

## Policy Brief

Open access Protocol

### BMJ Open Development of National Cancer Database for Cost and Quality of Life (CaDCQoL) in India: a protocol

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#### ABSTRACT

**Introduction** The rising economic burden of cancer on healthcare system and patients in India has led to the increased demand for evidence in order to inform policy decisions such as drug price regulation, setting reimbursement package rates under publicly financed health insurance schemes and prioritising available resources to maximise value of investments in health. Economic evaluations are an integral component of this important evidence. Lack of existing evidence on healthcare costs and health-related quality of life (HRQL) makes conducting economic evaluations a very challenging task. Therefore, it is imperative to develop a national database for health expenditure and HRQL for cancer.

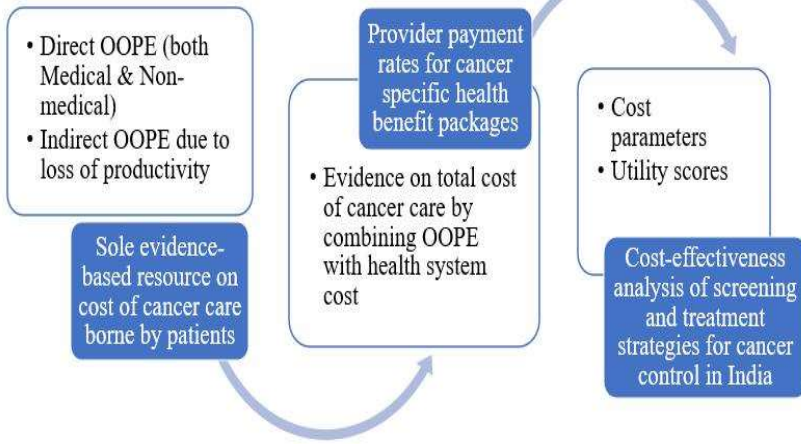
**Methods and analysis** The present study proposes to develop a National Cancer Database for Cost and Quality of Life (CaDCQoL) in India. The healthcare costs will be estimated using a patient perspective. A cross-sectional

#### Strengths and limitations of this study

- ▶ This study would lead to development of the first national database for costs and quality of life among patients with cancer in India.
- ▶ The patient costs and health-related quality of life scores will be determined by cancer site, stage of disease and type of treatment.
- ▶ The economic impact of cancer care on household financial risk protection will be assessed.
- ▶ Being a hospital-based study, we will not capture quality of life of cancer patients who do not seek care.
- ▶ The health system costs on cancer care will not be captured in this study, as these are available in National health system cost database.

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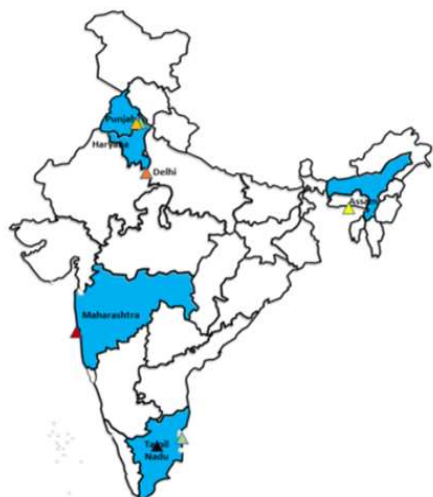
- First National Cancer Database for Costs and Quality of Life in India.
- This database would serve to build an open-access data repository to derive estimates of cancer-related medical care costs borne by the patients, indirect costs due to loss of productivity and Health-related quality of life (HRQOL).
- Estimates would be generated by type of cancer, stage or severity, as well as by treatment approach.



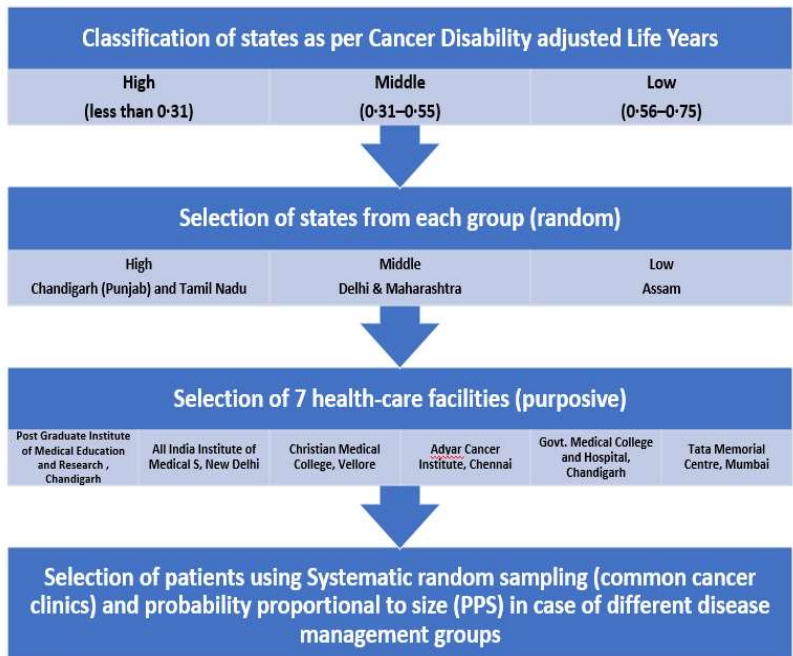
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### Aims and Objective

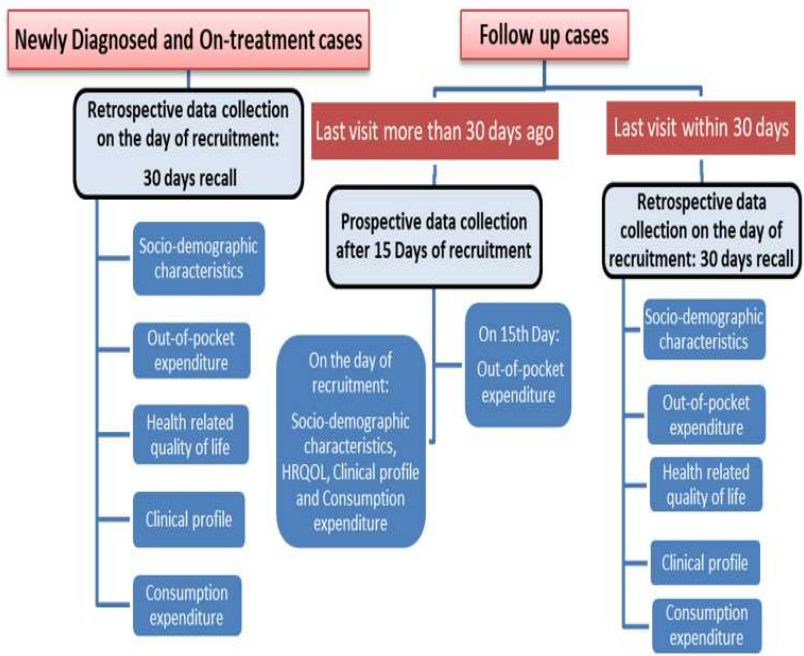
This policy brief addressed the policy question of economic burden and health-related quality of life among cancer patients in India. The results would be useful to inform policy decisions in the field of cancer such as informing health technology assessments for assessing the cost-effectiveness of anticancer drugs and price regulation



### Selection of health-care facilities



# Data collection plan



- The study sample would be sufficient to provide valid estimates of OOP, CHE and HRQOL for top 3, 6 and 12 cancers respectively in India, with a 5% margin of error and 95% CI.
- At 10% margin of error and 95% CI, our study would be powered to give valid estimates of OOP, CHE and HRQOL for top 11, 17 and 20 cancers respectively in India

Margin of Error	Sample size			Number of cancers with valid estimates		
	OOPE	CHE	HRQOL	OOPE	CHE	HRQOL
5%	1690	845	398	3	6	12
10%	422	211	99	11	17	20

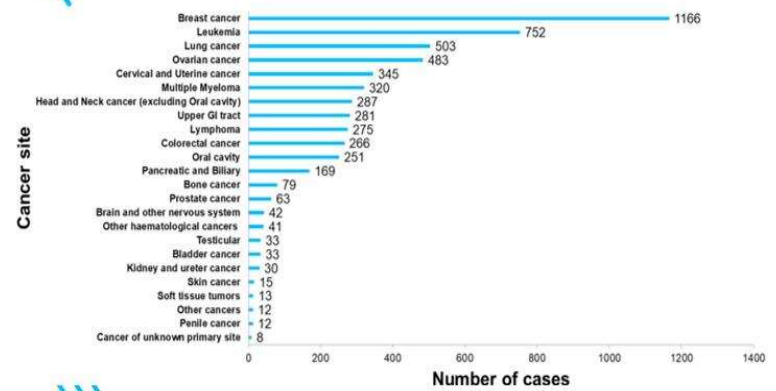
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## Preliminary findings

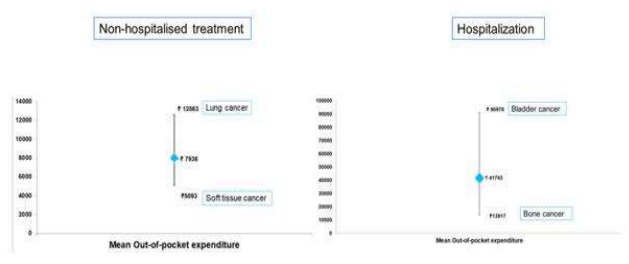
Out-of-pocket expenditure incurred per visit for non-hospitalised treatment of cancer in India

Components of OOPE	Mean (in ₹)	Standard Error (SE)
User fees/Hospital charges	353	46
Medicines	2591	139
Diagnostics	2777	96
Total Medical Expenditure	5722	181
Total Non-medical Expenses	2420	51
Overall OOPE (all cancers)	8142	192

## Distribution of cancers in India (Outpatient)



Out-of-pocket expenditure incurred for non-hospitalised and hospitalised cancer treatment



## Health-related quality of life among cancer patients

