



# **A Workshop:**

## **Developing Measures of Staff and Service User Perceptions of Acute In-patient Settings, using a Participatory Methodology**

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# Content of Workshop



- **The overall aim:**
  - To develop novel outcome measures for assessing service user and staff perceptions of acute in-patient mental health wards.
- **A mixed methods approach in 3 phrases:**
  - 1: Qualitative data collection and interim analysis.
  - 2: Data reduction, item creation and measure generation.
  - 3: Quantitative data collection and psychometric testing.

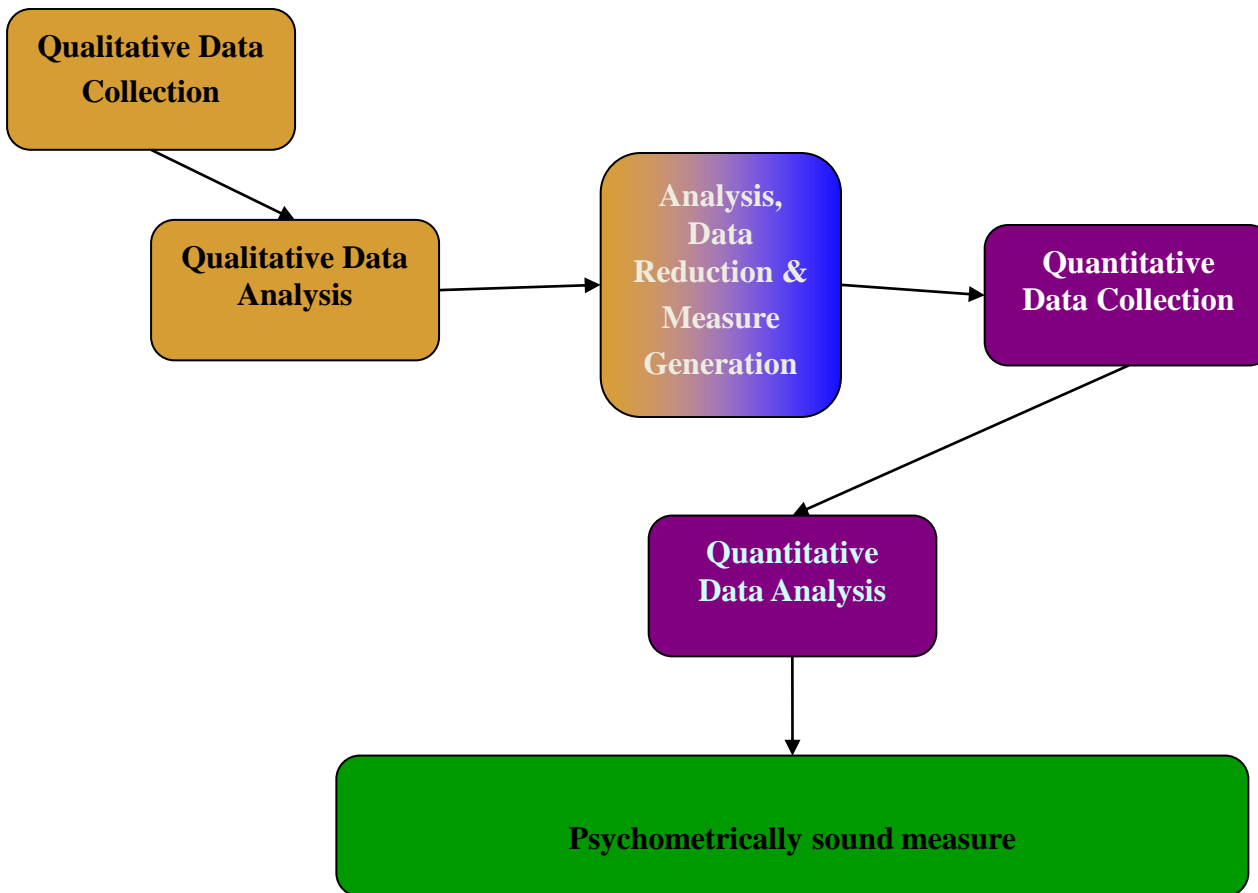
# The Participatory Model



- This method underpins the measure development process.
- It is novel because the measure emerges from direct contact with the research participants, who also guide the formation of the hypotheses.
- This makes it different from the normative, qualitative models where the researcher has control of the themes and the hypotheses.

Rose, D. *Users' voices: the perspectives of mental health service users on community and hospital care*. SCMh, 2001

# Sequential Exploratory Design



# Phase 1: Qualitative Data Collection and Interim Analysis.



- Staff & Service User Researchers
- Literature Search
- Topic Guide
- Reference Group
- Pilot Study
- Focus Groups (repeated)
- Interim Analysis

# Discussion




- Who might you involve in the measure development process?
- What might some of the practical problems be?
- What might some of the ethical issues be?

# Some Clues.....

- Literature review?
- Ask the experts?
- How do you explore perceptions?
- Interviews?
- Focus groups?
- How many participants?
- Consent?
- Adapt an existing questionnaire?
- Sample: HCA's, band 5, band 6, team leaders?
- CMHT's?
- Acute in-patients/staff?
- Confidentiality?
- Demographic criteria?
- Pilot work?

# Phase 2: Data Reduction, Item Creation and Measure Generation



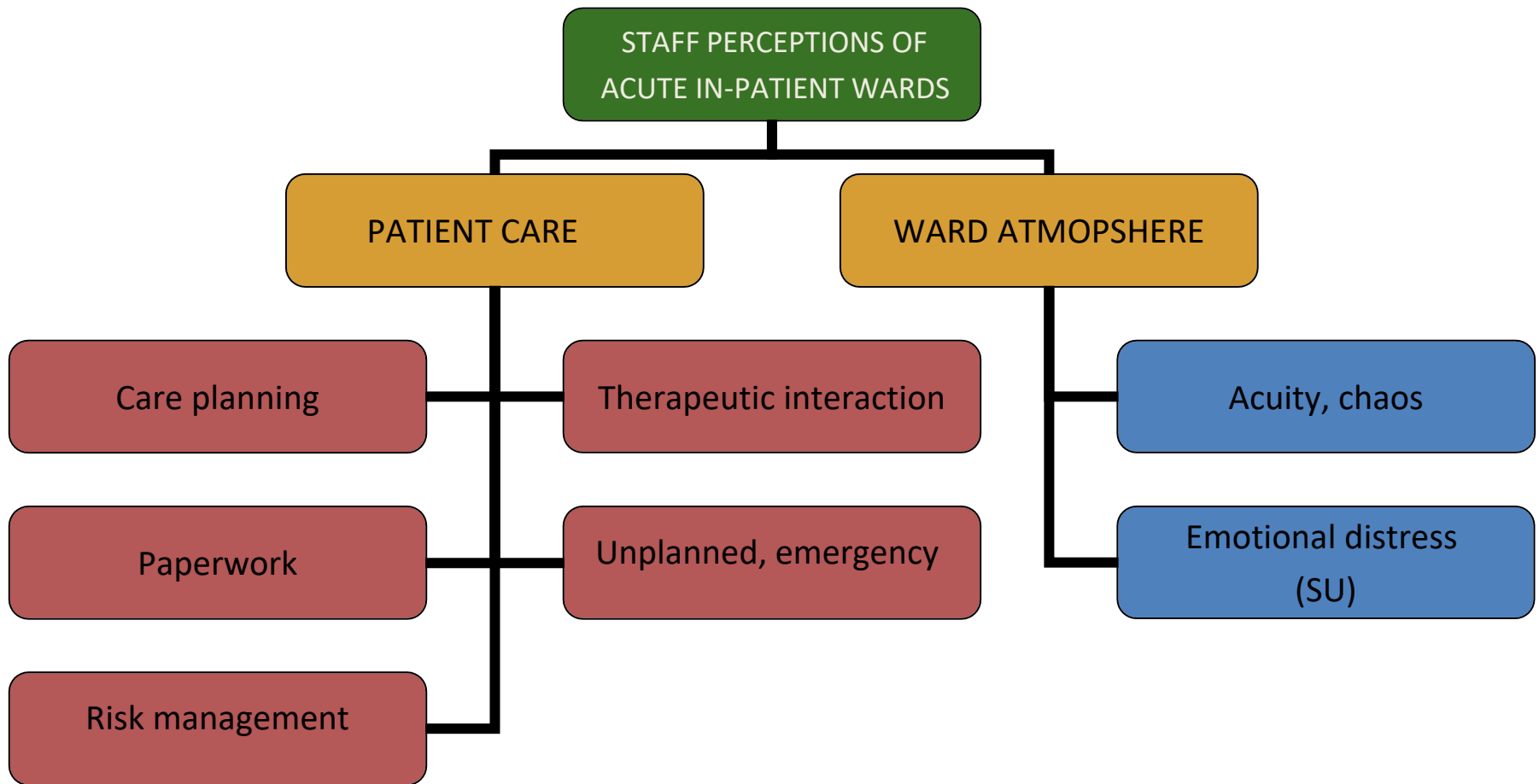
- Data Analysis
- Data Reduction
- Item Generation
- Item Reduction
- Expert Panels
- Reference Group



# Practical Exercise: Analysis & Item Creation

- Analyse the partial transcript and create themes that relate to the data
  - *Are there any similar/related themes that could form a broader category (domain)?*
- Create 2 questionnaire items, linked to the themes:
  - *Consider length, phrasing, wording?*
  - *What response format would you choose?*

# VOTE: Coding Structure



# Phase 3: Quantitative Data Collection and Psychometric Testing

TESTS	PARTICIPANTS	
	SU	Staff
OVERALL	262	243
Feasibility Study	40	40
Test Retest Reliability	40	40
Internal Consistency: Cronbach's Alpha	125	199
Convergent Validity	262	243
Factor Analysis	144	199

# Factor Analysis

- **Statistical test:**
  - Reveals the underlying dimensions of a measure.
  - Groups items into '*factors*' on the basis of how highly they are correlated.
  - The aim is to achieve a '*simple structure*', ie the maximum number of items loaded onto the minimum number of factors.
- Try grouping the questions into factors and label each factor

Kline P. *Intelligence: the psychometric view*. Routledge, 1991

# VOICE: Factor Analysis

<p><b>FACTOR 1: CARE</b></p> <p>2: I have a say in my care and treatment 3: Ward rounds are useful for me 4: I feel my medication helps me 5: I have the opportunity to discuss meds and side effects 15: I find it easy to keep in contact with family and friends</p>	<p><b>FACTOR 2: SECURITY</b></p> <p>9: I trust the staff to do a good job 11: I feel that staff treat me with respect 17: I feel safe on the ward 18: I feel staff respond well when the panic alarm goes off 19: I feel staff respond well when I tell them I'm in crisis 20: I feel able to practice my religion whilst I'm in hospital 21: I think staff respect my ethnic background</p>
<p><b>FACTOR 3: INTERACTION</b></p> <p>7: Staff take an interest in me 8: Staff are available to talk to when I need them 10: I feel that staff understand how my illness affects me 12: I think the activities on the ward meet my needs 13: I find one-to-one time with staff useful</p>	<p><b>FACTOR 4: POWERLESSNESS</b></p> <p>1: I was made to feel welcome when I arrived on this ward 6: Staff give me medication instead of talking to me 16: I am allowed to go outside when I want</p>

# To Conclude



- The participatory method is effective in producing a psychometrically sound measure.
- Thematic analysis of qualitative data yields the production of coherent items for a questionnaire.
- Factor analysis illuminates the underlying constructs of the topic under study.

# Some Useful References

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