a warm zone, but a narrow package of interventions that improve the chance of survival before evacuation. TECC guidance reflects this by prioritising hemorrhage control, basic airway support, maintenance of lifesaving interventions, rapid casualty movement and communication with receiving facilities.^{1,2} The ethical centre of gravity is survivability: a managed level of responder risk is accepted because prolonged delay to hemorrhage control and extraction is likely to worsen mortality.

The United States model also benefits from a broader civilian hemorrhage-control culture than many peer systems. C-TECC now explicitly includes active bystanders and non-traditional first care providers in its guidance, acknowledging that in many civilian attacks the earliest hemorrhage-control interventions are delivered not by paramedics but by members of the public, police, venue staff or private security.³ This shifts the survivability chain leftward by embedding simple lifesaving trauma care before formal ambulance arrival.

The United Kingdom and selected European lessons: control, interoperability, and forward medical adaptation

The United Kingdom and wider European picture is more heterogeneous than is often acknowledged. It is therefore inaccurate to speak of a single European model. A more defensible comparison is between the UK's structured interoperability doctrine and selected continental lessons, especially from France. Joint Emergency Services Interoperability Principles (JESIP) doctrine places co-location, communication, co-ordination, joint understanding of risk and shared situational awareness at the centre of multi-agency incident management. Its core purpose is to create a common operating picture that supports life-saving and harm reduction across agencies.⁴

The strength of the UK approach is organisational coherence. Its vulnerability, highlighted by the Manchester Arena Inquiry, is that command-and-control structures do not automatically produce timely casualty access. The Inquiry examined the emergency response in detail and considered whether some casualties might have survived with faster treatment and extraction, making clear that treatment delay was not merely an organisational defect but a survivability issue.¹⁴⁻¹⁵ Manchester demonstrates that a system may share risk effectively and still remain too slow to convert that shared understanding into medical access.

Continental Europe has also produced a different, more forward-leaning lesson set. Published accounts of the November 2015 Paris attacks describe physician-supported tactical emergency medicine integrated with specialist police operations, alongside highly coordinated hospital reception across the Paris hospital network.¹⁶⁻¹⁷ These accounts suggest that Europe cannot be characterised solely as delayed-access medicine. Rather, some systems have pursued forward tactical medical capability, albeit through different professional mixes and command cultures than those seen in the United States.

Australia: strong security guidance, less explicit medical doctrine

Australia has a well-developed national security and crowded-places framework, and official guidance recognises that attacks are likely to be low-cost, use readily available weapons and target public spaces. National crowded-place guidance explicitly identifies knives, vehicles and firearms among the likely weapons in Australia and stresses the need for preparedness in public environments.¹⁸ The 2025 national counter-terrorism and violent extremism strategy similarly describes a dynamic and evolving threat environment requiring whole-of-nation preparedness.⁵

What is less visible publicly is a clear national doctrine for the medical response once those incidents occur. Australia has capable ambulance services, established trauma systems and strong all-hazards emergency-management structures, but

the medical architecture for terrorism response remains more dispersed across jurisdictions and less explicitly codified than TECC-led approaches in the United States. In practice, Australian ambulance operations have often been more conservative about entry into unresolved threat environments. That conservatism is understandable, because firearms, explosives, secondary hazards and uncertain tactical conditions create legitimate responder-safety concerns. The challenge is that an overly restrictive threshold for medical entry may delay lifesaving care in casualties whose survival depends on very early hemorrhage control and extraction.^{1,18}

The Lindt Café siege remains the most consequential Australian case study for this dilemma. The NSW Coroner found that police should have moved to end the siege sooner after the offender fired his first shot, and the findings demonstrate how tactical delay, casualty access and survivability are closely linked in prolonged hostile incidents.¹⁹ The case should not be read as an argument for unrestricted ambulance entry into unsecured scenes. Rather, it illustrates the broader challenge that the medical consequences of tactical delay may be profound even when ambulance services are not the primary tactical decision-maker.

Australia's medical doctrine also needs to remain broad enough to reflect the contemporary threat environment. National guidance already anticipates simple weapon attacks and addresses chemical threats in crowded places, reinforcing that Australian terrorism medicine cannot be built solely around the classic hostage siege or large bombing scenario.^{5,18}

Discussion

The central finding of this comparative analysis is that the most consequential variable in terrorism-related medical response is not simply the type of attack, the ideology behind it, or even the absolute capability of a health system. Rather, it is the way a jurisdiction interprets threat and converts that interpretation into operational rules governing casualty access. In practical terms, the decisive question is this: at what point does a system consider it acceptable for lifesaving medical care to move toward the point of wounding? The answer shapes the interval between injury and intervention and therefore strongly influences preventable death. Current TECC doctrine is built on the premise that some treatment must occur before conventional scene safety is fully restored, provided that this occurs within a structured, threat-adapted framework.^{1,2}

This is not a minor doctrinal distinction. In terrorism incidents, the clinical timeline is unusually unforgiving. Many patients who die from extremity hemorrhage, junctional bleeding, airway obstruction, or delayed extraction do not die because medicine lacks the technical capacity to save them. They die because those interventions are not delivered early enough. The medical problem is therefore inseparable from the tactical one. A casualty

with a potentially survivable injury profile may become non-survivable when the access interval is prolonged by command uncertainty, incomplete shared situational awareness, or a doctrinal bias toward waiting for full control before medical movement begins. TECC attempts to solve this by structuring care according to threat phase, limiting interventions in direct threat conditions, expanding them in indirect threat conditions, and explicitly recognising casualty collection points and evacuation corridors as medical necessities rather than secondary logistical details.¹⁹

The United States model has been most influential in formalising this relationship between threat and survivability. Although implementation varies widely across states and agencies, the conceptual shift is clear: if law enforcement can establish even partial tactical protection, selected medical interventions should be brought forward rather than deferred. This does not imply reckless entry or abandonment of responder safety. Rather, it reflects a structured willingness to accept managed risk in order to reduce the period during which otherwise salvageable casualties remain untreated. In this sense, the US approach is not merely operationally assertive; it is clinically consequential.¹⁻²

A further strength of the US setting is that the concept of medical response extends beyond formal EMS. The TECC active-bystander guidance acknowledges that in many civilian attacks the earliest hemorrhage-control intervention is delivered by members of the public, police or venue staff rather than ambulance clinicians.³ This layered model is highly rational in terrorism incidents, because bystanders are often physically closest to the injured and can narrow the time to first intervention.

The UK experience illustrates a different strength and a different vulnerability. Its major contribution lies in formalised interoperability. JESIP doctrine correctly recognises that no medical response can succeed if police, fire, ambulance and command elements are operating from incompatible assumptions about risk and priorities.⁴ However, the Manchester Arena Inquiry demonstrates that interoperability alone does not guarantee timely treatment. The Inquiry's analysis of casualties who might have survived with faster treatment places treatment delay and extraction timing directly within the frame of medical outcome.¹⁴⁻¹⁵ The lesson is not that caution is inherently wrong, but that caution must be weighed continuously against the time-sensitive physiology of traumatic death.

This comparison is especially relevant for Australia. Australia has strong strategic and protective-security guidance for crowded places, active armed offender incidents and violent extremism, but the medical component of this preparedness is less explicit publicly than TECC-led models in the United States. In the absence of a clearly articulated and nationally recognisable medical doctrine for high-threat incidents, access thresholds may be interpreted conservatively, inconsistently or primarily

through a policing lens rather than a joint survivability lens. The casualty experiences the consequence of doctrinal ambiguity as delayed care.^{1,5,18}

A key issue here is the enduring tension between responder safety and patient survivability. This tension is often described as though it were binary, but in reality it is a continuum of managed exposure. No credible terrorism-medicine framework advocates unrestricted ambulance entry into an active kill zone. The more meaningful question is whether a system has developed a workable middle ground between total exclusion and unsafe permissiveness. TECC occupies this middle ground by defining intervention packages appropriate to each threat phase and embedding medical action within tactical protection.¹⁻² The importance of this approach is ethical as much as operational. It rejects both extremes: the ethically untenable proposition that responders should absorb uncontrolled risk, and the equally troubling proposition that casualties should wait for ideal conditions while preventable death progresses.

Another reason the discussion must remain medically focused is that terrorism response is frequently over-narrated through the lens of police tactics and under-analysed through the lens of trauma systems. Yet from the standpoint of patient outcome, prehospital access is only one part of a broader survivability chain. Once casualties begin moving, the receiving health system must manage sudden trauma surge, uneven patient distribution, incomplete identification, self-presenters, delayed documentation, competing media pressures and the possibility of contamination or secondary attacks. In the United States, ASPR TRACIE guidance stresses that no-notice incidents create distinctive hospital-flow problems requiring capacity expansion, role adaptation and throughput planning.^{10-11,20} A system that succeeds in warm-zone extraction but can still fail in emergency department decompression, if blood-product access or theatre prioritisation still risk avoidable mortality.

This hospital interface is particularly important when comparing international models. The French experience following the Paris attacks demonstrated that forward tactical medical engagement can coexist with coordinated hospital reception across a large urban trauma network.¹⁶⁻¹⁷ In other words, access and system absorption are not competing doctrines; they are mutually dependent. The earlier casualties are moved, the more pressure is placed on receiving hospitals to transition rapidly into mass-casualty mode. Trauma-system maturity therefore modifies the utility of forward-access models. A jurisdiction that develops protected early entry without simultaneously strengthening trauma distribution, operating room surge and communication with receiving centres may simply relocate the bottleneck. Conversely, a strong hospital system cannot compensate for prolonged delays at the scene, if patients do not arrive in time to benefit from definitive care.

The discussion must also account for the fact that terrorism and other high-threat events are increasingly characterised by complexity without scale. Many contemporary incidents do not resemble large, centrally directed, multi-site bombing campaigns. Instead, they may involve a lone actor using an edged weapon, improvised firearm, vehicle or crude explosive in a crowded public environment. These incidents may generate fewer casualties than major bombings but present the same doctrinal problem: access remains contested, information is incomplete, and casualties may deteriorate before conventional ambulance clearance is granted. This has direct implications for Australian preparedness. A doctrine designed primarily around rare, spectacular terrorism events may underperform in the more probable reality of smaller-scale but still access-constrained assaults.^{5,18}

There is also an important educational implication. Traditional paramedic and emergency nursing education often presumes that the patient encounter begins once the scene is safe enough for clinical work. Terrorism medicine requires a different cognitive model. Clinicians must understand threat phases, tactical movement concepts, ballistic and blast risk, limited-intervention priorities, extraction discipline and the possibility of fragmented communication with command. Equally, police and non-medical responders must understand that time-sensitive trauma care is not a luxury deferred until full control is achieved, but part of the survivability objective from the outset. This argues for integrated education and repeated multi-agency exercising rather than profession-specific preparedness alone.²¹

For Australia, the policy implication is not that it should simply import an American model wholesale. Differences in geography, ambulance structures, firearms exposure, jurisdictional governance and trauma-system organisation all matter. Australia would, however, benefit from a more explicit national conversation about what protected medical access should look like in high-threat incidents. That conversation should include ambulance services, police tactical groups, trauma centres, emergency physicians, emergency nurses, fire and rescue agencies, hospital incident commanders and public-preparedness leaders. A mature doctrine would clarify thresholds for escorted access, expected interventions by phase, casualty collection principles, transport priorities, communication standards and medical after-action review requirements. At present, much of this learning remains dispersed, localised or implicit.^{5,7}

Ultimately, terrorism medicine should be understood as a survivability discipline, not merely a tactical adjunct. Its purpose is not only to protect responders or preserve command order, though both remain essential. Its purpose is to reduce preventable death in environments where conventional assumptions about safety, access and tempo have broken down. That requires doctrine that treats time to contact, time to hemorrhage control,

time to extraction, and time to definitive care as interdependent measures of response quality. The most effective systems will be those able to balance risk without paralysis, organise jointly without delay and move appropriate care forward without losing control of the broader incident.^{1,7,14}

Implications for Australian practice

For Australia, the practical implication of this analysis is that terrorism medicine should no longer be treated as a niche extension of disaster response or as a problem governed solely by police tactical resolution. It should be recognised as a distinct survivability problem requiring an explicitly articulated medical doctrine for high-threat incidents. Australia already possesses strong strategic policy, protective-security guidance, and capable trauma systems, but these strengths do not automatically translate into timely casualty access in unresolved threat environments. The principal challenge for Australian practice is therefore not whether the country understands terrorism as a security problem, but whether it has sufficiently developed the medical doctrine, training architecture, and interagency thresholds needed to reduce preventable death when access is constrained.^{1,5,18}

The first implication is doctrinal. Australian ambulance and health systems would benefit from a nationally recognised framework that clearly defines what protected medical access should look like in high-threat incidents. A contemporary Australian model should specify the phases of care in direct threat, indirect threat, and evacuation conditions, identify the minimum lifesaving interventions expected in each phase, and clarify the decision thresholds for escorted or protected access. This should not be framed as unrestricted entry into unsafe scenes, but as a controlled middle ground between full exclusion and unsafe permissiveness. Such a doctrine would reduce ambiguity, improve interoperability, and support more consistent decision-making across jurisdictions.^{1-2,4}

The second implication is educational. Australia should embed terrorism medicine and high-threat casualty response more explicitly into paramedic, emergency nursing, medical and multidisciplinary emergency training. Traditional clinical education generally assumes that patient care begins once the scene is safe enough for normal practice. High-threat medicine requires a different cognitive model. Clinicians need to understand threat phases, ballistic and blast considerations, extraction discipline, casualty collection principles and the prioritisation of narrow lifesaving interventions under operational constraint. Equally, police and other non-medical responders need a stronger appreciation that hemorrhage control and rapid extraction are not secondary medical tasks, but central determinants of survivability. These capabilities are best developed through repeated multidisciplinary simulation rather than isolated agency education.^{4,21}

The third implication is operational. Australian jurisdictions should conduct routine joint exercises that specifically test the transition points between tactical control and medical access. Many exercises focus appropriately on command, communication, and perimeter management, but fewer directly interrogate the practical threshold at which casualties can be reached, treated and moved. Scenario design should, therefore, include contested access, delayed information, multiple casualty locations, self-presenters, secondary-threat considerations and compressed timelines for hemorrhage control and extraction. The objective should be to expose not only command weaknesses but also medical-access delays and handover failures that may otherwise remain hidden until a real incident occurs.^{7,21}

The fourth implication concerns the hospital interface. Australian practice should recognise that terrorism medicine is not only a prehospital issue. Earlier extraction and protected casualty access will only improve mortality if receiving hospitals can absorb sudden trauma surge, manage uneven casualty distribution, and maintain rapid access to surgery, blood products, imaging and critical care. This requires stronger linkage between police, ambulance, retrieval, trauma centres and hospital incident management during no-notice violent incidents. Hospitals designated or likely to receive casualties from high-threat events should also exercise scenarios involving incomplete patient identification, self-presenters, contamination concerns, media pressure and simultaneous security uncertainty.^{10-11,17,20}

The fifth implication is public preparedness. Because the first effective intervention in many violent incidents may come from a bystander, Australia should expand public hemorrhage-control capability in crowded places, high-risk venues and security-sensitive environments. This includes not only public education, but the considered placement of bleeding-control kits, integration of hemorrhage-control principles into venue emergency planning, and training of security staff, event personnel, and other likely first-on-scene non-medical responders. A mature terrorism-medicine system does not rely exclusively on ambulance arrival to initiate lifesaving care.³

The sixth implication is evaluative. Australia would benefit from a stronger mechanism for capturing medical lessons from terrorism-related and other high-threat incidents. At present, lessons are often identified through coronial, policing or broad emergency-management review processes, but the medical consequences of delayed access, extraction sequencing, field triage and hospital absorption are not always examined in a dedicated clinical-improvement frame. A national or cross-jurisdictional process for medical after-action review in high-threat incidents would help ensure that lessons are translated into doctrine, education and equipment decisions rather than remaining isolated within local experience.^{7,19}

Taken together, these implications suggest that Australia does

not need to copy a foreign model wholesale. Rather, it should develop a clearly Australian terrorism-medicine framework built around protected casualty access, narrow lifesaving intervention sets, interagency clarity, hospital surge linkage and public hemorrhage-control readiness. The core lesson from international comparison is not that one jurisdiction is universally correct. It is that systems with clearer medical access doctrine are better placed to convert threat understanding into survivability benefit.

Conclusion

The central lesson from terrorism-related medical response is that survivability is governed not only by clinical skill, but by how threat is translated into access. TECC remains the most useful common framework because it aligns care with operational reality and recognises that lifesaving treatment may need to begin before conventional scene safety is fully restored. The United States has operationalised this most clearly through forward hemorrhage-control logic and protected warm-zone care, while the United Kingdom and selected European systems demonstrate both the value of strong interoperability and the clinical consequences of delayed casualty access. Australia possesses strong strategic security guidance and capable emergency-care systems, but it would benefit from a more explicit terrorism-medicine doctrine that clarifies protected casualty access, interagency thresholds, and the medical lessons to be drawn from hostile incidents.

Several recommendations follow from this analysis. First, Australia should develop a nationally recognisable doctrine for medical response to high-threat incidents that defines operational phases, minimum expected interventions by phase, and thresholds for protected or escorted medical access. Second, ambulance services, police, fire and rescue, trauma centres and emergency departments should jointly exercise high-threat scenarios that specifically test the transition from tactical containment to casualty contact, treatment, extraction and hospital reception. Third, Australian health and emergency-service education should incorporate formal terrorism-medicine content, including hemorrhage control under threat, extraction discipline, casualty collection points and interagency decision-making in contested environments. Fourth, designated trauma centres and likely receiving hospitals should strengthen no-notice violent-incident planning to ensure that earlier extraction from the field is matched by effective hospital surge absorption. Fifth, Australia should expand public and venue-based hemorrhage-control capability through training, equipment placement and integration into crowded-place preparedness. Finally, Australia should establish a more formal process for capturing and disseminating medical lessons from high-threat incidents, so that doctrinal and clinical improvements are driven by systematic review rather than isolated local events.

A modern Australian approach should not attempt to replicate foreign systems without adaptation. It should instead adopt the

core principle shared by the strongest international practice: when the threat allows it, even partially, the medical system must be able to move lifesaving care closer to the point of wounding. In terrorism incidents, minutes lost to avoidable delay may become lives lost to preventable injury. For Australia, the next stage of maturity is, therefore, not simply better threat awareness, but clearer doctrine, better integration and a deliberate commitment to survivability-focused medical access.

Conflict of interest

The authors declare no conflicts of interest.

Funding

The authors received no funding for this study.

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