



EMS Strategic Improvement in Rural Areas

Addressing the inequities in EMS care & expanding access in underserved communities



EMS Clinical Governance Lead & Sub District Manager Eastern Cape Department of Health











Presentation Outline



- Current challenges in Rural EMS
- Strategic goals for EMS improvement
- Strategic management for Rural EMS
- Enhancing Response Time Efficiency
- Expanding EMS coverage in underserved areas
- Strengthening workforce capacity and training
- Community engagement & Prehospital care awareness
- Conclusion



Introduction

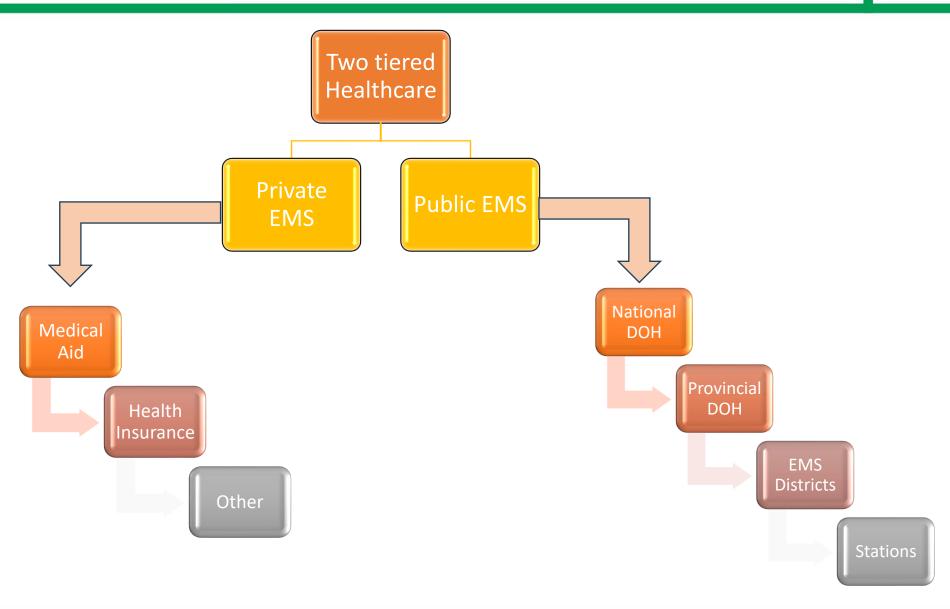


- Access to healthcare services remains unequal (R Rensburg, 2021), including access to EMS.
- Historic factors colonial system & apartheid
- Current factors socioeconomic disparities & shortage of workforce
- Access to timely, high quality prehospital care distribution
- Geographic barriers and resource constraints: rural, remote & underserved areas
- The presentation:
 - Identifies systemic EMS inequities
 - Strategies to improve coverage & care
 - & Promote health equity



South African EMS Landscape







Current Challenges in EMS



Healthcare in South Africa: how inequity is contributing to inefficiency

Published: July 6, 2021 5.01pm SAST

2030 HUMAN RESOURCES FOR HEALTH STRATEGY:

Investing in the health workforce for Universal Health Coverage













An online learning programme improves traumatic brain injury guideline adherence in a South African Helicopter Emergency Medical Service



Un programme d'apprentissage en ligne permet d'améliorer le respect des directives relatives aux lésions cérébrales traumatiques dans un service médical d'urgence par hélicoptère sud-africain

Willem Stassen *, Craig Wylie, Robyn Holgate

Aeromedical Division, ER24., PO Box 242, Paulshof 2056, Gauteng, South Africa

Received 3 March 2015; revised 6 May 2015; accepted 13 May 2015; available online 24 June 2015



Current Challenges in EMS



The future of South African paramedicine: Adapting to evolving challenges and shaping a patient-centred future

Paramedicine
1–8
© The Author(s) 2025
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/27536386251351938
journals.sagepub.com/home/pam



Naqeeb Majiet^{1,2}, Louis van Rensburg^{2,3}, Craig Wylie^{1,2}, Willem Stassen² and Naseef Abdullah^{1,4}

NEWS

Ambulance shortages in South Africa at critical levels, a threat to emergency care

Karen Singh | Published 3 weeks ago



Challenges in Rural EMS



- Geographic Barriers
- Infrastructure deficits
- Resource Limitations
- Retention strategy
- Delayed response times
- Health system disparities
- Financial & Budget Constraints
- Limited private-sector penetration
- Public Awareness & Cultural Factors

Overburdened public EMS



Strategic goals for rural EMS improvement



- Ensure universal EMS coverage aligned with NHI principles.
- Reduce response time disparities across provinces.
- Improve EMS workforce distribution and training.
- Increase community trust and awareness of EMS services.
- Integrate EMS into broader public health and primary care strategies.
- Continuous strategic planning & monitoring



Strategic Management Approach



- Strengthening national coordination & policy development
- Provincial EMS strengthening
- Public-private partnerships
- Data systems
- Workforce planning



Enhancing response time efficiency



- Use of CAD systems to optimize dispatching.
- Dynamic Deployment Strategy
- Reduce turnaround time in hospitals
- Implement rapid response teams
- Have performance measures and continuous improvement
- Community-based first responders.
- Decentralized EMS stations in high-need rural zones.
- Improved aeromedical services in remote areas.
- Change management ADKAR Model/Kotter's 8 step



Expanding EMS coverage in underserved areas



- WHO recommendation on coverage
- Task-shifting models: Training community health workers in basic EMS roles.
- EMS outreach programs in remote areas and rural villages.
- Addressing language and cultural barriers in prehospital care.



Strengthening EMS workforce capacity & training



- Training & Development, Stassen (2015) & Majiet (2025)
- Improve quality of prehospital health services, Kobusingye et al. (2005)
- Retention strategies
 - Push vs Pull factors, Govender (2024) & Mthombeni (2025)
 - Competitive benefits, Fried & Fottler (2015)
 - Management & supervisory teams, Fried & Fottler (2015)
 - Career growth
- Wellness and resilience programs for EMS personnel.



Community engagement & prehospital care awareness



- Promote EMS hotline awareness in rural languages.
- Community & school responder programme.
- Local Health Advisory Forums
- Use of local radio and social media to share EMS knowledge.



African OHEC System



• WHO, recommends a two-tier system for LMIC

Tier 1

Tier 2

- Community response
- EMS provides support
- Public engagement
- Access information & education
- Collaboration

- Formal EMS
- Community provides support
- Participation in LHAF

Implication: Positive responsive, locally embedded emergency care system—strengthening the entire chain of survival.



Donabedian model to assess the quality of prehospital care



Structure

Assesses EMS infrastructure & resources

Processes

Assess how EMS care is delivered

Output

Measures the health results



Conclusion



- South Africa's EMS system faces structural inequities.
- Strategic ways to improve rural access
- Investment in remote and rural prehospital care is needed
- Expanding EMS access is not only a health issue, but a matter of equity and justice.
- There is a need to establish tier 1