

The Importance of Data Quality in Mental Health Measurement: Risks for Practice and Policy When It Is Compromised

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Conclusions and Questions

- How can data quality be improved in behavioral health?
- How is the “quality” of data determined ?
when are data “good enough” ?
- How can all participants be engaged and be concerned about methodology ?

Improving Data Quality

Education

- Collaboration of all participants is crucial
- Recognize need for technical experts
- Understand that methodology is not a mystery
 - methodology is everybody's business if results are useful*
- Convey importance of data accuracy in decision making for practice and policy
- Clarify risks and implications of using “bad” data
- Understand data – questioning results
- Appreciate ethical implications

Improving Data Quality

Framework for Conceptualizing Data

- Reasonable, measurable operational definitions
- Obtain data as close to the source as possible
- Consider prevalence rates
- Sampling can be useful
- Consider estimation methods
- Consumer satisfaction – special issues

Improving Data Quality

Technical/Methodological Issues

- Establish minimum data standards
design, data collection, analysis, presentation, etc.
- Ensure uniformity and comparability
- Establish comparable operational definitions
- Ensure appropriate, understandable/not misleading data presentation

Factors Perpetuating Poor Data Quality

- Political pressures in public/private sectors
- Desire to impress those in authority
- Risk of harm is minimal
- Technology allows data analysis without statistical expertise
- No recognition of need for methodologists
- Lack of training of users of data re potential consequences of "bad" data

Factors Compromising Data Quality

- Inadequate/different formulation of question
- Lack of operational definitions
- Methodological problems in study design
- Measurement/instrument issues
- Lack of uniform data collection approaches
- Incorrect/inappropriate statistical analyses
- Misleading presentation of data
- Incorrect/inappropriate data interpretation

Considerations in Determining Data Quality

- When are data “good enough” ?
- Risks/consequences of decisions
- Balancing perfection and necessity - refuting ***“bad data are better than no data at all”***

Purpose for Making Data Based Decisions

- Improve practice at individual *client level*
- Increase program effectiveness - *program level*
- Influence policy in public/private sectors - local, state, federal, governing bodies - *system level*

Goals for Session

- Purpose of data collection
- Consequences of poor data quality
- Factors that compromise data quality
- Moving toward ensuring data quality
- Establishing standards – can it be done?
- Recognize ethical responsibilities