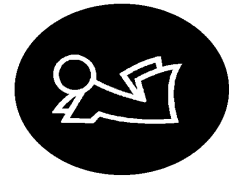




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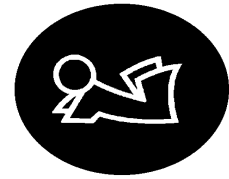
Conduct disorder: innovative service developments - the Developmental Neuropsychiatry Program (DNP)

**A model of evidenced based assessment and treatment for
children and adolescents with conduct disorder**

Alasdair Vance, Jo Winther, Chidambaram Prakash
Academic Child Psychiatry
Department of Paediatrics
University of Melbourne
Royal Children's Hospital



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Outline of presentation

1. Organisational context
2. Academic Child Psychiatry Unit
3. Design of the DNP



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Hospital-based Services

- Consultation & Liaison**
- Academic Child Psychiatry**
- Psychology**
- IMH Program Management**
- Adolescent Inpatient Unit (Banksia)**

Community-based Services

- MHS Intake**
- CD Early Intervention Program**
- Koori MH & Wellbeing**
- Consumer Consultant**
- Community Group Program**
- Community Development**

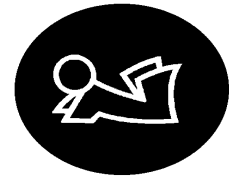
Community Teams / Clinics

- Flemington**
- Wyndham**
- Sunshine**
- Broadmeadows**
- Intensive Mobile Youth Service**





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Clinical services provided to 0-18 yr olds with psychiatric disorder (s) that cause psychosocial impairment or risk of harm to self and/or others

Vulnerable populations:

distressed infants – links with mother-baby units

co-morbid physical illness – HCL team

socially disadvantaged/at risk children/adolescents – links with Education/Protective Services

Suicidal and/or homicidal – links with Education/Emergency Departments

psychological trauma victims – links with CASA

children of parents with mental illness – links with Adult MHS & welfare services

co-morbid learning disabilities – links with Education system

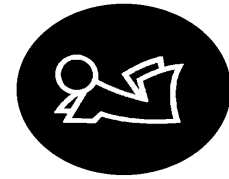
special cultural groups – CALD & Indigenous Health Network

Consultation, Education and Support for Service Providers in health, education and welfare sectors

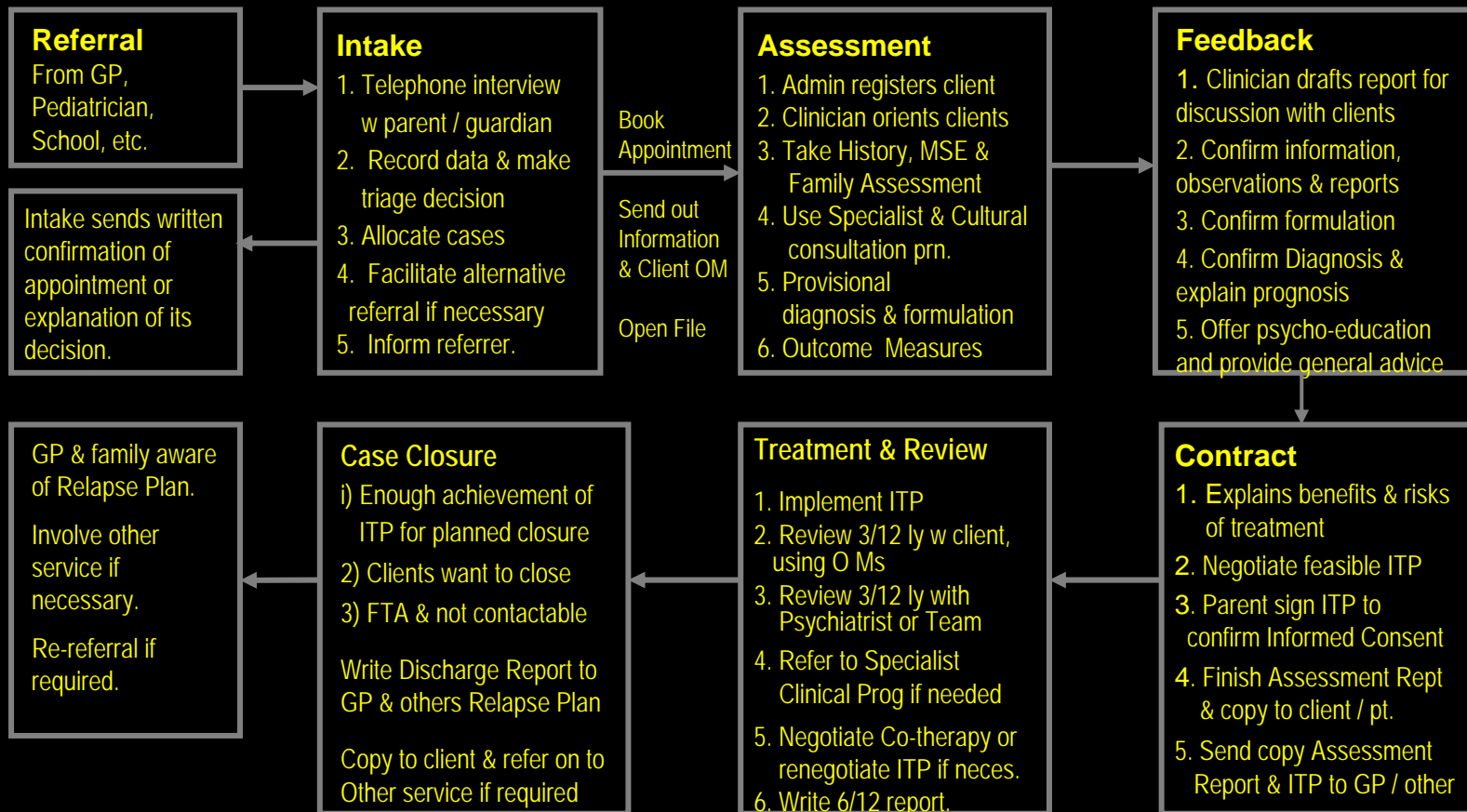


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Community CAMHS Care Pathway





CAMHS Outcome Measures



Strengths & Difficulties Questionnaire

(patient rated measure of symptoms and burden)

Health of the Nation Outcome Scale for Children & Adolescents

HoNOSCA (clinician rated measure of functional impact)

Children's Global Assessment Scale

C-GAS (clinician-rated measure of severity & impairment)

Factors Influencing Health Status

(clinician-rated measure of contextual risk factors)

**Outcome Measures collected at entry, at 3/12 intervals,
and on exit from services or on transition between levels of care**



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2. Academic Child Psychiatry Unit

- provides a comprehensive assessment of the following:

oppositional defiant problems

conduct problems

attentional difficulties

motor drivenness

impulsiveness

anxiety difficulties

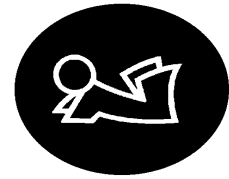
depressive difficulties

autistic spectrum disorder problems

early-onset psychotic symptoms



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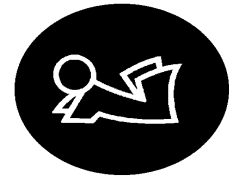
2. Academic Child Psychiatry Unit

- patients referred for diagnostic clarification and/or
- patients who have been through one or more psychological and/or medical treatment regimens and who remain treatment non-responsive

All the information collected - fed back to young people and their families with a diagnostic formulation, biopsychosocial formulation and a treatment plan



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2. Academic Child Psychiatry Unit

ACPU Structured Assessment components:

[1] Structured clinical interview with child and separately with the parent(s)/caregiver(s)

[2] Parent/Caregiver report: Child Behaviour Checklist, Children's Depression Scale, Connors Rating Scales

Hopkins Symptom Checklist, Spanier Dyadic Adjustment Scale, Family Assessment Device,

[3] Child-report: Youth Self Report, Children's Depression Inventory, Revised Children's Manifest Anxiety Scale

[4] Teacher report: Child Behaviour Checklist, Connors Rating Scales, Clinician rated Rutter and Graham Interview Schedule

[5] Demographic screen and developmental history of child, including key biological and psychosocial milestones

[6] Neurological/Endocrine screen of child

[7] Cognitive assessment with child/adolescent

Wechsler Intelligence Scale for Children Fourth Edition (WISC-IV)

Wide Range Achievement Test Third Edition (WRAT-3)

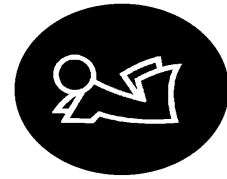
Cambridge Neuropsychological Test Automated Battery

(CANTAB - Memory Component)

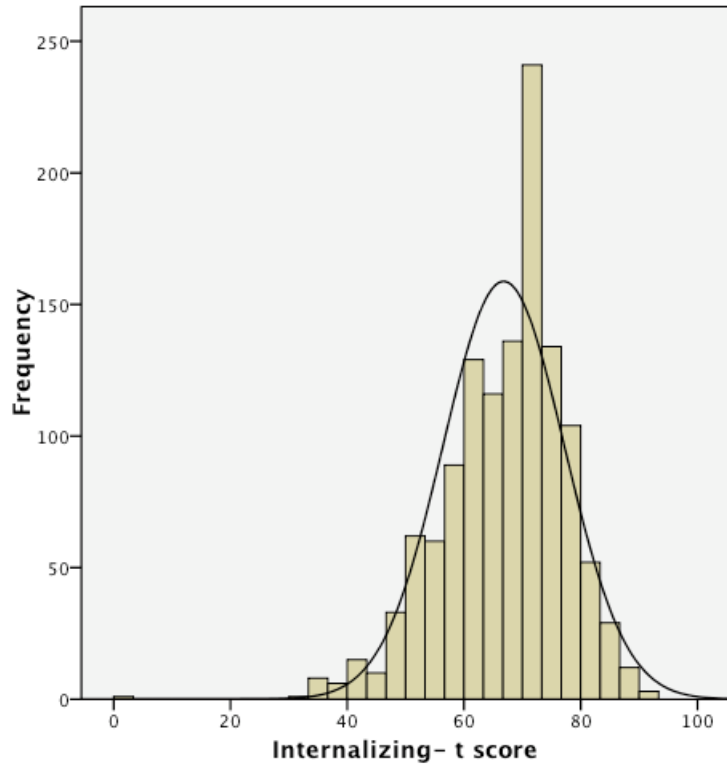


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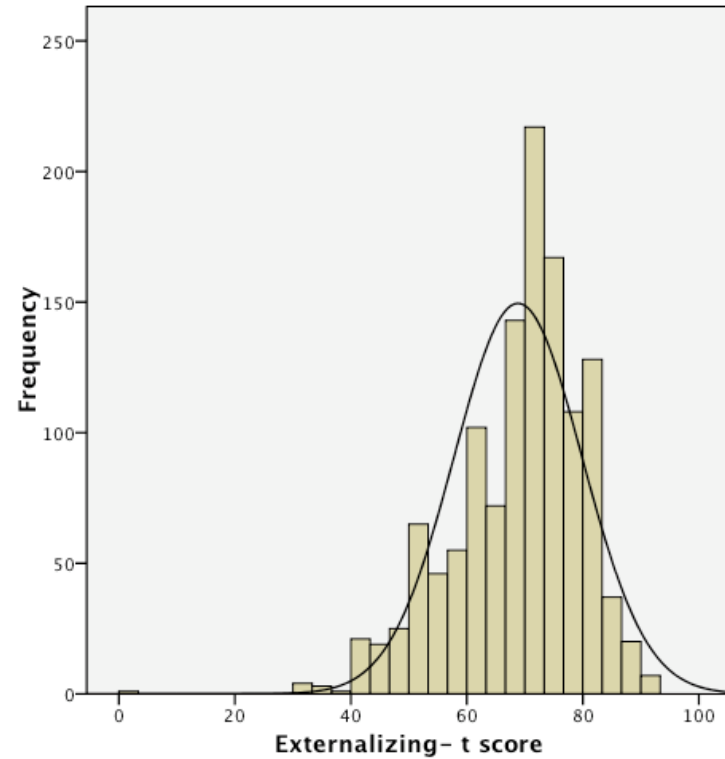
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Patient profile – initial assessment



Mean =66.79
Std. Dev. =10.392
N =1,241

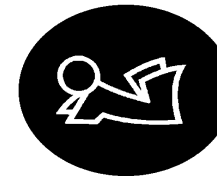


Mean =68.81
Std. Dev. =11.037
N =1,241

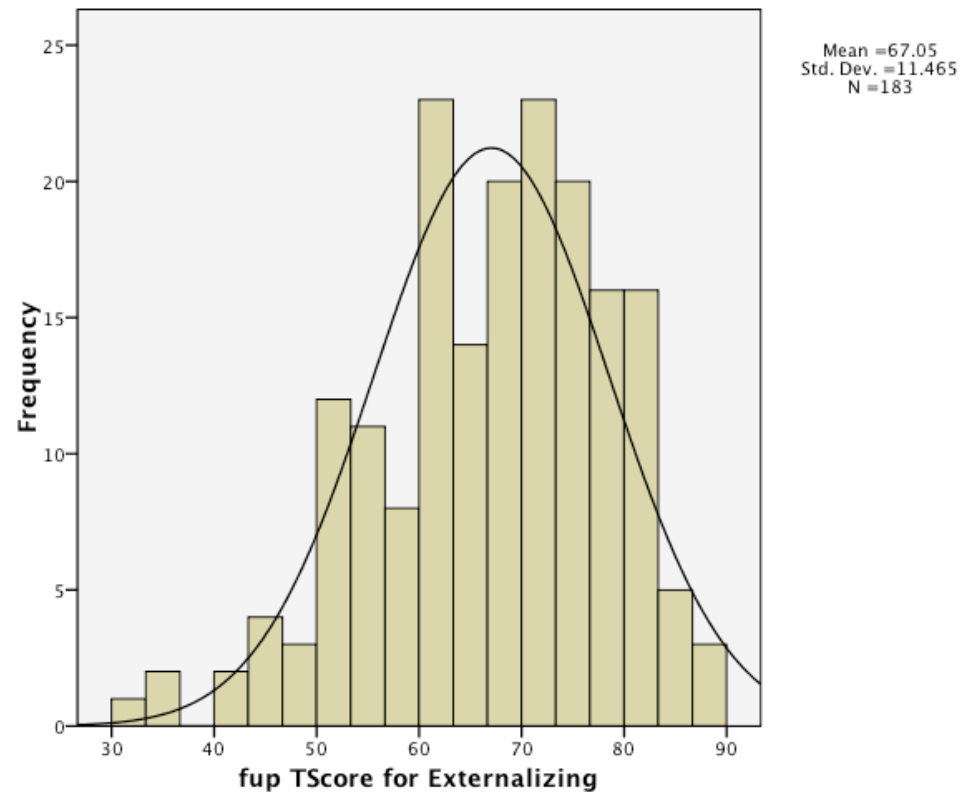
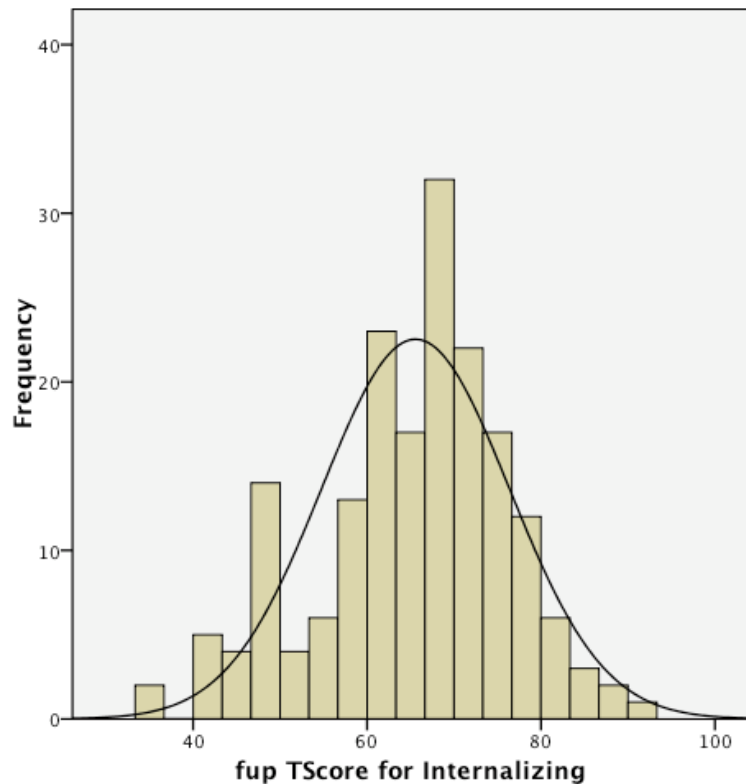


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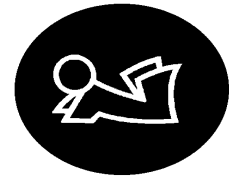


Patient profile – 12 month follow up





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Significant reduction - primarily externalising domain:

Internalising symptoms

**Wilks's Lambda = .97 (F1, 179) = 5.78, $p < .02$,
multivariate partial eta squared = .03**

Externalising symptoms

**Wilks's Lambda = .90 (F1, 179) = 1.97, $p < .0005$,
multivariate partial eta squared = .10**



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3. DNP: THE CHALLENGE

- multi-disciplinary clinical service delivery and research program
- focused on understanding the aetiological risk factors
- applying best practice assessment and treatment methodologies
- enhances the integration of psychological strategies with targeted psychopharmacology across key developmental phases
- evaluates treatment effects pre- and post-treatment
- informs randomised controlled trials of synergistic treatments
- informs new medication algorithms and psychological treatment manuals being developed



3. DNP Patient characteristics:

IMHP cases will have been assessed and had a trial of two or more defined medication and/or psychological treatments through a specialist multidisciplinary team (Tier 3) that have not adequately alleviated impairing symptoms and signs

Non-IMHP cases will have been assessed, diagnosed and treated by a paediatrician and have failed an appropriate trial of medication and/or psychological treatment



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3. DNP – management process

- each case will receive a developmental biological, psychological and social assessment using state-of-the-art standardized instruments.
- further, each case will receive a comprehensive developmental neuropsychiatry history, examination and investigations, as required, to determine a diagnosis and formulation
- a DNP staff member will meet with the referring case manager to systematically feed back this information. Together, the DNP staff member and referrer will synthesize an updated bio-psycho-social-developmental formulation and diagnosis. This will specifically focus on how any co-morbid conditions and their treatment may affect the management of disruptive behavioural problems



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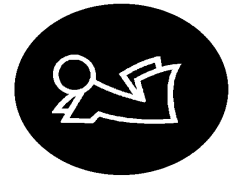


3. DNP-management process

- a DNP staff member and the referring case manager will target specific bio-psycho-social-developmental factors for specific/targeted interventions
- the case manager team provides the required resources to deliver specific treatments or, if unable, the DNP provides manualised parent and child group interventions +/- medication algorithms
- the case will be reviewed from a clinician, child and parent perspective at 1 week, 4 weeks and 12 weeks by phone/in person. A complete annual re-assessment will be offered.



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3. DNP-Summary

The DNP will apply modern neuroscience, neuropsychiatry, psychopharmacology and psychotherapy knowledge to help comorbid developmental and/or organic difficulties that impair emotional, behavioural, psychological and social functioning.

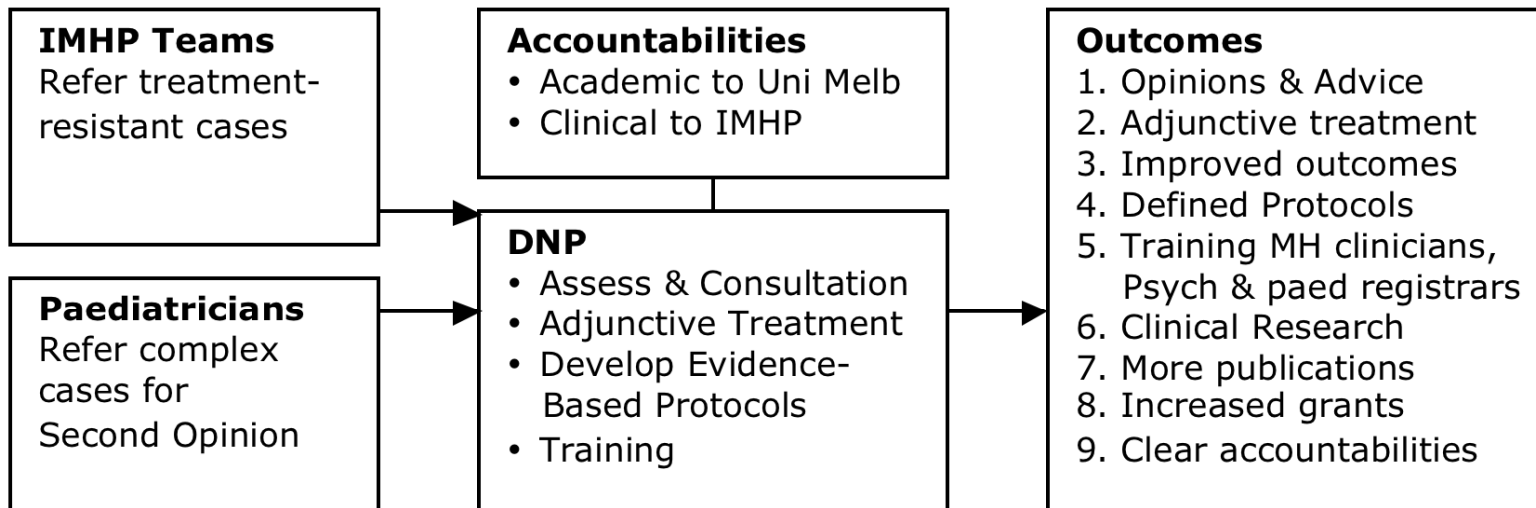
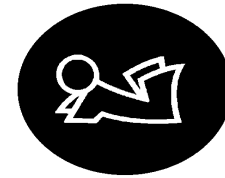


Figure 1. DNP Roles & Functions.