



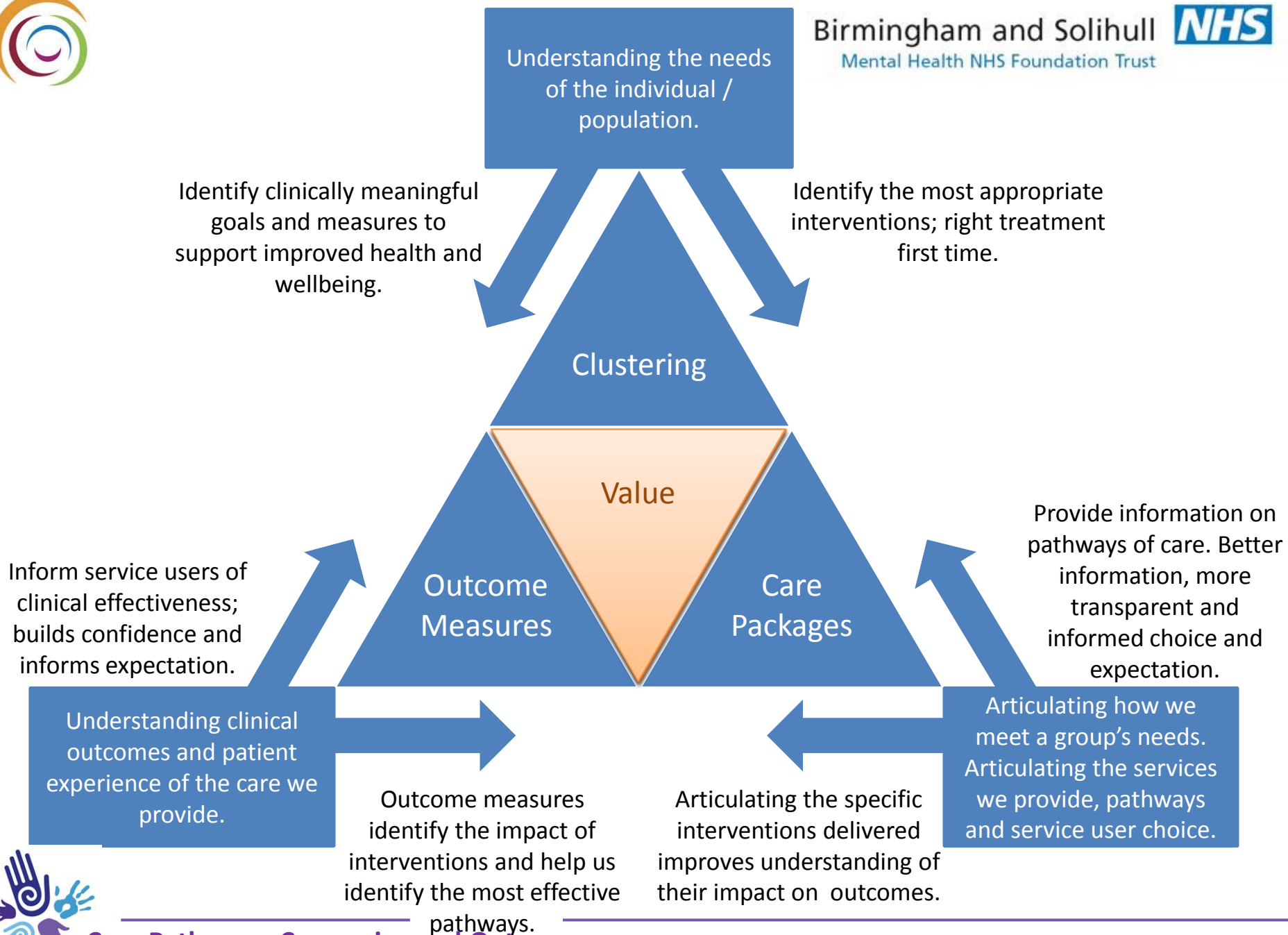
# HoNOS as an Outcome Measure

Clinical Development Group

July 2018

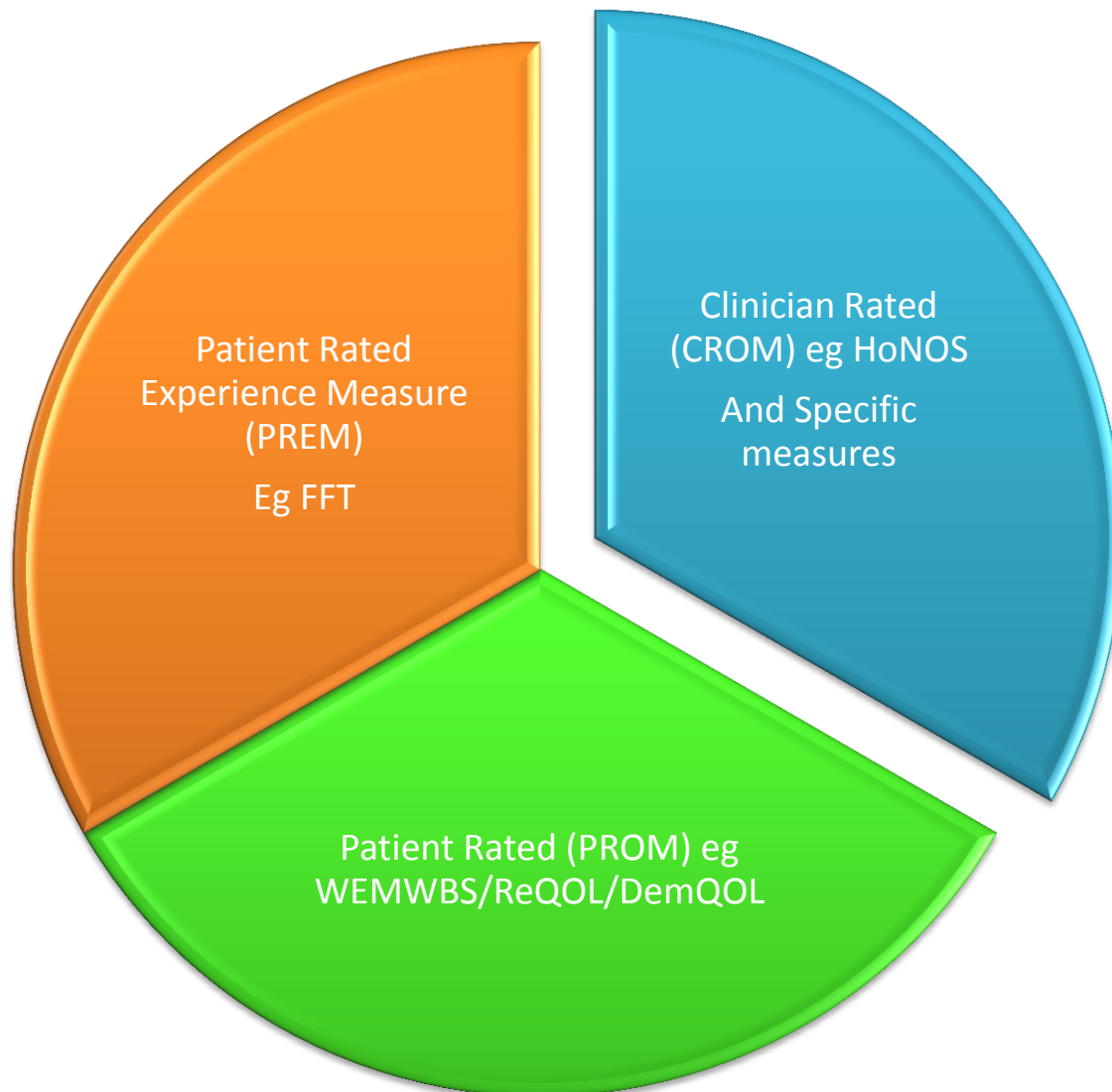


Care pathways,  
currencies and  
outcomes





# Outcome Measures





# HoNOS four Factor

**Factor 1: Personal Well-Being** (The sum of the following items)

- Item 4: Cognitive problems
- Item 5: Psychical illness or disability problems
- Item 10: Problems with activities of daily living
- Item 12: Problems with occupation and activities

Maximum factor score = **16**

**Factor 2: Emotional Well-Being** (The sum of the following items)

- Item 2: Non-accidental self-injury
- Item 7: Problems with depressed mood
- Item 8: Other mental and behavioural problems

Maximum factor score = **12**

**Factor 3: Social Well-Being** (The sum of the following items)

- Item 3: Problem-drinking or drug-taking
- Item 9: Problems with relationships
- Item 11: Problems with living conditions
- Item 12: Problems with occupation and activities

Maximum factor score = **16**

**Factor 4: Severe Disturbance** (The sum of the following items)

- Item 1: Overactive, aggressive, disruptive or agitated behaviour
- Item 6: Problems associated with hallucinations and delusions

Maximum factor score = **8**





# Internal reliability

- CFA's using national sample showed new 4 factor model = best statistical fit compared to other subscale structures
  - All data level and super class levels
- Internal consistency of 4 subscales pretty good
  - Personal well-being alpha = 0.78
  - Emotional well-being alpha = 0.72
  - Social well-being alpha = 0.75
  - Severe disturbance alpha = 0.61





# Central and North-West London Clinical Relevance

6. Problems associated with hallucinations and delusions (current)			7. Problems with depressed mood (current)	
<ul style="list-style-type: none"> <li>• Include hallucinations and delusions irrespective of diagnosis.</li> <li>• Do not include aggressive, destructive or overactive behaviors attributed to hallucinations or delusions, rated at Scale 1.</li> <li>• Include odd and bizarre behavior associated with hallucinations or delusions.</li> </ul>	<b>0</b> No evidence of hallucinations or delusions during the period rated.	no problem	<ul style="list-style-type: none"> <li>• Do not include over-activity or agitation, rated at Scale 1.</li> <li>• Do not include delusions or hallucinations, rated at Scale 6.</li> <li>• Do not include suicidal ideation or attempts, rated at Scale 2.</li> </ul>	<b>0</b> No problem associated with depressed mood during the period rated.
	<b>1</b> Somewhat odd or eccentric beliefs not in keeping with cultural norms.	minor		<b>1</b> Gloomy; or minor changes in mood.
	<b>2</b> Delusions or hallucinations (e.g. voices, visions) are present, but there is little distress to patient or manifestation in bizarre behavior, i.e. clinically present but mild.	mild		<b>2</b> Mild but definite depression and distress (eg feelings of guilt; loss of self-esteem).
	<b>3</b> Marked preoccupation with delusions or hallucinations, causing much distress and/or manifested in obviously bizarre behavior, i.e. moderately severe clinical problem.	moderate		<b>3</b> Depression with inappropriate self-blame; preoccupied with feelings of guilt.
	<b>4</b> Mental state and behavior is seriously and adversely affected by delusions or hallucinations, with severe impact on patient.	severe		<b>4</b> Severe or very severe depression, with guilt or self-accusation.

Score of 3-4 considered 'clinically significant', and is likely to impact other areas of wellbeing.





# Central and North-West London Clinical Relevance

## Scores:

0-2 Low symptoms

3-4 High symptoms

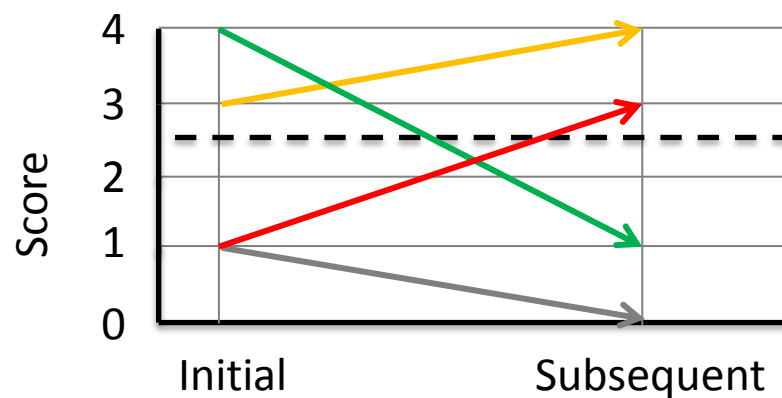
## Categorical change:

Low to low - no problem

Low to high - deterioration

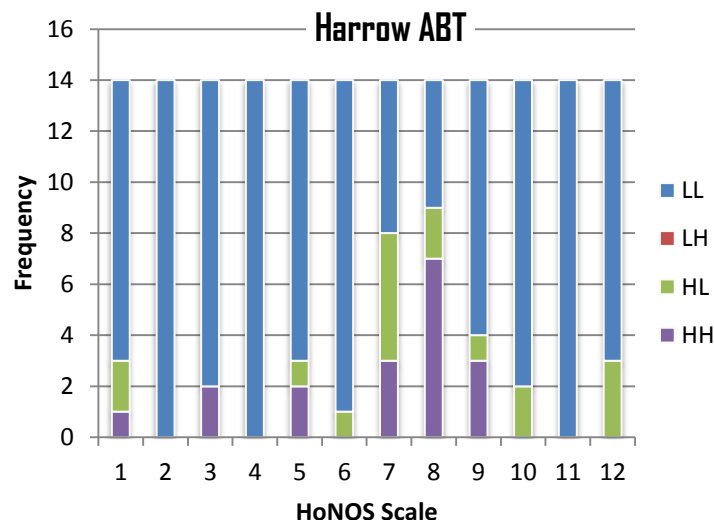
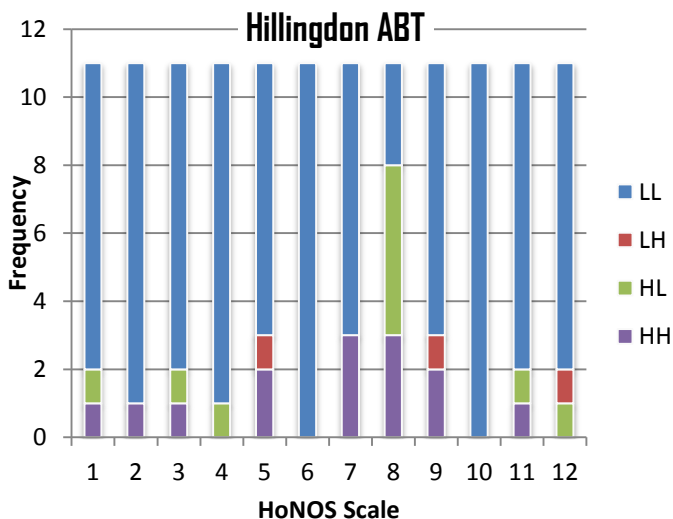
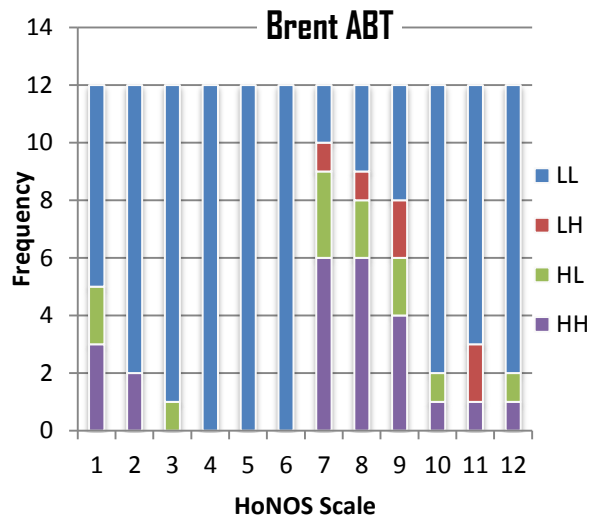
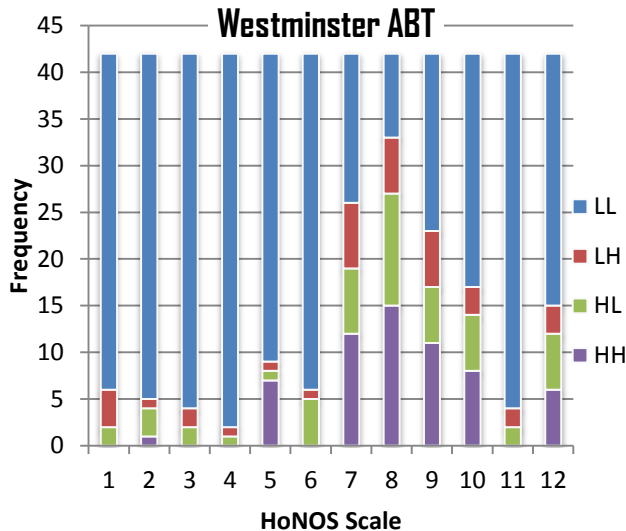
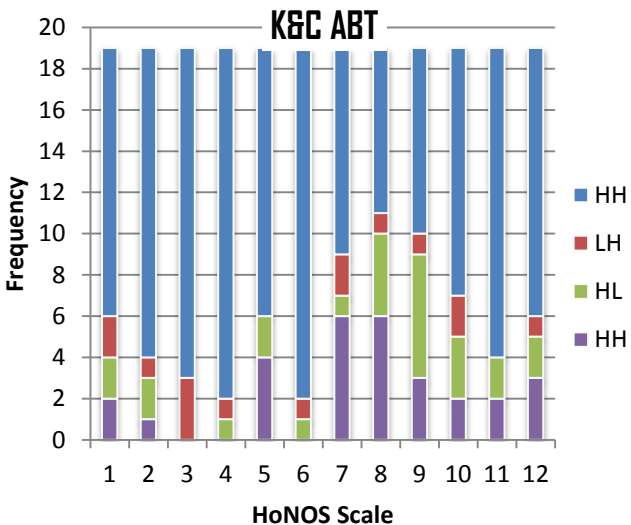
High to low - improvement

High to high - 'ineffective'





# Paired HoNOS Categorical Change: CLUSTERS 6-8







# BSMHFT approach

Categorical change within four factor model.

- Score 3 or 4 is high symptom, 0-2 is low.
- Count of 'high' within four factor group will be used. May have up to 4 measures of high in one group.
- Shift in count used to define change.
  - Individuals experiencing improved wellbeing in some but not all items within a factor will count as improving.
- Further scope to stratify based on severity

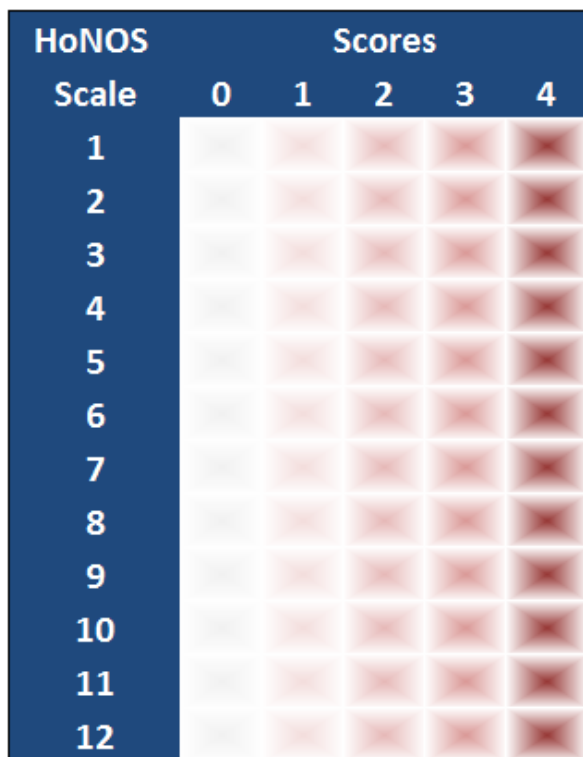
First aim is ease of interpretation: Can we draw meaningful comparisons without needing to explain the report.





# BSMHFT approach

HoNOS Scales



60 Data points

HoNOS significance

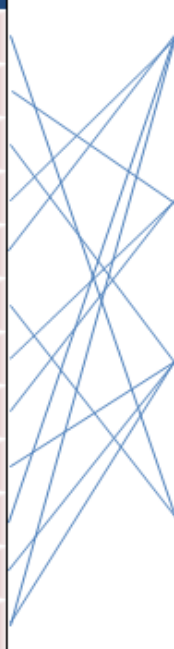


24 Data points

Four Factor Total Significance

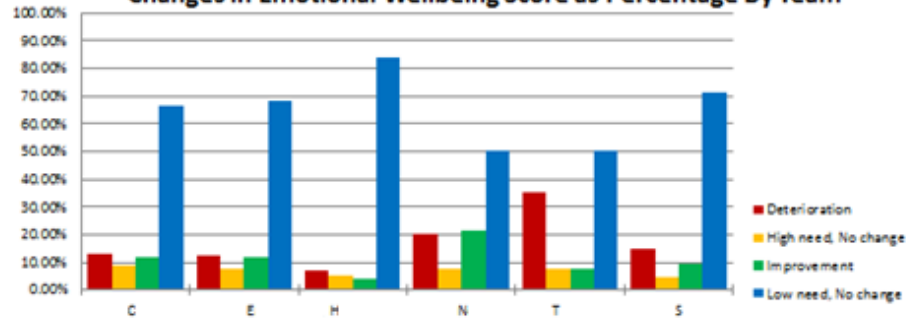


17 Data points

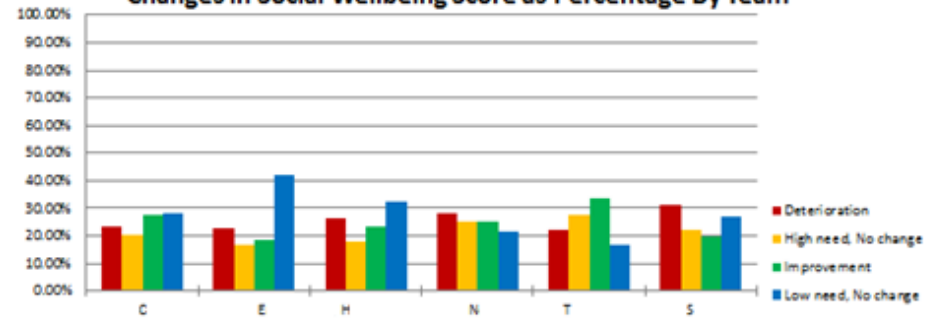




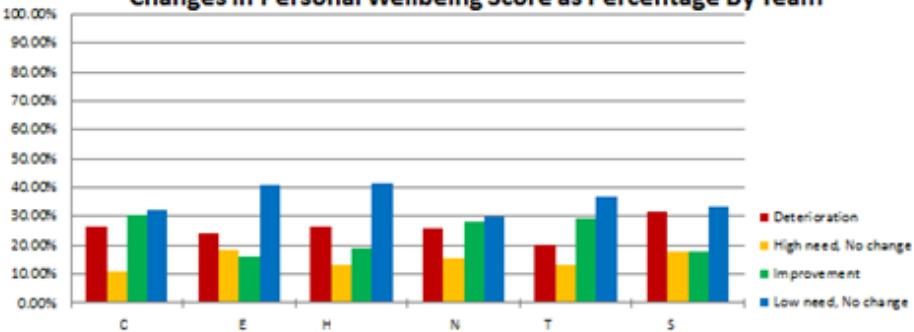
Changes in Emotional Wellbeing Score as Percentage By Team



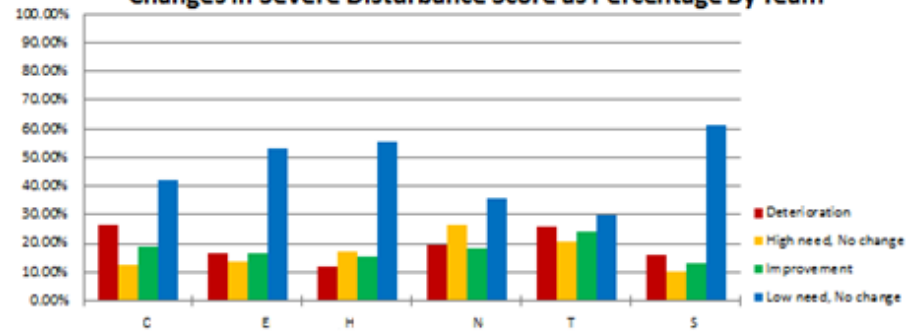
Changes in Social Wellbeing Score as Percentage By Team



Changes in Personal Wellbeing Score as Percentage By Team

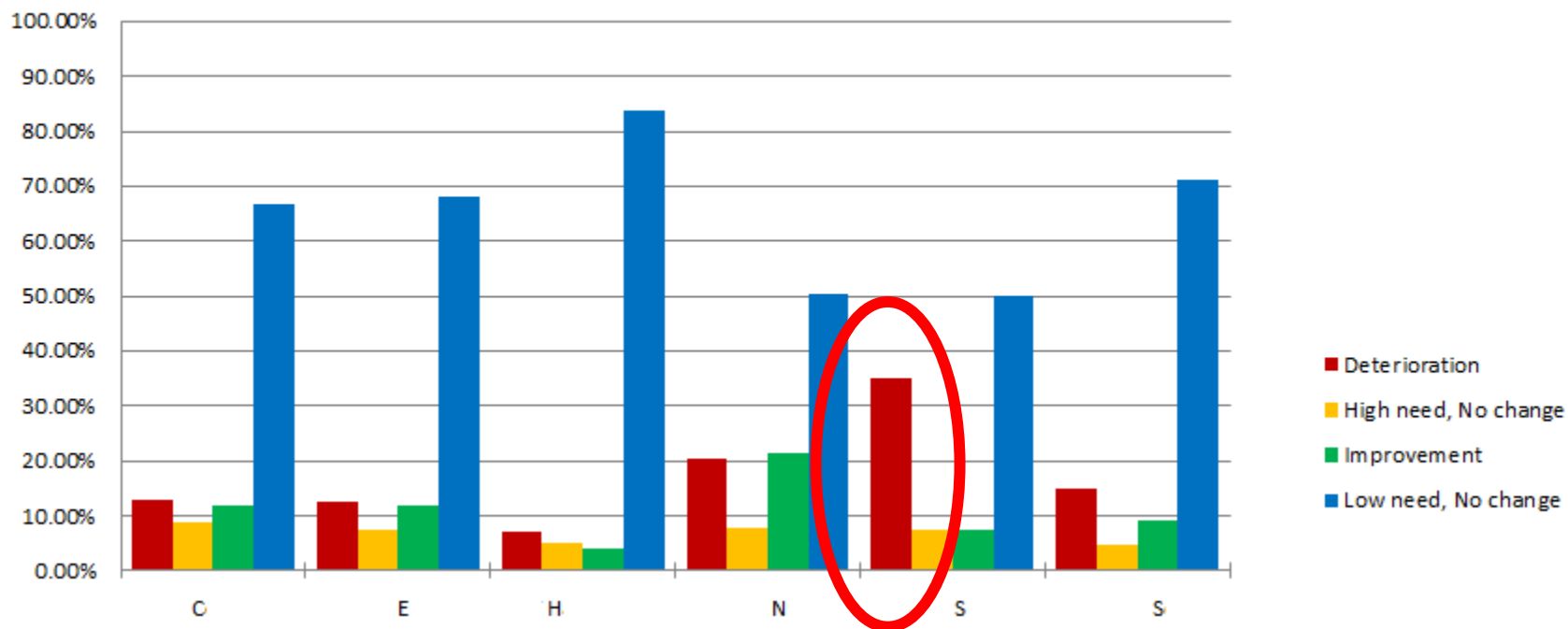


Changes in Severe Disturbance Score as Percentage By Team





## Changes in Emotional Wellbeing Score as Percentage By Team



### **Factor 2: Emotional Well-Being** (The sum of the following items)

Item 2: Non-accidental self-injury

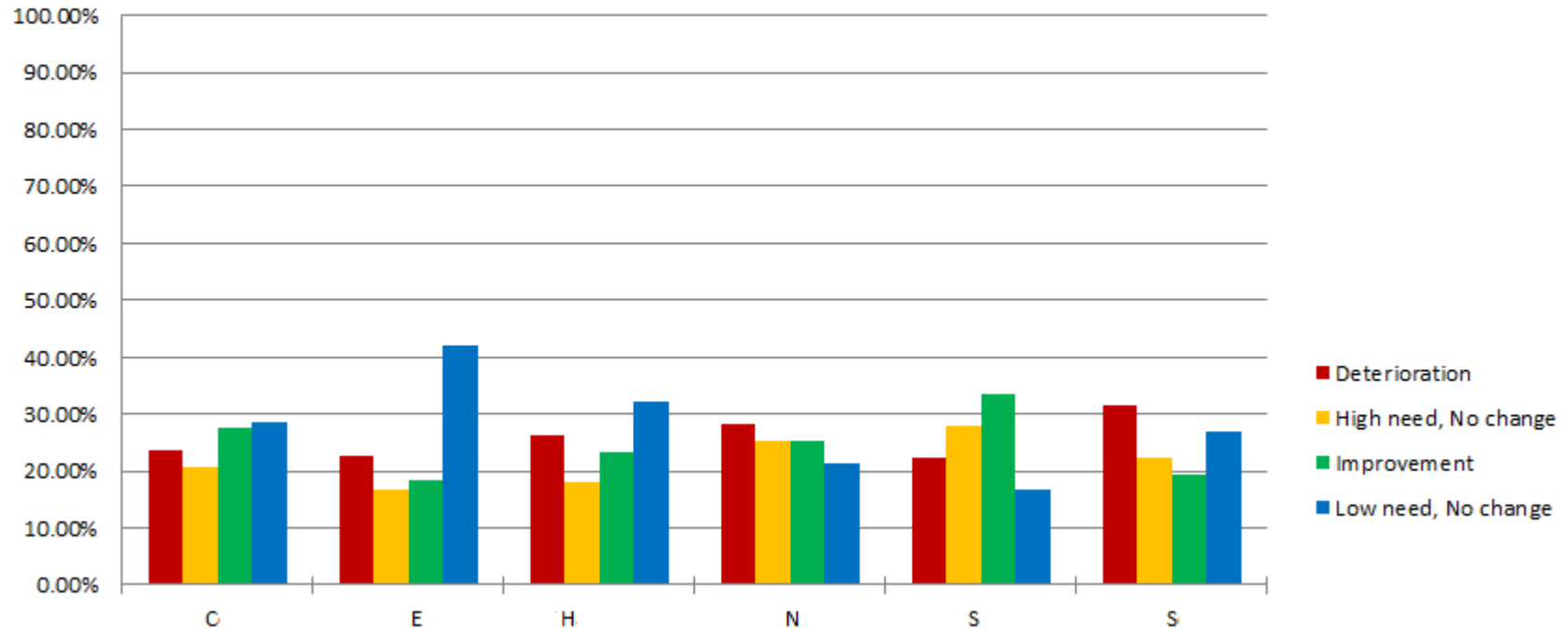
Item 7: Problems with depressed mood

Item 8: Other mental and behavioural problems





## Changes in Social Wellbeing Score as Percentage By Team



### **Factor 3: Social Well-Being** (The sum of the following items)

Item 3: Problem-drinking or drug-taking

Item 9: Problems with relationships

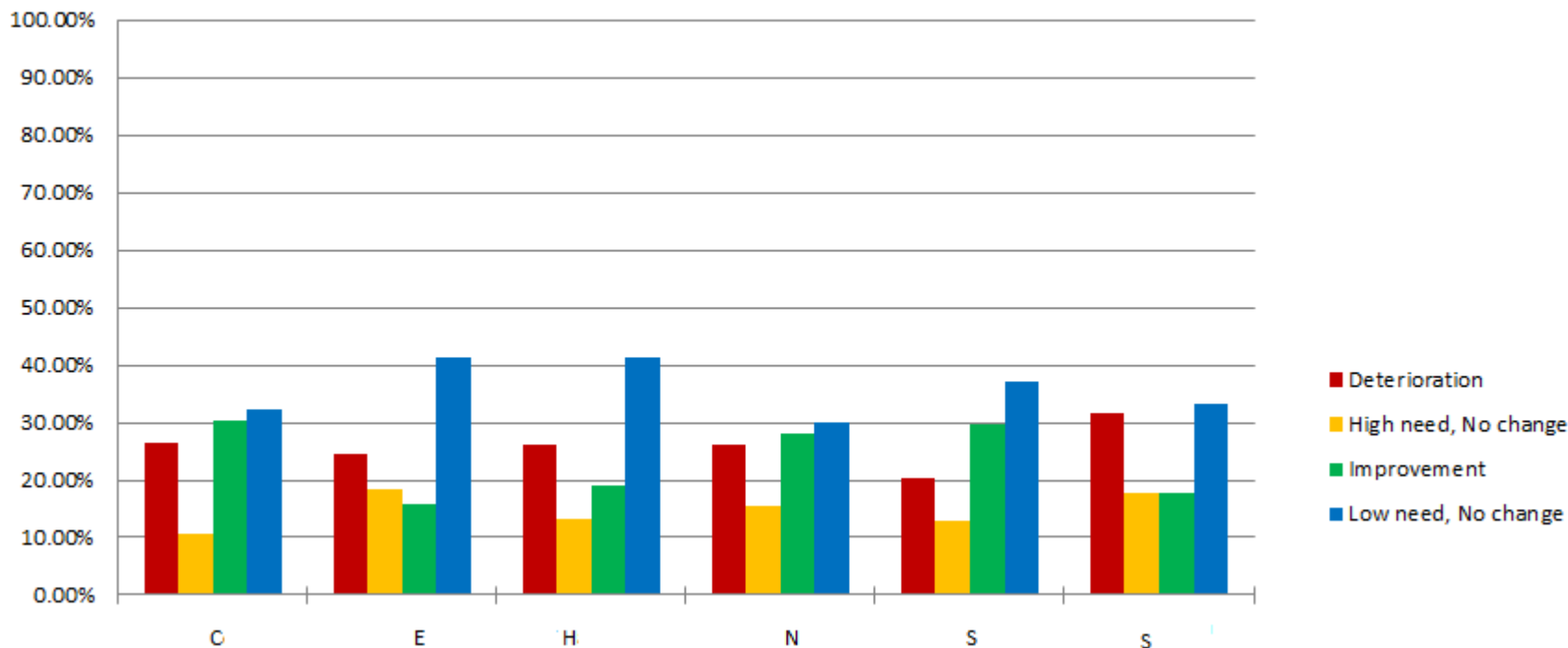
Item 11: Problems with living conditions

Item 12: Problems with occupation and activities





## Changes in Personal Wellbeing Score as Percentage By Team



### Factor 1: Personal Well-Being (The sum of the following items)

Item 4: Cognitive problems

Item 5: Psychical illness or disability problems

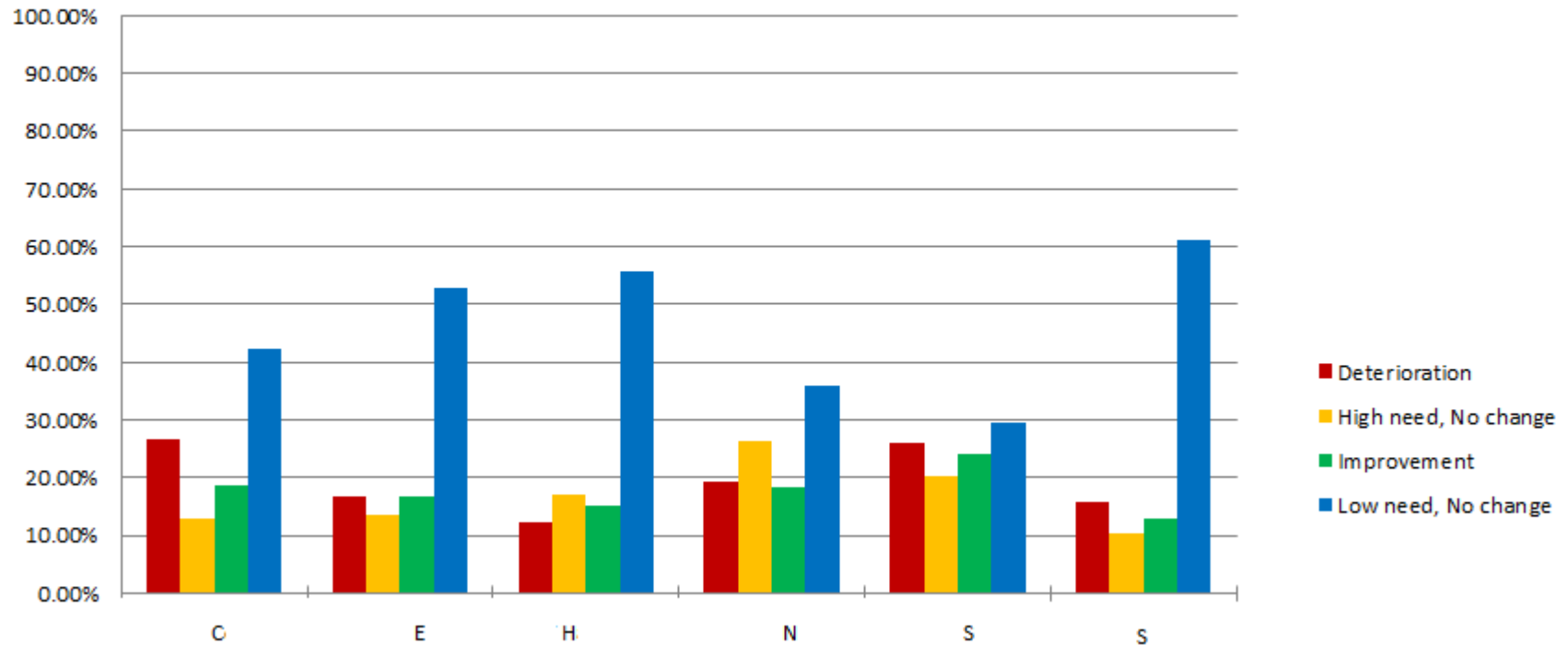
Item 10: Problems with activities of daily living

Item 12: Problems with occupation and activities





## Changes in Severe Disturbance Score as Percentage By Team



### **Factor 4: Severe Disturbance** (The sum of the following items)

Item 1: Overactive, aggressive, disruptive or agitated behaviour

Item 6: Problems associated with hallucinations and delusions





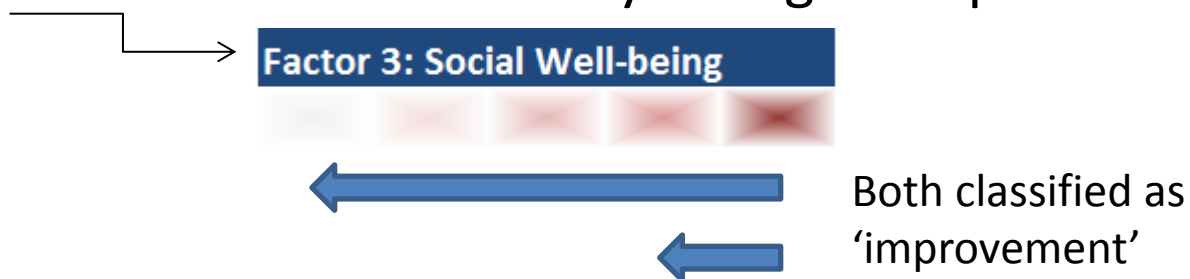
# Limitations

## Sensitivity of 'clinical relevance'

Score changes within the bandings (0-2 and 3-4) will not be reflected in the dichotomous 'clinical relevance' approach.

## Extent of change not reflected.

Extent of improvement/deterioration within the four factors is not reflected as any change is reported







# Practical uses

First need to understand the reason for variation:

- Population differences
- **Clinical effectiveness**
- HoNOS apathy.

Team effectiveness

- Service level,
- Team level,
- Clinician level.

Future link to interventions, payment.





# Feedback from clinicians

- ✓ Useful for reflective practice and discussion
- ✓ Feedback on scores captured
- ✓ Initial validation positive
- Needs more validation
- ✓ Supports caseload management
- ✗ Fear of performance management
- Expectations vs. condition course
- ✗ Granularity (scale of recovery lost)

