income countries (LMIC). The objective is to develop a tool that (1) identifies the essential components of an urban emergency response system, (2) outlines methods for identifying gaps among components, (3) recommends best practices for addressing these gaps, and (4) recommends improvement strategies to policy makers.

Methods A systematic review of literature was conducted to identify existing tools, scoring systems and urban emergency response indices. Then, in-depth interviews (IDIs), and focus group discussions (FGDs) were held with key stakeholders to identify essential response components. This was followed by a modified Delphi process with 25 emergency response experts, to score each component on a scale of 1 to 4 (1 being least critical and 4 being most critical). The highest ranked components were included in the City Emergency-health Response Capability (CERC) tool.

Results The literature review yielded 20 articles defining components to an emergency response system. Then 25 IDIs and 12 FGDs independently identified further components, which were subsequently ranked in the Delphi process. The highest ranked components were categorized into 5 domains: service delivery, safety and security, human resource, command and control, policy and procedures. The final CERC tool will use a set of scored questions and observations about these components in implementation.

Conclusion CERC aims to objectively identify gaps in LMIC urban emergency response systems. Using this tool, city officials can identify areas for improvement and resource allocation to increase their disaster-readiness.

**P1.002** PREHOSPITAL TRAUMA BURDEN MANAGED BY A SOUTH AFRICAN PROVINCIAL EMERGENCY MEDICAL SERVICE

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Background Trauma is one of the leading causes of death and disability in South Africa. There is a paucity of data describing the prehospital trauma burden and the aim of this study was therefore to describe the epidemiology of trauma emergencies managed by the Western Cape government Emergency Medical Service (WCG EMS) in South Africa.

Methods This retrospective study included a descriptive analysis of all trauma patients managed between July 2017 and June 2018.

Results The WCG EMS managed 492,303 cases during the study period. Of these cases, 168,980 (34.3%) were trauma cases. The majority of patients (66.4%) were males and between the socio-economically active ages of 21–40 years old (54.0%). Assaults were the most common cause of trauma emergencies, accounting for 50.2% of the EMS case load managed. The patient acuity was categorised as urgent for 47.5% of the cases, and 74.9% of the prehospital trauma burden was transported to a secondary level health care facility for definitive care.

Conclusion This is the first report of the prehospital trauma burden managed in the Western Cape of South Africa. The Western Cape suffers a unique trauma burden with a high proportion of assault and violence related trauma.

**P1.003** ASSESSMENT OF URBAN EMERGENCY RESPONSE SYSTEMS: A LITERATURE REVIEW

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Background Emergency response and preparedness is a global priority, particularly in an urbanizing world. Urban emergency response systems require complex coordination between many stakeholders. However, there are no validated tools that evaluate a city’s overall emergency response capacity and preparedness for disasters. To inform the development of such a tool, we conducted a literature review on the components, scoring systems, and the reliability of evaluation methods to measure urban emergency response and preparedness.

Methods A systematic search of PubMed, Google Scholar and EMBASE identified studies, guidelines, measures, and instruments focused on evaluating emergency response and preparedness at the hospital, city, and national levels between 1983 to 2017. Studies focusing on computer simulations, and those without measurement or scoring systems were excluded.

Results Out of 473 nonduplicate citations, 20 studies were included after full-text review describing 1) quantitative scoring methodologies, 2) key components of a response/preparedness plan, and 3) the development of assessment tools. Quantitative assessments of emergency preparedness or response used index scores, summary scores, performance scales, and observational checklists. Key readiness components included staff training, security and safety, leadership, and incident command structure; whereas staff knowledge, vulnerability, and functional recovery were critical for emergency response planning.

Conclusion A comprehensive emergency response and preparedness tool can be developed from clearly defined components, using quantitative methods such as indices or checklists. Such a tool could help in the assessment of a city’s emergency preparedness and response capacity in a reproducible and objective manner, but will require validation in an urban environment.

**P1.004** IMPACTS OF SAFE COMMUNITY PROGRAMS ON SOCIAL LOSS IN JAPAN

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Background Since 2005 when the Safe Community programs (SC) based on the seven indicators was firstly introduced in Japan, there are 17 communities which have introduced the SC into their community development policies. Among these communities, there is growing interest in what impacts SC has made in their communities.

Methods The social cost of main causes of injuries such as suicide, traffic incidents, falls of the elderly was calculated...