# "Economic impact and utilization of health services"

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Concensus Conference Calgary October 15, 2008

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### Question 2

 What are the effects of depression for the individual, family, and society?

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### Issues addressed

- 1. What are the costs of depression?
- 2. Do we use treatment resources **efficiently**?
- 3. Are we spending enough to treat depression?
- 4. Is the private burden of depression "fair"?



The data is not good

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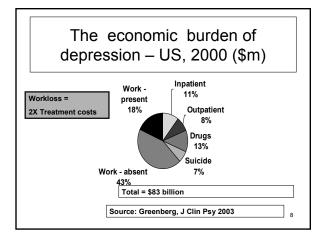
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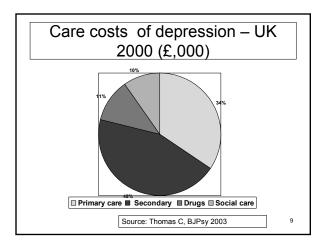
What are the costs of depression?

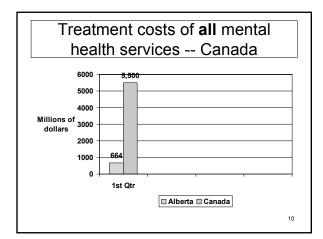


### Costs - a societal view

- Items requiring resources
  - Diagnosis and treatment
  - Support services
  - Workplace costs
- Non resource items
  - Human costs (health status)
  - Disability payments
    - · Government and private insurance
  - External costs (e.g., crime)







# Cost of treating **depression** -- Alberta

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### Treatment costs

- Treatment costs per person treated, Alberta
- Includes hospital, physician, ER
- · AND IS VERY ROUGH
- IS




### "Human costs"

- Based on a utility index (measures health status from 0 to 1)
- Data from Canadian Community Health Survey
- Quality adjusted life years (mental illness)
  - Diagnosed mentally ill 0.71
    Undiagnosed 0.80
    Not mentally ill 0.91

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- Dollar value (\$50,000) attached to a Quality adjusted life year
- Estimates for "human costs" of MI adults, Canada

– Diagnosed mentally ill \$18.7 billion– Undiagnosed mentally ill \$9.4 billion

 Comparison: Estimated cost of mental health services, <u>all persons</u>, Canada \$5.5 billion.

Human costs = 4 - 6 X Treatment costs

## Government disability payments, Alberta, 2006

- Canada Pension Plan and Assistance for the Severely Handicapped \$200 m.
- Total government expenditures on mental health treatment \$400 m
- · Per cent of government payments

Govt disability payments = ½ Treatment costs 50%

Source: Block R. HCM 2006 ; Block, PhD thesis, U of A, 2008

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### Summary

- Costs of depression in order of magnitude:
  - Human costs, 4 6X treatment costs
  - Workplace costs, approx 2X treatment costs
  - Treatment costs = \$13,000 / person
  - Govt disability payments approx. ½ treatment costs
- BUT
- Treatment costs can influence the other costs

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 Treatment costs impact all other costs



# Are we using resources (treatment) efficiently?



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### Effective treatment for depression

- Effective treatment
  - Seeing a health professional > once
  - And either
    - Medication prescription or
    - · Cognitive behavioral therapy
- Ineffective treatment
  - Other therapies

Source: Andrews G, J Ment Health Policy Econ 2000

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# Effective coverage % (Australia)

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# Net cost of **inefficiency**, **persons** with depression, Australia

Current cost of treament

\$483m.

Cost of optimal treatment

\$341M

Net <u>savings</u>

<u>\$142 m.</u>

- This was associated with a 1/3 gain in measured outcomes
- This is for the currently treated

Andrews G, 2000

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### Summary

- If we use optimal treatment methods, total treatment costs will fall by 1/3
- With better outcomes

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Are we spending enough on treatment?



# Cost of treating the **undiagnosed** with depression -- Australia

- · Current situation
- \$483.7 million
- Optimal treatment, current coverage
  - \$341.3 million
- Optimal treatment, optimal coverage \$375.5 million

Andrews G, 2000

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### Diagnosed / undiagnosed adults with mental illness in Canada Millions of 1.85 adults 1.8 1.75 ■ Diagnosed 1.65 **■** Undiagnosed 1.6 1.55 1.5 1.45 Source: Lim, Chronic Dis in Canada, 2008

### Summary

• Optimal coverage for untreated will add about 10% on to the costs

### Is the private burden "fair"?



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### Burden balance

Workloss vs Disability payments

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- Government disability payments = ½ treatment costs
- Workloss costs due to absenteeism = approx. 2X treatment costs
- → Disability = ¼ workloss

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- Treatment costs about \$13,000
- Workloss costs = 2 X treatment
- Human costs = 3 to 4 X treatment
- Treatment costs drive workloss and human costs
- Optimal treatment is cost saving
- Extending treatment to untreated persons costs about 10% more

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### But...

• There's lots we don't know.