Policy Brief

Assessing the readiness of healthcare facilities to provide non-communicable disease services in Kenya

Background

Kenya is experiencing an increasing burden of non-communicable diseases (NCDs). Half of all hospital admissions and more than a third (39%) of all deaths in Kenya are attributable to NCDs such as cancers, cardiovascular diseases, chronic respiratory diseases, diabetes, and mental health conditions. Efficient management of NCDs requires a systematic approach to the provision of health services. There are several elements to this approach. These include availability of equipment, diagnostic capacity, and medicines and commodities. Assessment of the readiness of the healthcare system to deliver services for NCDs is crucial for planning and resource allocation. This policy brief draws on the 2019/20 Kenya health facility assessment survey conducted by the African Population and Health Research Center (APHRC) to determine the readiness of a representative sample of facilities to manage NCDs in Kenya.

Key Messages

- Most healthcare facilities had essential equipment for the diagnosis of NCDs. Lack of essential medicines and commodities, as well as the lack of trained staff and national guidelines were the key gaps in the management of NCDs.
- Primary health care facilities (levels II and III) and public facilities had limited capacity to manage NCDs compared to levels IV-VI and private facilities.
- Readiness to provide diabetes and cancer services was optimal among facilities expected to offer these services.
- Facilities located in highly urbanized counties were more ready to manage NCDs than those located in rural and marginalized counties.

To address these barriers, this brief calls for the Kenyan government to:

- Strengthen primary healthcare system responses to NCDs through capacity-training of staff on the management of common NCDs, providing adequate national treatment guidelines and increasing the supply of medicines.
- Increase resource allocations to the county governments to support public primary healthcare facilities in delivering the NCD services. Rich experiences from the private facilities that have better NCD management capacity can inform the planning of NCD services in the public health care facilities.

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Introduction

Non-communicable diseases (NCDs) pose a major global health challenge in the 21st century, undermining socio-economic development around the world [1]. In low-resource settings, NCDs drain household resources due to the associated high healthcare costs, and often lead to loss of economic productivity driving households and individuals into, poverty [2]. An estimated 41 million annual deaths are caused by NCDs worldwide, and nearly 80% of these deaths occur in low- and middle-income countries (LMICs) [2].

Kenya is experiencing an increasing burden of chronic diseases with NCDs accounting for 39% of all deaths, over half of the hospital admissions, and more than half of hospital deaths [3]. The four major NCDs are: cardiovascular diseases (CVDs), cancers, diabetes and chronic respiratory diseases (CRD) account for over half of all NCD mortality in Kenya. Assessing the capacity of healthcare facilities at different levels of care in delivering NCDs management is the first step to providing a better understanding of the healthcare systems needs that require improvement This policy brief draws on the 2019/20 Kenya health facility assessment survey that aimed to determine the readiness of facilities to manage NCDs.

Measuring readiness

The data used in the preparation of this policy brief were obtained from a national survey conducted between June 2019 and December 2020 by APHRC. The study involved a sample of 258 private and public health facilities from 11 counties distributed across all the regions in Kenya. A facility assessment questionnaire was used to collect data on the availability of health inputs comprising equipment, diagnostic capacity, and medicines and commodities (Figure 1). A conversant health professional from each healthcare facility was selected to participate in the facility assessment questionnaire. The service readiness scores were calculated as the mean percentage availability of the tracer indicators such as trained staff and guidelines, equipment, diagnostic capacity, and medicines and commodities. A cut-off threshold of ≥70% was used to classify facilities as "ready" to manage NCDs following the WHO-recommended methodology for Service Availability and Readiness Assessment (SARA) [4].

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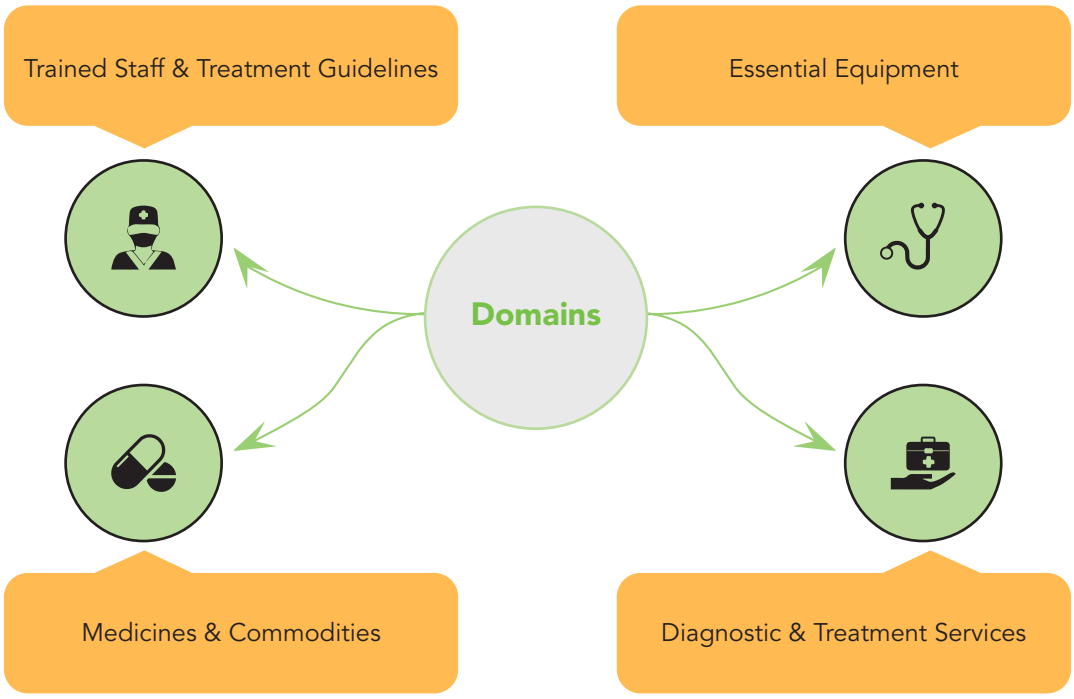

Figure 1 Readiness domains

Key Findings

The readiness of health facilities to manage NCDs

Table 1 shows the readiness of all health facilities to manage NCDs. Most healthcare facilities had essential equipment for the diagnosis of NCDs. However, the facilities were not ready to manage CVD, CRD and mental illness. Readiness to provide Diabetes and cancer services was optimal among facilities expected to offer these services.

Table 1 The readiness of health facilities to manage NCDs

Domains	Diabetes (N=212)	CVD (N=168)	CRD (N=168)	Cervical cancer (N=63)	Mental illness (N=105)
Trained staff & guidelines	57%	46%	52%	77%	29%
Equipment	93%	97%	57%	85%	49%
Medicine & commodities	53%	64%	34%	95%	14%
Readiness	74%	68%	47%	83%	26%

The readiness to manage NCDs by facility ownership

Table 2 shows the readiness to manage NCDs by facility ownership. The public facilities were not ready to provide services for all the chronic diseases studied except cervical cancer. The majority of private facilities offering services for diabetes, CVD and cervical cancer were classified as ready. Private facilities were more ready to provide chronic disease management services than public facilities.

Table 2 The readiness to manage NCDs by facility ownership

Domains	Public Facilities				
	Diabetes	CVD	CRD	Cervical cancer	Mental illness
Trained staff & guidelines	48%	36%	48%	82%	24%
Equipment	91%	95%	55%	73%	47%
Medicine & commodities	39%	50%	17%	92%	16%
Readiness	65%	59%	40%	82%	27%
	Private Facilities				
Trained staff & guidelines	62%	54%	56%	72%	36%
Equipment	94%	98%	58%	97%	51%
Medicine & commodities	62%	75%	48%	97%	10%
Readiness	79%	77%	54%	84%	25%

The readiness to manage NCDs by facility level and region

Figure 2 shows the readiness to manage NCDs by levels of care. Levels V and VI facilities were ready to provide services for most of the chronic diseases studied. The healthcare services for diabetes were available in most facilities across all levels of care. However, mental healthcare services were unavailable across all the levels of care. Primary health care facilities (levels II and III) had limited capacity to manage NCDs compared to higher-level facilities (IV-VI).

Level II					
	Diabetes	CVD	CRD	Cancer	Mental illness
Trained staff & guidelines	58%	42%	52%	74%	30%
Equipment	93%	96%	55%	92%	48%
Medicine & commodities	51%	61%	30%	98%	9%
Readiness	72%	67%	46%	85%	23%

Level III					
	Diabetes	CVD	CRD	Cancer	Mental illness
Trained staff & guidelines	42%	47%	44%	78%	22%
Equipment	92%	97%	57%	89%	51%
Medicine & commodities	45%	58%	34%	94%	21%
Readiness	72%	66%	45%	84%	30%

Level IV					
	Diabetes	CVD	CRD	Cancer	Mental illness
Trained staff & guidelines	87%	66%	74%	80%	32%
Equipment	99%	100%	71%	66%	52%
Medicine & commodities	88%	88%	66%	89%	35%
Readiness	94%	87%	71%	79%	41%

Figure 2 The readiness to manage NCDs by facility ownership

Level V					
	Diabetes	CVD	CRD	Cancer	Mental illness
Trained staff & guidelines	100%	100%	94%	100%	75%
Equipment	100%	93%	72%	78%	78%
Medicine & commodities	96%	84%	67%	89%	51%
Readiness	99%	89%	78%	92%	61%

Level VI					
	Diabetes	CVD	CRD	Cancer	Mental illness
Trained staff & guidelines	100%	100%	100%	100%	83%
Equipment	100%	100%	83%	100%	83%
Medicine & commodities	89%	100%	67%	100%	57%
Readiness	94%	100%	83%	100%	67%

The readiness to manage NCDs by region.

The readiness to manage NCDs by facility region is shown in figure 3. Medical equipment were fairly available across all the study counties except in Wajir. Facilities located in highly urbanized counties such Mombasa, Nairobi and Kisumu were more ready to manage NCDs than those located in the rural counties such as Wajir and Embu.

Region	Level	n	County	Staff & Guidelines	Equipment	Medicines & Commodities	Mean readiness score
Nairobi & Central	Level I-VI	36	Nairobi	65%	81%	50%	63%
	Level I-IV	19	Kirinyaga	67%	70%	35%	56%
	Level I-IV	20	Kiambu	52%	60%	61%	58%
Rift Valley	Level I-III	22	Baringo	48%	79%	39%	55%
	Level V	1	Nakuru	100%	95%	96%	96%
	Level I-IV	22	Narok	38%	79%	36%	52%
	Level VI	1	Uasin Gishu	100%	100%	86%	92%
Eastern	Level I-IV	21	Embu	36%	63%	27%	43%
	Level I-IV	23	Kitui	34%	77%	52%	55%
Western & Nyanza	Level V	1	Kisii	80%	90%	57%	75%
	Level I-V	22	Kisumu	49%	81%	54%	61%
	Level I-V	24	Nyamira	33%	73%	41%	49%
Coast & North Eastern	Level I-V	23	Mombasa	66%	80%	69%	73%
	Level V	1	Garissa	100%	90%	79%	87%
	Level I-IV	21	Wajir	30%	51%	27%	38%

Figure 3 The readiness to manage NCDs by region

Policy Implications

The findings of this study have important policy implications for NCD management in Kenya. Despite CVD being the most common or prevalent of the NCDs in the country, facilities were less prepared to manage this condition compared to diabetes. There is need for the Kenyan government to prioritize service delivery for NCDs according to disease burden.

The gaps identified in terms of service availability and readiness, as well as the disparities by type and level of care, coupled with sub-optimal availability of essential medicines, emphasize the need for a comprehensive primary care approach to expand the capacity of health facilities to deliver NCD services in Kenya.

Primary healthcare facilities are the first point of contact with the majority of the population. It is therefore important to strengthen the capacity of primary care facilities across the country to manage NCDs.

References

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This study was funded by the Amsterdam Institute for Global health and Development (AIGHD), through the Joep Lange Chairs and Fellows Programme.

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