

# Use of Data to Support Decision-making in Cancer Care: Evidence- based Interventions

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# Cancer Burden



Second leading cause of death globally

~ 22% cancer deaths due to tobacco use

8.8 million deaths in 2015, ~70% in LMIC

Annual economic cost ~ US\$ 1.16 trillion (est)

~14 million new cases in 2012, expect increase

~ 4 out of 5 LMIC have no data to inform cancer policy

# Cancer Statistics and Sources of Information

## Incidence Rate

- Census (denominator)
- Population-based cancer registry
- Death registration with causes of death

## Mortality Rate

- Census (denominator)
- Death registration with causes of death

## Cancer Survival

- Cancer registry, treatment information
- Death registration

## Risk Factors

- Population-based surveys - GATS, WHO STEPS

# Cancer Registries



Systematic collection, storage, analysis, and interpretation of data on cancer occurrence



Need authority, funding support, training



Hospital-based cancer registry  
Useful for hospital planning  
Evaluate clinical performance



Population-based cancer registry  
All cancer cases, all sources,  
geographically defined population  
Enables computation of incidence rates

# Health Surveillance



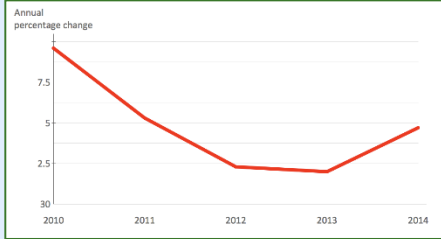
Population-based  
Cancer or NCD Registries

Vital Registration  
with Cause(s) of Death

Unique Personal Identifying  
Number



# Uses of Population-based Cancer Registry Data



**Inform Cancer Burden**

**Guide Patient Care**

**Guide Cancer Research**

**Evaluate Impact of Interventions**



# Needs



## Population-based cancer registries

- National Investment
- Mortality data
- Authority (legislation)
- High completeness, quality

Death registration with cause of death

Medical care system, basis of diagnosis (pathology)

Unique personal Identifying Number

Data access, sharing, and use

# Increase Use of Data

From cancer and death registries, population-based surveys, by hospital and registry staff, researchers, policy makers, patients, families

Analyze, Report, Communicate  
Registry Data

Improve  
Registry Operations,  
Data Quality, Patient Management  
Cost Efficiencies





