The original version of Patient Health Questionnaire (PHQ-9) was developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues (1999) and measures depression. The Generalized Anxiety Disorder 7-Item Scale (GAD-7) measures anxiety and was developed by Spitzer, Kroenke, Williams, and Löwe (2006). Both the PHQ-9 and GAD-7 have been translated into British Sign Language (PHQ-9 BSL and GAD-7 BSL respectively – see Rogers, Young, Lovell, Campbell, Scott and Kendal, 2013 for more information:

http://jdsde.oxfordjournals.org/content/18/1/110.full.pdf+html with the permission of the creator teams. The translation work was carried out by Robert Adam, Jen Dodds, Rosemary Oram, Nicholas Padden and Sara Rhys Jones. The PHQ-9 BSL and GAD-7 BSL are in the public domain and are free to use. The reliability and validity of the BSL versions of these two instruments have been robustly investigated and found to be acceptable. For details see Rogers et al. (2013).

#### Instructions for using PHQ-9 BSL / GAD-7 BSL

The assessments in BSL are available in the form of a DVD. It is also possible for these to be uploaded and accessed via a link which some NHS Trusts have chosen to do on their own secure servers. The assessments consist of video clips of the title and instructions, followed by each of the questions in turn. Each is intended as a standalone assessment that can be accessed autonomously by the client/patient in a similar way to self-completion of a written assessment.

#### Rating scale and scoring PHQ-9 and GAD-7 BSL

The response scale features in pop-up words in plain English, however there is an explanation in BSL as well that may be referred to at the start of the assessment and which can be accessed at any point during the course of the assessment. The words used in the rating scale for the BSL version were changed slightly from the English version (with the permission of the original creators), although the scoring remains the same (ranges from zero to a maximum score of 27 for PHQ-9 and zero to 21 for GAD-7). The plain English terms that we have used for the PHQ-9 BSL and GAD-7 BSL are as follows:

- "Not at all" was changed to "Never"
- "Several days" was changed to "A few days"
- "More than half the days" was changed to "Most of the days"
- "Nearly every day" did not need to be changed.

The changes were made to reflect more closely the BSL version of the rating scale and to avoid potential misunderstanding and ambiguity in BSL.

2 * *				<u> </u>
Scoring	Never	A few	Most of	Nearly
		days	the days	every day
PHQ-9	0	1	2	3
No. 1				
PHQ-9	0	1	2	3
No. 2				
PHQ-9	0	1	2	3
No. 3				
PHQ-9	0	1	2	3
No. 4				
PHQ-9	0	1	2	3
No. 5				
PHQ-9	0	1	2	3
No. 6				
PHQ-9	0	1	2	3
No. 7				
PHQ-9	0	1	2	3
No. 8				
PHQ-9	0	1	2	3
No. 9				

# PHQ-9 BSL

PHQ-9 total score

PHQ-9 No. 10 should be answered when a person has selected a response other than 'never' to one or more of the questions one to nine. The English terms for the response scale for this question remain unchanged:

 $\Box$  Not difficult at all  $\Box$  Somewhat difficult  $\Box$  Very difficult  $\Box$  Extremely difficult

Scoring:	Never	A few	Most of	Nearly
		days	the days	every day
No. 1				
GAD-7	0	1	2	3
No. 2				
GAD-7	0	1	2	3
No. 3				
GAD-7	0	1	2	3
No. 4				
GAD-7	0	1	2	3
No. 5				
GAD-7	0	1	2	3
No. 6				
GAD-7	0	1	2	3
No. 7				

## **Clinical cut-offs:**

Clinical cut-off scores for the English versions of these assessments, for the English speaking population, have been established as 10 for PHQ-9 (Kroenke, Sptizer, and Williams, 2001) and eight for GAD-7 (Kroenke, Spitzer, Williams, Monahan, & Lowe, 2007). These are the cut off scores used in the IAPT programme. However, for the BSL versions the cut off scores for Deaf BSL users have been established as lower following a rigorous process of analysis based on Deaf population responses. The clinical cut-offs for PHQ-9 BSL is eight and for GAD-7 it is six. The relevant journal article reporting these results is (Belk, Pilling, Rogers, Lovell, and Young, under review) and will be available shortly.

### **Obtaining copies of the assessments:**

Copies of the assessments in BSL are available for unrestricted clinical and research use and can be obtained by emailing Dr Katherine Rogers at Katherine.rogers@manchester.ac.uk

#### Statements:

The BSL versions of the PHQ-9 and GAD-7 assessments have been made freely available for use. The work on these BSL versions was carried out by the Social Research with Deaf people (SORD) programme at the University of Manchester. The translation work on the BSL versions was funded by the British Society for Mental Health and Deafness (BSMHD1101). The study of the validity and reliability of the assessments was funded through a NIHR doctoral research fellowship (Dr Katherine Rogers, award reference number: DRF-2009-02-118). The study was granted ethical approval by the National Research Ethics Service (NRES) Committee for Yorkshire and the Humber – Leeds West (REC number: 11/YH/0180). The project had ethical approval from nine local NHS organisations.

The research study on establishing the clinical cut-offs for PHQ-9 BSL and GAD-7 BSL was funded by the National Institute for Health Research's Health Services and Delivery Research Programme (Grant number: 12/136/79). The report/article where the results are presented is independent research commissioned by the National Institute for Health Research (NIHR). The views expressed in the publication are those of the author(s) and not necessarily those of the NHS, NIHR or the Department of Health. The study was granted ethical approval through the Proportionate Review Sub-committee of NRES (National Research Ethics Service) Ref: 14/LO/2234.

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