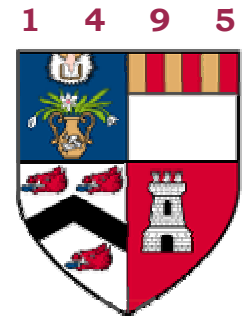


Overcoming the Barriers to Treating Illicit Drug Users in Primary Care :

Investing the attitudes of GPs towards
the treatment of illicit drug users
in Primary Care (PC)



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Problem

- **Rise in number of illicit drug users presenting in primary care**

=

- **Resistance from GPs to expand their involvement with drug dependent patients**
- **WHY?**

Objective

- To investigate and quantify the factors and barriers considered influential in the treatment decisions of GPs toward drug dependent patients.



Hypotheses

- **Barriers:**
 - **Patient characteristics**
 - drug dependency characteristics
 - **GP characteristics**
 - age, training
 - **GP Practice/Locality characteristics**
 - practice location, size



Methods (1)

- **A Discrete Choice Experiment (DCE) was used to determine the importance patient (drug dependent) characteristics:**
 - STEP 1: Identifying relevant effects.
 - STEP 2: Assigning levels to these effects.
 - STEP 3: Valuing relevant effects.
 - STEP 4: Data Analysis.



Identifying Relevant Effects

- **Preliminary Questionnaire sought responses from (926) GPs on:**
 - 'factors influencing the treatment of drug dependency'
- **Factor analysis used to identify recurrent themes**
- **Drug dependent patient characteristics:**
 - injecting behaviour
 - nature of drug use
 - attitude/behaviour of patient
 - safety



Assigning Levels to these Effects

- **Injecting Behaviour**
 - ‘never injected’
 - ‘occasional injecting’
 - ‘regular injecting’
- **Attitude/Behaviour of Patient**
 - ‘not demanding’
 - ‘very demanding’
- **Nature of Drug Use**
 - ‘opiates only’
 - ‘chaotic poly-drug user’
- **Safety**
 - ‘perceived safe’
 - ‘safety risk’

Valuing Relevant Effects

- Gives rise to $(3^1 * 2^3)$ 24 hypothetical patients
 - 1st: referral option
 - refer
 - not refer
 - 2nd: treatment option
 - A: treat with methadone maintenance
 - B: treat offering a range of specialist services
 - C: do not treat the drug dependency but provide general medical services



Example

Place tick (✓) in appropriate box Place tick (✓) in appropriate box

Patient	Injecting behaviour	Poly Drug Use	Attitude	Safety	1. Would refer	2. Would not refer	A. Treat: methadone maintenance	B. Treat: range of options	C. Would not treat
e.g.	Regular	Opiates only	Not demanding	Safety risk		✓			✓

Methods (2)

- **Standard questionnaire format used to collect:**
 - GP characteristics
 - gender, length of time in practice, training for the treatment of drug dependent patients, payment practice.
 - Practice/Locality characteristics
 - health board area, practice site, practice size, practice policy, payment policy, access to specialist centres and waiting time for referral



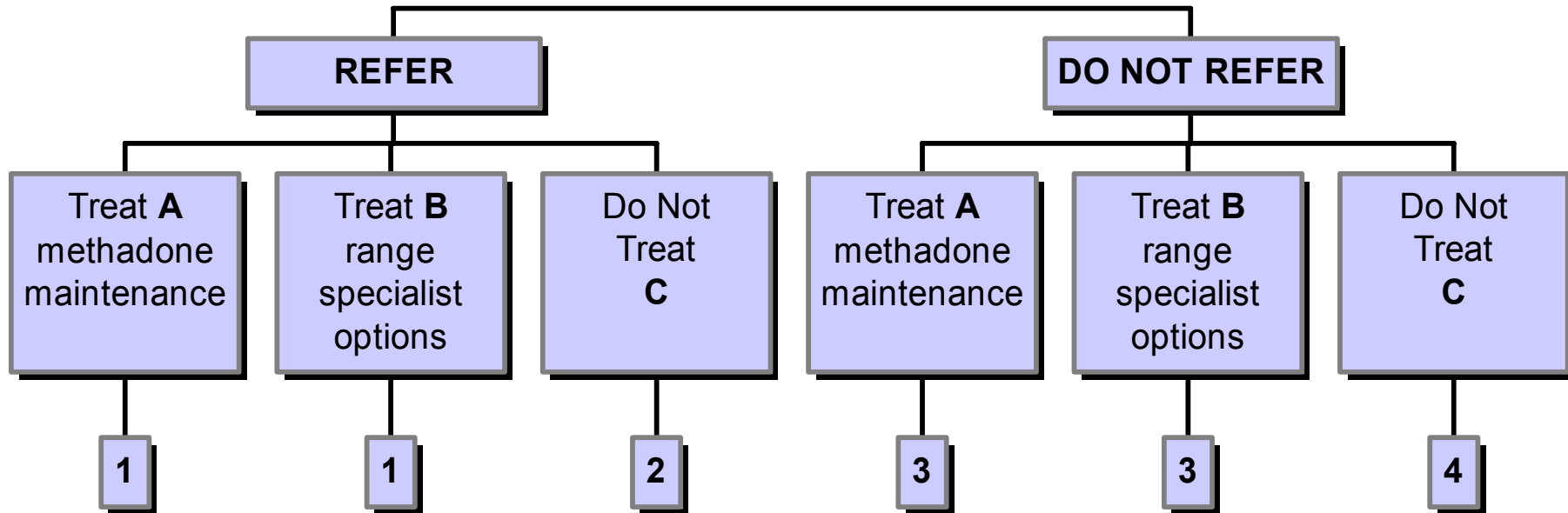
Methods (3)

- **Sample 1:4 GPs in Scotland (926) stratified according to:**
 - gender, age, practice size
- **Postal Questionnaire**
- **Data analysed: STATA 7**
 - Multinomial logit regression model clustered according to a reference identifier



Data Analysis (1)

Treatment Options



Data Analysis (2)

Preference for treatment option (1, 2, 3 or 4) =

f (Patient Characteristics + GP Characteristics
+ Practice / Locality Characteristics)

Data analysis (3)

- **Frequencies**
 - treatment action, access to treatment centres
- **Wald test for significant variables**
 - significant effects on treatment action strategy
- **Discrete changes / marginal effects**
 - largest effects on treatment action strategy
- **Predicted probabilities**
 - prediction of treatment action by altering/holding variables



Results (1)

- **Top 6 significant effects (in magnitude) on treatment action resulting from a discrete change:**
 - training
 - membership of a shared scheme
 - access to a treatment centre
 - whether payment is received
 - safety risk of patient



Results (2)

- **Average GPs will prefer to refer to a specialist centre but not provide any interim treatment over treating in PC/GP**
 - Factors that will improve the probability of GPs switching from referring (strategy 2) to treating in PC/GP (strategy 3) are:
 - receiving specialist training
 - receiving payment for the treatment of DD patients
 - encountering only non-difficult patients



Conclusions

- **Application of DCEs in modelling decision-making**
- **Example:**
 - identify important factors in treatment decision-making
 - identify and quantify the factors that influence changes in practice (or the barriers that prevent change)
 - influence, adapt, create policies and incentives to change practice

