Depression in Adults: Policy Research Needs

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Consensus Development Conference on Depression in Adults
Calgary, Alberta   October 15-17, 2008

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HEALTH ECONOMICS
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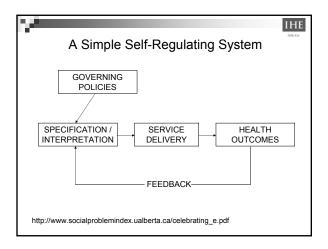## Policy Research

- To support decisions about the delivery of health services

- Not about the nature of health determinants

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Policy Research Priorities

- Too important a matter to be left to the research community!
                (a la G. Clemenceau)

- Are determined by health delivery policy and practice issues (often with research help)
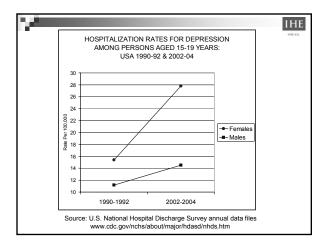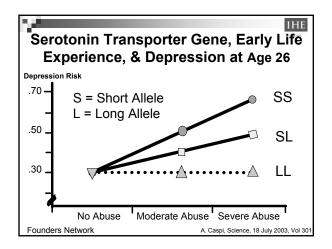
A Simple Self-Regulating System

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            ┌──────────────┐
            │  GOVERNING   │
            │   POLICIES   │
            └──────┬───────┘
                   │
                   ▼
┌──────────────┐  ┌──────────────┐  ┌──────────────┐
│SPECIFICATION/│  │   SERVICE    │  │   HEALTH     │
│INTERPRETATION│─▶│  DELIVERY    │─▶│  OUTCOMES    │
└──────┬───────┘  └──────────────┘  └──────┬───────┘
       │                                   │
       └──────────── FEEDBACK ─────────────┘
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http://www.socialproblemindex.ualberta.ca/celebrating_e.pdf

Policy Maker's Checklist

1. Is depression a significant problem?
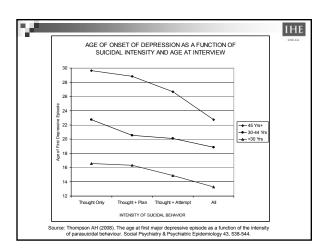
   i.   Human Burden?
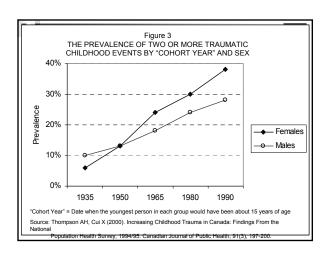
   ii.   How many?

   iii.   Who?

   iv.   Are things getting better? Worse?

HOSPITALIZATION RATES FOR DEPRESSION
AMONG PERSONS AGED 15-19 YEARS:
USA 1990-92 & 2002-04

Rate Per 100,000

Legend: Females, Males

1990-1992   2002-2004

Source: U.S. National Hospital Discharge Survey annual data files
www.cdc.gov/nchs/about/major/hdasd/nhds.htm

Policy Maker's Checklist

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1. Is depression a significant problem?

2. What is the economic burden?

3. Are depression treatments effective?

4. Does depression often go untreated?
   i. Do untreated wish treatment?
   ii. Can untreated access treatment?

Policy Maker's Checklist

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1. Is depression a significant problem?

2. What is the economic burden?

3. Are depression treatments effective?

4. Does depression often go untreated?

5. What is the cost of treatment?

Policy Maker's Checklist

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6. Can we prevent depression?
   i. Hereditary factors?
   ii. Early onset & suicide?
   iii. Early childhood abuse
   iv. Early fearfulness / avoidance

Serotonin Transporter Gene, Early Life Experience, & Depression at Age 26

Depression Risk

S = Short Allele
L = Long Allele

.70 — SS
.50 — SL
.30 — LL

No Abuse   Moderate Abuse   Severe Abuse

Founders Network   A. Caspi, Science, 18 July 2003, Vol 301

AGE OF ONSET OF DEPRESSION AS A FUNCTION OF
SUICIDAL INTENSITY AND AGE AT INTERVIEW

Age of First Depressive Episode

30
28
26
24
22
20
18
16
14
12

Thought Only   Thought + Plan   Thought + Attempt   All

INTENSITY OF SUICIDAL BEHAVIOR

Legend:
- 45 Yrs+
- 30-44 Yrs
- <30 Yrs

Source: Thompson AH (2008). The age at first major depressive episode as a function of the intensity
of parasuicidal behaviour. Social Psychiatry & Psychiatric Epidemiology 43, 538-544.

Figure 3
THE PREVALENCE OF TWO OR MORE TRAUMATIC
CHILDHOOD EVENTS BY "COHORT YEAR" AND SEX

Prevalence

40%
30%
20%
10%
0%

1935   1950   1965   1980   1990

Legend:
- Females
- Males

"Cohort Year" = Date when the youngest person in each group would have been about 15 years of age

Source: Thompson AH, Cui X (2000). Increasing Childhood Trauma in Canada: Findings From the National
Population Health Survey, 1994/95. Canadian Journal of Public Health, 91(3), 197-200.

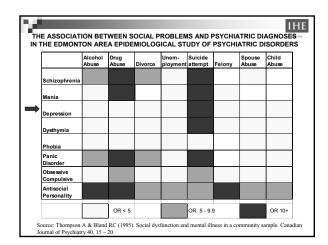## Policy Maker's Checklist

6. Can we prevent depression?

7. What is the cost of prevention?

8. How can we detect improvement?

9. The intervention/burden cost ratio?

10. What can cost-effectively change?

Policy Maker's Checklist

11. What else will intervention change?

THE ASSOCIATION BETWEEN SOCIAL PROBLEMS AND PSYCHIATRIC DIAGNOSES IN THE EDMONTON AREA EPIDEMIOLOGICAL STUDY OF PSYCHIATRIC DISORDERS

	Alcohol Abuse	Drug Abuse	Divorce	Unem-ployment	Suicide attempt	Felony	Spouse Abuse	Child Abuse
Schizophrenia	OR 5-9.9	OR 10+			OR 10+			
Mania		OR 10+			OR 10+			
Depression								
Dysthymia					OR 10+			
Phobia								
Panic Disorder	OR 5-9.9	OR 10+	OR 5-9.9		OR 5-9.9			
Obsessive Compulsive		OR 5-9.9			OR 5-9.9			
Antisocial Personality	OR 10+	OR 10+	OR 5-9.9	OR 5-9.9	OR 5-9.9	OR 10+	OR 5-9.9	OR 5-9.9

	OR < 5		OR 5 - 9.9		OR 10+

Source: Thompson A & Bland RC (1995). Social dysfunction and mental illness in a community sample. Canadian Journal of Psychiatry 40, 15 – 20.
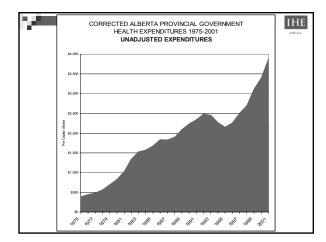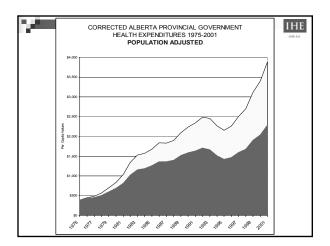
Policy Maker's Checklist

11. What else will intervention change?

12. Can our organization learn?

CORRECTED ALBERTA PROVINCIAL GOVERNMENT
HEALTH EXPENDITURES 1975-2001
UNADJUSTED EXPENDITURES

CORRECTED ALBERTA PROVINCIAL GOVERNMENT
HEALTH EXPENDITURES 1975-2001
POPULATION ADJUSTED

CORRECTED ALBERTA PROVINCIAL GOVERNMENT
HEALTH EXPENDITURES 1975-2001
POPULATION & INFLATION ADJUSTED

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HEALTH EXPENDITURES 1975-2001
POPULATION, INFLATION & AGE ADJUSTED

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For More Information:

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Many Thanks

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A Model For Setting Health Priorities

Activities   Outputs

SELECT DEFINITION(S)
OF HEALTH

SET INITIAL HEALTH PRIORITIES
BASED ON HEALTH IMPACT

REVISE HEALTH PRIORITIES   BASIC/CLINICAL
BASED ON PREVENTABILITY   RESEARCH PRIORITIES

REVISE HEALTH PRIORITIES   HEALTH PRIORITIES
BASED ON EMERGENT ISSUES

TRANSLATE HEALTH PRIORITIES   HEALTH SYSTEM
INTO SERVICE PRIORITIES   RESEARCH PRIORITIES

OPTIMIZE HEALTH IMPACT   HEALTH SYSTEM
WITHIN BUDGET   PRIORITIES

                                  HEALTH TARGETS