

Labor & Delivery Quality of Care Short Observational Index

Session 3: Collecting high-quality observation data

Session objectives

- Describe the terms “reliability” and “validity”
- Discuss how to collect good quality clinical observation data
- Conduct data quality activity in pairs

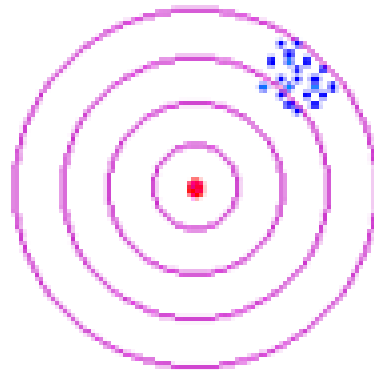
Competency in observation

- The primary aim is to make clinical observations that are valid and reliable
- Without good observation data, we cannot make accurate judgements about care quality or about how it changes over time.

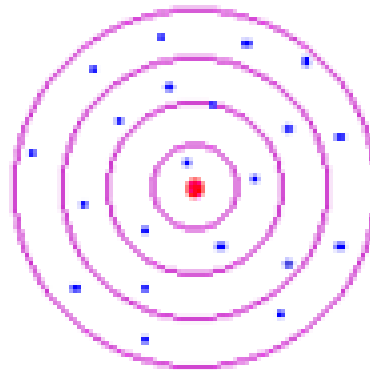
What are reliability and validity?

- Reliability = consistency; getting the same answer across different times and/or different observers
 - Related ideas: dependability, repeatability
- Validity = accuracy; collecting data that correctly describe what is happening

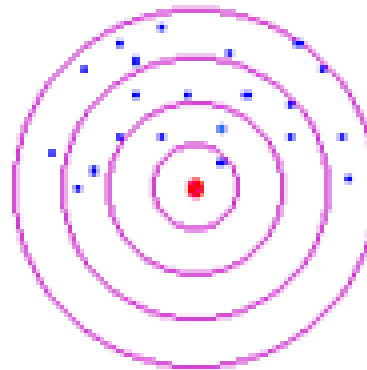
Inter-relatedness of validity and reliability



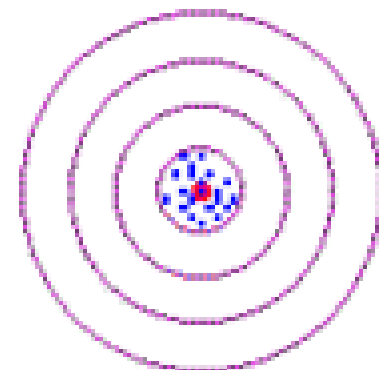
**Reliable
Not Valid**



**Valid
Not Reliable**



**Neither Reliable
Nor Valid**

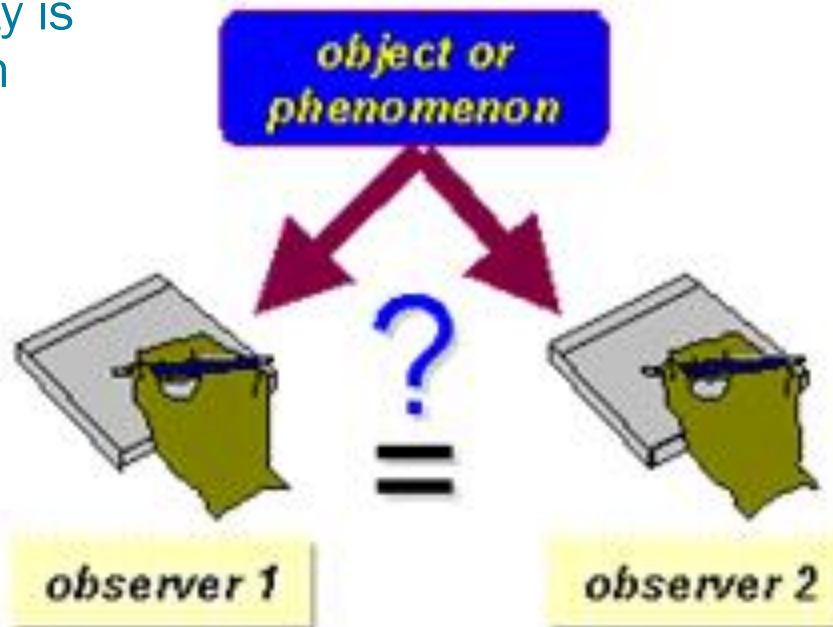


**Both Reliable
And Valid**

Modified from: Trochim, William M. *The Research Methods Knowledge Base*, 2nd Edition. Internet WWW page, at URL: <http://www.socialresearchmethods.net/kb/> (version current as of October 20, 2006).

Inter-rater reliability

Inter-rater reliability is the extent to which two or more individuals (observers) agree.



When reliability is assessment in comparison to a gold standard it also becomes a measure of **validity**

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Ensuring inter-rater reliability

- Train observers
- Ensure that tools have criteria that are followed by observers
- Calculate inter-rater reliability and calibrate observers.
- Retest inter-rater reliability

Assessing inter-rater reliability

- Measuring the accuracy and consistency of ratings across clinical observers (including in relation to a gold standard observer)

GOAL: 80-90% agreement

Data quality exercise

- In pairs:
 - Conduct data quality exercise
 - Review handout on how to assure data quality

Thank you!

