

Guide for the Use of the Prosthesis Evaluation Questionnaire



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Seattle, WA, USA

The Prosthesis Evaluation Questionnaire – PEQ Guide for Scoring and Analysis

The PEQ is composed of 9 validated scales that are each comprised of multiple questions, and there are a number of additional individual questions. The scales have been validated for internal consistency and temporal stability and are scored as a unit. The scales are not dependent on each other, so it is reasonable to use only the scales that are pertinent to your research question. The PEQ does not include standard demographic questions you may also wish to ask such as level of amputation, years since amputation, age, cause of amputation, etc.

Most questions in the PEQ use a visual analog scale format. Each visual analog scale is scored as a continuous numerical variable measured as the distance in millimeters from the left endpoint of the line to the point at which the respondent's mark crosses the line. Each line is 100 mm long and is always measured from the left (0-100). The questions are all worded so that a higher number (toward the right) will correspond with a more positive response. Take care in copying the forms to assure that photographic reduction or enlargement has not occurred!

This guide contains coding instructions for all the questions. Note that the questions that offer the option of making a check mark to indicate that the question is not applicable to the respondent are sometimes coded "100" and sometimes "nr (no response)". Follow the guide for each question. Question F, on page 11, is provided for the respondent's own reference and does not need to be coded. Any question that is left blank is scored "nr" and treated as missing.

To calculate any of the scale scores, compute the average (arithmetic mean) of all the questions which make up that particular scale (see table below) and which the respondent(s) answered. If an individual only answered 5 questions of a 6-item scale, be sure you divide by 5 when calculating their mean. At least half the questions of a scale should be answered with a number score not "nr" for the scale to be valid (round up if the number of items is odd).

The PEQ Scales

Validated Scale Name	Questions for each scale by page number and question letter
Ambulation (AM)	13A, 13B, 13C, 13D, 14E, 14F, 14G, 14H
Appearance (AP)	3J, 3M, 3N, 4O, 4P
Frustration (FR)	10B, 10C
Perceived Response (PR)	10A, 11D, 11E, 11G, 12H
Residual Limb Health (RL)	4Q, 4R, 4S, 5T, 5U, 5V
Social Burden (SB)	12I, 12J, 12K
Sounds (SO)	3K, 3L
Utility (UT)	1B, 1C, 1D, 2E, 2F, 2G, 2H, 2I
Well Being (WB)	16C, 16D

The questionnaire is divided into Groups, or topical sections, for ease of looking at similar issues at one time. The items in a section include different scales. The user should take care when computing scale scores to identify the correct questions for each scale. There are also individual questions in the PEQ which should not be combined into scale scores. In the code book these are listed as satisfaction, pain, transfer, prosthetic care, self efficacy, and importance questions. They are all individual items.

If you plan use the PEQ or if you have suggestions for improvement please let us know. We will do our best to answer any questions you may have about using the PEQ. Please e-mail to peq@prs-research.org or FAX to (USA) (206) 903-8141. The PEQ may be used free of charge, however, all portions are copyrighted by Prosthetics Research Study. Use of any part of the PEQ must be accompanied by appropriate acknowledgement of Prosthetics Research Study. Thank you.

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Coding of All Questions in the PEQ

Questions about Your Prosthesis

Page/ Item	Scale or Single Question	Variable Name	Question "Over the past four weeks..."	Scoring code
1A	Satisfaction Question	SAhapypros	...rate how happy you have been with your current prosthesis.	0-100
1B	Utility Scale	UTfit	...rate the fit of your prosthesis.	0-100
1C	Utility Scale	UTweight	...rate the weight of your prosthesis.	0-100
1D	Utility Scale	UTstand	...rate your comfort while standing when using your prosthesis.	0-100
2E	Utility Scale	UTsit	...rate your comfort while sitting when using your prosthesis.	0-100
2F	Utility Scale	UTbalance	...rate how often you felt off balance while using your prosthesis.	0-100
2G	Utility Scale	UTenergy	...rate how much energy it took to use your prosthesis for as long as you needed it.	0-100
2H	Utility Scale	UTfeel	...rate the feel (such as the temperature and texture_ of the prosthesis (sock, liner, socket) on your residual limb (stump).	0-100
2I	Utility Scale	UTdon	...rate the ease of putting on (donning) your prosthesis.	0-100
3J	Appearance Scale	APproslook	... rate how your prosthesis has looked.	0-100
3K	Sounds Scale	SOfreqsoun	... rate how often your prosthesis made squeaking, clicking, or belching sounds.	0-100
3L	Sounds Scale	SObotsoun	If it made any sounds in the past four weeks, rate how bothersome these sounds were to you. - Or check It made no sounds.	0-100 If checked score 100
3M	Appearance Scale	APdamagclo	... rate the damage done to your clothing by your prosthesis.	0-100
3N	Appearance Scale	APdamagcov	... rate the damage done to your prosthesis cover. — or check There is no cover on my prosthesis.	0-100 if checked score as "nr" (no response)
4O	Appearance Scale	APshoechoi	... rate your ability to wear the shoes (different heights, styles) you prefer.	0-100
4P	Appearance Scale	APclothchoi	... rate how limited your choice of clothing was because of your prosthesis.	0-100
4Q	Residual Limb Health Scale	RLsweat	... rate how much you sweat inside your prosthesis (in the sock, liner, socket).	0-100
4R	Residual Limb Health Scale	RLsmell	... rate how smelly your prosthesis was at its worst.	0-100
4S	Residual Limb Health Scale	RLswollen	... rate how much of the time your residual limb was swollen to the point of changing the fit of your prosthesis.	0-100
5T	Residual Limb Health Scale	RLrash	... rate any rash(es) that you got on your residual limb. — Or check 1 had no rashes on my residual limb in the last month.	0-100 if checked score 100
5U	Residual Limb Health Scale	RLhair	... rate any ingrown hairs (pimples) that were on your residual limb. — Or check 1 ad no ingrown hairs on my residual limb in the last month.	0-100 if checked score 100

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5V	Residual Limb Health Scale	RLsore	... rate any blisters or sores that you got on your residual limb. — Or check 1 had no blisters or sores on my residual limb in the last month.	0-100 if checked score 100
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Questions about Specific Bodily Sensations

Page/Item	Scale or Single Question	Variable Name	Question "Over the past four weeks,..."	Scoring code
6	Pain Question	PAfrephsen	...rate how often you have been aware of non-painful sensations in your phantom limb. a. never b. only once or twice c. a few times (about once/week) d fairly often (2/3 times/week) e. very often (4-6 times/week) f. several times a day g. all the time or almost all the time.	a=0 b=1 c=2 d=3 e=4 f=5 g=6
6B	Pain Question	PAintphsen	If you had non-painful sensations in your phantom limb during the past month, rate how intense they were on average. Or check I did not have non-painful sensations in my phantom limb.	0-100 If checked score as "nr" (no response)
6C	Pain Question	PAbotphsen	... how bothersome were these sensations in your phantom limb? Or check 1 did not have non-painful sensations in my phantom limb.	0-100 If checked score as "nr" (no response)
7D	Pain Question	PAfrephpa	...rate how often you had pain in your phantom limb. a. never b. only once or twice c. a few times (about once/week) d fairly often (2/3 times/week) e. very often (4-6 times/week) f. several times a day g. all the time or almost all the time.	a=0 b=1 c=2 d=3 e=4 f=5 g=6
7E	Pain Question	PAdurphpa	How long does your phantom limb pain usually last? a. 1 have none b. a few seconds c. a few minutes d. several minutes to an hour e. several hours f. a day or two g. more than two days	a=0 b=1 c=2 d=3 e=4 f=5 g=6
7F	Pain Question	PAintphpa	If you had any pain in your phantom limb during the past month, rate how intense it was on average. Or check I did not have any pain in my phantom limb.	0-100 If checked score as "nr" (no response)
7G	Pain Question	PAbotphpa	... how bothersome was the pain in your phantom limb? Or check 1 did not have any pain in my phantom limb.	0-100 If checked score as "nr"

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8H	Pain Question	PAfrerlpa	...rate how often you had pain in your residual limb. a. never b. only once or twice c. a few times (about once/week) d fairly often (2/3 times/week) e. very often (4-6 times/week) f. several times a day g. all the time or almost all the time	a=0 b=1 c=2 d=3 e=4 f=5 9=6
8I	Pain Question	PAintrlpa	If you had any pain in your residual limb during the past month, rate how intense it was on average. Or check I did not have any pain in my residual limb.	0-100 If checked score as "nr" (no response)
8J	Pain Question	PAbotrpa	...how bothersome was the pain in your residual limb? Or check I did not have any pain in my residual limb.	0-100 If checked score as "nr" (no-response)
8K	Pain Question	PAfreolpa	...rate how often you had pain in your other leg or foot. a. never b. only once or twice c. a few times (about once/week) d fairly often (2/3 times/week) e. very often (4-6 times/week) f. several times a day g. all the time or almost all the time	a=0 b=1 c=2 d=3 e=4 f=5 g=6
9L	Pain Question	PAintolpa	If you had any pain in your other leg or foot during the past month, rate how intense it was on average. Or check I had no pain in my other leg or foot.	0-100 If checked score as "nr" (no-response)
9M	Pain Question	PAbotolpa	...how bothersome was the pain in your other leg or foot? Or check I had no pain in my other leg or foot.	0-100 If checked score as "nr" (no-response)
9N	Pain Question	PAfrebapa	...rate how often you experienced back pain a. never b. only once or twice c. a few times (about once/week) d fairly often (2/3 times/week) e. very often (4-6 times/week) f. several times a day g. all the time or almost all the time	a=0 b=1 c=2 d=3 e=4 f=5 g=6
9O	Pain Question	PAintbapa	If you had any back pain during the past month, rate how intense it was on average. Or check I had no back pain.	0-100 If checked score as "nr" (no-response)
10P	Pain Question	PAbotbapa	...how bothersome was the back pain? Or check I had no back pain.	0-100 If checked score as "nr" (no-response)

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Questions about Social and Emotional Aspects of Using a Prosthesis

Page/ Item	Scale or Single Question	Variable Name	Question "Over the past four weeks,..."	Scoring code
10A	Perceived Response Scale	PRavoidoth	... rate how often the desire to avoid stranger's reactions to your prosthesis made you avoid doing something you otherwise would have done.	0-100
10B	Frustration Scale	FRfreqfrus	...rate how frequently you were frustrated with your prosthesis.	0-100
10C	Frustration Scale	FRmostfrus	If you were frustrated with your prosthesis at any time over the past month, think of the most frustrating event and rate how you felt at that time. Or check 1 have not been frustrated with my prosthesis.	0-100 if checked score 100
11D	Perceived Response Scale	PRpartresp	...rate how your partner has responded to your prosthesis. Or check 1 don't have a partner.	0-100 If checked score as "nr" (no- response)
11E	Perceived Response Scale	PRrelafct	... rate how this response has affected your relationship. Or check 1 don't have a partner.	0-100 If checked score as "nr" (non-response)
11F	This question prepares for following questions by having the respondent identify two particular people in their mind, giving minimal identification.		Think of two close family members (other than your partner) and write down their relationship to you, like mother or son. Or check 1 don't have any close family members.	This question is not scored
11G	Perceived Response Scale	PRfamlres	...rate how Family Member #1 has responded to your prosthesis. Or check I don't have close family members.	0-100 If checked score as "nr" (no- response)
12H	Perceived Response Scale	PRfam2res	...rate how Family Member #2 has responded to your prosthesis. Or check I don't have a second close family member.	0-100 If checked score as "nr" (no- response)
12I	Social Burden Scale	SBpartburd	...rate how much of a burden your prosthesis has been on your partner or family members. Or check I don't have a partner or family members.	0-100 If checked score as "nr" (no- response)
12J	Social Burden Scale	SBsochind	...rate how much having your prosthesis has hindered you socially.	0-100
12K	Social Burden Scale	SBcaregive	...rate your ability to take care of someone else, (e.g. your partner, a child, or a friend). Or check I don't take care of someone else.	0-100 If checked score as "nr" (no- response)

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Questions about Ability to Move Around

Page/ Item	Scale or Single Question	Variable Name	Question "Over the past four weeks,..."	Scoring code
13A	Ambulation Scale	AMwalk	...rate your ability to walk when using your prosthesis.	0-100
13B	Ambulation Scale	AMclose	...rate your ability to walk in close spaces when using your prosthesis.	0-100
13C	Ambulation Scale	AMupstair	...rate your ability to walk up stairs when using your prosthesis.	0-100
13D	Ambulation Scale	AMdownstair	...rate how you felt about being able to walk down stairs when using your prosthesis.	0-100
14E	Ambulation Scale	AMuphill	...rate your ability to walk up a steep hill when using your prosthesis.	0-100
14F	Ambulation Scale	AMdownhill	...rate your ability to walk down a steep hill when using your prosthesis.	0-100
14G	Ambulation Scale	AMsidewalk	...rate your ability to walk on sidewalks and streets! when using your prosthesis.	0-100
14H	Ambulation Scale	AMsliprate your ability to walk on slippery surfaces (e.g. wet tile, snow, a rainy street, or a boat deck) when using your prosthesis.	0-100
14I	Transfer Question	TRcar	...rate your ability to get in and out of a car when using your prosthesis.	0-100
15J	Transfer	TRhichair	... rate your ability to sit down and get up from a chair with a high seat (e.g., a dining chair, a kitchen chair, an office chair).	0-100
15K	Transfer Question	TRiochair	...rate your ability to sit down and get up from a low or soft chair (e.g. an easy chair or deep sofa).	0-100
15L	Transfer Question	TRtoilet	...rate your ability to sit down and get up from the toilet.	0-100
15M	Transfer Question	TRbath	...rate your ability to shower or bathe safely.	0-100

Questions about satisfaction with particular situations

Page/ Item	Scale or Single Question	Variable Name	Question "Over the past four weeks,..."	Scoring code
16A	Satisfaction Question	SAsatpros	...rate how satisfied you have been with your prosthesis.	0-100
16B	Satisfaction Question	SAsatwalk	...rate how satisfied you have been with how you are walking.	0-100
16C	Well Being Scale	WBsincamp	... rate how satisfied you have been with how things have worked out since our amputation.	0-100
16D	Well Being Scale	WBqol	... how would you rate your quality of life?	0-100

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17E	Prosthetic Care Question	PCprostist	How satisfied are you with the person who fit your current prosthesis?	0-100
17F	Prosthetic Care Question	PCcurtrain	How satisfied are you with the training you have received on using your current prosthesis? Or check I have not had any training with my current prosthesis.	0- 100 if checked score as "nr" (no-response)
17G	Prosthetic Care Question	PCalltrain	Overall, how satisfied are you with the gait and prosthetic training you have received since your amputation. Or check I have not had any training since my amputation.	0-100 if checked score as "nr" (no-response)

Questions about ability to do daily activities under difficult conditions

Page/Item	Scale or Single Question	Variable Name	Question	Scoring code
18A in Gp6	Self Efficacy Question	SEfitpoor	When the fit of my prosthesis is poor, I will get...	0-100
18B	Self Efficacy Question	SEcomfpor	When the comfort of my prosthesis is poor, I will get ...	0-100
18C	Self Efficacy Question	SEnopros	Without my prosthesis, I will get...	0-100

Questions about the Importance of different aspects of experience with the prosthesis

Page/Item	Scale or Single Question	Variable Name	Question	Scoring code
18A inGp7	Importance Question	IMimpwt	How important is it that the weight of your prosthesis feel right?	0-100
19B	Importance Question	IMimpdon	How important is the ease of putting on (donning) your prosthesis?	0-100
19C	Importance Question	IMimpappear	How important is the appearance of your prosthesis (how it looks)?	0-100
19D	Importance Question	IMimpshoe	How important is it to you to be able to wear different kinds of shoes (heights or styles)?	0-100
19E	Importance Question	IMimpcover	How important is it that your prosthesis' covering is durable (cannot be torn, dented, easily scratched, or discolored)?	0-100
19F	Importance Question	IMsweatbot	How bothersome is it when you sweat a lot inside your prosthesis (in the sock, liner, socket)?	0-100
20G	Importance Question	IMswellbot	How bothersome to you is swelling in your residual limb (stump)?	0-100
20H	Importance Question	IMnohair	How important is it to avoid having any ingrown hairs (pimples) on your residual limb (stump)?	0-100,
10I	Importance Question	IMlookubot	How bothersome is it to see people looking at you and your prosthesis?	0-100
20J	Importance Question	IMimpuphil	How important is being able to walk up a steep hill?	0-100