مبادئ توجيهية تحليلية:
إنشاء محددات الإعاقة وفق النظم اللغوي لنظام "استاتا" باستخدام المجموعة القصيرة لتأدية الوظائف الصادرة عن فريق واشنطن

مقدمة

تتلاقى المجموعة القصيرة للأداء الصادرة عن فريق واشنطن من حيث التحليل مع المجموعة المناظِرة الموسّعة؛ إذ يمكن للتحليل أن ينتج أيضاً معرّفات إعاقة متعددة استناداً إلى اختيار عتبة الجِدة أو حدها. أما لغة النظم لنظام "استاتا" أدناه فتتيح حساب معرفات الإعاقة باستخدام مجموعات مختلفة من مجالات المجموعة الموسعة باستخدام الحد الموصى به في إجراء المقارنات العالمية (حسب الوصف أدناه).

بالنسبة إلى معرّفات الإعاقة الموصوفة، يتحدد مستوى الشمول بمجال / سؤال واحد الأقل يحمل تصنيف "توجد صعوبة كبيرة" أو "لا يمكنني ذلك على الإطلاق" – أو بالمستوى الأعلى من الصعوبة وفق مقياس رباعي النقاط بالنسبة إلى مجالات "الجزء" و"الاكتئاب" و"الألم" و"التعب".

يتحدد كل معرف من معرفات الإعاقة الأربعة الواردة في هذه الوثيقة استناداً إلى اختيار مجالات الأداء المُدرجة:

المجموعة القصيرة لفريق واشنطن حول تأدية الوظائف:*المجموعة القصيرة*: 6 مجالات، 6 أسئلة.

المجموعة الموسّعة لفريق واشنطن حول تأدية الوظائف 1:*المجموعة الموسعة*: 11 مجالاً، 25 سؤالاً

المجموعة الموسّعة لفريق واشنطن حول تأدية الوظائف 2: *المجموعة الموسعة المعدلة (المجموعة الموسعة بدون مجالي"الألم" و"التعب")*: 9 مجالات، 20 سؤالاً

المجموعة الموسّعة لفريق واشنطن حول تأدية الوظائف 3: *المجموعة القصيرة المعززة* (المجموعة القصيرة مضافاً إليها "الجزء العلوي من الجسم"، و"الجزء" و"الاكتئاب"): 9 مجالات، 12 سؤالاً

ملاحظة: استعن بأساليب الموازنة والتقدير المعيارية لديك عند التحليل.

يستند النظم اللغوي للمكونات الإحصائية إلى علامات *المتغيرات* وعلامات *القيمة* الموضحة في الجداول أدناه. تشمل وحدة المجموعة الموسعة الكاملة أسئلة أكثر مما يحويه هذا الجدول. تتحدد حالة الإعاقة عبر درجة الصعوبة في الأنشطة الأساسية والعامة بدون استخدام تقنية مساعدة أو أية مساعدة أخرى. توجد أسئلة كثيرة عن الحركة، منها مثلاً ما يشير إلى صعوبة المشي مع

المساعِدة. وتلك الأسئلة غير مدرجة في خطة التحليل المقدمة هنا؛ غير أنه يمكن استخدامها في تحليلات أخرى تبدو أوثق صلة بتأثير التقنية المساعِدة (الميسرات البيئية) بشأن تأدية الوظائف.

الأسئلة / المتغيرات المبيّنة أدناه هي وحدها المستخدمة في تحديد معرفات الإعاقة. تأكد من استخدام *علامات المتغيرات والقيم* نفسها وراجع النظم اللغوي لنظام "استاتا" حتى تُظهِر *العلامات* المستخدمة في قاعدة بيانات.

تُدار "المجموعة القصيرة" بوصفها جزءاً من استقصاء للمقابلات المتبعة لدى هيئة الصحة الوطنية الأمريكية. البيانات المستخدمة في إعداد هذه المبادئ التوجيهية مأخوذة من إصدار الهيئة في 2013.

ملاحظة لمستخدمي *استقصاء الهيئة*: من الوارد أن تختلف أسماء المتغيرات في ملف بيانات الهيئة ووثائقها عن الأسماء المستخدمة في هذه الوثيقة؛ ومن ذلك مثلاً متغير مجال الاعتناء بالنفس المشار إليه بالاختصار *(SC-SS)* في هذه الوثيقة لأنه مشار إليه بالاختصار *(UB_SS)* في ملف بيانات الهيئة ووثائقها.

نمط الإجابة	علامة المتغير	أسئلة / مجالات المجموعة الموسعة لفريق واشنطن
		النظر
1	VIS_SS	**1- هل تواجه صعوبة في النظر حتى و أنت تضع النظارات الطبية؟**
		التواصُل
1	COM_SS	**2- هل تواجه صعوبة في التواصل مع الآخرين باستخدام لغتك المعتادة (كأن يصعب عليك فهم الآخرين أو أن يصعب عليهم فهمك؟)**
		السمع
1	HEAR_SS	**3- هل تواجه صعوبة في السمع حتى مع استخدام معينات سمعية؟**
1	3_HEAR	**4- هل تواجه صعوبة في سماع محادثة مع شخص واحد في غرفة هادئة؟**
1	4_HEAR	**5- هل تواجه صعوبة في سماع محادثة مع شخص واحد في غرفة صاخبة؟**
		الإدراك
1	COG_SS	**6- هل تواجه صعوبة في التذكر أو التركيز؟**
2	1_COG	**7- هل تواجه صعوبة في التذكر أو التركيز أو كليها؟**
3	2_COG	**8- ما معدل تكرار مواجهتك صعوبة في التذكر؟**
4	3_COG	**9- ما مقدار الأشياء التي تواجه صعوبة في تذكرها؟**
		الاعتناء بالنفس / الجزء العلوي من الجسم
1	SC_SS	**10- هل تواجه صعوبة في (الاعتناء بنفسك مثل) الاستحمام أو ارتداء الملابس؟**
1	1_UB	**11- هل تواجه صعوبة في رفع قنينة ماء من لترين من الخصر إلى مستوى العينين؟**
1	2_UB	**12- صعوبة استخدام الأيدي والأصابع**

لمزيدٍ من المعلومات حول فريق واشنطن المعني بإحصاءات الإعاقة، يُرجى زيارة:
http://www.washingtongroup-disability.com./

		الحركة
1	MOB_SS	**13- هل تواجه صعوبة في المشي أو صعود الدَرَج؟**
1	MOB_4	**14- هل تواجه صعوبة في المشي لمائة ياردة على سطح مستو بدون مساعدة أو جهاز معين؟**
1	MOB_5	**15- صعوبة المشي لثلث ميل على سطح مستوى بدون مساعدة أو جهاز معين**
1	MOB_6	**16- هل تواجه صعوبة في صعود أو نزول 12 درجة بدون مساعدة أو جهاز معين؟**
		التأثير (الجزع)
5	ANX_1	**17- ما معدل تكرار شعورك بالقلق أو الغضب أو التوتر؟**
6	ANX_3	**18- كيف كان مستوى مشاعرك في أقرب مرة شعرت فيها بالقلق أو الغضب أو التوتر؟**
		التأثير (الاكتئاب)
5	DEP_1	**19- ما معدل شعورك بالاكتئاب؟**
6	DEP_3	**20- ما مستوى شعورك بالاكتئاب في أقرب مرة شعرت به؟**
		الألم
7	PAIN_2	21- معدل تكرار الشعور بالألم خلال الأشهر الثلاثة الماضية؟
6	PAIN_4	22- ما مقدار الألم الذي انتابك في أقرب مرة شعرت به؟
		التعب
7	TIRED_1	23- ما معدل تكرار شعورك بالتعب الشديد أو الإنهاك خلال الأشهر الثلاثة الماضية؟
8	TIRED_2	24- كم دامت مشاعر التعب أو الإنهاك معك في أقرب مرة أصابتك؟
6	TIRED_3	25- هل كان مستوى التعب الذي شعرت به في أقرب مرّة تعباً شديداً أو إنهاكاً؟

ملاحظة: **الأحمر** يشير إلى المجموعة القصيرة لفريق واشنطن.

يوجد 25 سؤالاً وكلها مدرجة في المجموعة الموسعة 1.

الأسئلة المعروضة باللون **الأحمر** مع **الأزرق** مع **الأخضر** مُدرجة في المجموعة الموسعة 2.

الأسئلة المعروضة باللون **الأحمر** مع **الأخضر** مُدرجة في المجموعة الموسعة 3.

	النمط 1	النمط 2	النمط 3	النمط 4
1	لا توجد صعوبة	هناك صعوبة في التذكّر فقط	أحياناً	أشياء قليلة
2	نعم، توجد بعض الصعوبة	هناك صعوبة في التركيز فقط	غالباً	أشياء كثيرة
3	نعم، توجد صعوبة كبيرة	هناك صعوبة في التذكر والتركيز	طوال الوقت	كل شيء تقريباً
4	لا يمكنني ذلك على الإطلاق			
7	أرفض الإجابة			
8	غير متأكد			
9	لا أعرف			

	النمط 5	النمط 6*	النمط 7	النمط 8
1	يومياً	قليلاً	مطلقاً	لبعض اليوم
2	أسبوعياً	كثيراً	بعض الأيام	لمعظم اليوم
3	شهرياً	متوسط ما بين قليلاً وكثيراً	معظم الأيام	طوال اليوم
4	بضع مرات في السنة		كل يوم	
5	مطلقاً			
7	أرفض الإجابة			
8	غير متأكد			
9	لا أعرف			

* لاحظ في النظم اللغوي أدناه أن العناصر ذات نمط الإجابة 6 (ANX_3 وDEP_3 وPAIN_4 وTIRED_3) مدونة بحيث تضع "متوسط ما بين" وضعاً عددياً وسيطاً بين "قليلاً" و"كثيراً".

المجموعة القصيرة مدرجة ضمن المجموعة الموسعة. يضاف إلى المجموعة الموسعة ما يلي:

أسئلة إضافية للمجالات الستة القائمة ومجالات إضافية (متعددة وذات أسئلة متعددة).

النظم اللغوي للحزمة الإحصائية للعلوم الاجتماعية المبيّن أدناه مشتمل على زوجين من العناصر مختصين بمحتوى المجموعة الموسعة.

أولا، كان من الهامّ تحديد معرفات مختصة بمجال واحد؛ وذلك بالنسبة إلى مجالات تأدية الوظائف المشتملة على أسئلة متعددة. فمثلا، يوجد سؤالان متعلقان بتأدية الوظائف للجزء العلوي من الجسم، وكل منهما يستحث حركات محددة ومميزة: أي مدى الصعوبة في رفع قنينة ماء من الخصر إلى مستوى العينين (الذراعين / الكتفين)، ومدى الصعوبة في استخدام اليدين والأصابع. وقد خضع السؤالان للتحليل والضم لإنتاج مؤشر واحد متعلق

بالجزء العلوي من الجسم مقترناً بأربعة مستويات من الصعوبة تتراوح بين 1 (صعوبة منخفضة) إلى 4 (صعوبة كبيرة) – أي على غرار فئات الإجابات المقدمة للأسئلة المنفردة في المجموعة القصيرة: لا توجد صعوبة، توجد بعض الصعوبة، توجد صعوبة كبيرة، ولا يمكنني ذلك على الإطلاق. وعلى شاكلة مجال "الجزء العلوي من الجسم"، تمتاز مجالات "المجموعة الموسعة" (الإدراك، والجزع، والاكتئاب، والألم، والتعب) بأنماط إجابات مختلفة لا تصبر سريعاً إلى نمط معتاد للإجابة وفق معايير الفريق. اختُصّت مجالات تأدية الوظائف تلك بإصدار نمط إجابات مماثل رباعي المستويات على هيئة المستوى 1 إلى المستوى 4، حيث (1) يعني المستوى الأدنى من الصعوبة، و(4) يعني المستوى الأعلى من الصعوبة.

ثانياً، روعيت مؤشرات المجالات الفردية للوقوف على الحد المناسب للإدراج ضمن المعرف الكلي للإعاقة – أي لأغراض تقدير الانتشار وتفصيل مؤشرات المخرجات حسب حالة الإعاقة.

ملاحظة:

بالنسبة إلى كل المتغيرات، تُدوّن الرموز (7) *أرفض الإجابة*، و(8) *غير متأكد*، و(9)*لا أعرف* ضمن فئة مفقود.

Stata WG Extended Set Syntax Annotated with Output Tables

Actual Stata syntax is indented and are in Bold text.

NOTE: For data analysis, use your standard weighting and estimation techniques.

The syntax below produces **frequency distributions** on individual domain questions – **cross-tabulations** on multiple domain questions, and calculates INDICATOR variables for domains with multiple questions – for use in the determination of disability identifiers.

VISION

Step 1. Generate frequency distribution for Vision domain.

VIS_SS is the WG-SS Vision question.

```
gen Vision=VIS_SS if inlist(VIS_SS, 1,2,3,4)
replace Vision=. if inlist(VIS_SS, 7,8,9)
tabulate Vision
```

Vision: Degree of difficulty seeing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	13690	79.0	81.6	81.6
	Some difficulty	2708	15.6	16.2	97.8
	A lot of difficulty	333	1.9	2.0	99.8
	Cannot do at all	36	.2	.2	100.0
	Total	16767	96.8	100.0	
Missing		559	3.2		
Total		17326	100.0		

COMMUNICATION

Step 2. Generate frequency distribution for Communication domain.

COM_SS is the WG-SS Communication question.

> **gen** Communication=COM_SS **if inlist**(COM_SS, 1,2,3,4)
> **replace** Communication =. **if inlist**(COM_SS, 7,8,9)
> **tabulate** Communication

Communication: Degree of difficulty communicating using usual language

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	15874	91.6	94.7	94.7
	Some difficulty	745	4.3	4.4	99.2
	A lot of difficulty	94	.5	.6	99.7
	Cannot do at all	43	.2	.3	100.0
	Total	16756	96.7	100.0	
Missing		570	3.3		
Total		17326	100.0		

HEARING

Step 3. Generate frequency distributions and cross-tabulations for Hearing domain questions and determine Hearing Indicator

HEAR_SS is the WG-SS Hearing question.

> **gen** Hearing=HEAR_SS **if inlist**(HEAR_SS, 1,2,3,4)
> **replace** Hearing=. **if inlist**(HEAR_SS, 7,8,9)

HEAR_3 is *Difficulty hearing conversation with one person in quiet room*.

> **gen** HEAR_3_R=HEAR_3 **if inlist**(HEAR_3, 1,2,3,4)
> **replace** HEAR_3_R =. **if inlist**(HEAR_3, 7,8,9)

HEAR_4 is *Difficulty hearing one person in noisier room*.

> **gen** HEAR_4_R=HEAR_4 **if inlist**(HEAR_4, 1,2,3,4)
> **replace** HEAR_4_R=. **if inlist**(HEAR_4, 7,8,9)
> **tabulate** Hearing

Hearing: Degree of difficulty hearing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	13680	79.0	81.6	81.6
	Some difficulty	2753	15.9	16.4	98.0
	A lot of difficulty	310	1.8	1.8	99.9
	Cannot do at all	23	.1	.1	100.0
	Total	16766	96.8	100.0	
Missing		560	3.2		
Total		17326	100.0		

tabulate HEAR_3_R

HEAR_3_R: Difficulty hearing conversation with one person in quiet room

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	15249	88.0	91.0	91.0
	Some difficulty	1316	7.6	7.9	98.9
	A lot of difficulty	162	.9	1.0	99.9
	Cannot do at all	10	.1	.1	100.0
	Total	16737	96.6	100.0	
Missing		589	3.4		
Total		17326	100.0		

tabulate HEAR_4_R

HEAR_4_R: Difficulty hearing one person in noisier room

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	11697	67.5	70.0	70.0
	Some difficulty	4191	24.2	25.1	95.1
	A lot of difficulty	779	4.5	4.7	99.7
	Cannot do at all	48	.3	.3	100.0
	Total	16715	96.5	100.0	
Missing		611	3.6		
Total		17326	100.0		

Step 4. For Hearing questions, recode HEAR_3_R and HEAR_4_R to value 4 (cannot do at all) if Hear_SS is 4 (Cannot do at all).
The syntax below recodes HEAR_3_R and HEAR_4_R to 4 (cannot do at all) if Hear_SS is 4 (cannot do at all).

gen HEAR_3_X=HEAR_3_R

```
replace HEAR_3_X=4 if Hearing==4 & HEAR_3_R==.

gen HEAR_4_X=HEAR_4_R
replace HEAR_4_X=4 if Hearing==4 & HEAR_4_R==.
tabulate HEAR_3_X
```

HEAR_3_X: Difficulty hearing conversation with one person in quiet room

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	15249	88.0	91.0	91.0
	Some difficulty	1316	7.6	7.9	98.8
	A lot of difficulty	162	.9	1.0	99.8
	Cannot do at all	33	.2	.2	100.0
	Total	16760	96.7	100.0	
Missing		566	3.3		
Total		17326	100.0		

```
tabulate HEAR_4_X
```

HEAR_4_X: Difficulty hearing one person in noisier room

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	11697	67.5	69.9	69.9
	Some difficulty	4191	24.2	25.0	94.9
	A lot of difficulty	779	4.5	4.7	99.6
	Cannot do at all	71	.4	.4	100.0
	Total	16738	96.6	100.0	
Missing		588	3.4		
Total		17326	100.0		

Step 5. Generate a cross-tabulation of the two Hearing Extended Set questions: HEAR_3_X and HEAR_4_X.

The syntax below produces a cross-tabulation of the two Extended Set questions: HEAR_3_X: *Difficulty hearing in a quiet room* and HEAR_4_X: *Difficulty hearing in a noisier room* to determine a single HEARING INDICATOR.

```
tabulate HEAR_4_X HEAR_3_X
```

HEAR_4_X (Difficulty hearing in a Nosier room)	HEAR_3_X : Difficulty hearing conversation with one person in quiet room				
	No difficulty	Some difficulty	A lot of difficulty	Cannot do at all	Total
No difficulty	11603	94	0	0	11697
Some difficulty	3373	809	8	0	4190
A lot of difficulty	253	388	138	0	779
Cannot do at all	8	24	16	23	71
Total	15237	1315	162	23	16737

Step 6. Create a HEARING INDICATOR (H_INDICATOR) based on the two additional hearing questions HEAR_3_X and HEAR_4_X.

The syntax below creates a HEARING INDICATOR (H_INDICATOR) based on the cross-tabulation of the two additional hearing questions HEAR_3_X and HEAR_4_X.

```
gen H_INDICATOR=.
replace H_INDICATOR=1 if (HEAR_3_X==1 & HEAR_4_X==1) | ///
      (HEAR_3_X==1 & HEAR_4_X==2)
replace H_INDICATOR=2 if (HEAR_3_X==2 & (HEAR_4_X==1 | ///
      HEAR_4_X==2)) | (HEAR_3_X==1 & HEAR_4_X==3)
replace H_INDICATOR=3 if (HEAR_3_X==3 & (HEAR_4_X==1 | ///
      HEAR_4_X==2) | (HEAR_3_X==2 & HEAR_4_X==3) | ///
      (HEAR_3_X==1 & HEAR_4_X==4))
replace H_INDICATOR=4 if ((HEAR_3_X==3 & HEAR_4_X==3) | ///
      HEAR_3_X==4 | (HEAR_4_X==4 & (HEAR_3_X==2 | HEAR_3_X==3)))
tabulate H_INDICATOR
```

H_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	14976	86.4	89.4	89.4
	2.00	1156	6.7	6.9	96.3
	3.00	404	2.3	2.4	98.7
	4.00	211	1.2	1.3	100.0
	Total	16747	96.7	100.0	
Missing		579	3.3		
Total		17326	100.0		

COGNITION: Degree of difficulty remembering or concentrating

Step 7. Generate frequency distributions and cross-tabulations for Cognition domain questions and determine a Cognition Indicator.

> **gen** Cognition=COG_SS **if inlist**(COG_SS, 1,2,3,4)
> **replace** Cognition=. **if inlist**(COG_SS, 7,8,9)
> **tabulate** Cognition

Cognition: Degree of difficulty remembering or concentrating

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	13719	79.2	81.9	81.9
	Some difficulty	2632	15.2	15.7	97.6
	A lot of difficulty	382	2.2	2.3	99.9
	Cannot do at all	20	.1	.1	100.0
	Total	16753	96.7	100.0	
Missing		573	3.3		
Total		17326	100.0		

If response to COG-SS is *some difficulty*, *a lot of difficulty* or *cannot do at all*, then the respondent is asked COG_1: whether they have difficulty remembering, concentrating or both.

> **gen** COG_1_R=COG_1 **if inlist**(COG_1, 1,2,3)
> **replace** COG_1_R=. **if inlist**(COG_1, 7,8,9)
> **tabulate** COG_1_R

COG_1_R: Difficulty remembering, concentrating, or both?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Difficulty remembering only	983	5.7	32.4	32.4
	Difficulty concentrating only	388	2.2	12.8	45.2
	Difficulty with both remembering and concentrating	1659	9.6	54.8	100.0
	Total	3030	17.5	100.0	
Missing		14296	82.5		
Total		17326	100.0		

Step 8. Account for those who did not answer COG_1 (COG_SS is 1 – no difficulty and they were skipped) by recoding COG_1 to 0 (No difficulty).

If response to COG-SS is 1: *no difficulty*, then the variable COG_1_R is recoded into COG_1A, and the value assigned is 0: *no difficulty*.

```
gen COG_1A=COG_1_R
replace COG_1A=0 if COG_SS==1
tabulate COG_1A
```

COG_1A: Difficulty remembering, concentrating, or both? (including no difficulty)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	13719	79.2	81.9	81.9
	Difficulty remembering only	983	5.7	5.9	87.8
	Difficulty concentrating only	388	2.2	2.3	90.1
	Difficulty with both remembering and concentrating	1659	9.6	9.9	100.0
	Total	16749	96.7	100.0	
Missing		577	3.3		
Total		17326	100.0		

Step 9. Generate frequency distribution for remaining cognition questions.

Frequency distribution of the Cognition extended REMEMBERING questions: COG_2 *How often have difficulty remembering*, and COG_3 *Amount of things you have difficulty remembering*.

```
gen COG_2_R=COG_2 if inlist(COG_2, 1,2,3)
replace COG_2_R=. if inlist(COG_2, 7,8,9)

gen COG_3_R=COG_3 if inlist(COG_3, 1,2,3)
replace COG_3_R=. if inlist(COG_3, 7,8,9)
tabulate COG_2_R
```

COG_2_R: How often have difficulty remembering?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sometimes	1916	11.1	72.4	72.4
	Often	513	3.0	19.4	91.8
	All of the time	216	1.2	8.2	100.0
	Total	2645	15.3	100.0	
Missing		14681	84.7		
Total		17326	100.0		

```
tabulate COG_3_R
```

COG_3_R: Amount of things you have difficulty remembering?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A few things	2119	12.2	80.3	80.3
	A lot of things	386	2.2	14.6	94.9
	Almost everything	134	.8	5.1	100.0
	Total	2639	15.2	100.0	
Missing		14687	84.8		
Total		17326	100.0		

Step 10. Generate cross-tabulation of the two Cognition extended set questions COG_2R by COG_3_R.

The syntax below produces a cross-tabulation of the two Extended Set REMEMBERING questions: COG_2_R: *How often you have difficulty remembering* and COG_3_R: *The amount of things you have difficulty remembering* to determine a single REMEMBERING INDICATOR.

```
tabulate COG_2_R COG_3_R
```

COG_2_R: How often do you have difficulty remembering?		COG_3_R: Amount of things you have difficulty remembering?			
		A few things	A lot of things	Almost everything	Total
How often have difficulty remembering?	Sometimes	1788	105	20	1913
	Often	279	197	34	510
	All of the time	51	84	80	215
Total		2118	386	134	2638

Step 11. Create a Remembering Indicator based on distribution of COG_2_R and COG_3_R.

The syntax below creates a REMEMBERING INDICATOR (R_INDICATOR) based on the two additional remembering questions (COG_2_R and COG_3_R).
If Cognition is 1: no difficulty, then the Remembering Indicator is coded as 1: the lowest level of difficulty.

```
gen R_INDICATOR=0
replace R_INDICATOR=1 if Cognition==1
replace R_INDICATOR=2 if ((COG_2_R==1 & COG_3_R==1) | ///
        (COG_3_R==1 & COG_2_R==2) | (COG_3_R==2 & COG_2_R==1))
replace R_INDICATOR=3 if (COG_3_R==2 & COG_2_R==2)
replace R_INDICATOR=4 if (COG_3_R==3 | COG_2_R==3)
```

Step 12. If COG_1A is coded as 2 (concentrating only), then the Remembering Indicator is coded as 5.

These 388 individuals are respondents who were not included in the Remembering Indicator since they had only difficulty concentrating.

replace R_INDICATOR=5 **if** (COG_1A==2)

Step 13. Generate frequency distribution of the Remembering Indicator.

tabulate R_INDICATOR

R_INDICATOR

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	580	3.3	3.3	3.3
1.00	13719	79.2	79.2	82.5
2.00	2172	12.5	12.5	95.1
3.00	197	1.1	1.1	96.2
4.00	270	1.6	1.6	97.8
5.00	388	2.2	2.2	100.0
Total	17326	100.0	100.0	

Step 14. Supplement Remembering Indicator with information on difficulty concentrating.

The syntax below adds information on whether cognitive difficulties are compounded by difficulty concentrating in addition to difficulty remembering.
Create a COGNITION INDICATOR (COG_INDICATOR) based on R_INDICATOR (above) and the cognition question (COG_1_R).

The 388 individuals with 'concentrating only' were allocated as follows:
1. 357 with a little difficulty on Cognition question were classified as **2**
2. 30 with a lot of difficulty on Cognition question were classified as **3**
3. 1 with cannot do on Cognition question was classified as **4**

Those with <u>both</u> remembering <u>and</u> concentrating difficulty were upgraded 36 individuals from **2** to **3**, and 125 individuals from **3** to **4.**

gen COG_INDICATOR=R_INDICATOR
replace COG_INDICATOR=2 **if** (R_INDICATOR==5 & Cognition==2)
replace COG_INDICATOR=3 **if** (R_INDICATOR==5 & Cognition==3)
replace COG_INDICATOR=4 **if** (R_INDICATOR==5 & Cognition==4)

replace COG_INDICATOR=3 **if** (R_INDICATOR==2 & COG_1_R==3 & Cognition==3)
replace COG_INDICATOR=4 **if** (R_INDICATOR==3 & COG_1_R==3 & Cognition==3)

Step 15. Generate frequency distribution of the Cognition Indicator.

> **tabulate** COG_INDICATOR

COG_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	580	3.3	3.3	3.3
	1.00	13719	79.2	79.2	82.5
	2.00	2449	14.1	14.1	96.7
	3.00	226	1.3	1.3	98.0
	4.00	352	2.0	2.0	100.0
	Total	17326	100.0	100.0	

UPPER BODY

Step 16. Generate frequency distributions and cross-tabulations for Self-care and Upper body domain questions and determine the Upper Body Indicator.

SC_SS is the WG-SS Self-care question.
UB_1 is *Difficulty raising 2 liter bottle of water from waist to eye level.*
UB_2 is *Difficulty using hands and fingers*

> **gen** SELF_CARE=SC_SS **if inlist**(SC_SS, 1,2,3,4)
> **replace** SELF_CARE=. **if inlist**(SC_SS, 7,8,9)
>
> **gen** UB_1_R=UB_1 **if inlist**(UB_1, 1,2,3,4)
> **replace** UB_1_R=. **if inlist**(UB_1, 7,8,9)
>
> **gen** UB_2_R=UB_2 **if inlist**(UB_2, 1,2,3,4)
> **replace** UB_2_R=. **if inlist**(UB_2, 7,8,9)

First, calculate frequency distributions on the short set and two extended set questions.

> **tabulate** SELF_CARE

SELF_CARE: Degree of difficulty with self-care

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	16029	92.5	95.7	95.7
	Some difficulty	544	3.1	3.2	98.9
	A lot of difficulty	114	.7	.7	99.6
	Cannot do at all	68	.4	.4	100.0
	Total	16755	96.7	100.0	
Missing		571	3.3		
Total		17326	100.0		

UB_1_R: Diff raising 2 liter bottle of water from waist to eye level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	15677	90.5	93.6	93.6
	Some difficulty	743	4.3	4.4	98.0
	A lot of difficulty	167	1.0	1.0	99.0
	Cannot do at all	166	1.0	1.0	100.0
	Total	16753	96.7	100.0	
Missing		573	3.3		
Total		17326	100.0		

tabulate UB_2_R

UB_2_R: Degree of difficulty using hands and fingers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	15199	87.7	90.7	90.7
	Some difficulty	1229	7.1	7.3	98.1
	A lot of difficulty	255	1.5	1.5	99.6
	Cannot do at all	70	.4	.4	100.0
	Total	16753	96.7	100.0	
Missing		573	3.3		
Total		17326	100.0		

Step 17. Generate a cross-tabulation of the two Upper body Extended Set questions: UB_2_R and UB_1_R.

The syntax below produces a cross-tabulation of the two Extended Set questions: UB_1_R: *Difficulty raising a 2 liter bottle of water from waste to eye level* UB_2_R: *Difficulty using hands and fingers* to determine a single UPPER BODY INDICATOR (UB_INDICATOR).

tabulate UB_2_R UB_1_R

		UB_1_R: Diff raising 2 liter bottle of water from waist to eye level				
UB_2_R: Difficulty using hands and fingers		No difficulty	Some difficulty	A lot of difficulty	Cannot do at all	Total
Degree of difficulty using hands and fingers	No difficulty	14786	309	58	44	15197
	Some difficulty	782	355	51	40	1228
	A lot of difficulty	98	73	51	33	255
	Cannot do at all	9	5	7	49	70
Total		15675	742	167	166	16750

Step 18. Create an UPPER BODY INDICATOR (UB_INDICATOR) based on the two additional upper body questions UB_2_R and UB_3_R.

Syntax below creates UB_INDICATOR based on the distribution in the cross-tabulation above.

> **gen** UB_INDICATOR=4 **if** (UB_1_R==4 | UB_2_R==4)
> **replace** UB_INDICATOR=3 **if** UB_INDICATOR ~=4 & (UB_1_R==3 | UB_2_R==3)
> **replace** UB_INDICATOR=2 **if** UB_INDICATOR ~=4 & UB_INDICATOR~=3 & ///
> (UB_1_R==2 | UB_2_R==2)
> **replace** UB_INDICATOR=1 **if** UB_INDICATOR~=4 & UB_INDICATOR~=3 & ///
> UB_INDICATOR~=2 & (UB_1_R==1 | UB_2_R==1)
> **tabulate** UB_INDICATOR

UB_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	**1.00**	14790	85.4	88.3	88.3	
	2.00	1448	8.4	8.6	96.9	
	3.00	331	1.9	2.0	98.9	
	4.00	187	1.1	1.1	100.0	
	Total	16756	96.7	100.0		
Missing		570	3.3			
Total		17326	100.0			

MOBILITY

Step 19. Generate frequency distributions and cross-tabulations for Mobility domain questions and determine Mobility Indicator.

MOB_SS is the WG-SS Mobility question.
MOB_4 is Difficulty walking 100 yards on level ground without aid or equipment.
MOB_5 is Difficulty walking 1/3rd mile on level ground without aid or equipment.

> **gen** Mobility=MOB_SS **if inlist**(MOB_SS, 1,2,3,4)
> **replace** Mobility=. **if inlist**(MOB_SS, 7,8,9)
>
> **gen** MOB_4_R=MOB_4 **if inlist**(MOB_4, 1,2,3,4)
> **replace** MOB_4_R=. **if inlist**(MOB_4, 7,8,9)
>
> **gen** MOB_5_R=MOB_5 **if inlist**(MOB_5, 1,2,3,4)
> **replace** MOB_5_R=. **if inlist**(MOB_5, 7,8,9)

First, calculate frequency distributions on the short set and two extended set WALKING questions.

tabulate Mobility

Mobility: Degree of difficulty walking or climbing steps

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	13424	77.5	80.1	80.1
	Some difficulty	2165	12.5	12.9	93.0
	A lot of difficulty	792	4.6	4.7	97.7
	Cannot do at all	380	2.2	2.3	100.0
	Total	16761	96.7	100.0	
Missing		565	3.3		
Total		17326	100.0		

tabulate MOB_4_R

MOB_4_R: Diff walking 100 yards on level ground w/o aid or equipment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	13892	80.2	84.8	84.8
	Some difficulty	1369	7.9	8.4	93.2
	A lot of difficulty	491	2.8	3.0	96.2
	Cannot do at all	**623**	3.6	3.8	100.0
	Total	16375	94.5	100.0	
Missing		951	5.5		
Total		17326	100.0		

tabulate MOB_5_R

MOB_5_R: Diff walking 1/3rd mile on level ground w/o aid or equipment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	13025	75.2	82.8	82.8
	Some difficulty	1650	9.5	10.5	93.3
	A lot of difficulty	708	4.1	4.5	97.8
	Cannot do at all	347	2.0	2.2	100.0
	Total	15730	90.8	100.0	
Missing		1596	9.2		
Total		17326	100.0		

Step 20. Generate a cross-tabulation of the walking distance questions: MOB_4_R and MOB_5_R.

The syntax below produces a cross-tabulation of the two Extended Set WALKING questions: MOB_4_R: *Difficulty walking 100 yards without equipment* and MOB_5_R: *Difficulty walking 1/3 mile without equipment* to determine a single WALKING INDICATOR.

NOTE: **623** individuals who responded cannot do at all to MOB_4_R were not asked MOB_5_R and they do not appear in the table below. They are, however, accounted for in the WALKING indicator calculation.

> **tabulate** MOB_4_R MOB_5_R

MOB_4_R: Diff walking 100 yards on level ground w/o aid or equipment	MOB_5_R: Diff walking 1/3rd mile on level ground w/o aid or equipment				
	No difficulty	Some difficulty	A lot of difficulty	Cannot do at all	Total
No difficulty	12950	819	63	39	13871
Some difficulty	72	810	343	142	1367
A lot of difficulty	3	21	301	166	491
Cannot do at all **(623)**	0	0	0	0	0
Total	13025	1650	707	347	15729

Step 21. Create a WALKING INDICATOR (WALK_INDICATOR) based on the two additional walking questions MOB_4_R and MOB_5_R.

Syntax below creates WALKING_INDICATOR based on the distribution in the cross-tabulation above.

> **gen** WALK_INDICATOR=0
> **replace** WALK_INDICATOR=1 **if** (MOB_4_R==1 & (MOB_5_R==1 | MOB_5_R==2))
> **replace** WALK_INDICATOR=2 **if** (MOB_4_R==1 & MOB_5_R==3) | (MOB_4_R==2 & ///
>   (MOB_5_R==1 | MOB_5_R== 2 | MOB_5_R==3))
> **replace** WALK_INDICATOR=3 **if** (MOB_4_R==1 & MOB_5_R==4) | (MOB_4_R==3 & ///
>   (MOB_5_R==1 | MOB_5_R==2 | MOB_5_R==3))
> **replace** WALK_INDICATOR=4 **if** (MOB_4_R==2 & MOB_5_R==4) | (MOB_4_R==3 & ///
>   MOB_5_R==4)

Syntax below includes the **623** who responded cannot do at all to MOB_4_R into the WALKING INDICATOR.

> **replace** WALK_INDICATOR=4 **if** (WALK_INDICATOR==0 & MOB_4_R==4)
> **replace** WALK_INDICATOR=. **if** WALK_INDICATOR==0
> **tabulate** WALK_INDICATOR

WALK_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1.00**	13769	79.5	84.2	84.2
	2.00	1288	7.4	7.9	92.1
	3.00	364	2.1	2.2	94.3
	4.00	931	5.4	5.7	100.0
	Total	16352	94.4	100.0	
Missing		974	5.6		
Total		17326	100.0		

Step 22. Supplement Walking Indicator with information on difficulty Climbing steps (MOB_6).

Syntax below adds information from MOB_6 on *difficulty climbing up or down 12 steps* to create a combined Mobility Indicator (MOB_INDICATOR).

> **gen** MOB_6_R=MOB_6 **if inlist**(MOB_6, 1,2,3,4)
> **replace** MOB_6_R=. **if inlist**(MOB_6, 7,8,9)
> **tabulate** WALK_INDICATOR MOB_6_R

		MOB_6_R: Difficulty climbing up or down 12 steps				
WALK_INDICATOR		No difficulty	Some difficulty	A lot of difficulty	Cannot do at all	Total
walk_INDICATOR2	**1.00**	13048	645	**55**	**17**	13765
	2.00	370	767	**135**	**16**	1288
	3.00	43	106	200	14	363
	4.00	79	242	226	384	931
Total		13540	1760	616	431	16347

According to the table above, the syntax below reclassifies:

1. 55 individuals with level **1** on the WALKING INDICATOR as level **2** on the MOBILITY INDICATOR
2. 17 individuals with level **1** on the WALKING INDICATOR and 135 individuals with level **2** on the WALKING INDICATOR as level **3** on the MOBILITY INDICATOR, and
3. 16 individuals with level **2** on the WALKING INDICATOR as level **4** on the MOBILITY INDICATOR.

Step 23. Create a mobility indication (MOB_INDICATOR) with information garnered from cross-tabulation above.

> **gen** MOB_INDICATOR= WALK_INDICATOR
> **replace** MOB_INDICATOR=2 **if** (WALK_INDICATOR==1 & MOB_6_R==3)

```
replace MOB_INDICATOR=3 if (WALK_INDICATOR==2 & MOB_6_R==3) | ///
       (WALK_INDICATOR==1 & MOB_6_R==4)
replace MOB_INDICATOR=4 if (WALK_INDICATOR==2 & MOB_6_R==4)
tabulate MOB_INDICATOR
```

MOB_IDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1.00**	13697	79.1	83.8	83.8
	2.00	1192	6.9	7.3	91.1
	3.00	516	3.0	3.2	94.2
	4.00	947	5.5	5.8	100.0
	Total	16352	94.4	100.0	
Missing		974	5.6		
Total		17326	100.0		

ANXIETY

Step 24. Generate frequency distribution on ANX_1.

First, calculate frequency distributions on ANX_1: *How often do you feel worried, nervous or anxious?*

```
gen ANX_1_R=ANX_1 if inlist(ANX_1, 1,2,3,4,5)
replace ANX_1_R=. if inlist(ANX_1, 7,8,9)
tabulate ANX_1_R
```

ANX_1_R: How often feel worried, nervous, or anxious?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	1632	9.4	9.8	9.8
	Weekly	1872	10.8	11.2	21.0
	Monthly	1558	9.0	9.3	30.4
	A few times a year	4898	28.3	29.4	59.7
	Never	6714	38.8	40.3	100.0
	Total	16674	96.2	100.0	
Missing		652	3.8		
Total		17326	100.0		

Step 25. The syntax below recodes ANX_3R into ANX_3Y
1) to create a NOT ASKED category based on those who responded NEVER to ANX_1_R and
2) to place "SOMEWHERE BETWEEN" numerically in-between "A LITTLE" and "A LOT".

```
gen ANX_3Y=1 if ANX_3R==1
```

```
replace ANX_3Y=3 if ANX_3R==2
replace ANX_3Y=2 if ANX_3R==3
replace ANX_3Y=. if inlist(ANX_3R, 7, 8, 9)
```

Recode ANX_3Y to 0 (not asked) if ANX_1 is 5 (Never)

```
replace ANX_3Y=0 if ANX_1==5
tabulate ANX_3Y
```

ANX_3Y: Level of feelings last time felt worried/nervous/anxious

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not asked	6714	38.8	40.3	40.3
	A little	5700	32.9	34.2	74.5
	In between a little and a lot	3076	17.8	18.5	92.9
	A lot	1176	6.8	7.1	100.0
	Total	16666	96.2	100.0	
Missing		660	3.8		
Total		17326	100.0		

Step 26. Generate a cross-tabulation of the anxiety Extended Set questions: ANX_1_R and ANX_3Y.

The syntax below produces a cross-tabulation of ANX_1_R: *How often you felt worried, nervous or anxious* (a measure of frequency) and ANX_3Y: *The level of those feeling the last time you felt worried, nervous or anxious* (a measure of intensity) – used to determine a single ANXIETY INDICATOR (ANX_INDICATOR).

```
tabulate ANX_3Y ANX_1_R
```

ANX_3Y: Level of feelings last time felt worried, nervous or anxious	ANX_1_R: How often feel worried, nervous or anxious?					
	Daily	Weekly	Monthly	A Few Times A Year	Never	Total
Not asked	0	0	0	0	6714	6714
A little	489	887	897	3417	0	5690
In between a little and a lot	589	725	535	1221	0	3070
A lot	548	256	123	248	0	1175
Total	1626	1868	1555	4886	6714	16649

Step 27. Create an ANXIETY INDICATOR (ANX_INDICATOR) based on the two anxiety questions ANX_1_R and ANX_3Y.

Syntax below creates ANX_INDICATOR based on the distribution in the cross-tabulation above.

```

```
gen ANX_INDICATOR=1 if (ANX_3Y <= 4 & (ANX_1_R==4 | ANX_1_R==5))
replace ANX_INDICATOR=2 if ((ANX_1_R==3) | (ANX_1_R < 3 & ANX_3Y==1) | ///
    (ANX_1_R==2 & ANX_3Y==2))
replace ANX_INDICATOR=3 if ((ANX_1_R==1 & ANX_3Y==2) | ///
    (ANX_1_R==2 & ANX_3Y==3))
replace ANX_INDICATOR=4 if (ANX_1_R==1 & ANX_3Y==3)
replace ANX_INDICATOR=. if (missing(ANX_1_R) | missing(ANX_3Y))
tabulate ANX_INDICATOR
```

### ANX_INDICATOR

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1.00 | 11600 | 67.0 | 69.7 | 69.7 |
| | 2.00 | 3656 | 21.1 | 22.0 | 91.6 |
| | 3.00 | 845 | 4.9 | 5.1 | 96.7 |
| | 4.00 | 548 | 3.2 | 3.3 | 100.0 |
| | Total | 16649 | 96.1 | 100.0 | |
| Missing | | 677 | 3.9 | | |
| Total | | 17326 | 100.0 | | |

## DEPRESSION

*Step 28.Generate frequency distribution on DEP_1.*
First, calculate frequency distributions on DEP_1: *How often do you feel depressed*?

```
gen DEP_1_R=DEP_1 if inlist(DEP_1, 1,2,3,4,5)
replace DEP_1_R=. if inlist(DEP_1, 7,8,9)
tabulate DEP_1_R
```

DEP_1_R: How often do you feel depressed?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	756	4.4	4.5	4.5
	Weekly	926	5.3	5.6	10.1
	Monthly	1038	6.0	6.2	16.3
	A few times a year	4012	23.2	24.1	40.4
	Never	9929	57.3	59.6	100.0
	Total	16661	96.2	100.0	
Missing		665	3.8		
Total		17326	100.0		

*Step 29. The syntax below recodes DEP_3R into DEP_3Y to place "SOMEWHERE BETWEEN"
numerically in-between "A LITTLE" and "A LOT". It also creates the category NOT ASKED, if DEP_1
is NEVER (1)*

```
gen DEP_3Y=1 if DEP_3R==1
replace DEP_3Y=3 if DEP_3R==2
replace DEP_3Y=2 if DEP_3R==3
replace DEP_3Y=. if inlist(DEP_3R, 7,8,9)

replace DEP_3Y=0 if DEP_1==5
tabulate DEP_3Y
```

DEP_3Y: Level of feelings last time felt depressed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not asked	9929	57.3	59.6	59.6
	A little	3775	21.8	22.7	82.3
	In between a little and a lot	2016	11.6	12.1	94.4
	A lot	935	5.4	5.6	100.0
	Total	16655	96.1	100.0	
Missing		671	3.9		
Total		17326	100.0		

Step 30. Generate a cross-tabulation of the depression Extended Set questions: DEP_1_R and DEP_3Y.

The syntax below produces a cross-tabulation of DEP_1_R: *How often do you feel depressed* (a measure of frequency) and DEP_3Y: *The level of those feeling the last time you felt depressed* (a measure of intensity) – used to determine a single DEPRESSION INDICATOR (DEP_INDICATOR).

```
tabulate DEP_3Y DEP_1_R
```

DEP_3Y: Level of feelings last time felt depressed	DEP_1_R: How often do you feel depressed?					
	Daily	Weekly	Monthly	A Few Times A Year	Never	Total
Not asked	0	0	0	0	9929	9929
A little	161	346	548	2708	0	3763
In between a little and a lot	209	384	378	1042	0	2013
A lot	381	191	112	248	0	932
Total	751	921	1038	3998	9929	16637

*Step 31. Create a DEPRESSION INDICATOR (DEP_INDICATOR) based on the two depression
questions DEP_1_R and DEP_3Y.*

Syntax below creates DEP_INDICATOR based on the distribution in the cross-tabulation above.

```
gen DEP_INDICATOR=. if (missing(DEP_1_R) | missing(DEP_3Y))
replace DEP_INDICATOR=1 if (DEP_3Y <= 4 & (DEP_1_R==4 | DEP_1_R==5))
replace DEP_INDICATOR=2 if ((DEP_1_R==3) | (DEP_1_R < 3 & DEP_3Y==1) | ///
        (DEP_1==2 & DEP_3Y==2))
replace DEP_INDICATOR=3 if ((DEP_1_R==1 & DEP_3Y==2) | ///
        (DEP_1_R==2 & DEP_3Y==3))
replace DEP_INDICATOR=4 if (DEP_1_R==1 & DEP_3Y==3)
tabulate DEP_INDICATOR
```

DEP_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	13927	80.4	83.7	83.7
	2.00	1929	11.1	11.6	95.3
	3.00	400	2.3	2.4	97.7
	4.00	381	2.2	2.3	100.0
	Total	16637	96.0	100.0	
Missing		689	4.0		
Total		17326	100.0		

PAIN

Step 32. Generate frequency distribution on PAIN_2.
First, calculate frequency distributions on PAIN_2: *Frequency of pain in the past 3 months.*

```
gen PAIN_2_R=PAIN_2 if inlist(PAIN_2, 1,2,3,4)
replace PAIN_2_R=. if inlist(PAIN_2, 7,8,9)
tabulate PAIN_2_R
```

PAIN_2_R: Frequency of pain in past 3 months

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	6636	38.3	39.8	39.8
	Some days	6556	37.8	39.3	79.2
	Most days	1227	7.1	7.4	86.5
	Every day	2245	13.0	13.5	100.0
	Total	16664	96.2	100.0	
Missing		662	3.8		
Total		17326	100.0		

Step 33. The syntax below recodes PAIN_4 into PAIN_4Y to place "SOMEWHERE BETWEEN" numerically in-between "A LITTLE" and "A LOT". It also creates the category NOT ASKED, if PAIN_2 is NEVER (1).

```
gen PAIN_4Y=1 if PAIN_4==1
replace PAIN_4Y=3 if PAIN_4==2
replace PAIN_4Y=2 if PAIN_4==3
replace PAIN_4Y=. if inlist(PAIN_4, 7,8,9)

replace PAIN_4Y=0 if PAIN_2==1
tabulate PAIN_4Y
```

PAIN_4Y: How much pain you had last time you had pain?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not asked	6636	38.3	39.8	39.8
	A little	4865	28.1	29.2	69.0
	In between a little and a lot	3296	19.0	19.8	88.8
	A lot	1869	10.8	11.2	100.0
	Total	16666	96.2	100.0	
Missing		660	3.8		
Total		17326	100.0		

Step 34. Generate a cross-tabulation of the PAIN Extended Set questions: PAIN_2_R and PAIN_4Y.

The syntax below produces a cross-tabulation of PAIN_2_R: *Frequency of pain in the past 3 months* and PAIN_4Y: *How much pain you has the last time you had pain* (a measure of intensity) – used to determine a single PAIN INDICATOR (P_INDICATOR).

```
tabulate PAIN_4Y PAIN_2_R
```

PAIN_4Y: How much pain you had last time you had pain		PAIN_2_R: Frequency of pain in past 3 months				
		Never	Some Days	Most days	Every day	Total
	Not asked	6636	0	0	0	6636
	A little	0	4136	323	401	4860
	In between a little and a lot	0	1772	624	896	3296
	A lot	0	645	278	944	1867
Total		6636	6553	1225	2241	16655

Step 35. Create a PAIN INDICATOR (P_INDICATOR) based on the two PAIN questions PAIN_2_R and PAIN_4Y.

Syntax below creates P_INDICATOR based on the distribution in the cross-tabulation above.

```
gen P_INDICATOR=1 if (PAIN_2_R==1) | (PAIN_4Y==1 & ///
    (PAIN_2_R==2 | PAIN_2_R==3))
replace P_INDICATOR=2 if ((PAIN_2_R==2 & (PAIN_4Y==2 | PAIN_4Y==3)) | ///
    (PAIN_2_R==3 & PAIN_4Y==2) | (PAIN_2_R==4 & PAIN_4Y==1))
replace P_INDICATOR=3 if (PAIN_2_R==3 & PAIN_4Y==3) | ///
    (PAIN_2_R==4 & PAIN_4Y==2)
replace P_INDICATOR=4 if (PAIN_2_R==4 & PAIN_4Y==3)
tabulate P_INDICATOR
```

P_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1.00**	11095	64.0	66.6	66.6
	2.00	3442	19.9	20.7	87.3
	3.00	1174	6.8	7.0	94.3
	4.00	944	5.4	5.7	100.0
	Total	16655	96.1	100.0	
Missing		671	3.9		
Total		17326	100.0		

FATIGUE (Tired)

Step 36. Generate frequency distribution on FATIGUE Extended Set questions Tired_1, Tired_2 and Tired_3.

First, calculate frequency distributions on TIRED_1: *How often you felt tired in the past 3 months*.

```
gen TIRED_1_R=TIRED_1 if inlist(TIRED_1, 1,2,3,4)
replace TIRED_1_R=. if inlist(TIRED_1, 7,8,9)
tabulate TIRED_1_R
```

TIRED_1_R: How often felt very tired or exhausted in past 3 months

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	5619	32.4	33.7	33.7
	Some days	8391	48.4	50.4	84.1
	Most days	1632	9.4	9.8	93.9
	Every day	1019	5.9	6.1	100.0
	Total	16661	96.2	100.0	
Missing		665	3.8		
Total		17326	100.0		

Step 37. Recode Tired_2 to 0 (not asked) if Tired_1 is 1 (Never).
If response to TIRED_1 is 1: Never, then TIRED_2 (*How long most recent tired or exhausted feelings lasted*) is not asked. This variable is recoded so these individuals are included in the syntax below.

```
gen TIRED_2_R=.
replace TIRED_2_R=TIRED_2 if inlist(TIRED_2, 1,2,3)
replace TIRED_2_R=. if inlist(TIRED_2, 7,8,9)
replace TTIRED_2_R=0 if TIRED_1==1
tabulate TIRED_2_R
```

TIRED_2_R: How long most recent tired or exhausted feelings lasted?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not asked	5619	32.4	33.8	33.8
	Some of the day	8036	46.4	48.3	82.0
	Most of the day	1955	11.3	11.7	93.8
	All of the day	1036	6.0	6.2	100.0
	Total	16646	96.1	100.0	
Missing		680	3.9		
Total		17326	100.0		

Step 38. The syntax below recodes TIRED_3 into TIRED_3Y to place "SOMEWHERE BETWEEN" numerically in-between "A LITTLE" and "A LOT".

Also, if response to TIRED_1 is 1: Never, then TIRED_3 (*Level of tiredness*) is not asked. This variable is recoded so these individuals are included in the syntax below.

```
gen TIRED_3Y=1 if TIRED_3==1
replace TIRED_3Y=3 if TIRED_3==2
replace TIRED_3Y=2 if TIRED_3==3
replace TIRED_3Y=. if inlist(TIRED_3, 7, 8, 9)
replace TIRED_3Y=0 if TIRED_1==1
tabulate TIRED_3Y
```

TIRED_3Y: Level of tiredness

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not asked	5619	32.4	33.8	33.8
	A little	4912	28.4	29.5	63.3
	In between a little and a lot	4030	23.3	24.2	87.5
	A lot	2087	12.0	12.5	100.0
	Total	16648	96.1	100.0	
Missing		678	3.9		
Total		17326	100.0		

Step 39. Generate a cross-tabulation of the FATIGUE Extended Set questions: TIRED_1_R, TIRED_2_R and TIRED_3Y.

The syntax below produces a cross-tabulation of TIRED_1_R: *How often you felt tired or exhausted in the past 3 months* (a measure of frequency) and TIRED_2_R: *How long those feelings lasted* (a measure of duration) and TIRED_3Y: *The level of tiredness* (a measure of intensity) – used to determine a single TIRED INDICATOR (T_INDICATOR).

table TIRED_2_R TIRED_1_R , **by**(TIRED_3Y) **contents(freq)**

TIRED_3Y: Level of tiredness: *Intensity*	TIRED_2: How long feelings lasted: *Duration*	TIRED_1: How often felt very tired or exhausted in past 3 months: *Frequency*				
		Never	Some days	Most days	Every day	Total
Not asked	Not asked	5619				5619
A little	Some of the day		4066	264	124	4454
	Most of the day		252	73	27	352
	All of the day		68	15	18	101
In between	Some of the day		2224	400	166	2791
	Most of the day		497	266	123	887
	All of the day		194	71	84	349
A lot	Some of the day		536	165	84	785
	Most of the day		297	255	160	713
	All of the day		237	118	230	585
TOTAL		5619	8371	1627	1016	16633

Step 40. Create a FATIGUE INDICATOR (T_INDICATOR) based on the three FATIGUE questions TIRED_1_R, TIRED_2_R and TIRED_3Y.

Syntax below creates T_INDICATOR based on the distribution in the cross-tabulation above.

```
gen T_INDICATOR = .
replace T_INDICATOR=1 if (TIRED_1_R==1)
replace T_INDICATOR=1 if (TIRED_1_R==2 & TIRED_2_R==1 & TIRED_3Y==1)
replace T_INDICATOR=1 if (TIRED_1_R==3 & TTIRED_2_R==1 & TIRED_3Y==1)

replace T_INDICATOR=2 if (inlist(TIRED_1_R, 2,3,4) & inlist(TIRED_2_R, 2,3) & ///
      TIRED_3Y==1)
replace T_INDICATOR=2 if (inlist(TIRED_1_R ,2,3,4) & TIRED_2_R==1 & TIRED_3Y==2)
replace T_INDICATOR=2 if (TIRED_1_R==2 & TIRED_2_R==2 & TIRED_3Y==2)
replace T_INDICATOR=2 if (TIRED_1_R==4 & TIRED_2_R==1 & TIRED_3Y==1)
```

```
replace T_INDICATOR=3 if (inlist(TIRED_1_R, 3,4) & TIRED_2_R==2 & TIRED_3Y==2)
replace T_INDICATOR=3 if (inlist(TIRED_1_R, 2,3,4) & TIRED_2_R==3 & TIRED_3Y==2)
replace T_INDICATOR=3 if (inlist(TIRED_1_R, 2,3,4) & TIRED_2_R==1 & TIRED_3Y==3)
replace T_INDICATOR=3 if (inlist(TIRED_1_R, 2,3) & TIRED_2_R==2 & TIRED_3Y==3)
replace T_INDICATOR=3 if (TIRED_1_R==2 & TIRED_2_R==3 & TIRED_3Y==3)

replace T_INDICATOR=4 if (TIRED_1_R==4 & TIRED_2_R==2 & TIRED_3Y==3)
replace T_INDICATOR=4 if (inlist(TIRED_1_R, 3,4) & TIRED_2_R==3 & TIRED_3Y==3)
tabulate T_INDICATOR
```

T_Indicator

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	9949	57.4	59.8	59.8
	2.00	3864	22.3	23.2	83.0
	3.00	2312	13.3	13.9	96.9
	4.00	508	2.9	3.1	100.0
	Total	16633	96.0	100.0	
Missing		693	4.0		
Total		17326	100.0		

Creating Disability Status Indicators

Type of Disability Indicator		Number of Questions
SS_1	Short Set (SS)	6
Extended Set		
ES_1	SS + Hearing-indicator, Mobility-indicator, Cognition-indicator, Upper Body-indicator + PFAD (4)*	25
ES_2	SS + Hearing-indicator, Mobility-indicator, Cognition-indicator, Upper Body-indicator + AD (4)†	20
Short Set Enhanced		
ES_3	SS + Upper Body-indicator + AD (4)†	12

* PFAD (4): Pain, Fatigue, Anxiety and Depression Indicators at level 4
† AD (4): Anxiety and Depression Indicators at level 4

SS_1: WG Short Set Disability Indicator based on the 6 short set questions

The syntax below calculates the WG Short Set Disability Indicator based on the six short set questions **SS_1** at the recommended cut-off. The level of inclusion is: at least 1 domain/question is coded A LOT OF DIFFICULTY or CANNOT DO AT ALL.

```
gen SS_1=2
replace SS_1=. if (missing(Vision) & missing(Hearing) & missing(Mobility) & ///
        missing(Communication) & missing(SELF_CARE) & missing(Cognition))
replace SS_1=1 if ((Vision==3 | Vision==4) | (Hearing==3 | Hearing==4) | ///
        (Mobility==3 | Mobility== 4) | (Communication==3 | Communication==4) | ///
        (SELF_CARE==3 | SELF_CARE==4) | (Cognition==3 | Cognition==4))
tabulate SS_1
```

SS_1: WG Short Set Disability Identifier

		Frequency	Percent	Valid Percent	Weighted Estimate
Valid	WITHOUT DISABILITY	14905	86.0	88.8	90.5
	WITH DISABILITY	1872	10.8	11.2	9.5
	Total	16777	96.8	100.0	
Missing		549	3.2		
Total		17326	100.0		

ES_1: SS_1 + Hearing-indicator, Mobility-indicator, Cognition-indicator + Upper Body-indicator + PFAD (4)

The syntax below calculates an Extended Set Disability Indicator (**ES_1**) based on 25 questions at the recommended cut-off. The level of inclusion is: at least 1 domain/question is coded A LOT OF DIFFICULTY or CANNOT DO AT ALL for the six short set question; severity levels 3 or 4 for the Hearing-, Mobility-, Cognition- and Upper body-Indicators; and severity level 4 for Pain-, Fatigue-, Anxiety- and Depression-Indicators.

```
gen ES_1=2
replace ES_1=. if ///
        (missing(SS_1) & ///
        (H_INDICATOR < 1 | H_INDICATOR > 4) & ///
        (MOB_INDICATOR < 1 | MOB_INDICATOR > 4) & ///
         missing(COM_SS) & ///
         missing(SC_SS) & ///
        (COG_INDICATOR < 1 | COG_INDICATOR > 4) & ///
        (UB_INDICATOR < 1 | UB_INDICATOR > 4) & ///
         missing(P_INDICATOR) & ///
        (T_INDICATOR < 1 | T_INDICATOR > 4) & ///
        (ANX_INDICATOR < 1 | ANX_INDICATOR > 4) & ///
        (DEP_INDICATOR < 1 |DEP_INDICATOR > 4) )
replace ES_1=1 if (SS_1==1 | ///
```

```
        (H_INDICATOR==3 | H_INDICATOR==4) | ///
        (MOB_INDICATOR==3 | MOB_INDICATOR==4) | ///
        (COG_INDICATOR==3 | COG_INDICATOR==4) | ///
        (UB_INDICATOR==3 | UB_INDICATOR==4) | ///
        P_INDICATOR==4 | T_INDICATOR==4 | ///
        ANX_INDICATOR==4 | DEP_INDICATOR==4)
tabulate ES_1
```

ES_1: WG-ES Disability Indicator based on 11 domains and 25 questions

		Frequency	Percent	Valid Percent	Weighted Estimate
Valid	WITHOUT DISABILITY	13823	79.8	79.8	82.3
	WITH DISABILITY	3503	20.2	20.2	17.7
	Total	17326	100.0	100.0	

ES_2: SS_1 + Hearing-indicator, Mobility-indicator, Cognition-indicator + Upper Body-indicator + AD (4)

The syntax below calculates an Extended Set Disability Indicator (**ES_2**) based on 20 questions at the recommended cut-off. The level of inclusion is: at least 1 domain/question is coded A LOT OF DIFFICULTY or CANNOT DO AT ALL for the six short set question; severity levels 3 or 4 for the Hearing-, Mobility-, Cognition- and Upper body-Indicators; and severity level 4 for Anxiety- and Depression-Indicators.

```
gen ES_2=2
replace ES_2=. if (missing(SS_1) & ///
        (H_INDICATOR < 1 | H_INDICATOR > 4) & ///
        (MOB_INDICATOR < 1 | MOB_INDICATOR > 4) & ///
         missing(COM_SS) & missing(SC_SS) & ///
        (COG_INDICATOR < 1 | COG_INDICATOR > 4) & ///
        (UB_INDICATOR < 1 | UB_INDICATOR > 4) & ///
        (ANX_INDICATOR < 1 | ANX_INDICATOR > 4) & ///
        (DEP_INDICATOR < 1 | DEP_INDICATOR > 4))
replace ES_2=1 if (SS_1==1 | (H_INDICATOR==3 | H_INDICATOR==4) | ///
        (MOB_INDICATOR==3 | MOB_INDICATOR==4) | ///
        (COG_INDICATOR==3 | COG_INDICATOR==4) | ///
        (UB_INDICATOR==3 | UB_INDICATOR==4) | ///
        ANX_INDICATOR==4 | DEP_INDICATOR==4)
tabulate ES_2
```

ES_2: WG-ES Disability Indicator based on 9 domains and 20 questions

		Frequency	Percent	Valid Percent	Weighted Estimate
Valid	WITHOUT DISABILITY	14222	82.1	82.1	84.6
	WITH DISABILITY	3104	17.9	17.9	15.4
	Total	17326	100.0	100.0	

ES_3: SS_1 + <u>Upper Body-indicator</u> + AD (4)

The syntax below calculates the WG Short Set ENHANCED Disability Indicator (ES_3) based on the 12 questions at the recommended cut-off. The level of inclusion is: at least 1 domain/question is coded A LOT OF DIFFICULTY or CANNOT DO AT ALL for the six short set question; severity levels 3 or 4 for the Upper body-Indicators; and severity level 4 for Anxiety- and Depression-Indicators.

```
gen ES_3=2
replace es_3=. if (missing(Vision) & ///
        missing(Vearing) & ///
        missing(Mobility) & ///
        missing(Communication) & ///
        missing(SELF_CARE) & ///
        missing(Cognition) & ///
        missing(UB_INDICATOR) & ///
        missing(ANX_INDICATOR) & ///
        missing(DEP_INDICATOR) )
 replace es_3=1 if ((Vision==3 | Vision==4) | ///
        (Hearing==3 | Hearing==4) | ///
        (Mobility==3 | Mobility==4) | ///
        (Communication==3 | Communication==4) | ///
        (SELF_CARE==3 | SELF_CARE==4) | ///
        (Cognition==3 | Cognition==4) | ///
        (UB_INDICATOR==3 | UB_INDICATOR==4) | ///
        ANX_INDICATOR==4 | DEP_INDICATOR==4)
tabulate ES_3
```

ES_3: WG-SS Enhanced Disability Indicator based on 9 domains and 12 questions

		Frequency	Percent	Valid Percent	Weighted Estimate
Valid	WITHOUT DISABILITY	14393	83.1	85.8	87.7
	WITH DISABILITY	2384	13.8	14.2	12.3
	Total	16777	96.9	100.0	
Missing		549	3.2		
Total		17326	100.1		

حاشية: لماذا يُستَبعَد "الألم" و"التعب"؟

تجدر الإشارة إلى استبعاد مجالي "الألم" و"التعب" من عدّة معرّفات إعاقة واردة أعلاه. وقد دارت مناقشات كثيرة ضمن فريق واشنطن بخصوص هذين المجالين. وإن شئنا الدقة فهما لا يتعلقان بتأدية الوظائف ــ كما أن تحليلاتنا أكدت تلاقيهما الوثيق مع مجالات أخرى، فضلاً عن أن معدلات الإعاقة المترتبة على إدراج هذين المجالين قد تصبح مرتفعة للغاية.

وأخيراً، وبالنظر إلى قابلية المقارنة العالمية، فإن المجالين المذكورين أقل شيوعاً؛ بمعنى أنهما أكثر حساسية تجاه المؤثرات المحلية والاجتماعية-الثقافية مقارنة بالمجالات الأخرى لتأدية الوظائف.

فلكل تلك الأسباب آثرنا استبعادهما من عدّة تحليلات على الرغم من إمكانية إدراجهما ضمن تحليلات تكميلية تجريها مكاتب الإحصاء الوطنية وفق أسس وطنية، لا عالمية.