

PHQ-9 AND GAD-7: Measuring Vital Signs in Mental Health



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with sincere thanks to
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Aims

- Test whether session by session outcome measures are achievable in a busy clinical setting
- Evaluate the impact of session by session measures on patients, treatment and clinical supervision

Why?

- We fully understand health care outcomes are complex and multifaceted
- However if we simply wait around for the **'ideal'** outcome measure that is straight forward to administer, is applicable across HC populations and which “shows respect for the complexity of psychological interventions and outcomes” (Berger, 1996) then we will wait a very long time.
- Sperlinger (2002) ‘no system of outcome measurement will ever be able to capture the full complexity of the issues to be addressed’.
- Yet we do have the capacity in Adult Mental Health to fairly accurately assess levels of depression and anxiety – as this is our primary business we thought we would just do it !!! 



General Health Care and Routine Collection of Outcome Measures

➤ **Routine Outcome Measures**

- E.g. Pulse, Blood Pressure and Temperature, Respirations, F/B chart
- E.g. SUDS – Pain (0 – 10)

➤ **More Complex Condition Specific Outcome Measures**

- E.g. FBP, U&E, Cardiac Enzymes, ECG, EEG CT Scan, MRI Scan, Ultra Sound, X-Ray, Tread-mill Test, Urinalysis, BMI.

Mental Health Clinical Outcome Measurement

- Rare in mental health
- Some resistance from practitioners
- Seen as crude
- Seen as time consuming
- Seen as interfering with the real work that needs to be done and the patient therapist relationship



So why bother

- **CBT Philosophy**
 - scientist practitioner, treatment as a collaborative process
- **New treatments**
 - do they work/can we administer them effectively?
- **New staff**
 - can they deliver
- **A new comprehensive care environment**
 - (Stepped Care)

Plan

- Administer standard session by session clinical patient reported outcome measures
- PHQ9, GAD7 + Disorder Specific Measures + Satisfaction Measures

Use of data

Patient Feedback

Clinician & Supervisor Feedback

“An ability to use information from session-by-session outcome measures to guide the supervision agenda”
(Roth & Pilling, 2008)



The Evidence

- *Lambert et al. (2001) found that giving clients feedback concerning change (as assessed by an outcome measure) resulted in better therapeutic outcome and less drop out rates.*
- *Clients who received session by session routine outcome feedback were also more likely to experience reliable change and in fewer sessions (Reese et al, 2009)*

Current Best Routine Care Position

- *Only 38% of patients completing CORE –OM returned valid pre-treatment and post-treatment CORE-OM forms (12,746/33,587)*

Stiles et al, 2007, Psychological Medicine

- *“if routine outcome monitoring is to provide the public with information about how likely they are to recover in a particular service it needs to achieve much higher data completion rates that the 33% in Stiles et al. (2006) and the 38% in Stiles et al. (2007).”*

Clark et al, 2007, Psychological Medicine



Psychiatry

- *Clinicians remain unconvinced* about the effectiveness of routine outcome measurement (Bilsker & Goldner, 2002).

Proportion of Consultants Psychiatrists using outcome instruments occasionally or routinely

Depression/Anxiety

- Measuring therapeutic response 143/340 = 42.1%

Schizophrenia/Psychosis

- Measuring therapeutic response 91/340 = 26.7%

Drug and alcohol problems

- Measuring therapeutic response in drugs and alcohol problems 29/340- 8.5%

Gilbody et al (2002)



Clinical Psychology (APA)

- Bickman et al. (2000) - of 539 respondents, 23% reported that they used standardized outcome measures with their adolescent clients.
- Hatfield and Ogles (2004) – of 874 respondents 37% indicated that they used some form of outcome measure in practice

CBT (IAPT Pilot Site Data)

Year One Data from Doncaster and Newham

- Initial PHQ9/GAD7 recorded: 91%-100%
- Final PHQ9/GAD7 recorded: 88%-100%
- Initial CORE recorded: 74%-87%
- Final CORE recorded: 6%-56%

It can be done!



Outcome Measures should be:

- ▶ **Applicable:**
The measure should address dimensions that are important to the patient (symptoms and disability) and useful to clinicians in their clinical work.
- ▶ **Acceptable:**
Measures should be brief and user friendly, the language easily understood and the format of the measure clear.
- ▶ **Practical**
Outcome measures need to be practical for routine use in clinical practice with minimal cost, simple scoring and interpretation and require minimal training.
- ▶ **Reliable:**
The measure should provide the same results when completed by two different people.
- ▶ **Valid:**
The measure should quantify and measure what it is designed to measure.
- ▶ **Sensitive to change:**
If the measure is to reflect outcome of treatment or intervention then it should be sensitive to meaningful changes in the patient's mental health status.



The Patient Health Questionnaire

PHQ-9 (Kroenke et al, 2001)

- A multipurpose, patient administered instrument for screening, diagnosing, monitoring and measuring the severity of depression
- Incorporates DSM diagnostic criteria
- Includes a robust severity index
- Measures the presence and duration of suicide ideation
- A visual analogue scale assigns weight to the degree to which depressive problems have affected the patient's level of functioning

It's also.....

- Free to use
- Quick to administer
- With excellent psychometric properties – + sensitive to change



Generalized Anxiety Disorder-7 (GAD-7)

- GAD-7 can help MHP recognize and then treat anxiety disorders
- uses seven questions to assess anxiety
- performed well in screening for generalized anxiety disorder, panic disorder, social anxiety disorder, and posttraumatic stress disorder.

It's also

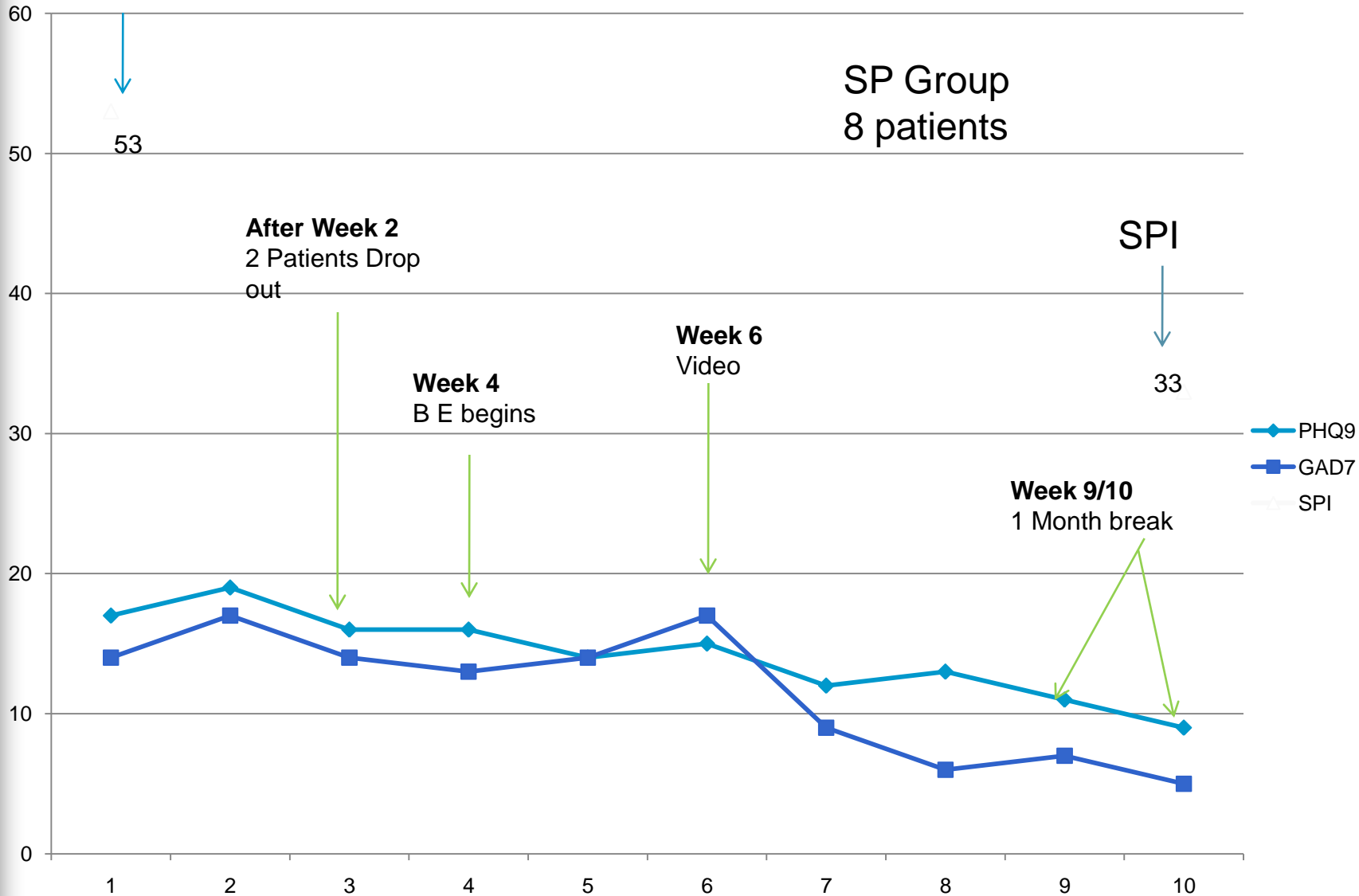
- Free to use
- Quick to administer
- With good psychometric properties - however sensitivity to change for non- co-morbid anxiety emerging but not yet definitive



A Brief Overview of Our Experience

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SETRUST

SOCIAL PHOBIA GROUP





What Did We Learn the Above Scores?

- Session by session measurement is possible
- Average Scores reflected SPI changes
- It highlighted that the first two weeks are crucial – we had assumed the first week was by far the worse
- Confirmed SP patients hate video
- But it also seems to have brought most benefit!!!
- Patient's reported routine measurement did enhance treatment
- Patients actually wanted to compare their own scores over time and their scores compared to others



Timings

- 144 patients – first attempt at completing PHQ-9 and GAD-7
- Average length of time 2-3 minutes
- Some patients with specific conditions
 - = 5 minutes.
- Subsequent scoring on average took less than 2 minutes (again some patients consistently took over 4 minutes to complete regardless of number of repetitions!!!!)



Overall

- Administering PHQ9 and GAD7 in a busy CBT routine clinical setting is achievable
- It takes no longer than the time already spent on Mood Check and enhances the accuracy of the mood checks (better than SUDS)
- For those that require longer – assign the scores as homework to be completed prior to session.



What our patients thought.....

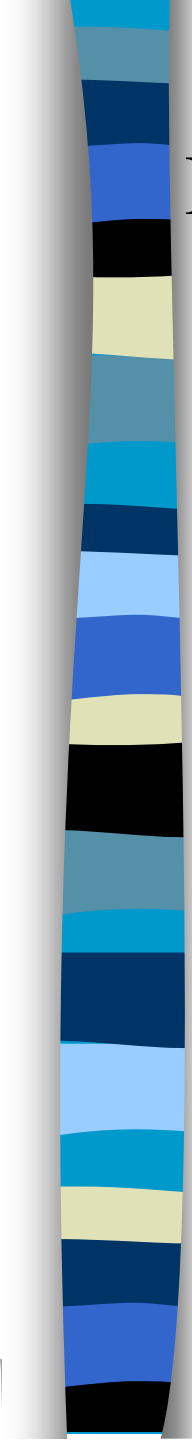
- *“Was able to see the aim of it and my progress”*
- *“Felt really good when I could see how far I’d come”*
- *“Hard to concentrate – felt nervous at first - felt it was like a test plus pretty pissed at the beginning because they wouldn’t come down but saw that when I tried new stuff it was frightening but worthwhile”*
- *“It was easier to be honest on the form rather than hearing myself moan about how bad my week was”*
- *“I felt part of the process, felt it was an easier way to explain how I was feeling than just answering the question “how’s your mood today?”*



What do Patients Think?

- *‘It was easy to understand, not too technical’ (Patient 4)*
- *‘For quite a long time they **[the scores]** stayed the same and then they started dropping slowly and that was a big boost’ (Patient 2)*
- *‘He **[the MHP]** would go through the questions. And I knew that I was getting better, just through the answers I was giving’ (Patient 12)*

Simpson et al (2008) *Mental Health in Family Medicine*



Is the completion of session by session PHQ9
and GAD7 effective in the treatment of
Psychosis and Bipolar Illness?

Roy Cheetham

Cognitive Behavioural Psychotherapist for
Psychosis and Bipolar Illness

SETRUST



Anxiety and Depression in Psychosis and Bipolar Illness

Every patient with either a Psychotic Illness or Bipolar Illness suffers both anxiety and depression. In fact anxiety has a key role to play in the development of these illness's and in subsequent relapses. Depression, like other non-psychotic illness, appears to be the result of failed attempts to fix the cause or causes of anxiety.

Positively reframing Anxiety and Depression in Psychosis and Bipolar Illness

It is difficult at times for patients to recognise triggers in the development or relapse of mental health problems. However, it is easy for them to recognise anxiety and depression.

Therefore it would seem reasonable to assume that symptoms such as anxiety and low mood could be seen as early predictors in the development but mainly the relapse of mental illness.



Early Interventions in Psychosis and Bipolar Illness.

This is far from a new concept in the areas of Psychosis and Bipolar Illness.

(Zubin, J. & Spring, B (1977) Vulnerability – A new view of schizophrenia. *Journal of Abnormal Psychology*, **86**, 103–126)

(Docherty, J. P., Van Kammen, D. P., Siris, S. G., *et al* (1978) Stages of onset of schizophrenic psychosis. *American Journal of Psychiatry*, **135**, 420–426)

(Heinrichs, D. W., Cohen, B. P. & Carpenter, W. T. (1985) Early insight and the management of schizophrenic decompensation. *Journal of Nervous and Mental Disease*, **173**, 133–138)

(Herz, M. & Melville, C. (1980) Relapse in schizophrenia. *American Journal of Psychiatry*, **137**, 801–812)

(Birchwood M; Tood P; Jackson C (1988). "Early intervention in psychosis: the critical period hypothesis *British Journal of Psychiatry* Supplement 33 (33): 53–59)

(Egeland JA, Hostetter AM, Pauls DL, Sussex JN. (2000) Prodromal symptoms before onset of manic-depressive disorder suggested by first hospital admission histories. *J Am Acad Child Adolesc Psychiatry*.39:1245–52)

(Kessing LV, Hansen MG, Andersen PK, Angst J. (2004) The predictive effect of episodes on the risk of recurrence in depressive and bipolar disorders - a life-long perspective. *Acta Psychiatr Scand*.109:339–44)

Richard M, (2004) The early warning symptom intervention for patients with bipolar affective disorder. *Advances in Psychiatric Treatment* (2004) 10: 18-26



What is early intervention and why is it important.

Early intervention means detection and treatment of Psychosis and Bipolar disorder during the critical early phase of illness.

Delays cause unnecessary distress, increase the risk of relapse and are potentially harmful for the person, their family and friends. Early treatment has been shown to improve the long-term course of Psychosis and Bipolar disorder.

Duration of Untreated Psychosis DUP

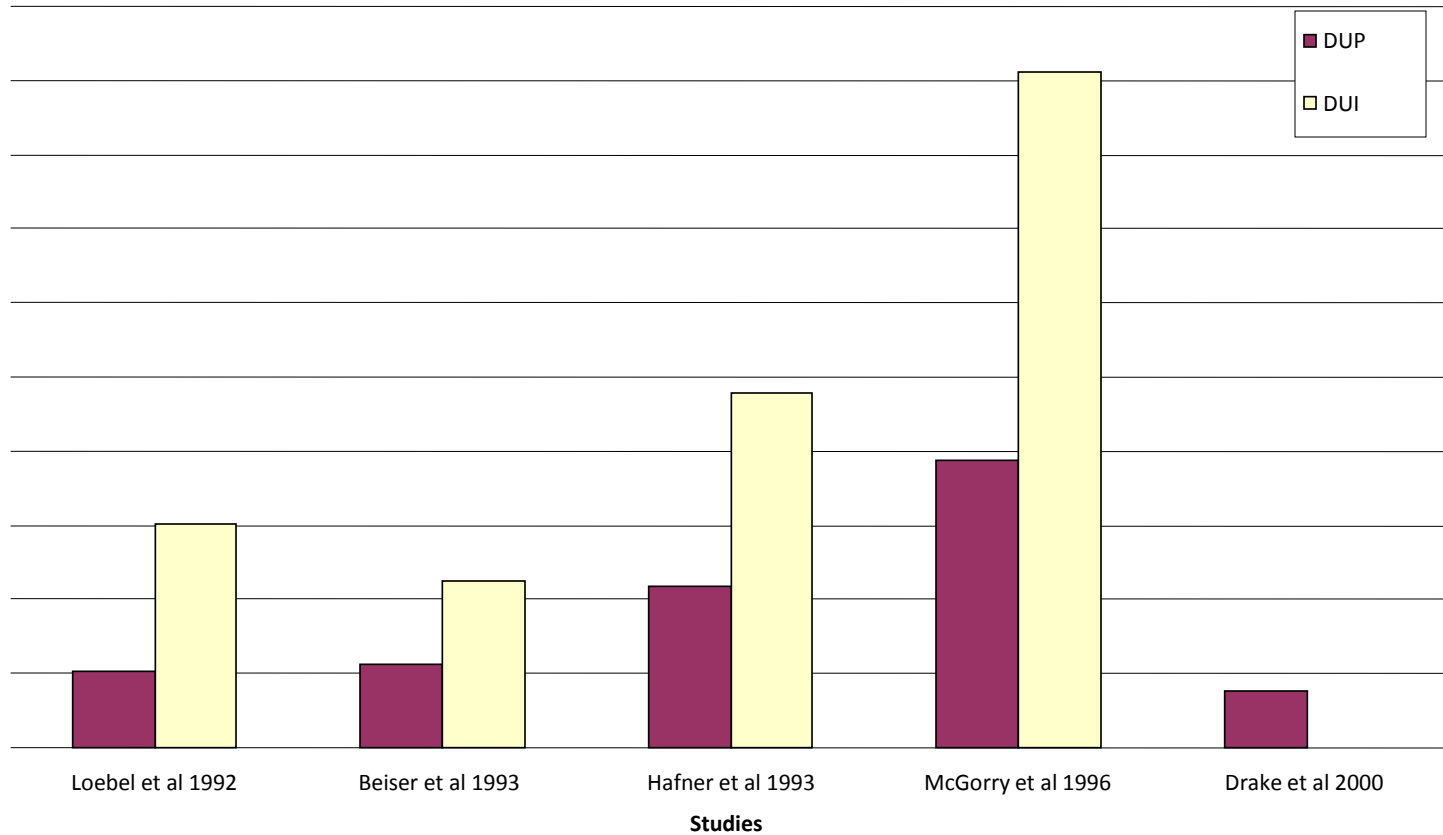
the amount of time from onset of symptoms of psychosis to the prescription of antipsychotic medication

Duration of Untreated Illness DUI

the amount of time from the recognition that things are not going well to the prescription of antipsychotic medication

Duration of Untreated Psychosis

Duration of untreated Psychosis and
Duration of untreated illness





Consequences of delayed treatment

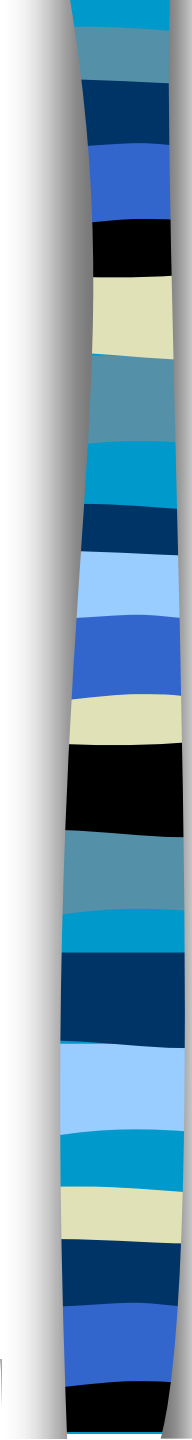
- Slower and less complete recovery
 - Poorer prognosis
 - Increased stigma
 - Increased risk of depression and suicide
 - Interference with psychological and social development
 - Strain on relationships; loss of family and social supports
- Disruption of parenting skills (if have children)
 - Disruption of study, employment and unemployment
 - Substance abuse
 - Violence/criminal activities
 - Unnecessary hospitalisation
 - Loss of self esteem and confidence
 - Increased cost of management

Potential benefits of early intervention

- Improved recovery
- More rapid and complete remission
- Better attitudes to treatment
- Lower levels of expressed emotion/family burden
- Less treatment resistance
- (Birchwood and Macmillan, 1993. McGorry et al, 1995. Loebel et al, 1992. Stirling et al, 1991)

When your car breaks down you can get help within **60 minutes.**

When your mind breaks down it can take **18 months.**



Early intervention and the use of session by session outcome measures in a local CBT for Psychosis and Bipolar Illness service.

All new patients seen over a 12 month period.

Total = 35

Bipolar = 19

Psychosis = 16

- Clinical outcomes.
- Patient feedback.



Clinical Outcomes

- Scores of PHQ9 and GAD7 on a session by session bases were indicative of:
 - An improvement in patients symptoms.
 - Patients symptoms worsening.
 - Increased stress in the patients life.
 - Goal orientation
 - Schedule disruption
 - (Circadian Rhythms. Franz Hlberg, 1950)
 - Non compliance of medication.
 - High risk behaviours
 - A Critical Incident

(Manic Defence Hypothesis. John Neale, 1988, Bentall et al, 2006).



Patient Feedback

- Every patient highlighted anxiety related Prodromal signatures in a list of early warning signs to relapse.
- 82% of patients highlighted either Anxiety or a dip in mood as their earliest indicator of potential relapse.
- Every patient felt that having a list of prodromal signature to relapse and management plan gave them a sense of control which they lacked before treatment.

Patients comments on completing PHQ9 and GAD7

- “It was easy to do.”
- “Enlightening. I didn’t realise I had things going on that I wasn’t dealing with.”
- “It highlighted stressors I wouldn’t have thought of but had actually experienced during the week.”
- “Although I was showing signs of elation outwardly inside I feel low.”
- “At present I am stable.”



Why Measure Outcomes?

- Good for patients
- Good for clinicians
- Good for Clinical Supervisors
- Essential for DHSSPS
- Therefore Good for the Tax Payer