

Sleep Cohort Study-Health Status Survey

ID **subj_id, visit_number** table: sf36

This survey asks for your views about your health. The questions are quoted directly from a nationally standardized survey to allow comparison among people with many different health conditions. We will use the information to help understand how sleep problems may affect one's health and daily activities.

Please answer every question by marking the one answer that best describes your health and abilities. If you are unsure of an answer, please give the best answer you can.

1. In general, would you say your health is:

sf1 (1 - 5)

 1 Excellent 2 Very Good 3 Good 4 Fair 5 Poor

2. **Compared to one year ago**, how would you rate your health in general **now**? (Check one)

sf2 (1 - 5)

 1 Much better now than 1 year ago 4 Somewhat worse now than 1 year ago
 2 Somewhat better now than 1 year ago 5 Much worse now than 1 year ago
 3 About the same

3. The following items are about activities you might do during a typical day. Does **your health now limit you** in these activities? If so, how much? (Mark one answer on each line.)

Yes, limited a lot	Yes, limited a little	No, not limited at all
1	2	3

a. Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports. sf3a (1 - 3)

b. Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf. sf3b (1 - 3)

c. Lifting or carrying groceries. sf3c (1 - 3)

d. Climbing several flights of stairs. sf3d (1 - 3)

e. Climbing one flight of stairs. sf3e (1 - 3)

f. Bending, kneeling, or stooping. sf3f (1 - 3)

g. Walking more than a mile. sf3g (1 - 3)

h. Walking several blocks. sf3h (1 - 3)

i. Walking one block. sf3i (1 - 3)

j. Bathing or dressing yourself. sf3j (1 - 3)

4. During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities **result of your physical health**? (Mark one answer on each line.)

YES	NO
1	2

- a. Cut down the amount of time you spent on work or other activities. sf4a (1 - 2)
- b. Accomplished less than you would like. sf4b (1 - 2)
- c. Were limited in the kind of work or activities. sf4c (1 - 2)
- d. Had difficulty performing the work or other activities (for example, it took extra effort). sf4d (1 - 2)

5. During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious)? (Mark one answer on each line.)

YES	NO
1	2

- a. Cut down the amount of time you spent on work or other activities. sf5a (1 - 2)
- b. Accomplished less than you would like. sf5b (1 - 2)
- c. Didn't do work or other activities as carefully as usual. sf5c (1 - 2)

6. During the **past 4 weeks**, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups? (Check one)

sf6 (1 - 5)	
__ 1 __	__ 4 __
Not at all	Quite a bit
__ 2 __	__ 5 __
Slightly	Extremely
__ 3 __	
Moderately	

7. How much **bodily** pain have you had during the **past 4 weeks**? (Check one)

sf7 (1 - 6)	
__ 1 __	__ 4 __
None	Moderate
__ 2 __	__ 5 __
Very mild	Severe
__ 3 __	__ 6 __
Mild	Very severe

8. During the **past 4 weeks**, how much did **pain** interfere with your normal work (including both work outside the home housework)? (Check one)

sf8 (1 - 5)	
__ 1 __	__ 4 __
Not at all	Quite a bit
__ 2 __	__ 5 __
Slightly	Extremely
__ 3 __	
Moderately	

9. These questions are about how you feel and how things have been with you **during the past 4 weeks**. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the during the past 4 weeks... (Mark one answer on each line.)

All of	Most of	A good bit	Some of	A little of	None of
<u>the time</u>	<u>the time</u>	<u>of the time</u>	<u>the time</u>	<u>the time</u>	<u>the time</u>
1	2	3	4	5	6

- a. Did you feel full of pep? sf9a (1 - 6)
- b. Have you been a very nervous person? sf9b (1 - 6)
- c. Have you felt so down in the dumps nothing could cheer you up? sf9c (1 - 6)
- d. Have you felt calm and peaceful? sf9d (1 - 6)

- e. Did you have a lot of energy? sf9e (1 - 6)
- f. Have you felt downhearted and blue? sf9f (1 - 6)
- g. Did you feel worn out? sf9g (1 - 6)
- h. Have you been a happy person? sf9h (1 - 6)
- i. Did you feel tired? sf9i (1 - 6)

10. During the **past 4 weeks**, how much of the time has your **physical or emotional problems** interfered with your social activities (like visiting friends, relatives, etc.)? (Check one)

sf10 (1 - 5)

- 1 All of the time 4 A little of the time
- 2 Most of the time 5 None of the time
- 3 Some of the time

11. Please choose the answer that best describes how **true** or **false** each of the following statements is for you. (Mark one answer on each line.)

	Definitely <u>True</u>	Mostly <u>True</u>	Not <u>Sure</u>	Mostly <u>False</u>	Definitely <u>False</u>
	1	2	3	4	5

- a. I seem to get sick a little easier than other people. sf11a (1 - 5)
- b. I am as healthy as anybody I know. sf11b (1 - 5)
- c. I expect my health to get worse. sf11c (1 - 5)
- d. My health is excellent. sf11d (1 - 5)

Scoring:

These composite scores are computed if there are not too many missing values:

physical_functioning
role_physical
bodily_pain
general_health
vitality
social_functioning
role_emotional
mental_health

In the table in the database, for every sf36 field, there is a health status score field with an _hs appended to the name. For example, sf_1 has the associated health status score sf1_hs. These scores are assigned by a trigger on the table. In many cases the _hs values are the same as the raw values. The exceptions follow: (note if the raw value is missing there is no scored valued assigned.)

```

if :new.SF1 = 1 then
    :new.SF1_HS := 5.0;
elsif :new.SF1 = 2 then
    :new.SF1_HS := 4.4;
elsif :new.SF1 = 3 then
    :new.SF1_HS := 3.4;
elsif :new.SF1 = 4 then
    :new.SF1_HS := 2;
elsif :new.SF1 = 5 then

```

```

:new.SF1_HS := 1;

:new.SF6_HS := 6 - :new.SF6;

if :new.SF7 = 1 then
    :new.SF7_HS := 6.0;
elsif :new.SF7 = 2 then
    :new.SF7_HS := 5.4;
elsif :new.SF7 = 3 then
    :new.SF7_HS := 4.2;
elsif :new.SF7 = 4 then
    :new.SF7_HS := 3.1;
elsif :new.SF7 = 5 then
    :new.SF7_HS := 2.2;
elsif :new.SF7 = 6 then
    :new.SF7_HS := 1;
end if;

if :new.SF8 = 1 then
    if (:new.SF7 = 1 or :new.SF7 is null) then
        :new.SF8_HS := 6.0;
    end if;
    if :new.SF7 > 1 then
        :new.SF8_HS := 5.0;
    end if;
elsif :new.SF8 = 2 then
    if (:new.SF7 is null) then
        :new.SF8_HS := 4.75;
    else
        :new.SF8_HS := 4;
    end if;
elsif :new.SF8 = 3 then
    if (:new.SF7 is null) then
        :new.SF8_HS := 3.5;
    else
        :new.SF8_HS := 3;
    end if;
elsif :new.SF8 = 4 then
    if (:new.SF7 is null) then
        :new.SF8_HS := 2.5;
    else
        :new.SF8_HS := 2;
    end if;
elsif :new.SF8 = 5 then
    :new.SF8_HS := 1;
end if;

:new.SF9A_HS := 7 - :new.SF9A;
new.SF9D_HS := 7 - :new.SF9D;

:new.SF9E_HS := 7 - :new.SF9E;
new.SF9H_HS := 7 - :new.SF9H;
new.SF11B_HS := 6 - :new.SF11B;
:new.SF11D_HS := 6 - :new.SF11D;

```

From the scores the following constructs are computed:

Physical functioning:

is based on sf3a_hs, sf3b_hs, sf3c_hs, sf3d_hs, sf3e_hs, sf3f_hs, sf3g_hs, sf3h_hs, sf3i_hs, sf3j_hs
Missing values are counted and the scores are summed and averaged. This is the logic to compute the composite score:

```
valid_values := 10 - missing_values;  
if valid_values <= 4 then  
  currscore := NULL;  
elseif valid_values > 4 and valid_values <= 9 then  
  curravg := currsum / valid_values;  
  currscore := ((currsum + (missing_values * curravg)) - 10) * 5;  
else  
  currscore := (currsum - 10) * 5;  
end if;  
:new.PHYSICAL_FUNCTIONING := currscore;  
end if;
```

Role_physical

is based on sf4a_hs, sf4b_hs, sf4c_hs, sf4d_hs

Missing values are counted and the scores are summed and averaged. This is the logic to compute the composite score:

```
valid_values := 4 - missing_values;  
if valid_values <= 1 then  
  currscore := NULL;  
elseif valid_values > 1 and valid_values <= 3 then  
  curravg := currsum / valid_values;  
  currscore := ((currsum + (missing_values * curravg)) - 4) * 25;  
else  
  currscore := (currsum - 4) * 25;  
end if;  
:new.ROLE_PHYSICAL := currscore;
```

Bodily_pain

is based on sf7_hs and sf8_hs .

Missing values are counted and the scores are summed and averaged. This is the logic to compute the composite score:

```
valid_values := 2 - missing_values;  
if valid_values = 0 then  
  currscore := NULL;  
elseif valid_values = 1 then  
  curravg := currsum / valid_values;  
  currscore := ((currsum + (missing_values * curravg)) - 2) * 10;  
else  
  currscore := (currsum - 2) * 10;  
end if;  
:new.BODILY_PAIN := currscore;
```

General_health

is based on sf1_hs, sf11a_hs, sf11b_hs, sf11c_hs, sf11d_hs

Missing values are counted and the scores are summed and averaged. This is the logic to compute the composite score:

```
valid_values := 5 - missing_values;  
if valid_values <= 2 then  
  currscore := NULL;  
elseif valid_values > 2 and valid_values <= 4 then  
  curravg := currsum / valid_values;  
  currscore := ((currsum + (missing_values * curravg)) - 5) * 5;  
else  
  currscore := (currsum - 5) * 5;
```

```
end if;
:new.GENERAL_HEALTH := currscore;
```

Vitality

is based on sf9a_hs, sf9e_hs, sf9i_hs

Missing values are counted and the scores are summed and averaged. This is the logic to compute the composite score:

```
valid_values := 4 - missing_values;
if valid_values <= 1 then
  currscore := NULL;
elsif valid_values > 1 and valid_values <= 3 then
  curravg := currsum / valid_values;
  currscore := ((currsum + (missing_values * curravg)) - 4) * 5;
else
  currscore := (currsum - 4) * 5;
end if;
:new.VITALITY := currscore;
```

Social_functioning

is based on sf6_hs, sf10_hs

Missing values are counted and the scores are summed and averaged. This is the logic to compute the composite score:

```
valid_values := 2 - missing_values;
if valid_values < 1 then
  currscore := NULL;
elsif valid_values = 1 then
  curravg := currsum / valid_values;
  currscore := (((currsum + (missing_values * curravg)) - 2)/8) * 100;
else
  currscore := ((currsum - 2)/8) * 100;
end if;
:new.SOCIAL_FUNCTIONING := currscore;
```

Role_emotional

is based on sf5a_hs, sf5b_hs, sf5c_hs.

Missing values are counted and the scores are summed and averaged. This is the logic to compute the composite score:

```
valid_values := 3 - missing_values;
if valid_values <= 1 then
  currscore := NULL;
elsif valid_values = 2 then
  curravg := currsum / valid_values;
  currscore := (((currsum + (missing_values * curravg)) - 3)/3) * 100;
else
  currscore := ((currsum - 3)/3) * 100;
end if;
:new.ROLE_EMOTIONAL := currscore;
```

Mental_health is based on sf9b_hs, sf9c_hs, sf9d_hs, sf9f_hs, sf9h_hs

Missing values are counted and the scores are summed and averaged. This is the logic to compute the composite score:

```
valid_values := 5 - missing_values;
if valid_values <= 2 then
  currscore := NULL;
elsif valid_values > 2 and valid_values <= 4 then
  curravg := currsum / valid_values;
  currscore := ((currsum + (missing_values * curravg)) - 5) * 4;
else
  currscore := (currsum - 5) * 4;
end if;
```

```
:new.MENTAL_HEALTH := currscore;
```