

Economic evaluation comparing centre-based compulsory treatment with community-based Methadone treatment in Hai Phong City, Vietnam



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Introduction

- There is a lack of evidence on the costeffectiveness of centre-based compulsory treatment (CCT) in Vietnam
- Methadone maintenance treatment (MMT) started in 2008 but to date covers only 5% (7,000) of people in need (140,000) since the majority of Government funding is put into CCT modality

Study design and methods

A. To answer research question A:

- 320 released participants (who will have been released from 3 CCT centres in Hai Phong City) will be recruited. The 2-year stay in the CCT centres will be viewed as 'the intervention'. Post 'intervention' data at 3 and 9 month follow-ups will be compared to pre 'intervention' data across the 5 outcome measures identified
- The Government of Vietnam wants evidence of the cost-effectiveness of the two dominant treatment modalities to enable decision making in drug policy and resource allocation

in the research question A

B. To answer research question **B**:

- Cost-effectiveness analysis comparing CCT and MMT will be employed and the incremental costeffectiveness ratios (ICER) will be measured for each of the 6 outcome measures identified in the research question B. A societal perspective will be adopted.
- Secondary data of 2009 MMT cohort study will be used for MMT effectiveness. A total of 388 MMT participants were followed up at 24 months
- Secondary data of 2009 MMT costing study will be used
- Primary data of costing of CCT centres will be collected from all 3 CCT centres
- Primary data of costs to patients (both CCT released participants and MMT patients) will be collected

Aim

The PhD research aims to compare the costeffectiveness of centre-based compulsory treatment (CCT) for substance abuse with community-based Methadone maintenance treatment (MMT) in Hai Phong City of Vietnam.

Issues under debate

- 1. Choosing cost-effectiveness analysis (CEA) vs. cost-benefit analysis (CBA):
 - The feature that distinguishes among techniques of economics evaluation is the way in which the consequences of health care programmes are valued
 - CBA requires outcomes to be valued in monetary units. However, many key outcome variables in drug addiction treatment cannot be associated with a monetary equivalent due to unavailability of reasonable estimates (criminal activities, family conflicts, loss of freedom)
 - CEA enables comparison using (ICER) without the need to put a monetary value on outcome. However, CEA by definition is based on a single programme outcome therefore faces the challenge of multiplicity of outcomes in drug addiction treatment

Research questions

In Hai Phong City, Vietnam:

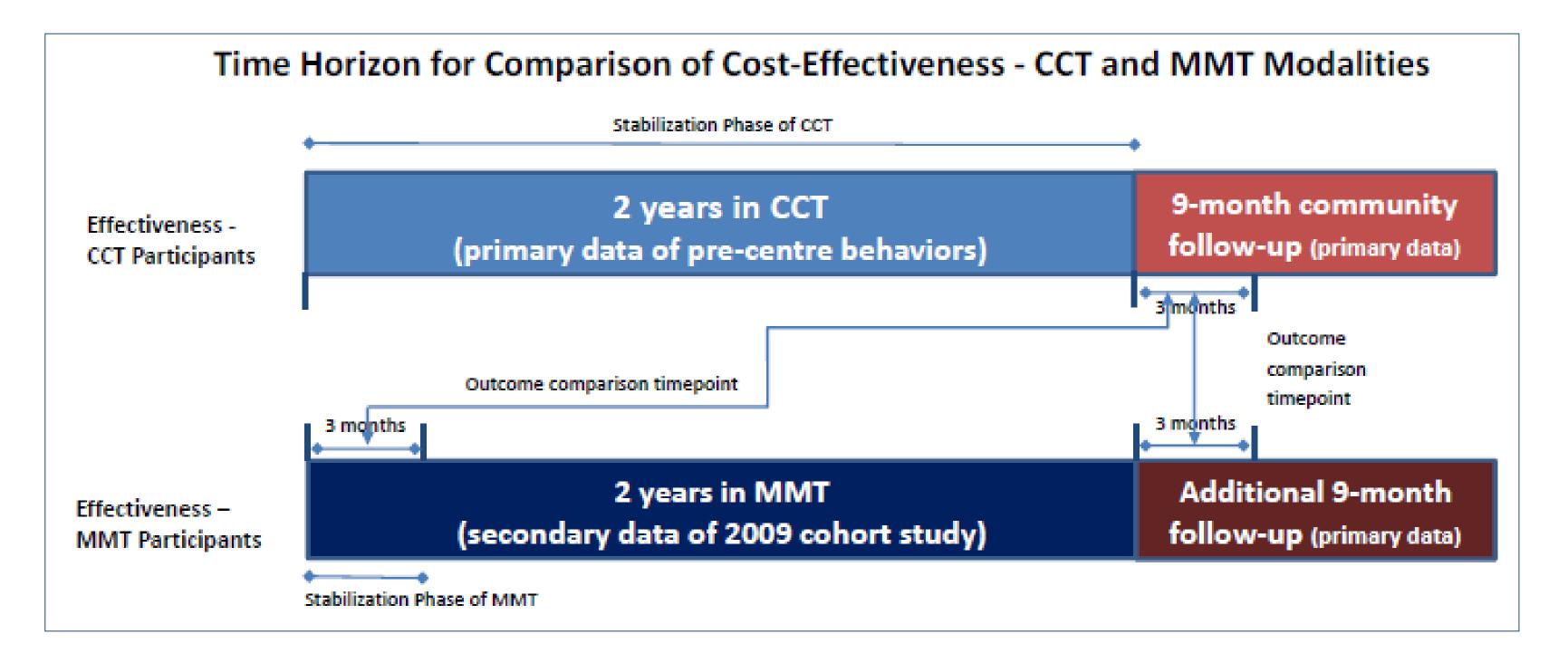
- A) Does participation in CCT result in improved health and social outcomes for heroin users? Health and social outcome will be measured in terms of:
 - 1) illicit drug use
 - 2) drug-use related criminal behaviors
 - 3) drug-use related HIV risk behaviors
 - 4) overdose incidents and
 - 5) quality of life.

B) Is CCT more cost-effective than MMT in terms of:1) proportion of people free from drug use2) number of drug-free days

✓ Having considered the pros and cons of CBA and CEA, we have chosen CEA because there are practical methods to overcome the drawback of CEA while it is not possible to overcome the drawback of CBA at this stage

2. Tackling issue of inequivalent comparison:

- Comparing a 2 year centre-based drug rehabilitation model (time-limited) with Methadone maintenance treatment (on-going) represents a *time inequivalent comparison*
- In order to minimize this "inequivalence in time horizon", we will frame a 2-year and 9-month time horizon comparison, which includes a two-year rehabilitation of drug users in CCT and 9-month community follow-up
- ✓ For MMT participants, we will use secondary data of the two-year 2009 MMT cohort study and conduct an additional 9-month prospective cohort follow-up for MMT participants (see diagram below)
- ✓ The CEA comparing the two treatment modalities will be analyzed within this framed time horizon



- 3) number of days free from criminal behaviors
- 4) number of drug-use related HIV risk behaviors reduced
- 5) number of overdose incidents reduced and
- 6) number of QALYs gained for heroin users?

* We are interested in your views or advice on the design and methodology of our study.

** Research timeline: March 2012 – March 2015

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