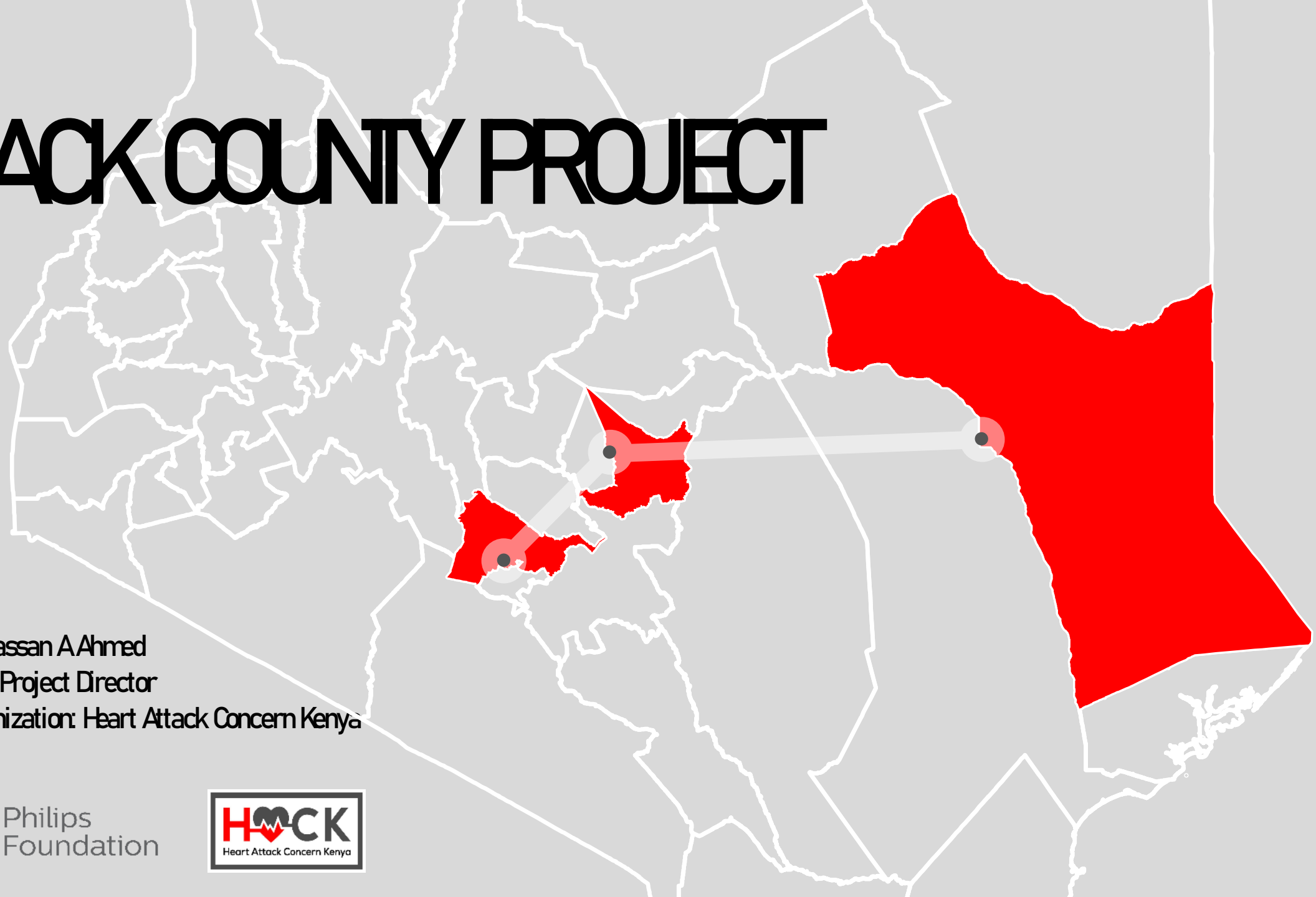
HACK COUNTY PROJECT



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Acknowledgement

- Philips Foundation
- Philips East Africa
- Ministry of health
- County Government of Kiambu, Embu and Garissa

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EMBU COUNTY GOVERNMENT
THE LAND OF OPPORTUNITIES

COUNTY GOVERNMENT OF KIAMBU
URUTAGWO MWIRUTI

THE COUNTY GOVERNMENT OF GARISSA
HAKI JWE NGAO
KENYA

REPUBLIC OF KENYA
HARAMBEE
MINISTRY OF HEALTH

Project Overview

Aim: The Project aims to improve preparedness for recognition, diagnosis, prompt and appropriate treatment for heart attack patients in 3 counties, namely: Kiambu, Garissa and Embu

Intervention:

- Development of STEMI guidelines, training of health workers and mentorship
- Equipping of facilities with ECGs and training
- Strengthening heart attack referral systems
- Educating the public on recognition of heart attack symptoms and appropriate care
- M&E for learning and policy advocacy

Project duration: 12 months (ending Oct 2021 (need for a no-cost extension to Dec 2021)

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Background

A collaboration between Heart Attack Concern Kenya, Philips Foundation and County Government of Kiambu, Embu and Garissa

Main purpose was to We set out to chart and grade the level of preparedness for ACS care according to six constructs:

a) Presence of in-house protocols of care
b) Timely diagnosis
c) Appropriate monitoring and resuscitation
d) Timely delivery of antiplatelet and reperfusion therapy
e) Escalation and de-escalation processes
f) availability of local expertise.

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Objective

To carry out a situational analysis of select county hospitals including but not limited to healthcare worker skills and knowledge and the facilities' resources and preparedness in ACS diagnosis and management

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Level of Preparedness of County Hospitals: Methodology

Aim: A multi-layered and cross-sectional survey of multiple county hospitals and facilities in Embu Kiambu and Garissa skills was used to assess these six constructs

Phase 1

- A multi-layered and cross-sectional survey of multiple county hospitals and facilities in Embu Kiambu and Garissa skills was used to assess these six constructs

Phase 2

- This was accompanied by independent verification of local resources of healthcare workers

Area of Focus

- Availability of ECG machines in the emergency department
- availability of thrombolytics
- rate of dissemination of cardiac enzyme results
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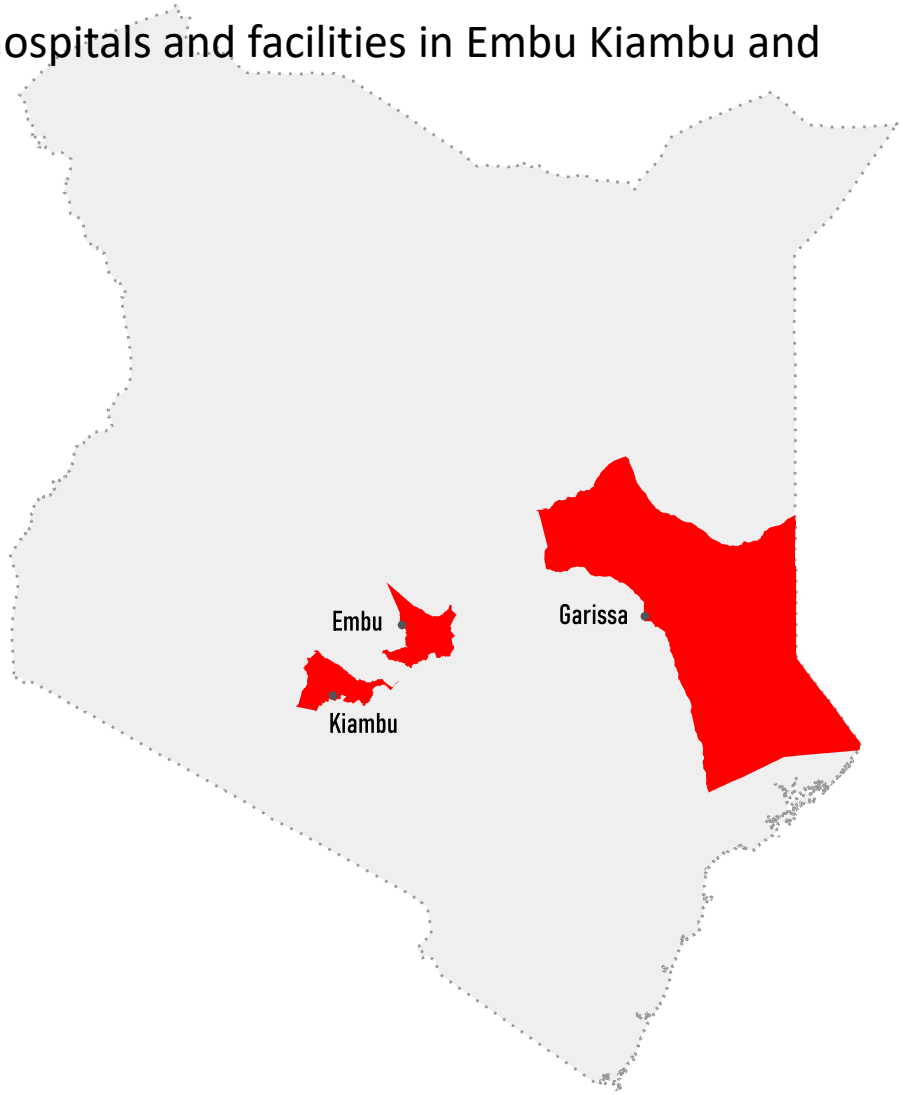
- existence of a STEMI and Cardiac protocol
- referral networks were captured in a structured questionnaire.



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	1	2	3	4	5	6	7	8	9	10	11	12
Level	Chest pain Protocol	ECG Availability	ECG Interpretation	Troponin Testing	Aspirin Loading (300mg)	Anti-platelet therapy loading	Lysis Protocol	Thrombolysis	Monitoring	Resuscitation protocols	Defibrillator	Referral System
5	In Situ and staff well versed	Within 10 minutes	Dedicated system to ensure interpretation within 10 minutes of performance. Referral processes and on-site interpretation included	Result within 60 minutes	Can be given at on arrival and within 10 minutes	Can be given at on arrival and within 10 minutes	In situ and staff we'll versed	Available at entry point. Can be given within 20 minutes of ECG	ECG and hemodynamics monitoring in ER and ICU/HDU level with spare available	Appropriate staff mandated to complete ACLS course. At least two per shift	Functioning and in ER and HDU	In situ and staff well versed
4		Within 30 minutes	No dedicated system. ECGs can be reported via informal network within 30 minutes	Result within 120 minutes	Available and can be given within 30 minutes	Available and can be given within 30 minutes		Available at entry point. Can be given within 60 minutes of ECG	ECG and hemodynamics monitoring in ER and ICU/HDU level. No spare available			Staff not well versed
3	In place. Staff not well versed	Within 90 minutes	Within 90 minutes	Result within six hours	Available and can be given within 90 minutes	Available and can be given within 90 minutes	In place. Most staff not well versed	Not available at entry point or cannot be given in 60 minutes	ECG and hemodynamics monitoring in either ER or ICU/HDU but not in both level	Less than 30% staff on shift able to do this	One in hospital	Informal processes exist but not formalized
2		Within 3 hours	Within 3 hours informally	Result within 12 hours	Available within 3 hours	Available within 3 hours		Available within 3 hours	Only one of the above available, but not both, within the ER or HDU level areas			Process depends on person to person referral
1	Not in place	Greater than 3 hours	Greater than 3 hours	Greater than 12 hours to get the result	Not available	Not available	Not in place	Takes more than three hours to access	Not in place	Not in place	Not in place	No process demonstrated

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Level of Preparedness of County Hospitals

County	Hospital	Level of heart attack preparedness based on the 12 elements criteria											
		Chest pain Protocol	ECG Availability	ECG Interpretation	Troponin Testing	Aspirin Loading (300mg)	Anti-platelet therapy loading	Lysis Protocol	Thrombolysis	Monitoring	Resuscitation protocols	Defibrillator	Referral System
Garissa	Garissa level 5	Not in place	Within 90 minutes	Within 3 hours informally	Result within 120 minutes	Available and can be given within 90 minutes	Available and can be given within 90 minutes	Not in place	Available within 3 hours	ECG and hemodynamics monitoring in either ER or ICU/HDU but not in both level	Not in place	One in hospital	Informal processes exist but not formalized
Garissa	Iftin level 4	Not in place	Greater than 3 hours	Within 3 hours informally	Result within 12 hours	Not available	Not available	Not in place	Takes more than 3hrs to access	Only one of the above available, but not both, within the ER or HDU level areas	Not in place	Not in place	No process demonstrated
Embu	Embu level 5	Not in place	Within 90 minutes	Greater than 3 hours	Result within six hours	Available and can be given within 90 minutes	Not available	Not in place	Takes more than 3hrs to access	ECG and hemodynamics monitoring in either ER or ICU/HDU but not in both level	Not in place	One in hospital	Informal processes exist but not formalized
Embu	Siakago level 4	Not in place	Greater than 3 hours	Greater than 3 hours	Result within 12 hours	Available within 3 hours	Not available	Not in place	Takes more than 3hrs to access	Only one of the above available, but not both, within the ER or HDU level areas	Not in place	Not in place	Informal processes exist but not formalized
Kiambu	Kiambu level 5	Not in place	Within 3 hours	Within 3 hours informally	Result within six hours	Available and can be given within 30 minutes	Not available	Not in place	Takes more than three hours to access	Only one of the above available, but not both, within the ER or HDU level areas	Not in place	One in hospital	Process depends on person to person referral
Kiambu	Kihara level 4	Not in place	Within 30 minutes	Reported via informal network within 30 minutes	Result within six hours	Available within 3 hours	Not available	Not in place	Takes more than 3hrs to access	Available within 3 hours Only one of the above available, but not both, within the ER or HDU level areas	Not in place	One in hospital	Process depends on person to person referral

Conclusion

A structured approach to diagnosing and managing ACS patients is needed. There is urgent need for resource mobilization, training of healthcare workers, provision of ECG, provision of thrombolytics and establishment of an elaborate referral network.

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Thank You