Outcomes-based Treatment
An Alternative to Evidence-based Models

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Evidence-Based Treatment

- Utilize a treatment model documented to be effective in controlled clinical research
- Question of whether the model is implemented with fidelity
- No guarantees that it will work in routine clinical practice
- No verification of outcomes
Outcomes-Based Treatment

- Monitor baseline and initial relevant outcomes for **all** clients – outcomes can be clinical and/or societal
- Monitoring done during typical period of maintenance (aftercare)
- Uses information already required for quality care
- Retrieval of data for analyses
Evidence vs. Outcomes

- Evidence-based models hope that outcomes will be similar to those obtained from formal studies.
- Outcomes-based models actually monitor outcomes on a routine basis.
- Outcomes-based models facilitate ongoing treatment improvement and documentation of clinical and societal benefits in real world environments.
In Which Company Would You Invest?

- **Company A:**
  Has a business model that is reported to be profitable in other locations but has no evidence for this location

- **Company B:**
  Has audited reports showing that it is profitable in this location
Potential Uses for Outcomes Documentation

- Identifying Differential Relapse Risks
- Enhancing Client Motivation
- Treatment Improvement
- Marketing Services
- Justifying Treatment Costs
- Public Relations
Beware of Arbitrary Metrics

- Scientifically reliable and valid
- Irrelevant to the real world

Reference on arbitrary metrics:

Addiction Treatment Examples:
- Average days of use in past 30 days
- Scores on a variety of psychological instruments
Arbitrary Metric Example

Programs A and B each treat 100 cases

Program A:
Before treatment average days of use = 25
After treatment average days of use = 10

Program B:
Before treatment average days of use = 25
After treatment average days of use = 8

Which program has the better outcomes?
Arbitrary Metric Example

Real world results:

Program A:
60 in full recovery; 40 minimal change

Program B:
All 100 still using just on weekends, but all still have continuing problems and meet current criteria for dependence

To which program would you refer a family member?
Identifying Differential Relapse Risk
Defining the Case-mix: The Population Served

- Prognostic indicators or scales and their relative prevalence in a treatment population
- Influences treatment type and duration required to produce outcome goal
- Frames expectations for treatment
- Levels the playing field for making program comparisons
Demographic Risk Scale

- Less than 25 years of age.
- No high school diploma or GED.
- Unemployed.
- Never married.

Three or more positive characteristics increases expected relapse rate by about 20%
Demographic Risk Scale and Observed Outcomes

High Risk

Low Risk

35 Units of service = threshold for low risk group
75 Units of service = threshold for high risk group

Recovery and CATOR Clinical Severity Scale

N = 9,867 Treatment Completers

% Abstinent at Month 6 vs. CATOR Clinical Severity Score
Client Motivation and Empowerment
Maintenance Care Thresholds

N = 12,783 Treatment Completers

Hoffmann & DeHart. (1996). CATOR Fact Sheet
Hypothetical Example:
Outcome of 100 Clients at 6 months

- 50 Attended 6 months of maintenance care
  - Overall abstinence: 35 sober = 70%
  - 32 also attended self-help groups regularly
    - 26 are abstinent = 81%

- 25 Attended 3-5 months of maintenance
  - 14 sober = 56%

- 25 Did not attend 3 months of maintenance
  - 10 sober = 40%
One Year Abstinence Rates for Older Alcohol Dependent Clients

Combinations of 4+ months of Maintenance Care and/or Weekly AA Attendance for 1,350 treatment completers

CONTINUED CARE & SELF-HELP GROUPS
Rate attendance using the scale:
1 = never/stopped 3 = Several times a mo.
2 = Once a month or less 4 = At least once a week
How often did you attend the following during the past three months:

09. Formal aftercare
10. AA
11. NA
12. Rational Recovery
13. SMART Recovery group
14. Other support group
Treatment Improvement
CLINICAL CONTINUOUS IMPROVEMENT COMPONENTS

Patient Assessment
Intake and ongoing assessments

Outcomes
Recovery outcome measurement-
Societal benefit measures
Financial benefit measures

Treatment Plan
Define problems
Treatment priorities-
Treatment placement

Treatment Response/Progress
Biopsychosocial treatment
Process measurements
Adjustments to treatment plan as needed
TREATMENT RATINGS [asked by follow-up interviewer]

How helpful have the following treatment components have been for recovery?

0 = not used 1 = not helpful; 2 = a little; 3 = some; 4 = very

01. Group Therapy ______
02. Individual counseling ______
03. Lectures & education ______
04. Working the AA/NA steps ______
05. Peer-group meetings (e.g., AA) ______
06. Family portion of program ______
07. Talking with other clients ______
08. Overall rating for the program ______
Feedback on Helpfulness of Program Components

- Helpfulness in recovery – not satisfaction with the component

- Low scores indicate opportunities for improvement

- High scores indicate potential areas of excellence
Scott Miller, Ph.D. developed measures to assess the level of compatibility.

Research indicates that outcomes are better when the client and clinician are in agreement on tasks and issues.

The measures are available at no cost.
Treatment Response Measures: e.g., DAPPER

- DAPPER provides ratings on constructs from the six dimensions of the ASAM PPC-2R
- Initial ratings identify areas of primary concern or issues that require initial attention
- Repeated ratings reflect response to treatment or lack thereof
Preliminary Findings from a Swedish Treatment Program

- The OAARS is an inexpensive outcome monitoring system using selected items from the DAPPER.

- Discharge ratings on some OAARS ratings correlated with outcomes at 3 and 6 months after discharge.

- Favorable ratings indicated positive outcomes.
Justifying Investment in Treatment
Societal Benefits

- Lower mortality rates – addictions cause premature deaths
- Improved personal and vocational functioning
- Improved domestic relationships
- Personal safety improvement – less driving under the influence & crime
Financial Benefits

- Decreased healthcare costs
- Reduced incarcerations and criminal justice costs
- Reductions in other costs related to crime
- Improved vocational functioning
- Reduced welfare costs
Healthcare Returns: Proportional to Effectiveness

Average Days of Hospitalization

Relapsed vs. Recovery
Before Tx  p = N.S.
Yr 1 & Yr 2  p < .001

Highway Safety Returns: Proportional to Effectiveness

Motor Vehicle Accidents

Criminal Justice Returns: Proportional to Effectiveness

Proportion of Cases Arrested

# Healthcare Returns On Investment for Dependent Employees

<table>
<thead>
<tr>
<th></th>
<th>Before Treatment</th>
<th>After Treatment</th>
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<tbody>
<tr>
<td>Employees Hospitalized</td>
<td>24%</td>
<td>10%</td>
</tr>
<tr>
<td>Employees Using ER</td>
<td>29%</td>
<td>21%</td>
</tr>
<tr>
<td>Total Days of Hospitalization</td>
<td>7639</td>
<td>5158</td>
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Vocational Functioning
Returns On Investment

Problem types include: absenteeism, tardiness mistakes, lack of work completion, conflicts, and on the job injuries

<table>
<thead>
<tr>
<th>Number of Problem Types</th>
<th>Before Treatment</th>
<th>After Treatment</th>
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<tbody>
<tr>
<td>None</td>
<td>35%</td>
<td>76%</td>
</tr>
<tr>
<td>One</td>
<td>23%</td>
<td>16%</td>
</tr>
<tr>
<td>Two</td>
<td>18%</td>
<td>5%</td>
</tr>
<tr>
<td>Three</td>
<td>11%</td>
<td>2%</td>
</tr>
<tr>
<td>Four plus</td>
<td>13%</td>
<td>1%</td>
</tr>
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Medicare/Medicaid Funded Treatment and Recovery

Medicare/Medicaid Funded Treatment and Recovery

Drug Court Economics

Costs and Returns per Case

- Cost of Drug Court = $7793
- Cost of Probation Only = $6344
- Initial cost difference = ($1449)
- Gross Savings Two Years Post = $2615
- Net Savings for Drug Court = $1166

St. Louis Drug Court cited on www.jointogether.org/y/0,2521568901,00.html
Implications of Financial Benefit Findings

- Dependent cases account for the preponderance of costs
- Treatment has to be effective to return optimal benefits
- Failure to adequately fund treatment can be more expensive in the long run
Marketing
Marketing to Whom?

- Potential clients and/or families of those affected
- Employers with stable workforces consisting of employees who are difficult or expensive to replace
- Public officials tasked with stretching limited budgets
- Insurers – FOR GET IT – clinical outcomes are not in their equation
Marketing Strategies

- Provide realistic and documented recovery rates – shape expectations
- Data to support treatment plan based on client characteristics and treatment options
- Provide competitive advantage over programs that don’t have outcomes
Public Relations
Public Relations Errors

Many people concerned about addictions:

- Talk to the wrong people
- About the wrong topics
- Using the wrong terminology
- And wonder why nothing changes
The Lesson of the Peacock

- The peacock is among the most beautiful of birds.

- However, its “song” is among the most awful of sounds.

- Trying to teach a peacock to sing is a waste of time and neglects the beauty – focuses on weakness not strength.
Voice of the Peacock

- An alcohol or drug dependent person does not make an attractive poster child – biased perspectives – stigma.

- Failures are very obvious and visible.

- Successes tend to disappear from view.

- The general public does not care whether dependent people recover.
Beauty of the Peacock

- Return on investment is one of the greatest in the healthcare arena.
- Reasonable recovery rates relative to other chronic illnesses can be documented.
- Treatment costs are modest compared to other areas of healthcare.
- Benefits of treatment are found throughout society
Return on investment for addictions treatment tends to range from 4:1 to 7:1 depending on factors considered.

Ohio Statewide study of only those treated found a 4:1 return.

California studies that included those affected by the addicted found a 7:1 return in the treatment investment.
ROI – Only Part of The Equation

- No one area gets all the returns.
- The majority of returns do not accrue to the healthcare segment.
- Corrections and law enforcement get a substantial portion of returns.
- Not everyone is concerned with the return on investment.
Who Cares About What?

- The general public cares about safety and financial issues.
- Employers care about turnover and performance.
- Public officials want support for positions that will get them reelected.
- The media look for a good story that will get attention.
Relationships With the Media

- Reporters are always looking for a good story – either good or bad news.
- Combining a personal recovery story with outcome data can be a powerful positive story.
- A little controversy can be a positive thing if you select the controversy.
Relationships With Elected Officials

- Most elected officials have no realistic understanding of addictions or treatment
- Most are interested in the general welfare
- To do what is right, some will need political cover to support treatment vs. punitive strategies
Relationships with Employers

- Focus on employers with stable workforces and where employees are difficult or expensive to replace
- Make the case that recovering employees make excellent workers
- Educate them that afflicted workers can be identified and treated successfully
Relationships with the General Population

- The general public cares about safety and financial issues.
- Most people are not concerned about the welfare of addicted individuals.
- Most people do not have a realistic understanding of addictions or treatment.
Collaboration in Sharing Outcome Results

- General findings from multiple sources enhances credibility of all.
- Data from multiple locations overcomes the “Will that apply here?” problem.
- Comparative results can provide justification for additional resources.
Building or Selecting an Outcome Monitoring System
Basic Principles

- Start modestly – don’t overbuild the system – focus on the primary purpose(s) or objective(s) of the monitoring
- Prioritize the information to be documented – from absolutely essential to what would just be interesting
- Select the most essential variables for the initial version of the system
- Plan to add lower/different priority items later
Potential Internal Objectives

- Internal use for program improvement – identifying program strengths and weaknesses
- Internal use for motivation for engagement and retention
- Identification of groups with differential outcomes – better or worse than average
- Identify staff development potentials
Marketing Applications

- Document realistic and defensible outcomes for marketing to target audiences

- Use outcomes to establish a positive message for recovery – e.g., publicize recovery information for recovery month

- Use the data for informational brochures

- Marketing materials for initial engagement of clients and/or family
Potential Funding Objectives

- Document financial benefits of treatment
- Target where treatment shows returns to areas of interest – e.g., reduced healthcare costs, reduced incarceration costs, improved vocational functioning
- Capture data on events or concrete variables – e.g., days of hospitalization, days of incarceration, days of absenteeism
- Work with economist to convert to dollars
Funding Objectives cont.

- Consider all sources of funding – local, state, federal – and pathways of funding

- Identify persons/organizations who have investment in returns from positive treatment outcomes – e.g., general hospitals, county commissioners

- Consider nontraditional collaborations – e.g., county sheriff who needs a case manager for the jail, DOC commissioner faced with prison over crowding
Think Outside the Box

- Active monitoring of outcomes can actually improve outcomes.
- Phone follow-up contact can be used to detect potential problems or relapse risks.
- Extended follow-up may be practical via phone, e-mail, or public media.
- Do you build your own or buy a service?
Outcome Options

An internally built outcome system can meet the needs of many programs without a large expense or formal instruments – free templates exist.

Services exist that will monitor outcomes and in some cases provide treatment enhancements – but most add costs.

The decision is based on what meets the needs in light of the price.
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