Population planning for alcohol and other drug services: the national Drug and Alcohol Clinical Care & Prevention (DA-CCP) project

Medicine | National Drug and Alcohol Research Centre | Drug Policy Modelling Program

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History and context

Service planning poorly done

- How many services do we need?
- What types do we need?
- Where do we need them?

Past & current attempts to plan for treatment

- Often based on historical funding (supply = demand)
- Little research on 'unmet demand'
- No systematic agreement about treatment types and best practice standards
- No estimates of potential resources required

Drug and Alcohol Clinical Care & Prevention (DA-CCP)

- DA-CCP – an endeavour to overcome this
- Build a national planning model
- Develop standard types of care and identify their components

- DA-CCP based on an earlier NSW mental health planning model (Pirkis et al., 2007)

DA-CCP Aims and Objectives

- To build the first national population based model for drug and alcohol service planning
- To estimate the need and demand for services
- To use clinical evidence and expert consensus to specify the care packages required by individuals and groups
- To calculate the resources needed to provide these care packages
- To provide a tool for jurisdictions: the development of a national model that can be adapted for use within each Australian jurisdiction (transparency and consistency in service planning)

- Work in progress – model outputs not yet available.

The DA-CCP model

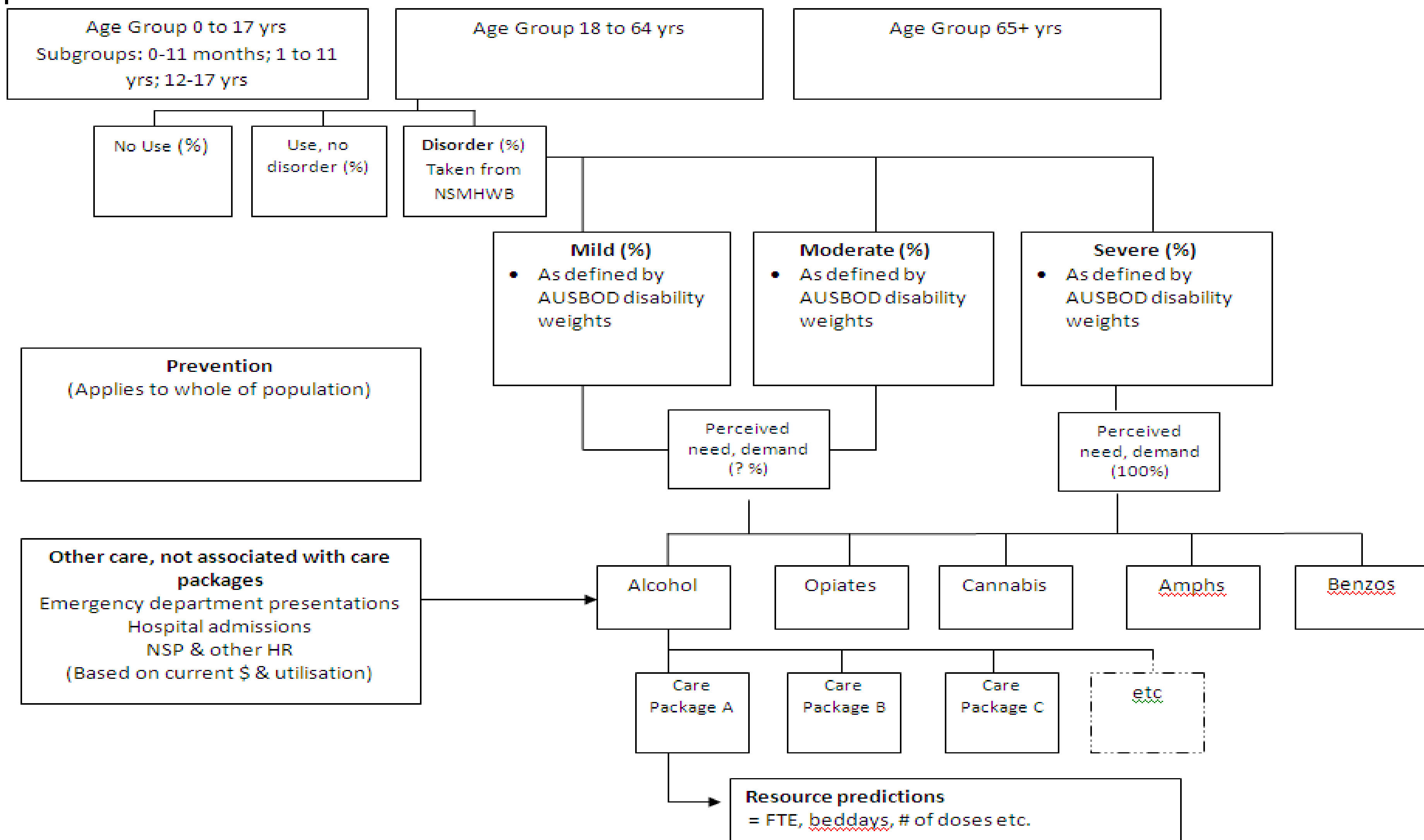
- The model is about what **‘should be’**, not what currently is
- Five drug classes (alcohol, opiates, cannabis, methamph & benzos)
- Five age groups (0-11mnths; 1-11 yrs; 12-17 yrs; 18-64 yrs; 65+)
- Care packages: range of service types:
  - Outpatient, community based treatments
  - Residential rehabilitation services
  - Inpatient, hospital based treatments
  - Inpatient, community based treatments
  - Primary care services (eg. GPs)
- Care packages are evidence based. In the absence of evidence, then care packages are based on expert consensus
- ‘Where’ not included: not a geographical resource distribution formula

What will DA-CCP tell us…

- Nationally shared descriptions of units of service (care packages)

- Estimates of:
  - The # of people 'needing' treatment (by drug type and by age range)
  - The # of staff (FTE) required (medical, allied health/nursing, AOD workers)
  - The # of beds; treatment places required
  - The amount of other care (doses of meds, medical investigations etc)

- A tool for each jurisdiction to use in planning for AOD services


DA-CCP SCHEMA
Age Group 0 to 17 yrs
Subgroups: 0-11 months; 1 to 11 yrs; 12-17 yrs
Age Group 18 to 64 yrs
Age Group 65+ yrs
No Use (%)
Use, no disorder (%)
Disorder (%) Taken from NSMHWB
Mild (%)
As defined by AUSBOD disability weights
Moderate (%)
As defined by AUSBOD disability weights
Severe (%)
As defined by AUSBOD disability weights
Prevention
(Applies to whole of population)
Perceived need, demand (? %)
Perceived need, demand (100%)
Other care, not associated with care packages
Emergency department presentations
Hospital admissions
NSP & other HR
(Based on current $ & utilisation)
Alcohol
Opiates
Cannabis
Amphs
Benzos
Care Package A
Care Package B
Care Package C
etc
Resource predictions
= FTE, beddays, # of doses etc.

The epidemiology

Derived from National Survey of Mental Health and Wellbeing (1997)

- Nationally representative, face-to-face survey of 10,641 individuals, 18-85 yrs
- DSM-IV and ICD-10 diagnoses

Those who meet diagnostic criteria for abuse or dependence

- Separated into mild, moderate and severe
- Based on disability weights from Burden of Disease work (Begg et al., 2007)

Perceived need/demand - treatment rate for mild, moderate and severe

- Mild 20-25%
- Moderate 65-75%
- Severe 100%

Based on overall ‘best’ treatment prevalence of 51% (Tolkien report)

Care packages

The care for a person **for a year** is defined in terms of:

- the drug type
- the age group
- the severity of presentation (mild, moderate, severe)

And for each of these:

- frequency & duration of sessions (outpatient treatments)
- type of clinician (FTE time)
- number of bed days & occupancy rate

The level of care that is specified for an "average" person is adequate, anything less would be unsatisfactory.

What are the alcohol ‘care packages’?

1. Psychosocial interventions - without RP meds - standard
2. Psychosocial interventions - with RP meds - standard
3. Psychosocial interventions - without RP meds - complex
4. Psychosocial interventions - with RP meds - complex
5. Withdrawal - home based - standard - without RP meds
6. Withdrawal - daily outpatient - standard without RP meds
7. Withdrawal - daily outpatient - standard with RP meds
8. Withdrawal - daily outpatient - complex - with RP meds
9. Withdrawal - residential - standard - with RP meds
10. Withdrawal - residential - complex - with RP meds
11. Rehabilitation - day program - 25 days - standard
12. Residential rehabilitation - 8 week stay
13. Residential rehabilitation - 13 week stay
14. Residential rehabilitation - 26 week stay

What are the opioid ‘care packages’?

1. Opioid maintenance treatment - standard
2. Opioid maintenance treatment - complex
3. Psychosocial interventions - standard
4. Psychosocial interventions - complex
5. Withdrawal - daily outpatient - standard
6. Withdrawal - daily outpatient - complex
7. Withdrawal - residential - standard
8. Withdrawal - residential - complex
9. Rehabilitation - day program - 25 days - standard
10. Residential rehabilitation - 8 week stay
11. Residential rehabilitation - 13 week stay
12. Residential rehabilitation - 26 week stay
13. Residential rehabilitation - methadone to abstinence
14. Residential rehabilitation - stabilisation program

Example: Opioid care package, maintenance treatment

Induction

- 1 x 60 mins assessment by doctor
- 1 x 60 min assessment by case manager
- 1 x 30 min diagnostic testing (inc routine bloods FBC, U & E, LFT, BBV)
- 1 x 20 min UDS
- 2 x 15 min referral (pharmacy, clinical psychology, counselling)
- 1 x 30 min case conference
- 1 x 30 min medical review (first week)
- 3 x 30 min medical review (week 2 to 4)
- 3 x 30 min case management (week 2 to 4)

Maintenance

- 12 x 30 minutes medical reviews
- 12 x 30 minute Case Management
- 1 x 30 minute Referral
- 1 x 30 minute bloods per year
- 6 x 20 minute UDS per year
- 2 x 30 min case conferencing

Individual psychosocial interventions

- 1 x 15 min intake
- 1 x 60 min assessment
- 6 x 60 min 1:1 psychosocial intervention/family/supporter
- 1 x 15 min case conference
- 2 x 30 min transfer of care/ discharge / care coordination

Dosing, tobacco intervention, assertive follow-up

Additional ‘care’ that we spread across the model

- Consultation/liaison services in hospitals (ED and acute)
- Harm reduction services (eg Needle Syringe programs)
- Services for pregnant woman with AOD disorders
- Early and brief interventions
- Telephone services
- Prevention activities & programs

Challenges

1. Epidemiology
   - Epidemiology is dated (and inaccurate for low prevalence, eg opioid dependence)
   - Treated prevalence – expert judgment, plus disability weights
   - Allocation to care packages – expert consensus plus existing utilisation
2. Care components
   - High quality evidence for some care packages is lacking
   - Evidence for prevention is lacking
3. Other issues
   - Co-morbidity
   - Not all drugs covered (eg pharmaceutical opioids)
   - Indigenous module

Conclusions

- Progressive approximations towards a sensible model
- First endeavour – will be built on in subsequent iterations
- Internationally cutting edge – only one other nation attempting work in this area (Canada)
- Capacity to transform Australian planning of AOD services

Thank-you

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