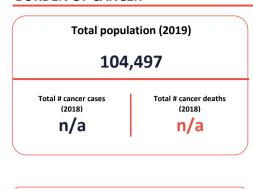


BURDEN OF CANCER



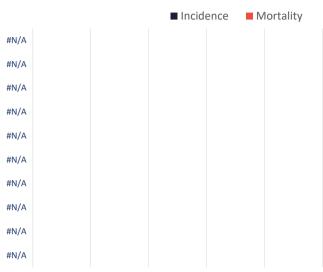
Premature deaths from NCDs (2016)

190

Cancer as % of NCD premature deaths (2016)

31.4%

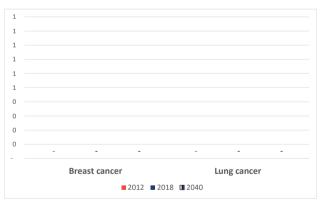
Most common cancer cases (2018)



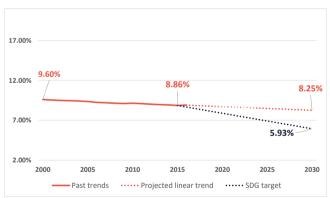


TRENDS

Estimated past and future trends in total cases per year (breast and lung)



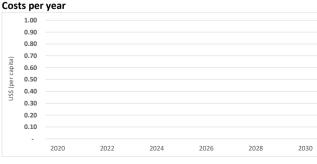
Probability of premature death from cancer per year



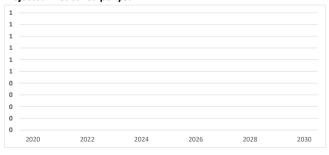
INVESTMENT CASE (2019)

*Upper middle income

At this income level, investing in a package of essential services and scaling-up coverage will:



Projected lives saved per year



■ Retinoblastoma ■ Wilms tumour

Other childhood cancer

TONGA

HEALTH SYSTEM CAPACITY

^a per 10,000 cancer patients Availability of population-based cancer	2242		WORKFORCE			
registry (PBCR)**	2019	Registration activity	^a per 10,000 cancer patients			
Quality of mortality registration***	2007-2016	No coverage	Available staff in Ministry of Health who dedicates significant proportion of their time to cancer	2019	yes	
# of external beam radiotherapy	2010	,	# of radiation oncologist ^a	2019	n/a	
photon,electron) ^a	2019	n/a	# of medical physicist ^a	2019	n/a	
# of mammographs ^a	2020	n/a	# of surgeons ^a	2014	n/a	
of CT scanners ^a	2020	n/a	# of radiologist ^a	2019	n/a	
# of MRI scanners ^a	2020	n/a	# of nuclear medicine physician ^a	2019	n/a	
# of PET or PET/CT scanners ^a	2020	n/a	# of medical & pathology lab scientists ^a	2013	n/a	
FORMULATING RESPONSE						
Integrated NCD plan	2019	operational	# Public cancer centres per 10,000 cancer patients	2019	n/a	
NCCP (including cancer types)	2019	n/a	Early detection programme/ guidelines for 4 cancers (breast, cervix, colon, childhood)	2019	2 cancer(s)	
MPOWER measures fully implemented and achieved	2018	0	Pathology services	2019	generally available	
Cancer management guidelines	2019	yes	Bone marrow transplantation capacity	2019	generally not available	
Palliative care included in their operational, integrated NCD plan	2019	yes	Palliative care availability: community/home-based care	2019	generally available	
# of treatment services (surgery, radiotherapy, chemotherapy)	2019	1	Availability of opioids* for pain management	2015-2017	37	
Breast cancer screening program	2019	yes	*Defined daily doses for statistical purposes (S-DDD) per million inhabitants per day			
Breast cancer screening program: Starting age, target population	2019	n/a				
GLOBAL INITIATIVES						
Elimination of Cervical Cancer	ination of Cervical Cancer			Global Initiative for Childhood Cancer		
HPV vaccination programme coverage	2018	n/a	Annual cancer cases (0-14 years old)	2020	5	
Cervical cancer screening	2019	yes	Early detection programme/guidelines	2019	no	
Screening programme type	2019	opportunistic	Defined referral system	2019	no	
Screening programme method	2019	PAP smear	Annual cancer cases (0-14 years old)			
Screening participation rates	2019	<10%	Annual cancer cases (0-14 years old)			
Early detection programme/guidelines	2019	yes		■ Acute	lymphoid leukaemia	
Defined referral system	2019	yes	■ Hodgkin lymphoma ■ Burkitt lymphoma ■ CNS, low grade tumours			
				■ CN3, 10	ow grade tulliours	

^{**}The incidence estimates for this country have a high degree of uncertainty because they are not based on population based cancer registry
***The mortality estimates for this country have a high degree of uncertainty because they are not based on any national NCD mortality data