



PHRM 311

PSYCHIATRY MODULE

EVIDENCE APPRAISAL INTEGRATED ACTIVITY
INTRODUCTORY SLIDES

Facilitated by:

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APPRAISING PRIMARY LITERATURE IN PSYCHIATRY...KEY POINTS TO CONSIDER

1. What symptom rating scale is being used?
 - Is it commonly used? How does it compare with other rating scales?
2. What is the MCID – minimum clinically important difference?
 - Are the statistically significant results = clinically significant?

APPRAISING PRIMARY LITERATURE IN PSYCHIATRY...KEY POINTS TO CONSIDER

3. Generalizability - can these results apply to my patient?

- Is the study in acute episode treatment, or maintenance treatment?
- What were the exclusion criteria?
- Can I apply mean/average data to an **individual** patient?

4. Can't always calculate NNTs

EXAMPLE: RATING SCALES FOR ASSESSING EFFICACY OF ANTIPSYCHOTICS

Two commonly used rating scales:

- PANSS - The Positive and Negative Syndrome Scale
- CGI - Clinical Global Impressions Scale

PANSS

THE POSITIVE AND NEGATIVE SYNDROME SCALE (1987)

- Observer-rated severity of symptoms in schizophrenia
- Developed to assess both positive and negative symptoms of schizophrenia as well as general psychopathology
- Includes:
 - Eighteen items of the Brief Psychiatric Rating Scale - 1962
 - Twelve items of the Psychopathology Rating Schedule – 1975

The Positive and Negative Syndrome Scale

Positive Subscale (7-49)	Negative Subscale (7-49)	General Psychopathology Subscale (16-112)
P1. Delusions	N1. Blunted affect	G1. Somatic concern
<i>P2. Conceptual disorganization</i>	<i>N2. Emotional withdrawal</i>	<i>G2. Anxiety</i>
<i>P3. Hallucinatory behavior</i>	N3. Poor rapport	<i>G3. Guilt feelings</i>
<i>P4. Excitement</i>	N4. Passive/apathetic social withdrawal	<i>G4. Tension</i>
<i>P5. Grandiosity</i>	N5. Difficulty in abstract thinking	<i>G5. Mannerisms and posturing</i>
<i>P6. Suspiciousness</i>	N6. Lack of spontaneity and flow in conversation	<i>G6. Depression</i>
<i>P7. Hostility</i>	N7. Stereotyped thinking	<i>G7. Motor retardation</i>
		<i>G8. Uncooperativeness</i>
		<i>G9. Unusual thought content</i>
		<i>G10. Disorientation</i>
		<i>G11. Poor attention</i>
		<i>G12. Lack of judgment and insight</i>
		<i>G13. Disturbance of volition</i>
		<i>G14. Poor impulse control</i>
		<i>G15. Preoccupation</i>
		<i>G16. Active social avoidance</i>

Items in italics from the Brief Psychiatric Rating Scale.

Kay SR, Opler LA, Fiszbein A. *Positive and Negative Syndrome Scale (PANSS) Manual*. Toronto, Ontario, Canada: Multi-Health Systems, 1992.

PANSS: TOTAL SCORING

- Each item rated on a 7-point scale (1=absent, 2=minimal, 3=mild, 4=moderate, 5=moderate severe, 6=severe, and 7=extreme)
- The range of possible PANSS total scores (30 to 210)

CGI

CLINICAL GLOBAL IMPRESSION (1976)

- 7-point scale, describes a patient's overall clinical state as a global impression made on the rater
- **CGI-severity scale**
 - 1=normal, not at all ill, 2=border- line mentally ill, 3=mildly ill, 4=moderately ill, 5=markedly ill, 6=severely ill, and 7=among the most extremely ill patients
- **CGI-improvement scale**
 - 1=very much improved, 2=much improved, 3=minimally improved, 4=no change, 5=minimally worse, 6=much worse, 7=very much worse

WHAT DOES THE PANSS MEAN?



Available online at www.sciencedirect.com



Schizophrenia Research 79 (2005) 231–238



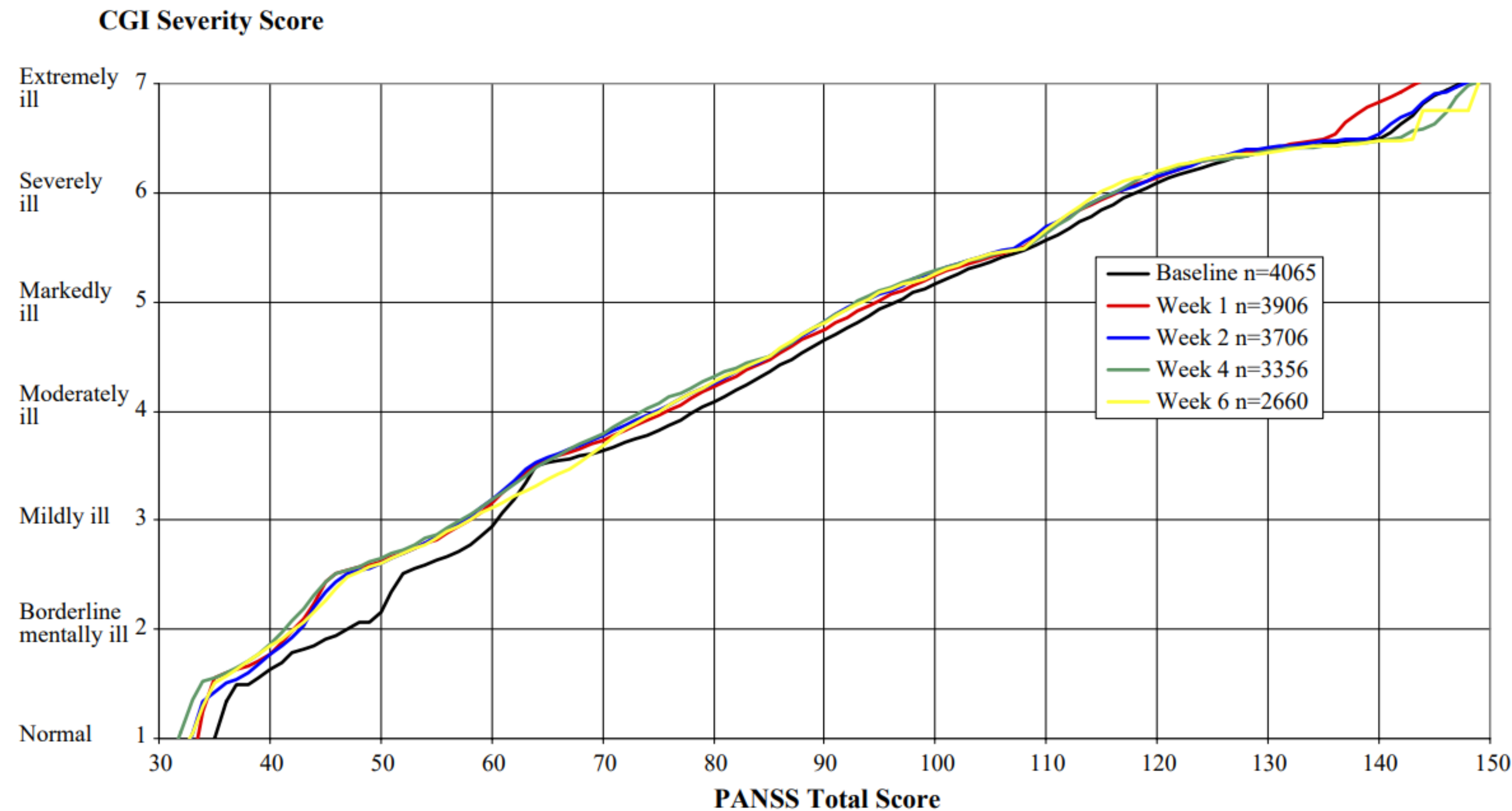
www.elsevier.com/locate/schres

What does the PANSS mean?

Stefan Leucht^{a,b,*}, John M. Kane^b, Werner Kissling^a, Johannes Hamann^a,
Eva Etschel^c, Rolf R. Engel^c

“in clinical studies a reduction of at least 20%, 30%, 40% or 50% of the initial PANSS score has been used as a cut-off to define ‘response’, but what these cut-offs mean from a **global ‘clinical’ perspective** is unclear”

PANSS TOTAL SCORE VS. CGI-S



- 110-120 = severely ill
- 90-100 = markedly ill
- 70-80 = moderately ill
- 60 = mildly ill
- 40 = borderline mentally ill
- 30 = normal

Fig. 1. Linking of CGI-severity with the PANSS total score. The graph plots the corresponding (real) CGI score for every (integer) PANSS score. For the reverse direction, the intersection of the lines indicates an integer CGI value with the graph providing the corresponding PANSS score.

PANSS CHANGE VS. CGI-I TREATMENT RESPONSE

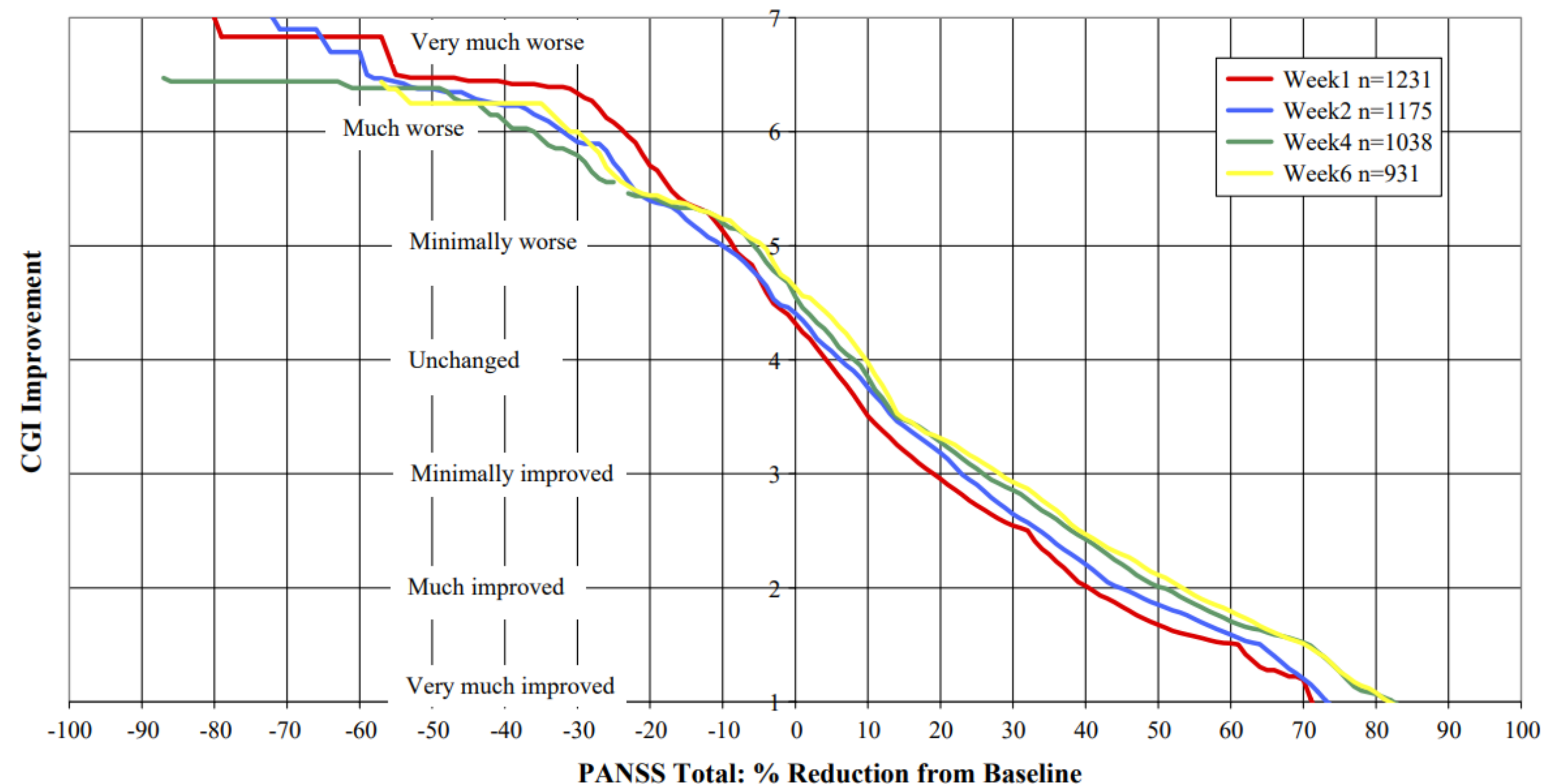


Fig. 2. Linking of CGI-improvement with percentage PANSS reduction. The graph plots the corresponding (real) CGI score for every (integer) PANSS score. For the reverse direction, the intersection of the lines indicates an integer CGI value with the graph providing the corresponding PANSS score.

- 20-25% reduction = CGI-I 3 = minimally improved
- Common threshold for treatment response in treatment-resistant schizophrenia
- 40-50% reduction = CGI-2 = much improved
- 50% reduction most common for treatment response in schizophrenia studies
- 70-80% reduction = very much improved

OTHER COMMON RATING SCALES

Psychiatric Condition	Scale	Abbrev
Schizophrenia	Brief Psychiatric Rating Scale	BPRS
Depression	Hamilton Depression Scale	HDRS (or HAM-D)
Depression	Montgomery-Asberg Depression Rating Scale	MADRS
Mania	Young Mania Rating Scale	YMRS

etc...

APPRAISAL PRESENTATIONS

- 5-minute presentation by group representative
- 5-minute question period
 - Each preceding group must ask next group a question
 - (except group presenting last must ask first group a question)
- To ask a question
 - Type in chat “I have a question for <insert person/group’s name>”
 - You will be called upon to ask your question in the order they appear in the chat