

The Population and Outcomes Based Research and Evaluation Framework of North Metro CAMHS in Western Australia

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Population Focused and Evidence Based



Four Evidence Bases : population morbidity and pathways; internationally agreed treatment effectiveness; local aggregated practice evidence; individual case evidence

these support:

Interventions undertaken by clinicians

both of these inform:

Practice Determinants and Parameters

Population based Prevalence and Pathway evidence : Stage three



- **Linkage database analysis**

Projects which link a number of the databases above in order to ascertain causal mechanisms and clinical pathways for children and adolescents experiencing mental health difficulties in WA

Population Focused and Evidence Based



Four Evidence Bases :

1. population morbidity and pathways
2. *internationally agreed treatment effectiveness*
3. local aggregated practice evidence
4. individual case evidence

Database two: Internationally Recognised Evidence based Intervention



- *Up to date database of evidence based interventions and protocols*
- *Gaps identified in evidence based intervention strategies with targeted population groups*
- *Research projects address gaps*
- *Evaluation projects address applying evidence based interventions from the database to service team and area populations*

Intervention Evidence Database



- Effectiveness rather than efficacy
- Accommodate constantly changing information
- Applicable directly and flexibly at the clinical level
- System of incorporating into treatment decisions, such as clinical intervention support tools
- System parameters such as supervision support utilization

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Database three : Local Aggregate Evidence



- Aggregated local area outcomes data, specifically National Outcomes Case Collection (NOCC), assessment data (*practice based evidence : who are we helping and who are we not helping?*)
- Comparison with outcomes data from evidence-based intervention studies
- Comparison with similar services elsewhere (*benchmarking*)

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Database four : Case Specific Evidence



- Standardised assessment and review protocols
- Specialised assessment and review protocols
- Diagnoses
- NOCC and use of NOCC clinical decision tool to compare with other CAMHS cases across Australia
- Measuring case specific progress towards goals
- Clinician variables

Determinants of Informed Intervention decision making



- Information from population based databases and catchment area mapping
- Evidence based intervention database and research
- Local aggregate data on practice outcomes
- Case specific evidence

Linked together, these could improve local level targeting, treatment options and decision-making, practice determinants and parameters

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Practice Determinants and Parameters

- Therapeutic practices and supervision
- Protocols for comparing client progress outcome data over time
- Professional development and performance development goals
- System protocols
- Clinical pathways protocols
- Clinical support tools and clinical intervention support tools
- Routine assessment of treatment quality and integrity
- Service delivery models and prioritisation

Specific Features of the Framework



- Intervention driven by population based needs for mental health services (*not who walks in the door but who lives in the catchment area*)
- Practice determinants, parameters, pathways and interventions are determined by ongoing evidence regarding effectiveness at a local level
- Research and evaluation projects and strategies determined by population based needs and existing databases of evidence

Priorities



- Accessing population based information for each community CAMHS team and for CAMHS at a state-wide level
- Developing an evolving database of CAMHS relevant evidence-based interventions and protocols
- Linking database of evidence-based interventions with practice evidence database based on NOCC outcomes instruments
- developing case specific evidence feedback loops and trailing clinical intervention support tools



Can Evidence-Based Practice Happen in CAMHS ?

Hawaii CAMHS has introduced a model of evidence based service delivery over a ten year period, incorporating intervention, practice and case databases (three of our proposed databases)

Daleiden, E and Chorpita, B : From Data to Wisdom: Quality Improvement Strategies Supporting Large Scale Implimentation of Evidence-based Strategies Child Adolesc Psychiatric Clin N Amer 14 (2005) 329-349

HAWAII WEBSITE



- www.hawaii.gov/health/mental-health.html
- Link to the Hawaii CAMHS page. Once there, click onto “evidence based services”. Then scroll down to the blue menus, and perhaps to the Fall 2004 report. The drop down section back on the home page “CAMHD materials for provider use” list some of their newsletters. The Sept 2005 newsletter may be of interest as it has a description of the evidence-based interventions committee.



Progress of Hawaii Model

- Development of treatment decision-making algorithms “practice element profiles” for various mental health problems, which include culture, sex and age, based on local practice evidence utilising evidence-based intervention
- The Hawaii EBS database and algorithms have been adopted by other USA CAMHS services. These are updated on an annual basis

Incorporation Into Practice



- Change ratings (client rates symptoms)
- Improving, do nothing, select algorithm
- Not improving, go to treatment selection
- Not improving with treatment selection, examine treatment integrity, take to supervision, videotape

Current Funded Projects to support framework :



- *(1) Linked Population / Intervention/ Outcomes CAMHS database project*
- “Development of a sustainable, annually updated database system for targeting an appropriate population for CAMHS intervention, linked to a sustainable, annually updated joint consumer and clinician accessible database of appropriate interventions for various clinical conditions, with a system developed for updating and disseminating this information to consumers and clinicians, linked to an outcomes database”
- Two research psychologists employed to concentrate on the first two components above (population and intervention)
- funded for six months until the end of October 2007

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A Practical Demonstration of the two databases developed to date

Introduction



- The current framework consists of two main components.

Population and Prevalence Database

Intervention Evidence Database

- Integrated into a single web-style document.

Population and Prevalence Database



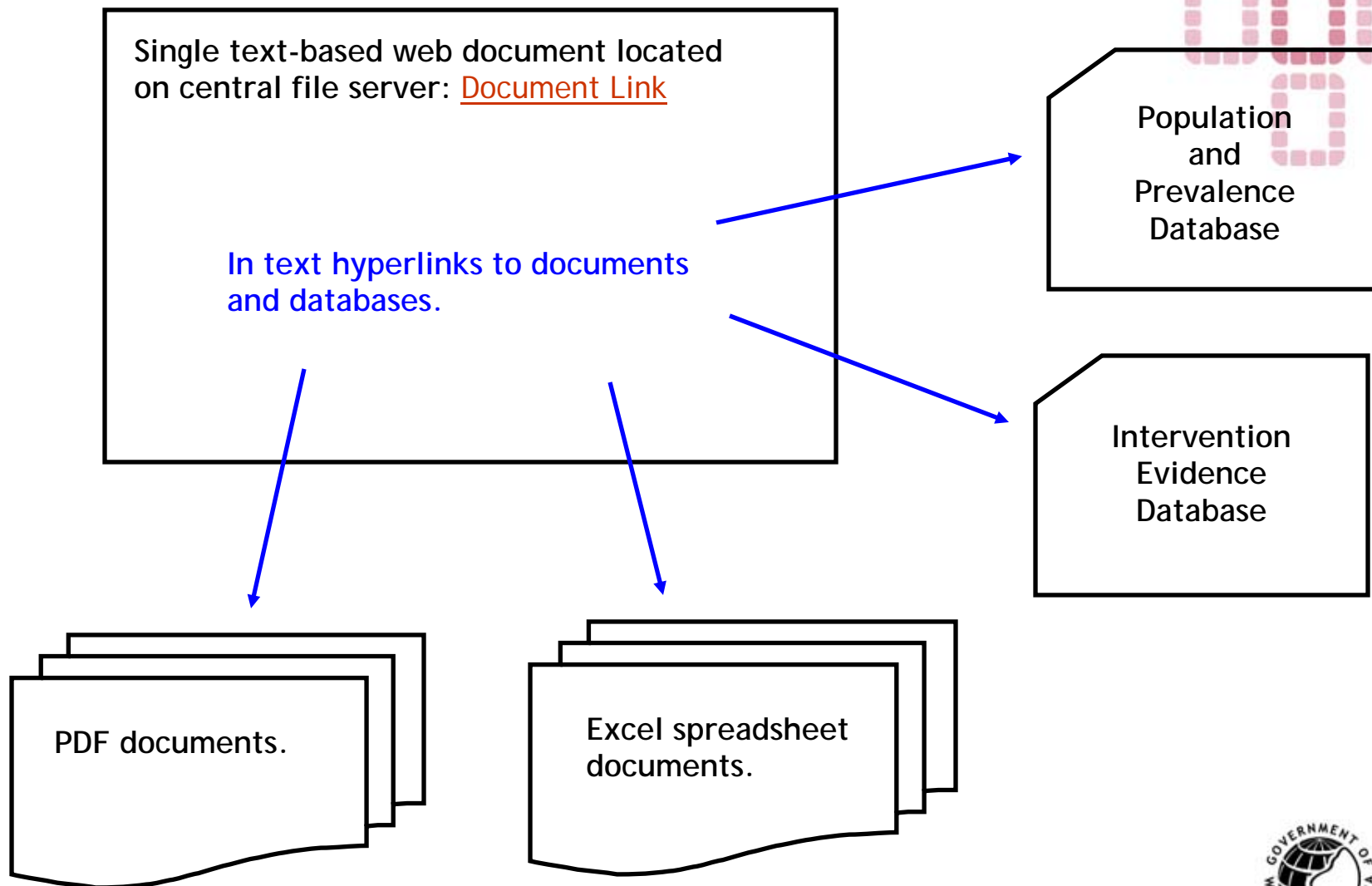
- Census population data according to catchment.
- Population projection data and graphs: 2007 to 2020.
- Diagnostic prevalence rates and trend tables.
- Computer Aided Telephone Interview (CATI) data - Health and Well-being Surveillance System (HWSS) - performed annually (2004-2007).

Framework Document



- Overarching document that encapsulates all
- the current data sets.
- Is installed on a shared CAMHS drive for access by all clinicians.
- Web-style document.
- Based on Microsoft Office Applications: Word, Excel, Access.
- Overview of data sets and links to data and documents.
- Allows easy use and navigation.

Framework Document Structure





Specific query: CAMHS region level diagnostic information.

- What were the most prevalent disorders in N. Metro for males 9-12 yrs in 2006?
- Adjustment disorder (F43.2) and mixed disorder of conduct and emotion (F92).
- 35 (or 15%) of 9-12 year olds presented with F92 diagnosis.



Intervention Evidence Database for CAMHS Clinicians

- Provides straight forward access to evidence-based information on interventions for mental health problems seen by CAMHS clinicians.
- Long-term goal to make a system which gives very specific & current indications of intervention effectiveness.



Overview

- Sources of Evidence
- Contents of the Database
- Accessing the Database Information

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Sources of Evidence



- Available guidelines, practice parameters, research reviews, etc.
- From searches of databases, government agency websites & guideline providers such as

National Institute for Clinical Excellence (UK)

Cochrane Collaboration

Scottish Intercollegiate Guidelines Network

National Guideline Clearing House (US)

Overview

- Sources of Evidence
- **Contents of the Database**
- Accessing the Database Information



Contents of the Database: Major Topics



- Database concentrates on intervention evidence but also provides access to evidence-based information on:

Prevention

Diagnosis & clinical course

Causes

Prevalence & clinical course

Contents of the Database: Other Important Topics



- Children in care
- Cultural & linguistic diversity
- The Family - including divorce & separation, family dynamics, etc.
- Indigenous issues
- Infants & toddlers
- Outcome measures
- Parenting
- Perpetrator of abuse - suspected or confirmed
- Seclusion & restraint
- Sexuality - Precocious puberty, gender issues, etc.
- Victim of abuse - Suspected or confirmed
- Youth in detention & correctional facilities

Accessing the Database Information



- A user's manual is provided.
- **Overarching web-style document provides two main ways of accessing the evidence information:**
 1. Through a simple index of links to individual documents
 2. Through a searchable database.

Accessing the Intervention Database Information: Search Results



- A list of relevant documents
- Direct access to the documents via links on the page
- Problem area and intervention that the document concentrates on
- What the document is- Whether an actual treatment guideline or a review of evidence, etc.



Accessing the Intervention Database Information: An example

- Example: A search the effectiveness of CBT treatments for an unspecified childhood anxiety disorder.

Current and Future Directions



- Clinician pilot testing of two databases developed so far
- Incorporate further clinical and population data.
- Pilot test Hawaii intervention database in WA
- More automated data linkages for clinical pathway analysis and service gap identification.
- More integrated and seamless interface.
- *Linking database of evidence-based interventions with practice evidence database based on NOCC outcomes instruments*
- *developing case specific evidence feedback loops and trailing clinical intervention support tools*