The Utility and Cost-Utility of Treatments for Major Depression

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Significance

- Tradeoffs between costs and outcomes are an inescapable reality of health care today
- Cost-utility analysis can guide choices toward interventions with the most health value
- Major limitation of a cost-utility approach is that utility ratings are:
  - Infrequently available in the literature
  - Expensive and time-consuming to collect

Study Objectives

- Describe a new approach to measure utilities
- Apply this approach to usual care for major depression, generating estimates of the change in utility attributable to the intervention
- Obtain costs of treatment from claims data and report cost-utility ratios

How We Measured Utilities

- Modified expert panel approach used to estimate change in utility attributable to different patterns of treatment
- Panelists made 3 sets of ratings using a web-based tool:
  - before treatment
  - After 3 months of no new treatment (natural history ratings)
  - After 3 months of treatment
- Utility of treatment = After treatment –Natural history

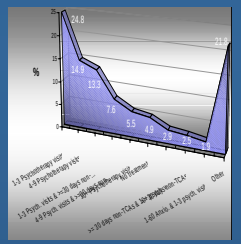
Panelists Made Estimates of Utility for Specific Clinical Scenarios

- Defined homogenous patient groups with respect to the utility of the treatment. This included both patient and illness characteristics.
- Defined 18 treatment patterns after an index visit
  - Number of psychotherapy visits (0, 1-3, 4-9, 10+)
  - Use of a non TCA antidepressant > 30 days (yes, no)
  - Received medication follow-up visit (yes, no)
  - Number of days of sedative use (0,1-60, >60)

How We Identified Usual Care Treatment Patterns

- Used Medstat Claims + Pharmacy data from 1998-2000 for patients with an index visit for major depression (N=6343)
- Acute Phase Treatment defined as 4 months post index visit

Frequency of Usual-Care Treatment Patterns for Acute-Phase Major Depression in a Privately Insured Population, Aged 18-50, 1998-2000.



How We Estimated Costs

- Medstat claims data 1998-2000 used to obtain uninsured mean costs of treatment weighted by the CPT code frequency.
- Medstat Pharmacy data to estimate the weighted, mean, cost of a 3 month supply of a non-TCA ADA.

Conclusions (1)—Which Treatments Have the Most Utility?

- For mild depression, utility with f/u ADA = utility of 10+
- As depression severity increases, utility of medication with f/u > 10+ psychotherapy
- For all severity levels combination treatment produces the biggest gains.

Conclusions (2)—Which Treatments Provide the Most Health Value?

- The lowest cost and most frequent , 1-3 psychotherapy visits, produces minimal improvement.
- With one exception, treatments that include an ADA and med f/u dominate all other treatments.
- Adding a medication f/u provides a lot of benefit with minimal cost.
- The magnitude of improvement increases as depression severity increases.

Results

Figure 1

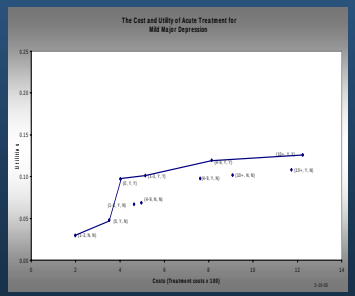


Figure 2

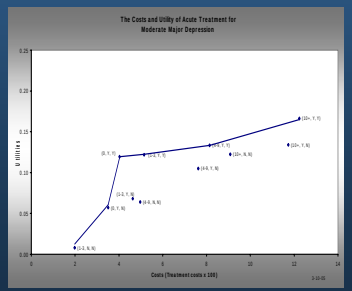


Figure 3

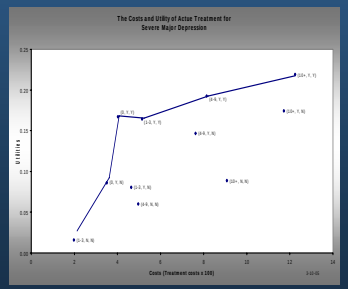
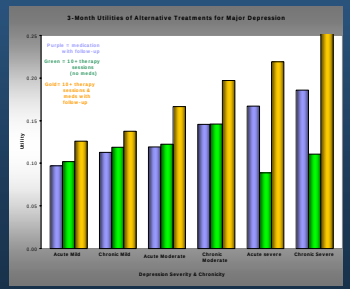


Figure 4



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