100. Closing the First-Mile Gap in Emergency Care: The Emergency Care Awareness Network (ECAN): A Community-Based Model for Inclusive Emergency Preparedness in Kenya

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Background: Emergency care should begin before professional help reaches the patient. The World Health Organization's Emergency Care System Framework begins at the scene, where bystander response links communities to the emergency-care continuum through early recognition, basic first aid, and timely activation of transport to definitive care. In Kenya, inadequate community awareness and limited bystander capacity remain barriers to prehospital care, particularly in rural and underserved settings where access to emergency medical services is often delayed. To address this gap, the Emergency Care Awareness Network (ECA) was established in Kilifi County as a community-centered model strengthening the first mile
Methods: ECAN is a phased community model complementing existing emergency medical services. Its five components address emergency recognition, first aid and CPR, emergency activation and communication, community preparedness, and linkage with formal services. The first phase, currently underway, focuses on community awareness, sensitization, and stakeholder engagement to build trust, encourage participation, and establish collaborative relationships. These foundations will support subsequent skills training and stronger community-service linkages, promoting community ownership and sustainable participation in emergency preparedness and response
Results: Initial implementation has involved community awareness and sensitization activities, alongside stakeholder engagement. Three stakeholders have expressed interest in collaboration, providing an opportunity to strengthen community emergency preparedness. However, formal documentation of community reach and participation remains limited, highlighting the need for systematic monitoring and evaluation in subsequent phases.
Conclusion: ECAN is a locally developed, community-centered initiative addressing gaps in emergency preparedness by strengthening the first mile of emergency care. Its phased approach, prioritizing community awareness, trust-building, and stakeholder engagement before skills development, aligns with the AfCEM 2026 theme of Inclusion. The model offers potential for adaptation in underserved communities across Kenya and other African settings, subject to further implementation and evaluation

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101. Transforming prehospital care in Kenya through a real-time electronic patient care record

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Background: Effective documentation in emergency medical services (EMS) is important for continuity of care, quality improvement and data-driven decision-making. In many African settings, paper-based patient care reports may be incomplete, illegible or lost during transfers, contributing to delayed communication and fragmented records. To support both clinical and operational EMS workflows, a digital solution was conceptualized to enable real-time information sharing while retaining offline functionality in low-resource environments.
Methods: A user-centred design approach was employed to develop an electronic patient care report (ePCR) based on enhanced adult, pediatric and maternal workflows. The platform was designed for Android-based field devices, enabling local data storage and synchronization when connectivity becomes available. Key features include digital patient documentation, hospital prenotification, automated vital-sign integration, dispatch support, mapping, secure audit trails and central data management. Development was structured around digital documentation, operational integration and decision-support features.
Results: The proposed ecosystem is designed to provide end-to-end visibility from call receipt at the dispatch Centre to hospital handover. It connects dispatch teams, ambulance crews and receiving facilities through patient-information sharing, location tracking, estimated arrival times and patient-condition updates. Documentation can continue offline, with synchronisation after connectivity returns. Expected benefits include more complete records, earlier hospital preparation, reduced information loss during transfers and organised EMS data for quality improvement, operational planning and research.
Conclusion: This innovation presents a context-appropriate ePCR ecosystem for Kenya and similar African EMS settings. By strengthening communication, supporting clinical decision-making and enabling data-driven service improvement, it has the potential to enhance prehospital care and continuity of care while advancing digital transformation across African EMS systems.

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