Rational use of Medicines in Public health facilities of Tamil Nadu; A Provider's prescription analysis

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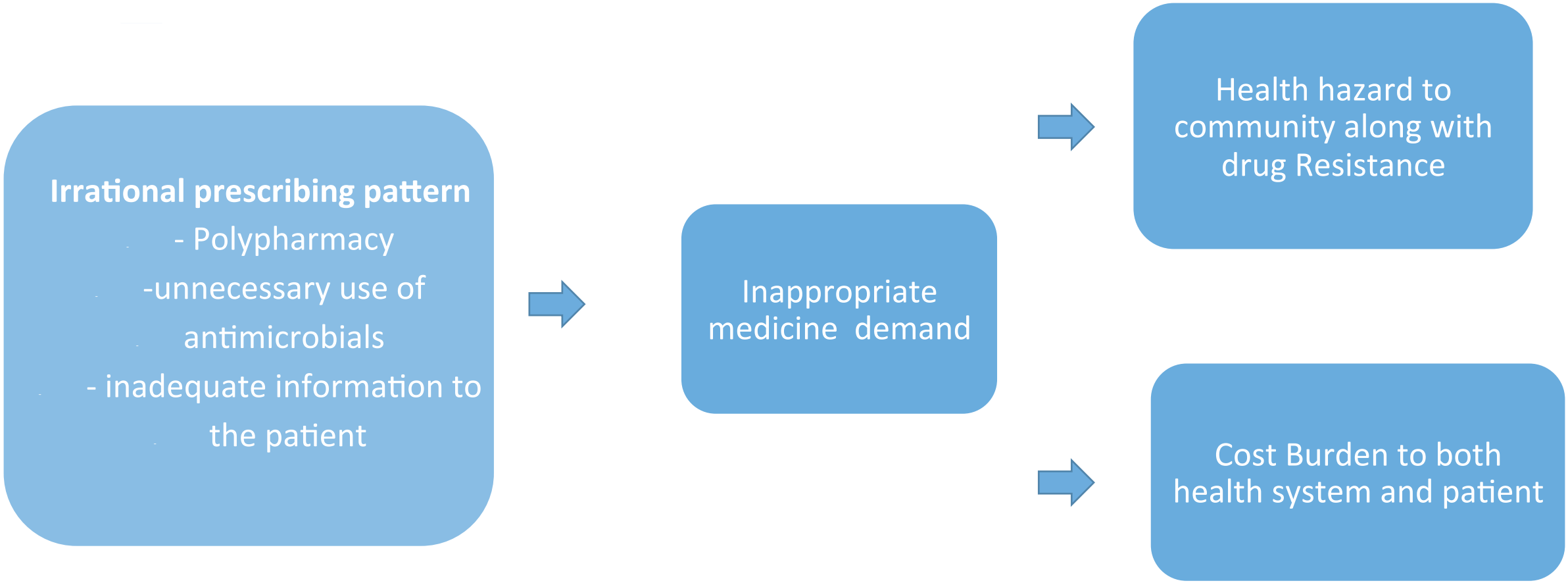
Introduction

- The rational use of drugs requires that patients receive medications:

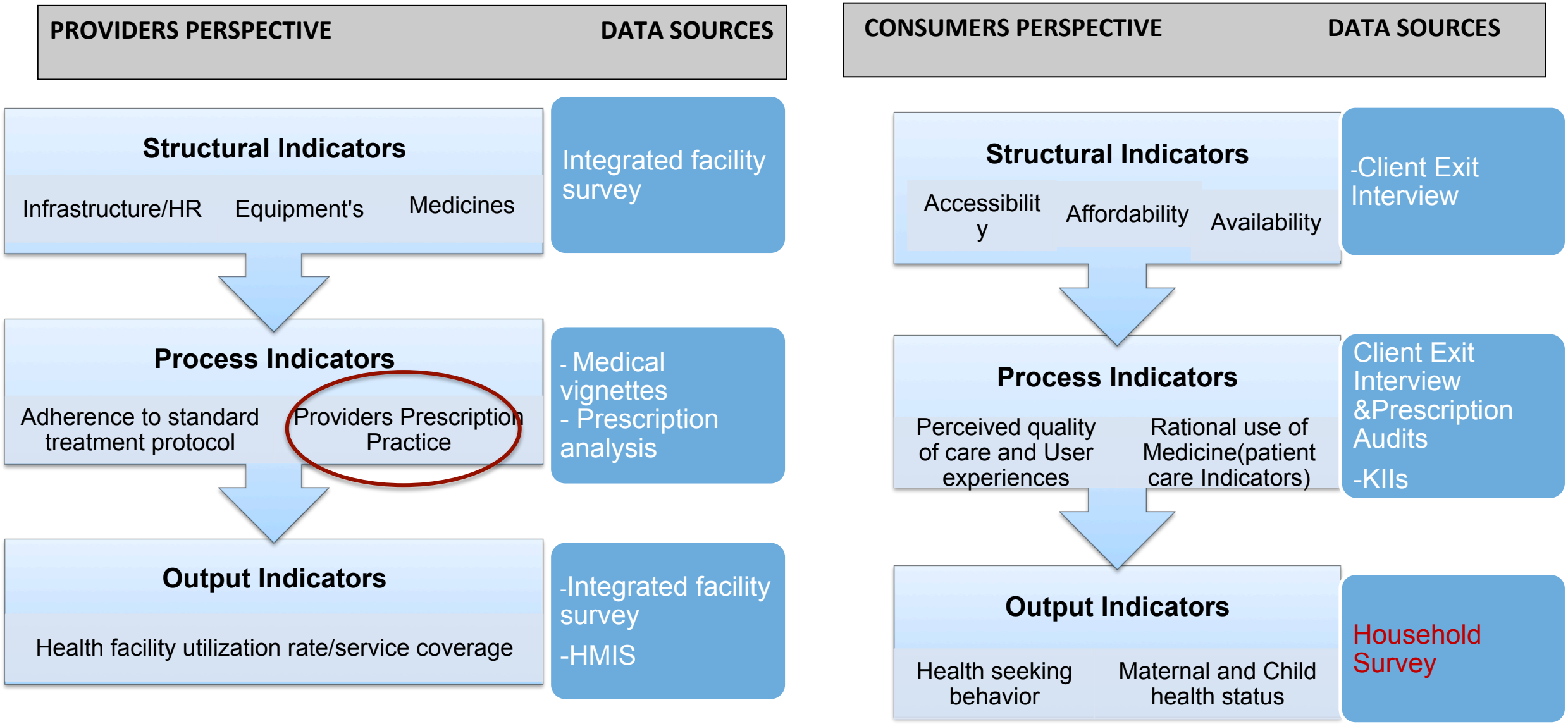
  - appropriate to their clinical needs,
  - in doses that meet their own individual requirements for an adequate period of time
  - at the lowest cost

- Worldwide more than 50% of all medicines are prescribed, dispensed, or sold inappropriately, while 50% of patients fail to take them correctly (WHO)

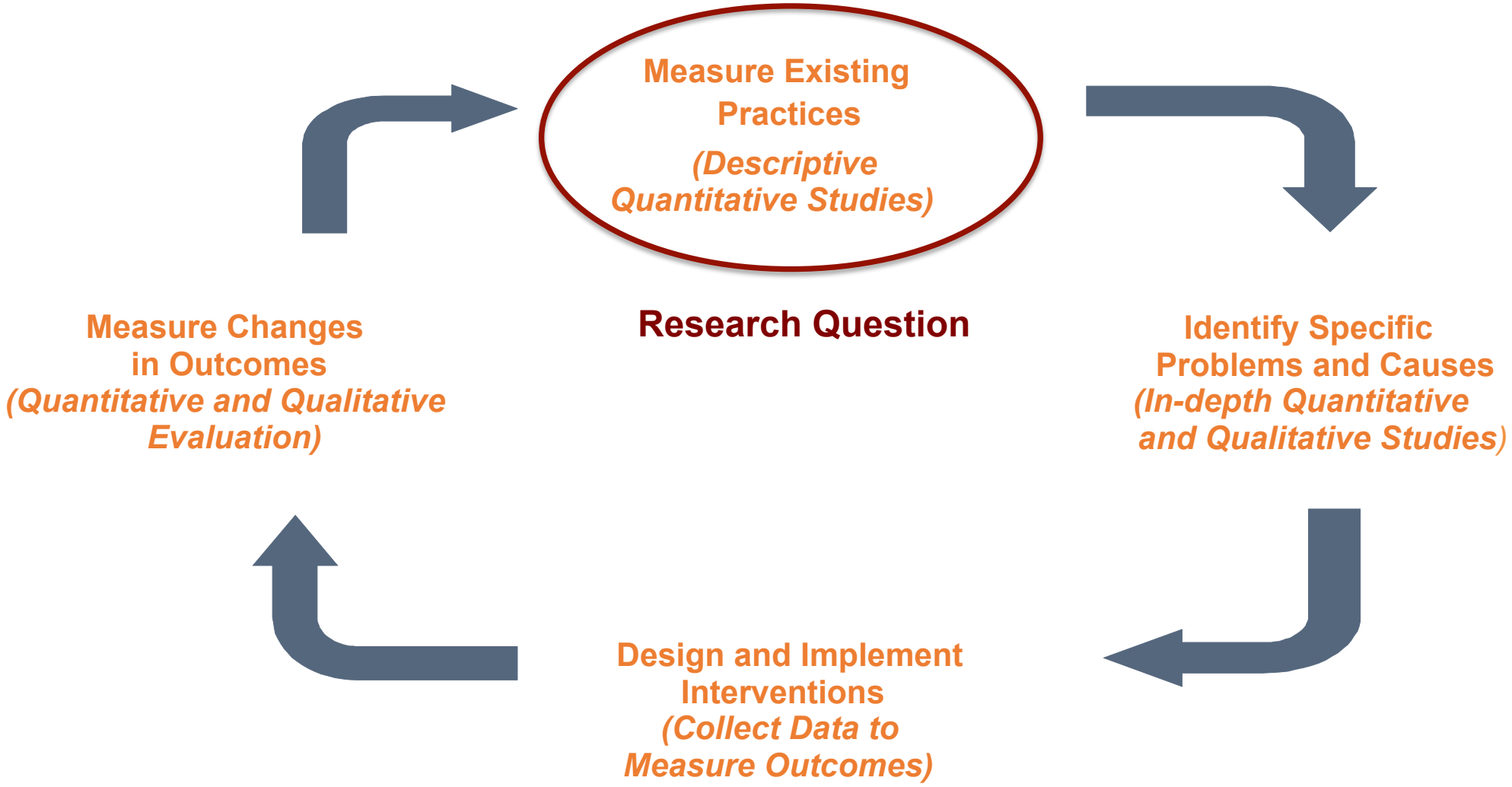
Rational drug use problem; health system relevance



Rational drug Use and Quality of care



Changing drug misuse problem



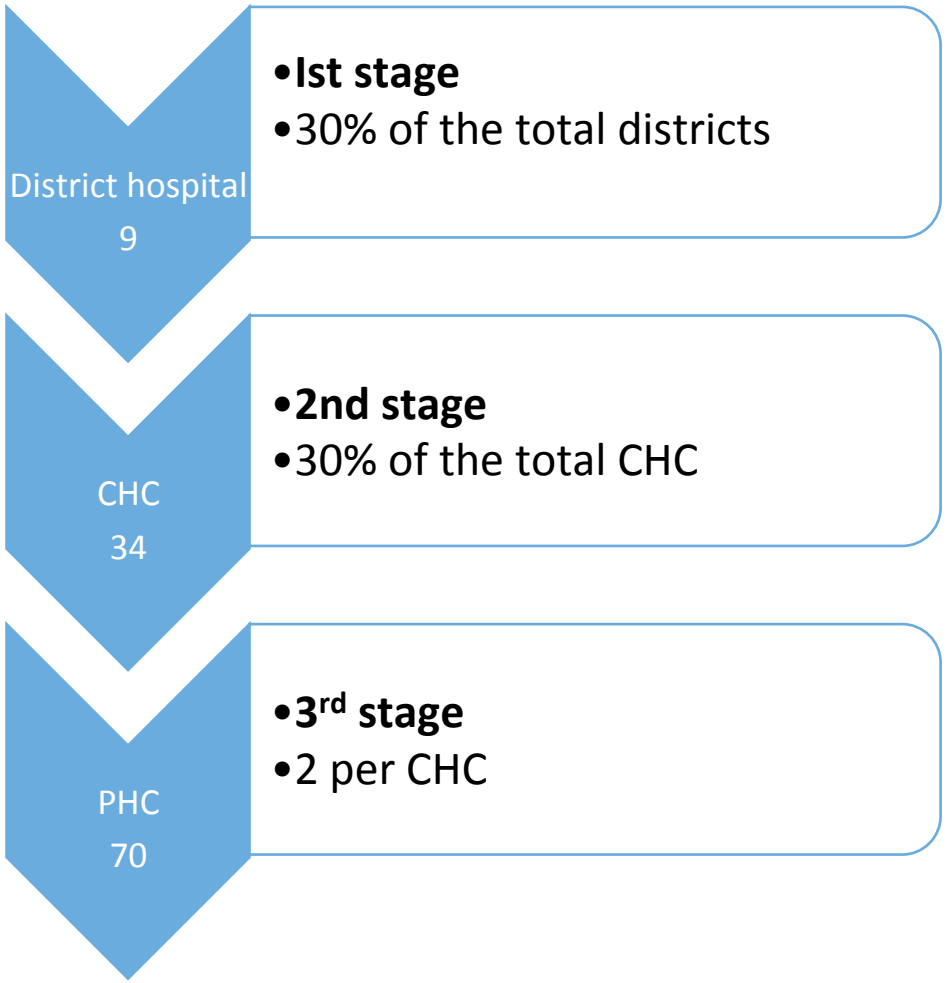
Methodology - WHO/INRUD

Prescribing Indicators

- Average number of medicines prescribed per patient
- % medicines prescribed by generic name
- % encounters with an antibiotic prescribed
- % medicines prescribed from essential medicines list
- % of prescription containing fixed dose against single dose

Sampling and Data collection methods

Sampling technique : Multistage cluster sampling



Data collection:

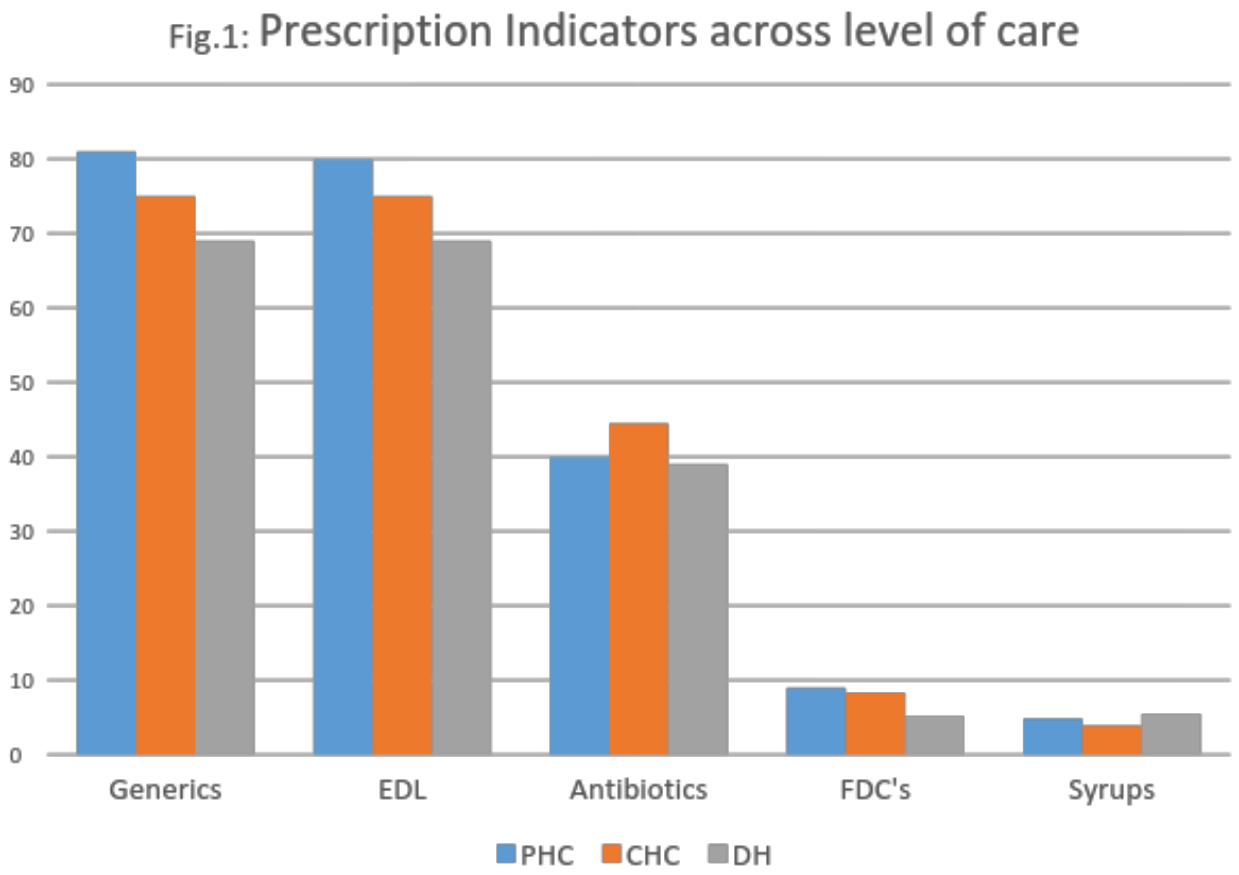
- 10-15 prescription was collected per facility
- with total of 1589

Unit of analysis: Prescription

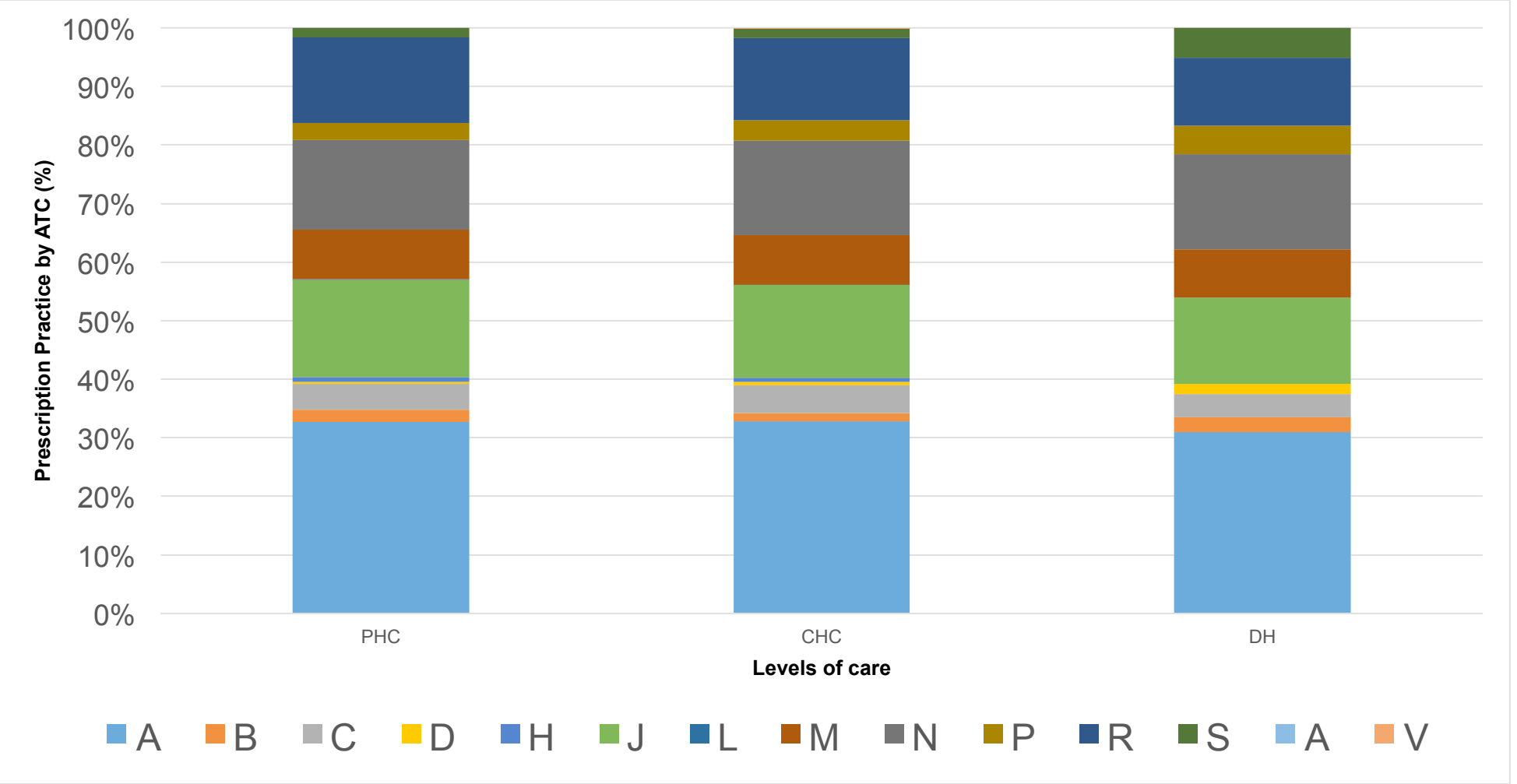
Results

- 1539 prescriptions were used for the analysis which included (62%) from the PHCs, 399(26%) from the CHCs/ SDH, 155(10%) from the district hospitals

Table1: Prescription indicator across Tamil Nadu	
Indicator	**Quantity/ percentage**
Average number of medicines per encounter	2.7
Percentage of prescription having generic drugs	78
Percentage of prescription having FDC	8
Percentage of encounters with antibiotics prescribed	41
Percentage of drugs prescribed from EDL	77



Prescription practice by ATC



Prescription pattern of cat “A” Drugs (%)

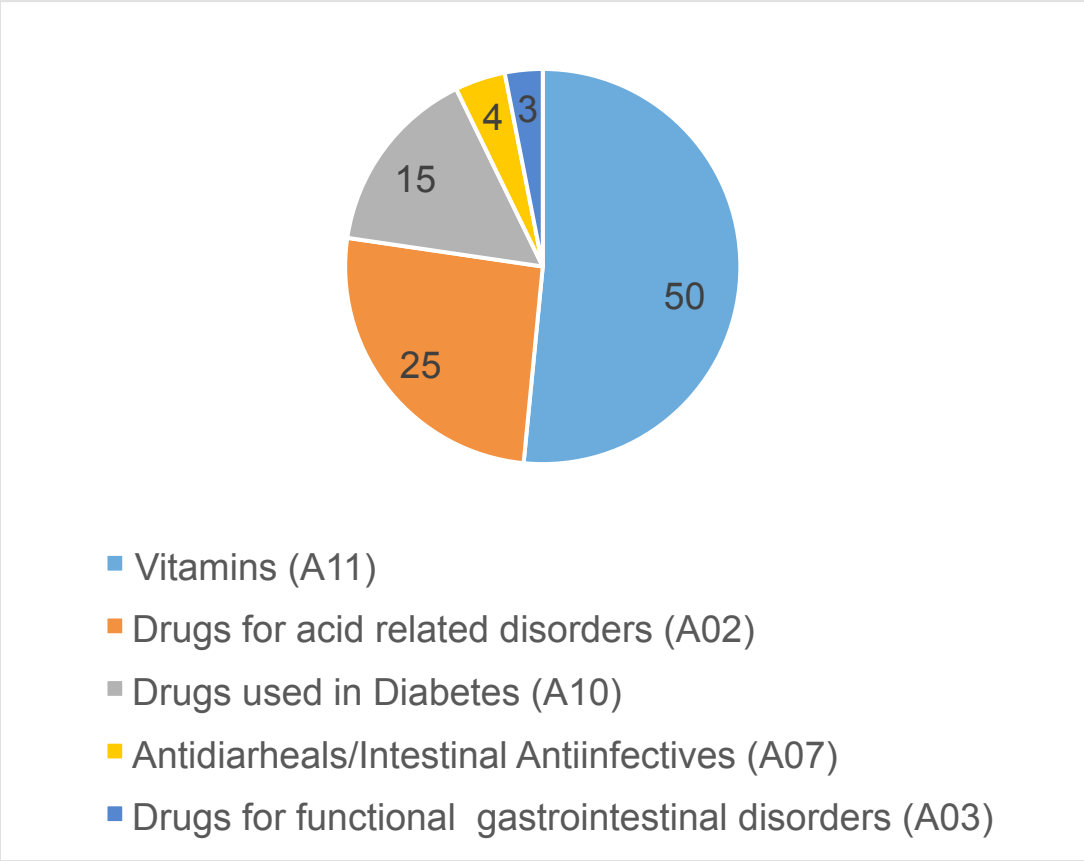
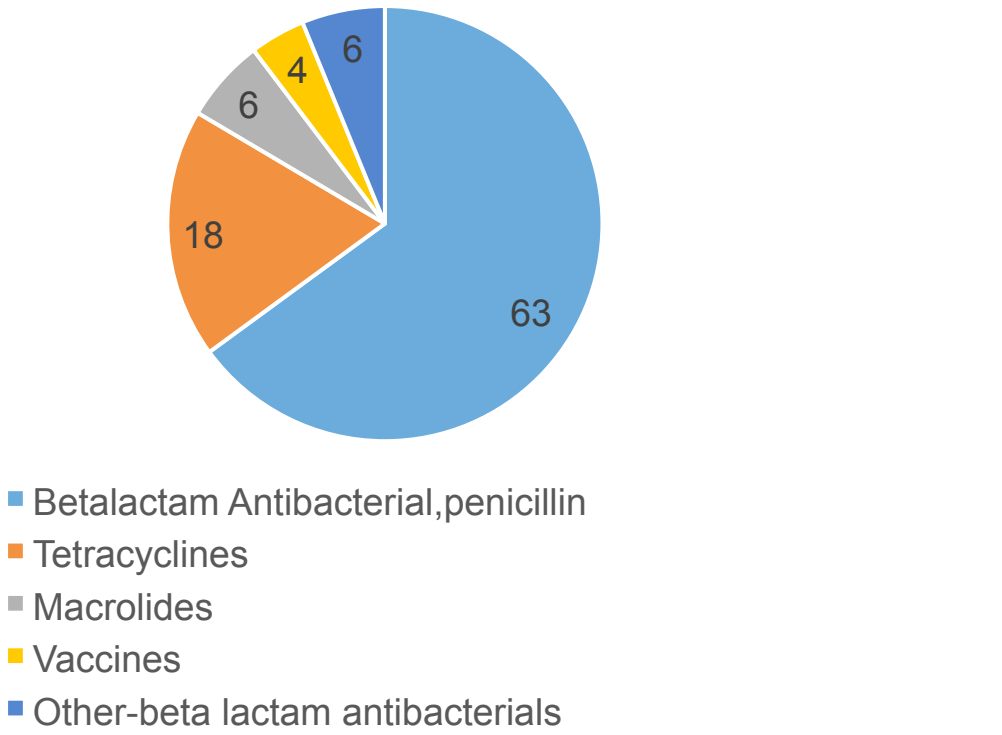


Figure 8.2 Prescription practice of Cat “J” drugs (%)



Conclusion and Policy Implication

Strengths

- With high % encounters with generic drugs and drugs from EDL along with relatively low % of FDC's we can comment that the Prescription Practice was fairly good in Tamil Nadu. In Literature this type of prescription pattern is related to:

- containing cost

- retaining patient's faith in public health facilities

Weaknesses

- No significant difference in the prescription pattern across level of care warrants the need to **strengthen gatekeeping mechanisms in health care**

- Percentage of antibiotic encounters were in inappropriate range (20-50%) as per community setting

- With growing concern of antibiotic resistance, **a regulation policy for antibiotic usage is recommended**

Limitations

- Cannot comment on rationality of prescription as

1. Providers Prescription practice depends on

- Patient demand

- supply side factors (availability, affordability, perceived quality)

- Providers competence (Adherence to standard treatment protocols/essential medicine list)

- Incentives to prescribe certain drugs

2. Majority prescription didn’t have probable diagnosis thus couldn’t link to DDD and standard treatment guidelines.

THANK YOU