

Economic Evaluation for first-line anti-hypertensive medicines: Applications for the Philippines

Masters Dissertation

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Background

- Hypertension
 - Leading cause of mortality and morbidity
 - Leading cost of social health insurance (SHI) reimbursements
 - Treatment: ACE inhibitors, ARBs, BBs, CCBs and diuretics
 - Philippine Hypertension Guidelines
 - Guidelines versus use

Background

- Cost of health care in the Philippines
 - Cost for 1 hospitalization equals one year of treatment for 3 patients
 - High cost of medicines
 - 45-70% OOP
 - Poverty, health care induced poverty
- Out-patient benefit packages for common diseases

Objectives

- Based on economic evidence, what anti-hypertensive medicine/s should PhilHealth subsidize on an outpatient basis?
- How could economic evaluation guide policy?

Aims:

- To review economic studies for first line anti-hypertensive medical treatment without co-morbidities; and
- To discuss practical, informational and policy implications on the use of economic evaluation in the Philippines.

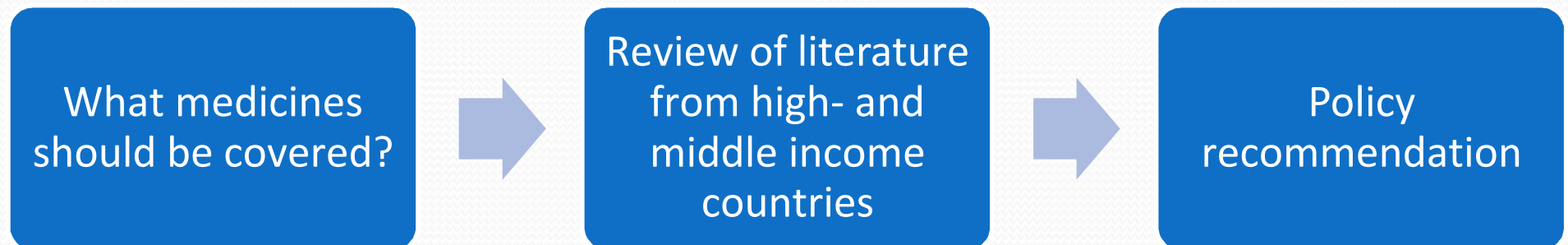
Objectives

- Study is an example of how economic evidence (cost-effectiveness) can be used to provide policy recommendations.

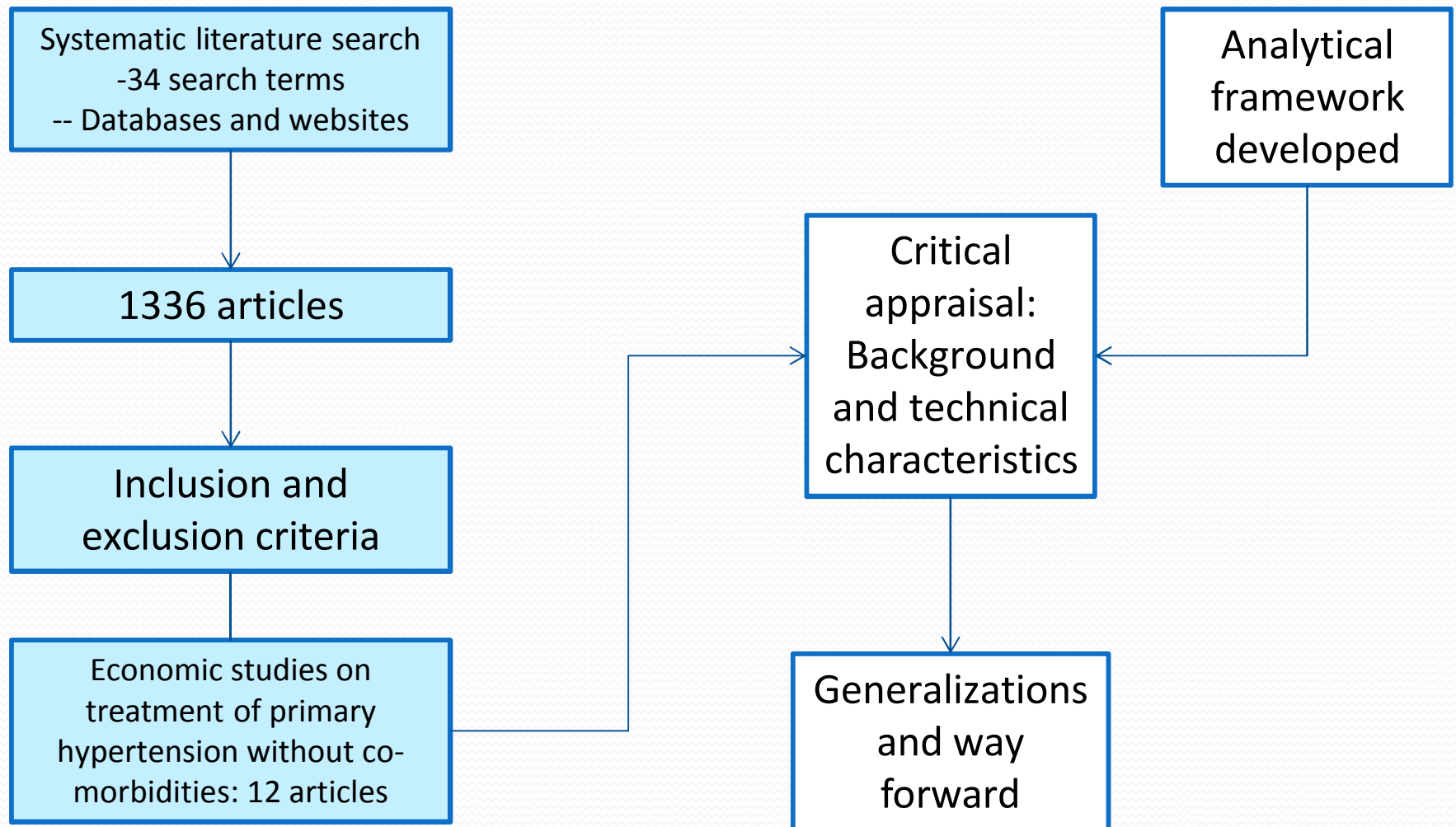


Objectives

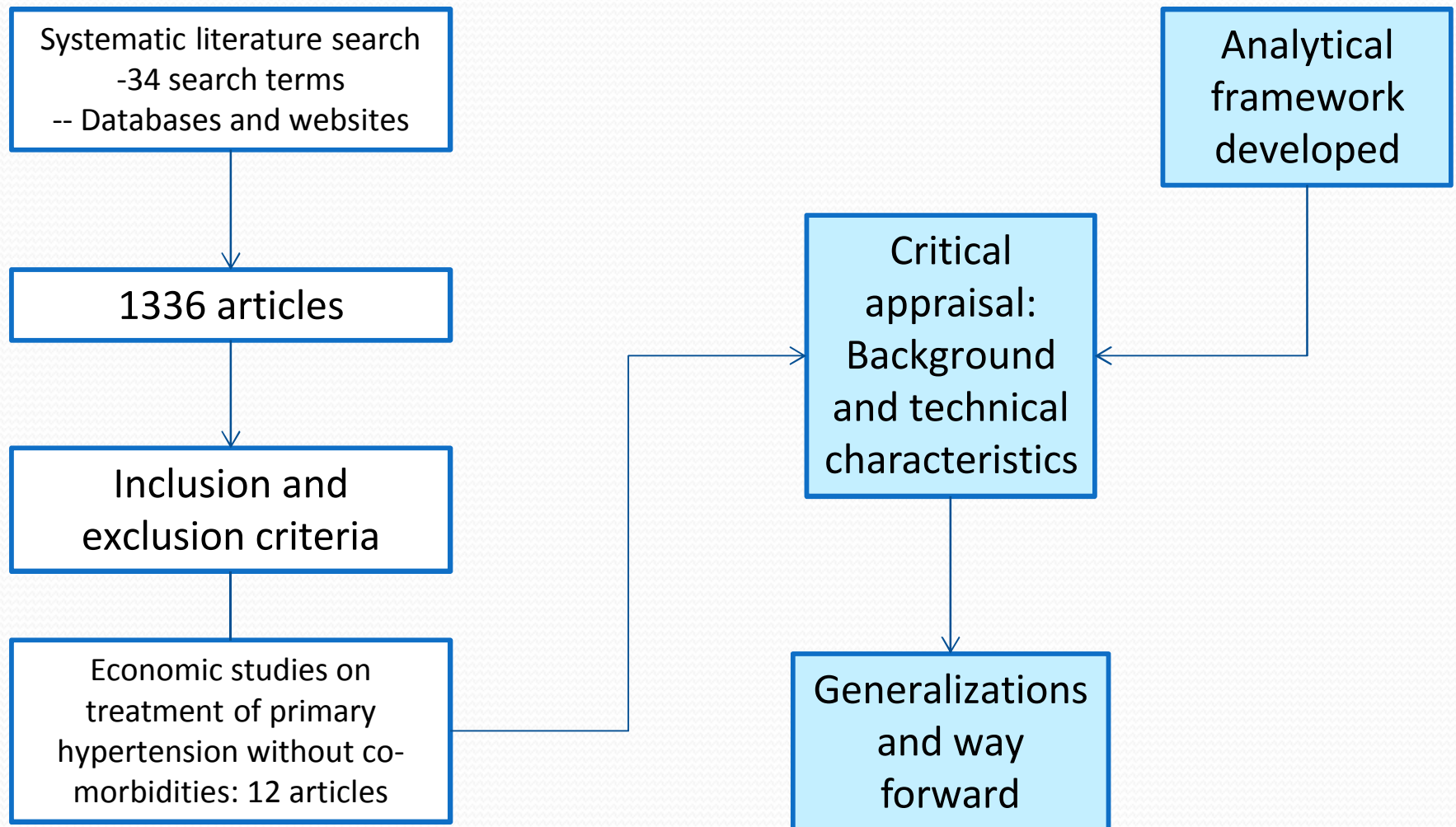
- Study is an example of how economic evidence (cost-effectiveness) can be used to help policy.



Methodology



Methodology



Methodology: Analytical framework

Background characteristics:

- Title
- Author/s
- Year
- Journal
- Intervention and comparators
- Objective/study question
- Target audience
- Economic study type
- Study population
- Setting and country
- Source of funding/conflict of interest

Technical characteristics:

- Perspective
- Time horizon
- Methodology/modelling
- Search strategy for parameters
- Costs, Effectiveness measures
- Discounting
- Assumptions and biases
- Results, cost-effectiveness ratio, endpoints
- Sensitivity analysis
- Generalizability
- Strengths and limitations
- Conclusions
- Implications and feasibility
- Recommendations

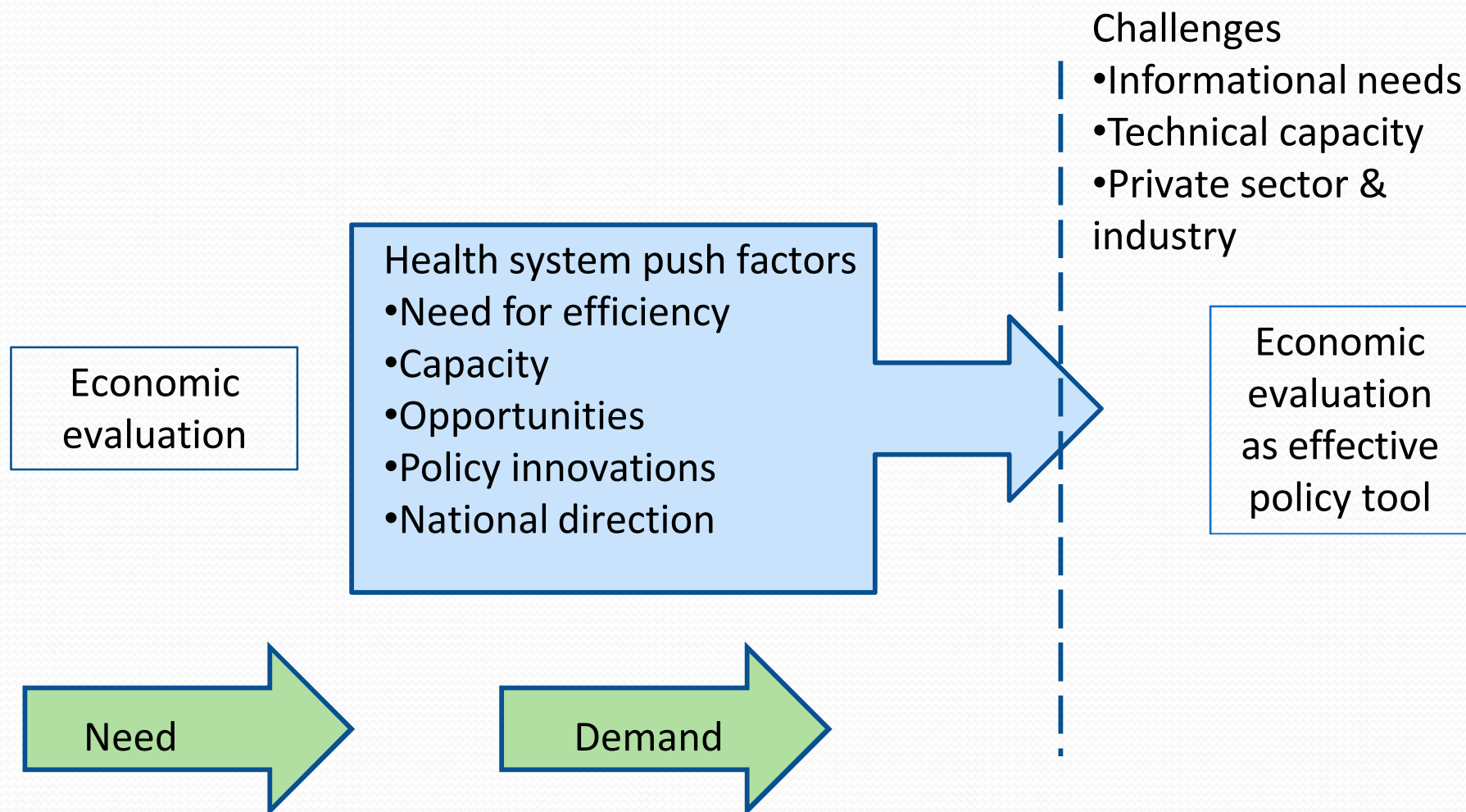
Results

- 12 studies: CMA, CEA, CUA, literature review
- 1998-2010
- Peer-reviewed international and national journals, national HTA agencies
- Comparison of drugs in the same class and different classes
- Middle- and high- income countries
- Funding sources

Results: Cost-effective modalities

- Diuretics as first-line treatment for hypertension without co-morbidities
- Patients with co-morbidities (e.g. high risk of heart failure and diabetes): ACE inhibitors, ARBs, CCBs
- Diuretic use in the Philippines is low
- How much out-patient diuretics should be funded?
- Competing goods – health promotion, prevention, other essential medicines

Discussion: Use of economic evaluation in the Philippines



Discussion: Making decisions



Generalizations and way forward

- What drug/s to subsidize: Diuretics, CCB and ACE inhibitors
- Feasibility of economic evaluation: Capacity, information and policy demand
- First-line treatment versus other best buys

- Process of making decisions
 - Evidence
 - Policies and standards
 - Priorities and objectives
 - Contexts

Thank you!

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