



Stanford Patient Education Research Center

Stanford University School of Medicine

CHRONIC DISEASE SELF-MANAGEMENT PROGRAM QUESTIONNAIRE CODE BOOK

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General Health

Self-Rated Health

In general, would you say your health is:.....(Circle one)

Excellent..... 1

Very good..... 2

Good 3

Fair 4

Poor..... 5

Scoring

Score the number circled. If two consecutive numbers are circled, choose the higher number (worse health); if two non-consecutive numbers are circled, do not score. The score is the value of this single item only. A higher score indicates poorer health.

Characteristics

Tested on 1,129 subjects with chronic disease. N=51 for test-retest.

No. of items	Observed Range	Mean	Standard Deviation	Internal Consistency Reliability	Test-Retest Reliability
1	1-5	3.29	.91	—	.92

Source of Psychometric Data

Stanford Chronic Disease Self-Management Study. Psychometrics reported in Lorig K, Stewart A, Ritter P, González V, Laurent D, & Lynch J, *Outcome Measures for Health Education and other Health Care Interventions*. Thousand Oaks CA: Sage Publications, 1996, p.25.

Comments

This item is used in the National Health Interview Survey. In a number of studies self-rated health has been found to be an excellent predictor of future health.

References

Idler EL, & Angel RJ, Self-rated health and mortality in the NHANES-I epidemiologic follow-up study. *American Journal of Public Health*, 80, 1990, pp.446-452.

Schoenfeld DE, Malmrose LC, Blazer DG, Gold DT, & Seeman TE, Self-rated health and mortality in the high-functioning elderly: A closer look at healthy individuals; MacArthur Field Study of Successful Aging. *Journal of Gerontology: Medical Sciences*, 49, 1994, pp.M109-M115.

U.S. Bureau of the Census, *National Health Interview Survey*. Washington DC: U.S. Dept. of Commerce, 1985.

Ware JE Jr, Nelson EC, Sherbourne CD, & Stewart AL, Preliminary tests of a 6-item general health survey: A patient application; in AL Stewart & JE Ware Jr (Eds), *Measuring Functioning and Well-Being: The Medical Outcomes Study Approach*, Durham NC: Duke University Press, 1992, pp.291-303.

Wolinsky FD, & Johnson RJ, Perceived health status and mortality among older men and women. *Journal of Gerontology: Social Sciences*, 47, 1992, pp.S304-S312.

Symptoms

Health Distress

These questions are about how you feel and how things have been with you during the past month. For each question, please circle the **one** number that comes closest to the way you have been feeling.

How much time during the **past 2 weeks**...

	None of the time	A little of the time	Some of the time	A good bit of the time	Most of the time	All of the time
1. Were you discouraged by your health problems?	0	1	2	3	4	5
2. Were you fearful about your future health?	0	1	2	3	4	5
3. Was your health a worry in your life?.....	0	1	2	3	4	5
4. Were you frustrated by your health problems?	0	1	2	3	4	5

Scoring

Score each item as the number circled. If two consecutive numbers are circled, score the higher (more distress) number. If the numbers are not consecutive, do not score the item. The scale score is the mean of the four items. If more than 1 item missing, set the value of the scale to missing. Scores range from 0-5; higher score indicating more distress about health.

Characteristics

Tested on 1,130 subjects with chronic disease. N=51 for test-retest.

No. of items	Observed Range	Mean	Standard Deviation	Internal Consistency Reliability	Test-Retest Reliability
4	0-5	2.04	1.16	.87	.87

Source of Psychometric Data

Chronic Disease Self-Management Study. Psychometrics reported in: Lorig K, Stewart A, Ritter P, González V, Laurent D, & Lynch J, *Outcome Measures for Health Education and other Health Care Interventions*. Thousand Oaks CA: Sage Publications, 1996, pp.25.

Comments

This is a modified version of the MOS health distress scale. We use 4 of the original 6 items, and changed the wording slightly. If possible items should be scrambled among other items using the same response categories, if possible (e.g., [Energy/Fatigue](#) scale). Because of the problems we have had using scales to measure negative emotion (e.g., depression) across cultures, we have substituted this scale. While it is not a depression or an anxiety scale, it does give us a good idea of distress caused by illness. It correlates .61 with the MOS depressive symptoms scale and .63 with the CES-D scale. Reprinted with permission, Duke University Press.

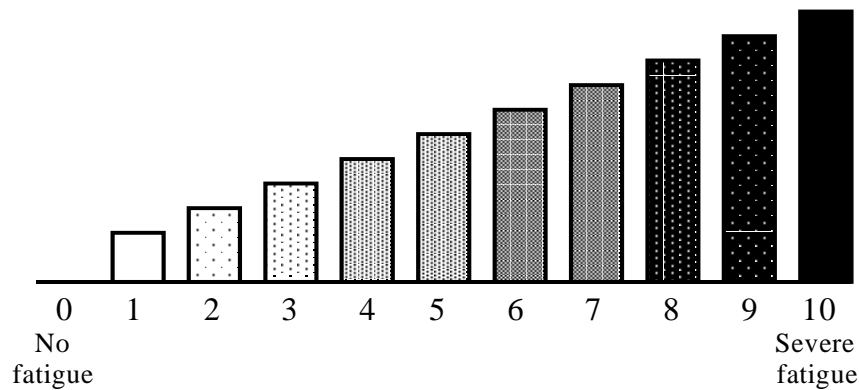
References

Lorig K, Stewart A, Ritter P, González V, Laurent D, & Lynch J, *Outcome Measures for Health Education and other Health Care Interventions*. Thousand Oaks CA: Sage Publications, 1996, pp.25,52-53.

Stewart AL, Hays RD, & Ware JE, Health Perceptions, energy/fatigue, and health distress measures, in Stewart AL & Ware JE, *Measuring Functioning and Well-Being: The Medical Outcomes Study Approach*. Durham NC: Duke University Press, pp. 143-172.

Fatigue Visual Numeric

We are interested in learning whether or not you are affected by FATIGUE. Please circle the number below that describes your fatigue in the past 2 weeks:



Scoring

The score is the number circled or histogram marked. Scores range from 0 to 10, with the higher score indicating more fatigue. If two consecutive numbers are circled, score the higher (more fatigue) number, if two non-consecutive numbers are circled, do not score.

Characteristics

Tested on 122 subjects.

No. of items	Observed Range	Mean	Standard Deviation	Internal Consistency Reliability	Test-Retest Reliability
1	0-10	4.89	2.71	—	NA

Source of Psychometric Data

English-language participants in the Stanford/El Paso Border Diabetes Project. Unpublished.

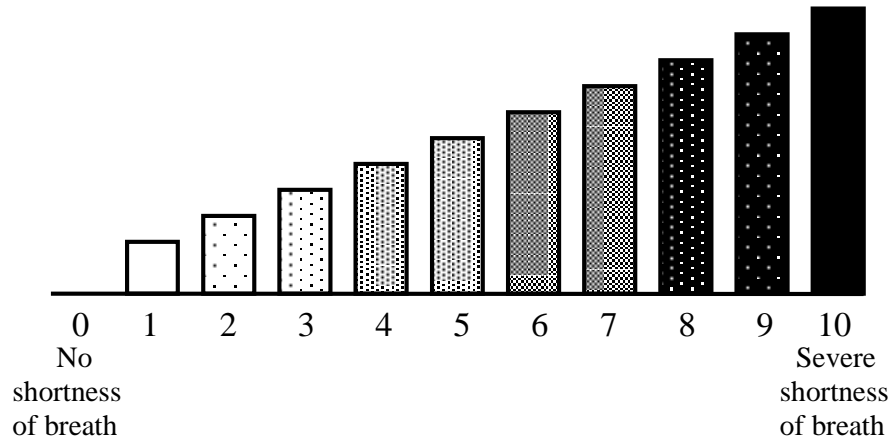
Ritter PL, González VM, Laurent DD, Lorig KR. Measurement of Pain Using the Visual Numeric Scale. *Journal of Rheumatology*, 33(3), 574-80, 2006.

Comments

This scale is a modified version of the visual analog scale. We found that this scale is easier for subjects to use, resulting in less missing and unclear responses. The VNS was originally developed in Spanish.

Shortness of Breath Visual Numeric

We are interested in learning whether or not you are affected by SHORTNESS OF BREATH. Please circle the number below that describes your shortness of breath in the past 2 weeks:



Scoring

The score is the number circled or histogram marked. Scores range from 0 to 10, with the higher score indicating more shortness of breath. If two consecutive numbers are circled, score the higher (more shortness of breath) number, if two non-consecutive numbers are circled, do not score.

Characteristics

Tested on 122 subjects.

No. of items	Observed Range	Mean	Standard Deviation	Internal Consistency Reliability	Test-Retest Reliability
1	0-8	2.43	2.60	—	NA

Source of Psychometric Data

English language participants in the Stanford/EI Paso Border Diabetes Project. Unpublished.

Ritter PL, González VM, Laurent DD, Lorig KR. Measurement of Pain Using the Visual Numeric Scale. *Journal of Rheumatology*, 33(3), 574-80, 2006.

Comments

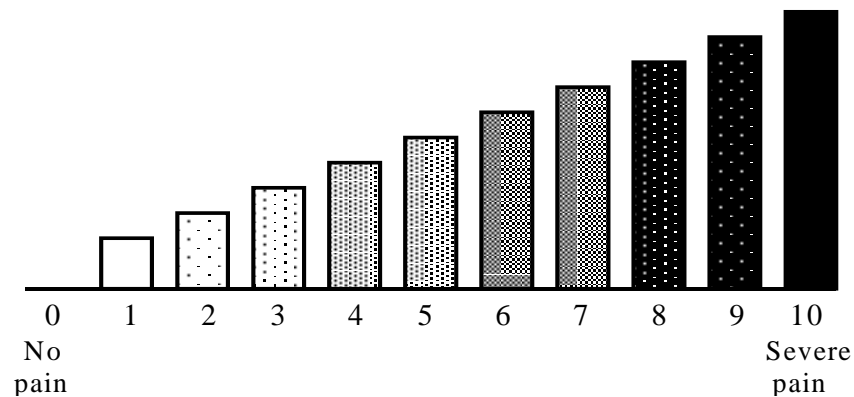
This scale is a modified version of the visual analog scale. We found that this scale is easier for subjects to use, resulting in less missing and unclear responses. The VNS was originally developed in Spanish.

References

Unpublished at this time.

Pain Visual Numeric

We are interested in learning whether or not you are affected by PAIN. Please circle the number below that describes your pain in the past 2 weeks:



Scoring

The score is the number circled or histogram marked. Scores range from 0 to 10, with the higher score indicating more pain. If two consecutive numbers are circled, score the higher (more pain) number, if two non-consecutive numbers are circled, do not score.

Characteristics

Tested on 122 subjects, N=42 for test-retest.

No. of items	Observed Range	Mean	Standard Deviation	Internal Consistency Reliability	Test-Retest Reliability
1	0-10	4.36	3.03	—	.92

Source of Psychometric Data

English language participants in the Stanford/El Paso Border Diabetes Project. For test-retest reliability, the Online Arthritis Self-Management Program. Published in: Ritter PL, González VM, Laurent DD, Lorig KR. Measurement of Pain Using the Visual Numeric Scale. *Journal of Rheumatology*, 33(3), 574-80, 2006.

Comments

This scale is a modified version of the visual analog scale. We found that this scale is easier for subjects to use, resulting in less missing and unclear responses. The scale above is that used for our Internet studies, with color and shading used. We have used these anchor phrases and a variation, "pain as bad as could be", for the right-hand anchor. We have used "Severe pain" or "Severe pain or

discomfort” for some time, in order to keep phrases for pain, fatigue, and shortness of breath scales consistent. They psychometrics are based on "Severe pain or discomfort". The VNS was originally developed in Spanish.

References

Ritter PL, González VM, Laurent DD, Lorig KR. Measurement of Pain Using the Visual Numeric Scale. *Journal of Rheumatology*, 33(3), 574-80, 2006.

Physical Activities

Exercise Behaviors

During the past week, even if it was not a typical week for you, how much **total** time (for the **entire week**) did you spend on each of the following? (Please circle **one** number for each question.)

	none	less than 30 min/wk	30-60 min/wk	1-3 hrs per week	more than 3 hrs/wk
1. Stretching or strengthening exercises (range of motion, using weights, etc.)	0	1	2	3	4
2. Walk for exercise	0	1	2	3	4
3. Swimming or aquatic exercise	0	1	2	3	4
4. Bicycling (including stationary exercise bikes)	0	1	2	3	4
5. Other aerobic exercise equipment (Stairmaster, rowing, skiing machine, etc.)	0	1	2	3	4
6. Other aerobic exercise					
<i>Specify</i>	0	1	2	3	4

Scoring

Code each item as the number circled, then convert as follows. If two consecutive numbers are circled, code the lower number (less exercise). If two non-consecutive numbers are circled, do not score the item. For "Other aerobic", try to fit the type of exercise into the existing aerobic categories (i.e., treadmill as "other aerobic equipment"), otherwise leave as "other aerobic" (i.e., "dancing"). However, if exercise that is **not** aerobic, such as yoga or weight training, do not score as aerobic. Yoga, weight training, tai chi, etc., should be scored as "stretching or strengthening".

Each category is converted to the number of minutes below. Time spent in stretching or strengthening is the value for item 1. Time spent in aerobic exercise is the sum of the values for items 2 through 6.

None	Less than 30 minutes/week	30-60 minutes/week	1-3 hours/week	More that 3 hours/week
0	15	45	120	180

Characteristics

Stretching/strengthening (minutes/week) tested on 1,127 subjects with chronic disease. N=51 for test-retest.

No. of items	Observed Range	Mean	Standard Deviation	Internal Consistency Reliability	Test-Retest Reliability
1	0-180	40.1	54.8	—	.56

Aerobic exercise (minutes/week) tested on 1,130 subjects with chronic disease. M=51 for test-retest.

No. of items	Observed Range	Mean	Standard Deviation	Internal Consistency Reliability	Test-Retest Reliability
5	0-540	90.6	90.9	—	.72

Source of Psychometric Data

Stanford Chronic Disease Self-Management Study. Psychometrics reported in: Lorig K, Stewart A, Ritter P, González V, Laurent D, & Lynch J, *Outcome Measures for Health Education and other Health Care Interventions*. Thousand Oaks CA: Sage Publications, 1996, pp.25,37-38.

Comments

We have used this scale to measure both aerobic and a combination of stretching strengthening exercise for many years.

References

Lorig K, Stewart A, Ritter P, González V, Laurent D, & Lynch J, *Outcome Measures for Health Education and other Health Care Interventions*. Thousand Oaks CA: Sage Publications, 1996, pp.25,37-38.

Confidence About Doing Things

Self-Efficacy for Managing Chronic Disease 6-item Scale

We would like to know how confident you are in doing certain activities. For each of the following questions, please choose the number that corresponds to your confidence that you can do the tasks regularly at the present time.

1. How confident do you feel that you can keep the fatigue caused by your disease from interfering with the things you want to do?

not at all | | | | | | | | | | totally
confident 1 2 3 4 5 6 7 8 9 10 confident

2. How confident do you feel that you can keep the physical discomfort or pain of your disease from interfering with the things you want to do?

not at all | | | | | | | | | | totally
confident 1 2 3 4 5 6 7 8 9 10 confident

3. How confident do you feel that you can keep the emotional distress caused by your disease from interfering with the things you want to do?

not at all | | | | | | | | | | totally
confident 1 2 3 4 5 6 7 8 9 10 confident

4. How confident do you feel that you can keep any other symptoms or health problems you have from interfering with the things you want to do?

not at all | | | | | | | | | | totally
confident 1 2 3 4 5 6 7 8 9 10 confident

5. How confident do you feel that you can do the different tasks and activities needed to manage your health condition so as to reduce your need to see a doctor?

not at all | | | | | | | | | | totally
confident 1 2 3 4 5 6 7 8 9 10 confident

6. How confident do you feel that you can do things other than just taking medication to reduce how much your illness affects your everyday life?

not at all | | | | | | | | | | totally
confident 1 2 3 4 5 6 7 8 9 10 confident

Scoring

The score for each item is the number circled. If two consecutive numbers are circled, code the lower number (less self-efficacy). If the numbers are not consecutive, do not score the item. The score for the scale is the mean of the six items. If more than two items are missing, do not score the scale. Higher

number indicates higher self-efficacy.

Characteristics

Tested on 605 subjects with chronic disease

No. of items	Observed Range	Mean	Standard Deviation	Internal Consistency Reliability	Test-Retest Reliability
6	1-10	5.17	2.22	.91	NA

Source of Psychometric Data

Stanford/Garfield Kaiser Chronic Disease Dissemination Study. Psychometrics reported in: Lorig KR, Sobel, DS, Ritter PL, Laurent, D, Hobbs, M. Effect of a self-management program for patients with chronic disease. *Effective Clinical Practice*, 4, 2001,pp. 256-262.

Comments

This 6-item scale contains items taken from several SE scales developed for the Chronic Disease Self-Management study. We use this scale now, as it is much less burdensome for subjects. It covers several domains that are common across many chronic diseases, symptom control, role function, emotional functioning and communicating with physicians. For internet studies, we add radio buttons below each number. There are 2 ways to format these items. We use the format on this document, the other is shown on the web page. Please note that this is a one to ten scale not a zero to 10 scale.

References

Lorig KR, Sobel, DS, Ritter PL, Laurent, D, Hobbs, M. Effect of a self-management program for patients with chronic disease. *Effective Clinical Practice*, 4, 2001,pp. 256-262.

Daily Activities

Social/Role Activities Limitations

During the **past 2 weeks**, how much...

(Circle one)

	Not at all	Slightly	Moderately	Quite a bit	Almost totally
1. Has your health interfered with your normal social activities with family, friends, neighbors or groups?	0	1	2	3	4
2. Has your health interfered with your hobbies or recreational activities?	0	1	2	3	4
3. Has your health interfered with your household chores?	0	1	2	3	4
4. Has your health interfered with your errands and shopping?	0	1	2	3	4

Scoring

The score of each item is the number circled. If two consecutive numbers are circled for a single item, score the higher number (more limitation). If two non-consecutive numbers are circled, do not score the item. The score of the scale is the mean of the four items. If more than one item is missing, do not score the scale. The higher score indicates greater activities limitations.

Source of Psychometric Data

Stanford Chronic Disease Self-Management Study. Psychometrics reported in: Lorig K, Stewart A, Ritter P, González V, Laurent D, & Lynch J, *Outcome Measures for Health Education and other Health Care Interventions*. Thousand Oaks CA: Sage Publications, 1996, pp.25,52-53.

Characteristics

Tested on 1,130 subjects with chronic disease. N=51 for test-retest.

No. of items	Observed Range	Mean	Standard Deviation	Internal Consistency Reliability	Test-Retest Reliability
4	0-4	1.70	1.11	.91	.68

Comments

This scale is adapted from the Medical Outcomes Study. It measures how much illness interferes with role activity. It is sensitive to change, and is a good one to use in educational studies. If you must have a short questionnaire, this is a scale to use. Reprinted with permission, Duke University Press.

References

Lorig K, Stewart A, Ritter P, González V, Laurent D, & Lynch J, *Outcome Measures for Health Education and other Health Care Interventions*. Thousand Oaks CA: Sage Publications, 1996, pp.25,52-53.

Medical Care

Communication with Physicians

When you **visit your doctor**, how often do you do the following (*please circle **one** number for each question*):

		Almost Never	Some- never	Fairly times	Very often	Always often
	0	1	2	3	4	5
1. Prepare a list of questions for your doctor.....	0	1	2	3	4	5
2. Ask questions about the things you want to know and things you don't understand about your treatment.....	0	1	2	3	4	5
3. Discuss any personal problems that may be related to your illness	0	1	2	3	4	5

Scoring

Score each item as the number circled. If more than one consecutive number is circled, code the lower number (less communication). If the numbers are not consecutive, do not score the item. The score is the mean of the three items. If more than one is missing, set the value of the score for the scale to missing. A higher score indicates better communication with physicians.

Characteristics

Tested on 1,130 subjects with chronic disease. N=51 for test-retest.

No. of items	Observed Range	Mean	Standard Deviation	Internal Consistency Reliability	Test-Retest Reliability
3	0-5	3.08	1.20	.73	.89

Source of Psychometric Data

Stanford Chronic Disease Self-Management Study. Psychometrics reported in: Lorig K, Stewart A, Ritter P, González V, Laurent D, & Lynch J, *Outcome Measures for Health Education and other Health Care Interventions*. Thousand Oaks CA: Sage Publications, 1996, pp.24,40.

Comments

This scale was developed to see if the key behaviors we teach concerning communicating with health care providers have changed.

References

Lorig K, Stewart A, Ritter P, González V, Laurent D, & Lynch J, *Outcome Measures for Health Education and other Health Care Interventions*. Thousand Oaks CA: Sage Publications, 1996, pp.24,40.

Health Care Utilization

1. **In the past 6 months**, how many times did you visit a physician?
Do NOT include visits while in the hospital or the hospital emergency room. _____ visits
2. **In the past 6 months**, how many times did you go to a **hospital** emergency room? _____ times
3. How many different **times** did you stay in a hospital overnight or longer **in the past 6 months**? _____ times
4. How many total NIGHTS did you spend in the hospital **in the past 6 months**? _____ nights

Scoring

These are single items. We have found that we often have to follow up with telephone clarification for these items, no matter how they are written. You will need to figure out how stringent you want to be in your own research. For example, do you want to count an ER visit that resulted in an in-patient admission? Do you want to distinguish between acute and SNF nights in hospital (patients often can't distinguish)? Do you want to clarify whether the physician visits include infusions, allergy shots, dialysis, or diagnostic tests?

Characteristics

Tested on 1128 to 1130 subjects with chronic disease. N=51 for test-retest.

Item Name	No. of Subjects	Observed Range	Mean	Standard Deviation	Internal Consistency Reliability	Test-Retest Reliability
Physician visits	1,128	0-54	5.33	5.23	—	.76
Emergency dept visits	1,128	0-9	.40	.93	—	.94
Times hospitalized	1,128	0-14	.23	.76	—	.89
Nights hospitalized	1,130	0-116	1.31	5.53	—	.97

Source of Psychometric Data

Stanford Chronic Disease Self-Management Study. Psychometrics reported in: Lorig K, Stewart A, Ritter P, González V, Laurent D, & Lynch J, *Outcome Measures for Health Education and other Health Care Interventions*. Thousand Oaks CA: Sage Publications, 1996, pp.24-25.

Comments

There is no perfect way to get self-reported utilization data - do not try for a time period of more than six months. The article below discusses the validity of these questions.

References

Ritter PL, Kaymaz H, Stewart A, Sobel DS, Lorig KR, Self-reports of health care utilization compared to provider records. *Journal of Clinical Epidemiology*, 2001, 54, pp.136-141.

Lorig K, Stewart A, Ritter P, González V, Laurent D, & Lynch J, *Outcome Measures for Health Education and other Health Care Interventions*. Thousand Oaks CA: Sage Publications, 1996, pp.24-25.