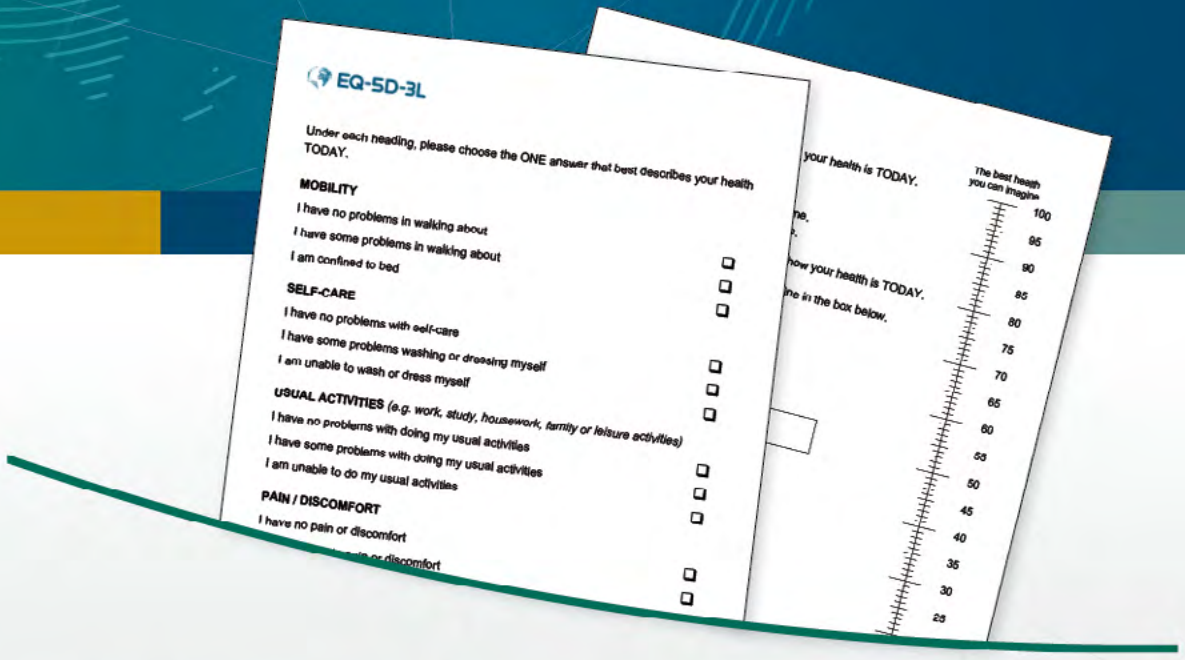
User Guide

EQ-5D-3L

How to apply, score, and present results from the EQ-5D-3L



Version 7.0

Updated November 2026

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How to obtain the EQ-5D-3L: To register your interest in using EQ-5D-3L, please complete the registration form on the **EuroQol website**. No license fee will be charged for non-commercial use of the instrument. For simple non-commercial studies, applicants are asked to agree to EuroQol's Terms of Use. For all other applications, the EuroQol Office will contact you by e-mail and inform you about the terms and conditions that apply to your use of the EQ-5D-3L, including licensing fees (if applicable).

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1. Introduction

This guide provides users with basic information on how to use the EQ-5D-3L questionnaire. Topics include administering the instrument, deriving a value for EQ-5D-3L health states, value sets, setting up a database for data collected using EQ-5D-3L, presentation of results, modes of administration and translations. The guide should be used in conjunction with the EuroQol website, which contains regularly updated, detailed information about the EQ-5D-3L. Where appropriate, weblinks to relevant resources on the EuroQol website are provided in this guide. For further information or assistance regarding the use of the EQ-5D-3L, you can also contact the EuroQol Office directly.

1.1 EuroQol

EuroQol* consists of a Research Foundation and a Group Association. The EuroQol Research Foundation is a not-for-profit organisation that develops, makes available and supports the use of instruments with the widest possible applicability for the measurement and valuation of health.

The EuroQol Research Foundation is responsible for the development of EQ-5D, a preference-based measure of health-related quality of life (HRQoL) that is widely used around the world in clinical trials, population studies and real-world clinical settings. EQ-5D is recommended by several health technology assessment bodies internationally as a key component in the economic evaluation of health-care technologies.[1]

The EuroQol Research Foundation is a registered not-for-profit organisation that invests all income into research, education and user support.

The EuroQol Research Foundation is the single organisation that manages the distribution and licensing of the EuroQol family of instruments worldwide. The EuroQol Group invests its income into research, education and user support.

The EuroQol Group Association consists of a large global network of experts, from a wide range of academic disciplines and countries, who are committed to ongoing research on the EuroQol family of instruments.

* The organisational structure is provided on the EuroQol website.

The scientific expertise behind EuroQol is the EuroQol Group Association, an international network of multidisciplinary researchers dedicated to the measurement of health status. When established in 1987, the EuroQol Group Association originally consisted of researchers from Europe. Today, it is a global network of more than 120 members from Africa, Asia, Europe, North America, Oceania and South America.

For more than 30 years EuroQol has funded or co-funded research and development into standardised non-disease-specific instruments to describe and value HRQoL. Research areas include: the investigation and application of different valuation methodologies to obtain health state values for use in cost-utility analysis, development of value sets for health states, EQ-5D use in clinical studies and in population surveys, experimentation with the EQ-5D descriptive system, computerised applications, interpretation of EQ-5D responses, the role of EQ-5D in measuring social inequalities in self-reported health, and the measurement and valuation of HRQoL in younger populations. The EuroQol Group Association has been holding annual scientific meetings since its inception in 1987.

The EuroQol website provides detailed information and updates on the EuroQol family of instruments, guidance for users, a list of available language versions and value sets by country/ region, key references, frequently asked questions, details on how to register to use our instruments, information about the EuroQol Group organisation, and contact details.

1.2 The EQ-5D® family of instruments

EQ-5D is a standardised instrument developed by the EuroQol Group to provide a simple, generic measure of HRQoL for clinical and economic appraisal.[2]

The EQ-5D® family of instruments have been developed to describe and value HRQoL across a wide range of disease areas, settings and populations. They are also frequently used in research into health in the general population.

There are four versions of the instrument: two for use in adults (**EQ-5D-3L**, **EQ-5D-5L**) and two for use in children and adolescents (**EQ-5D-Y-3L**, **EQ-5D-Y-5L**)*. For over 30 years they have been widely used in clinical trials, population studies and in real-world clinical settings. Given their use worldwide, they have been translated into numerous languages following a rigorous translation process (see Section 7 and 8).**

EQ-5D instruments are cognitively undemanding and take only a few minutes to complete. Designed for self-completion by respondents and available in both paper and digital versions, the EQ-5D is ideally suited for use in online or postal surveys, in clinics and in interviews (face-to-face or telephone). Proxy versions are also available for populations in which self-completion is not possible (see Section 7.2). Instructions to respondents are included in the questionnaire.

* Other instruments currently in development, with experimental status, include the EQ-TIPS (Toddler and Infant Populations), a new instrument to measure and value health in children aged 0 – 3 years, and the EQ-HWB (EQ Health and Well-being instrument) which assesses a broader range of dimensions than standard EQ-5D instruments and is intended for use in assessing the health and wellbeing of patients, social care users and carers.

** Please note, users are not permitted to translate EuroQol instruments, such as EQ-5D, without permission. Using tools such as Google Translate or generative artificial intelligence (e.g., ChatGPT) to create a translation is a breach of copyright (see Section 7.1).

Each EQ-5D instrument consists of two parts, a short descriptive system questionnaire and a visual analogue scale (EQ VAS). These are explained for the EQ-5D-3L in more detail in Section 1.3, while methods for assigning EQ-5D values (utilities, preference weights) to EQ-5D-3L health states are described in Section 4.

1.3 EQ-5D-3L

The EQ-5D three-level version (EQ-5D-3L) was introduced in 1990. It is one of the most widely used instruments for measuring HRQoL. Currently, more than 180 official self-complete language versions of EQ-5D-3L are available (see Section 7).

The EQ-5D-3L consists of two parts, a descriptive system and the EQ VAS.

The descriptive system measures five dimensions of health: **MOBILITY**, **SELF-CARE**, **USUAL ACTIVITIES**, **PAIN / DISCOMFORT** and **ANXIETY / DEPRESSION**. Each dimension has three response levels: no problems, some problems, unable to / extreme problems. The respondent is asked to indicate his / her health state on the day they complete the questionnaire by checking the box next to the most appropriate response level for each of the five dimensions. Responses are coded as single-digit numbers expressing the severity level selected in each dimension (labelled 1-3). The digits for the five dimensions can be combined in a 5-digit code that describes the respondent's health state profile; for instance, 21111 means some problems in the mobility dimension and no problems in any of the other dimensions (see Section 2 for further information on how to score the descriptive system).

The EQ VAS records the respondent's self-rated health on a vertical VAS where the endpoints are labelled, 'The best health you can imagine' and 'The worst health you can imagine'. The EQ VAS provides a quantitative measure of the respondent's perception of their overall health.*

A sample version of the EQ-5D-3L Paper Self-Complete in English for the UK is shown in Figure 1 and a sample digital version is provided in Section 11, accompanied by guidelines on how to represent the EQ-5D-3L digitally. Broad guidance on the use of EQ-5D versions by age range is provided in Section 8 (Table 7).

Note: The instrument names (e.g. EQ-5D-3L, EQ-5D-Y-5L) are not abbreviations and are the correct terms to use in print or verbally.

* As of 2018, the EQ VAS in all versions of the EQ-5D-3L has been updated to match the EQ VAS format used in the EQ-5D-5L.

SEVERITY LEVELS
for dimensions in the descriptive system

The numbers representing the three severity levels of a dimension are simply labels used in the numerical description of a health state (see Section 2.1). They have no arithmetic properties. For instance, one cannot assume that a state 21111 is better than 13111 and the numbers should not be added to derive a summary score. Summary scores for EQ-5D-3L health states can be derived through application of an appropriate 'value set' (see Section 4).

USE OF ACRONYMS
with EQ-5D-3L

Please note that when reporting results using EQ-5D-3L, or in other contexts, researchers and others might prefer to use acronyms instead of writing out dimension headers in full. In this situation, the acronyms used should be as follows:

- Mobility: MOB
- Self-care: SC
- Usual activities: UA
- Pain / discomfort: PD
- Anxiety / depression: AD
- EQ visual analog scale: EQ VAS

Note, these acronyms will be identical for the EQ-5D-5L but will not be the same for the youth (EQ-5D-Y-3L and -Y-5L) instruments.

Figure 1 / UK (English) EQ-5D-3L Paper Self-Complete

(sample version, v2.2)

Under each heading, please choose the ONE answer that best describes your health TODAY.

MOBILITY

I have no problems in walking about ❑
I have some problems in walking about ❑
I am confined to bed ❑

SELF-CARE

I have no problems with self-care ❑
I have some problems washing or dressing myself ❑
I am unable to wash or dress myself ❑

USUAL ACTIVITIES (*e.g. work, study, housework, family or leisure activities*)

I have no problems doing my usual activities ❑
I have some problems doing my usual activities ❑
I am unable to do my usual activities ❑

PAIN / DISCOMFORT

I have no pain or discomfort ❑
I have moderate pain or discomfort ❑
I have extreme pain or discomfort ❑

ANXIETY / DEPRESSION

I am not anxious or depressed ❑
I am moderately anxious or depressed ❑
I am extremely anxious or depressed ❑

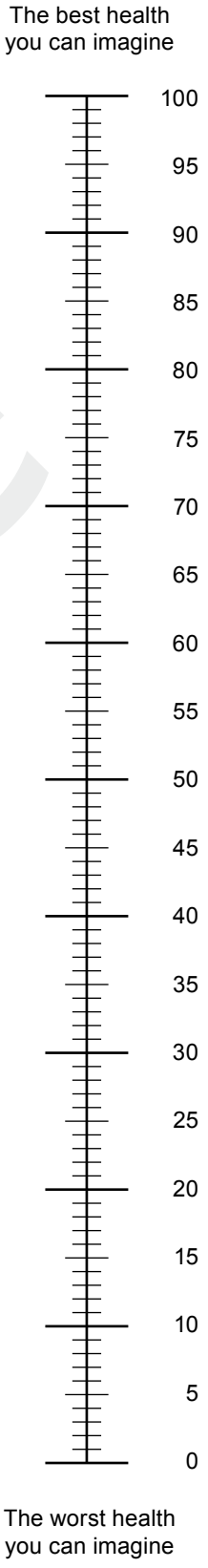
Sample

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Note: Making any EQ-5D (sample) version available on a publicly accessible webpage is not allowed. To reproduce or display any EQ-5D sample version, please submit a request for permission by using the EQ-5D **registration form**.

- We would like to know how good or bad your health is TODAY.
- This line is numbered from 0 to 100.
- 100 means the best health you can imagine.
  0 means the worst health you can imagine.
- Please mark an X on the line to show how your health is TODAY.
- Now, write the number you marked on the line in the box below.

YOUR HEALTH TODAY = ☐



Sample

2. Scoring the EQ-5D-3L descriptive system

This example shows how a health state is described using the EQ-5D-3L descriptive system in the paper self-complete version:

Under each heading, please choose the ONE answer that best describes your health TODAY.

MOBILITY

I have no problems in walking about	☑
I have some problems in walking about	☐
I am confined to bed	☐

SELF-CARE

I have no problems with self-care	☑
I have some problems washing or dressing myself	☐
I am unable to wash or dress myself	☐

USUAL ACTIVITIES (e.g. work, study, housework, family or leisure activities)

I have no problems doing my usual activities	☐
I have some problems doing my usual activities	☑
I am unable to do my usual activities	☐

PAIN/DISCOMFORT

I have no pain or discomfort	☐
I have moderate pain or discomfort	☐
I have extreme pain or discomfort	☑

ANXIETY/DEPRESSION

I am not anxious or depressed	☐
I am moderately anxious or depressed	☑
I am extremely anxious or depressed	☐

Levels of perceived problems are coded as follows:

☑ ☐ ☐ Level 1 is coded as a '1'

☐ ☑ ☐ Level 2 is coded as a '2'

☐ ☐ ☑ Level 3 is coded as a '3'

This example identifies the health state '11232'.

Notes:

- There should be only ONE response for each dimension.
- Missing values are preferably coded as '9'.
- Ambiguous values (e.g. two boxes ticked for a single dimension) should be treated as missing values.
- This example is for the EQ-5D-3L Paper Self-Complete. Instructions for the interview and proxy versions are provided with those instruments.

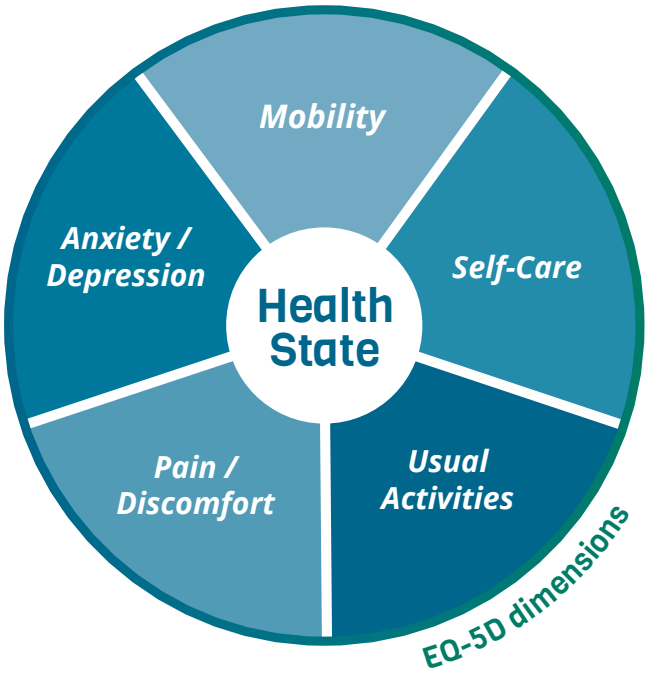
2.1 What is a health state?

Each of the five dimensions comprising the EQ-5D descriptive system is divided into three levels of perceived problems:

LEVEL 1: indicating no problem
LEVEL 2: indicating some problems
LEVEL 3: indicating extreme problems

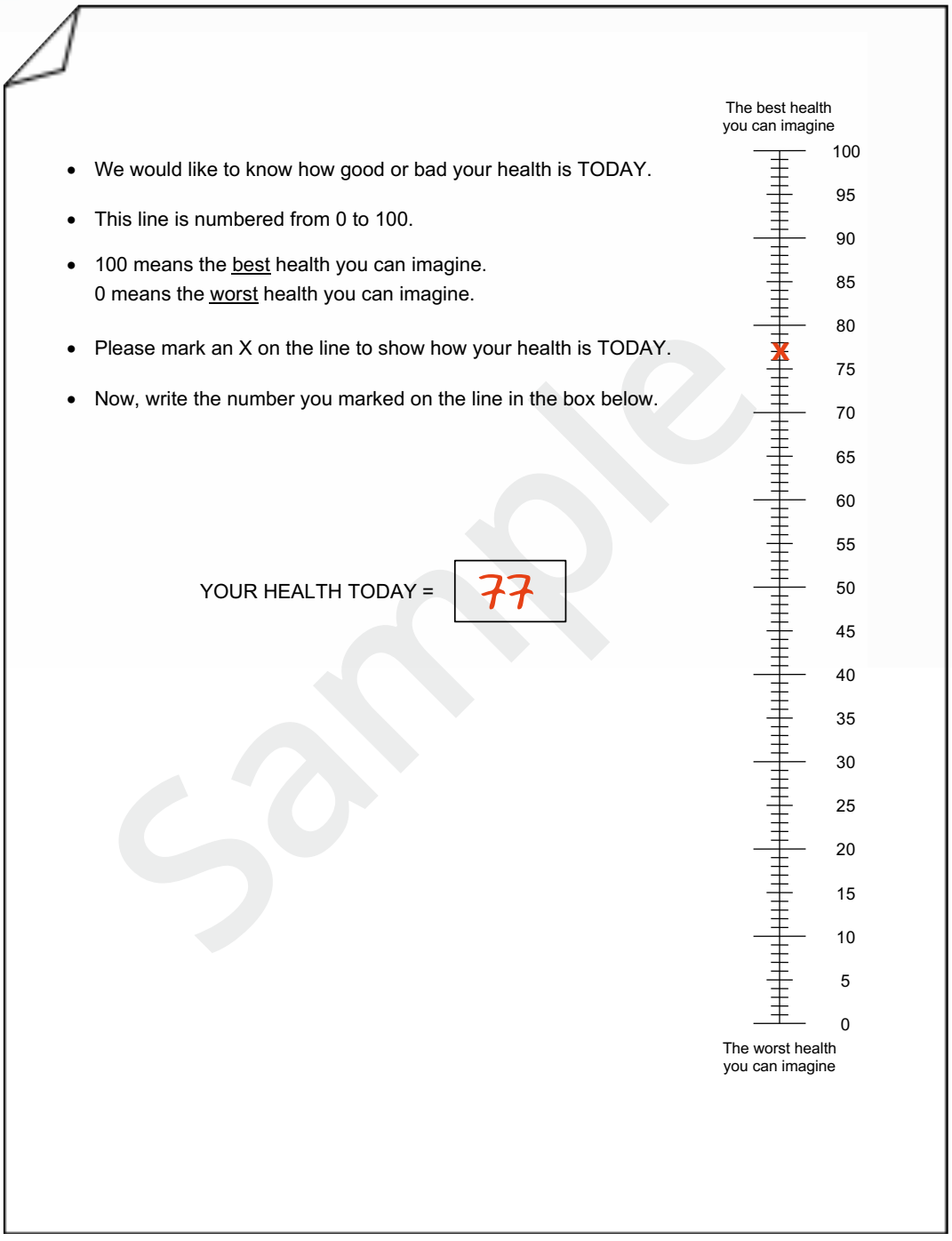
A unique health state is defined by combining one level from each of the five dimensions.

A total of 243 possible health states is defined in this way. Each state is referred to in terms of a 5-digit code. For example, working clockwise from the top of the diagram, state 11232 indicates no problems with mobility and self-care, some problems with performing usual activities, extreme pain and discomfort, and moderate anxiety or depression, while state 11111 indicates no problems on any of the five dimensions.



3. Scoring the EQ VAS

This example from the EQ-5D-3L Paper Self-Complete version shows how the EQ VAS is scored.



Notes:

- Missing values should be coded as '999'.

4. Assigning EQ-5D values (utilities, preference weights) to EQ-5D-3L health states

EQ-5D-3L health states can be summarised using the 5-digit code (see Section 2.1) or represented by a single summary number (EQ-5D value)*, which reflects how good or bad a health state is according to the preferences of the general population of a country/region. EQ-5D values are a major feature of the EQ-5D-3L instrument, facilitating the calculation of quality-adjusted life years (QALYs) that are used to inform economic evaluations of healthcare interventions. The preferences of the general population of a country/region for different health states represent the societal perspective which, in general, is considered the preferred perspective in health economic analysis.[3,4,5]

EQ-5D values for health states are derived by applying a formula that attaches values (weights) to each of the levels in each dimension. The EQ-5D value is calculated by deducting the appropriate weights from 1, the value for full health (i.e. state 11111). The collection of EQ-5D values (weights) for all possible EQ-5D-3L health states is called a value set. Most EQ-5D-3L value sets have been obtained from a valuation exercise, in which a representative sample of the general population in a country/region is asked to place a value on EQ-5D-3L health states using methods such as the time trade-off (TTO) valuation technique or the VAS valuation technique. This approach ensures that the values represent the societal perspective.

Value sets for EQ-5D-3L have been derived for many countries. An updated list of available value sets, including publication references and links to value set syntax files** (e.g. STATA, SAS, SPSS), can be found on the EuroQol website. If a standard value set is not available for your country/region, an option may be to select a value set for a country/region that most closely approximates yours.

* An EQ-5D value is also sometimes referred to as an index, score, utility, preference weight, preference-based value, or QALY weight.

** A syntax file is a computer program that can be run using statistical software to automatically calculate the values for the EQ-5D health states stored in a database.

FURTHER INFORMATION ON VALUE SETS

- For anyone working with EQ-5D-3L data, an essential guide to the use of the EuroQol Group's value sets can be found in Vol. 2 of the EuroQol Group Monograph series, EQ-5D Value Sets: Inventory, Comparative Review and User Guide (Springer, 2006).

5. Organising EQ-5D-3L data

Table 1 / **Illustration of how to organise EQ-5D-3L data in a database**

VARIABLE NAME	ID	SEX	AGE	EDU	COUNTRY	YEAR	MOBILITY
Variable description	Patient ID number	1 = Male 2 = Female 9 = Missing value	999 = Missing value	1 = Low 2 = Medium 3 = High 9 = Missing value	Country where data was collected	Year in which data was collected	1 = No problems 2 = Some problems 3 = Confined to bed 9 = Missing value
Data row 1	1001	1	43	1	UK	2006	2
Data row 2	1002	2	24	2	UK	2006	2

VARIABLE NAME	SELFCARE	ACTIVITY	PAIN	ANXIETY	HEALTH STATE	EQ_VAS
Variable description	1 = No problems 2 = Some problems 3 = Unable to 9 = Missing value	1 = No problems 2 = Some problems 3 = Unable to 9 = Missing value	1 = No problems 2 = Some problems 3 = Extreme problems 9 = Missing value	1 = No problems 2 = Some problems 3 = Extreme problems 9 = Missing value		999 = Missing value
Data row 1	1	2	2	1	21221	80
Data row 2	1	1	1	1	21111	90

Notes:

- The variable names are just examples. However, the variables for the five dimensions of the EQ-5D descriptive system should be named '*mobility*', '*selfcare*', '*activity*', '*pain*', and '*anxiety*', as these are the names used in the syntax files for calculating EQ-5D values (utilities).
- A respondent's rating on EQ VAS is to the nearest whole number.

6. Presenting EQ-5D-3L results

Data collected using EQ-5D-3L can be presented in various ways. A basic subdivision can be made according to the structure of the EQ-5D-3L:

1. **Presenting results from the EQ-5D-3L descriptive system as a health profile**
2. **Presenting results of the EQ VAS as a measure of overall self-rated health status**
3. **Presenting results for EQ-5D-3L values.**

The way results can be presented is determined both by the data and by what message you, as a researcher, wish to convey. The following subsection illustrates some of the basic ways of presenting EQ-5D-3L data. A comprehensive methodological guide to analysing and reporting EQ-5D data by Devlin and colleagues is also available.[6]

6.1 Health profiles

Reporting descriptive statistics on patient-reported outcomes (PRO) data can be very insightful. In patient samples, it can identify which dimensions of health are most affected by a given condition or treatment; in population health surveys, it can provide an overview of the frequency of problems across dimensions and, in repeated surveys, show their evolution over time.

When reporting data, it is important to begin by describing the number and percentage of patients reporting each level of problem on each dimension of the EQ-5D-3L. For example, table 2 gives an example from a survey that included the EQ-5D-3L (and 5L), which was conducted in 6800 individuals who were representative of the Lombardy general adult population for age, gender and geographic distribution.[7] The study authors also reported the proportion of patients with a full health state of 11111 (43.9%), as well as stratifying the results by age and gender (data not presented here). Tables can also be broken down for other subgroups – for example, by treatment arm. It is also possible for these tables to include the proportions per subgroup, such as age, before / after treatment, treatment versus comparator, etc.

Table 2 / **EQ-5D-3L frequencies reported by dimension and level**[7]

	MOBILITY n (%)	SELF-CARE n (%)	USUAL ACTIVITIES n (%)	PAIN / DISCOMFORT n (%)	ANXIETY / DEPRESSION n (%)
Level 1 (No problems)	5880 (86.5)	6535 (96.1)	5984 (88.0)	3971 (58.4)	4524 (66.5)
Level 2 (Some problems)	899 (13.2)	249 (3.7)	759 (11.2)	2709 (39.8)	2163 (31.8)
Level 3 (Extreme problems)	21 (0.3)	16 (0.2)	57 (0.8)	120 (1.8)	113 (1.7)
Total	6800 (100)	6800 (100)	6800 (100)	6800 (100)	6800 (100)

Sometimes it is more convenient to dichotomise the EQ-5D levels into 'no problems' (level 1) and 'any problems' (levels 2 and 3), thereby changing the profile into frequencies of reported problems.

It can be useful not only to describe patient health at one specific point in time, but also when looking at changes in health over time – for example, before or after an intervention, or at different study visits in a clinical trial as compared to baseline. The example below demonstrates the value of descriptive EQ-5D data when looking at pre- and post-treatment data. Devlin et al (2010)[8] looked at the change in the number and percentage of NHS hip replacement patients reporting problems by dimension (see Table 3), before and after surgery. They found that there were improvements in patients' anxiety or depression, self-care and pain or discomfort – not just mobility.[8]

Table 3 / **Numbers and proportions reporting levels within EQ-5D dimensions: pre- and post-operation for hip replacements**[8]

	MOBILITY		SELF-CARE		USUAL ACTIVITIES		PAIN / DISCOMFORT		ANXIETY / DEPRESSION	
	pre	post	pre	post	pre	post	pre	post	pre	post
Level 1 (No problems)	19 (4.3%)	239 (54.4%)	168 (38.6%)	319 (73.3%)	15 (3.4%)	199 (45.6%)	1 (0.2%)	219 (50.5%)	240 (55.5%)	349 (80.8%)
Level 2 (Some problems)	420 (95.7%)	200 (45.6%)	264 (60.7%)	115 (26.4%)	347 (79.6%)	221 (50.7%)	240 (55.3%)	200 (46.1%)	183 (42.4%)	74 (17.1%)
Level 3 (Extreme problems)	0 (0%)	0 (0%)	3 (0.7%)	1 (0.2%)	74 (17.0%)	16 (3.7%)	193 (44.5%)	15 (3.4%)	9 (2.1%)	9 (2.1%)
Total[a]	439 (100%)	439 (100%)	435 (100%)	435 (100%)	436 (100%)	436 (100%)	434 (100%)	434 (100%)	432 (100%)	432 (100%)
Reporting some problems[b]	420 (95.7%)	200 (45.6%)	267 (61.4%)	116 (26.6%)	421 (96.6%)	237 (54.4%)	433 (99.8%)	215 (49.5%)	192 (44.5%)	83 (19.2%)
Change in numbers reporting problems	-220		-151		-184		-218		-109	
% change reporting problems	-52%		-57%		-44%		-53%		-57%	
Rank of dimensions in terms of % changes	3		1=		4		2		1	

[a] Results are for those who responded to both the pre- and postoperative questionnaire. About 84% of respondents to the preoperative EQ-5D also responded to the postoperative EQ-5D.

[b] Some problems = levels 2 + 3.

Although very useful information is contained in tables like Table 3, they can be hard to read; an overall summary is sometimes helpful. One way of simplifying the information is based on the principles of a Pareto improvement in Welfare Economics – the Pareto Classification of Health Change (PCHC).[8] With this approach, an EQ-5D health state is deemed to be 'better' than another if it is better on at least one dimension and is no worse in any other dimension. An EQ-5D health state is deemed to be 'worse' than another if it is worse in at least one dimension and is no better in any other dimension.

Using that principle to compare a patient's EQ-5D health states between any two time periods, there are only four possibilities:

- Their health state is better
- Their heath state is worse
- Their health state is exactly the same
- The changes in health are 'mixed': better on one dimension, but worse on another.

When Devlin and colleagues applied this approach to the hip replacement data shown in Table 3, they found that <5% had no change, 82% had improved health, <5% had worse health, and <10% had a 'mixed' change.[8] Therefore, a simple analysis provided a very clear summary of what is happening to patients' health as a result of hip surgery without relying on value sets.

6.2 EQ VAS

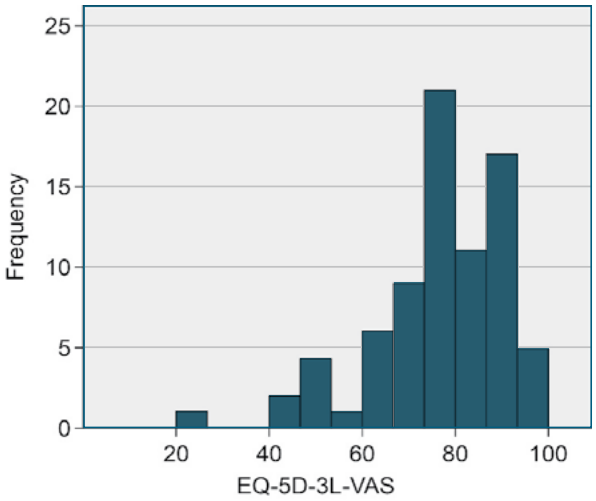
As described earlier, EQ VAS is a 0–100 scale where respondents are asked to indicate their overall health on the day they complete the questionnaire. EQ VAS scores are conceptually different to EQ-5D-3L values, or index scores, which are described in the next section. EQ VAS scores represent the individual respondent's perception of their current overall health, while EQ-5D-3L values represent the value (or utility) which a society attaches to a given EQ-5D-3L health state. Whether to use one or the other, or both, when presenting study results depends on the aim of the study. EQ VAS data may be more relevant in clinic settings, or population studies and surveys, when self-reported descriptive data are required, whereas EQ-5D-3L values may be more relevant in economic assessments of health care, when perceived benefits at a societal level are relevant.

EQ VAS data should be presented using a measure of central tendency and a measure of dispersion. This could be the mean value and the standard deviation (SD) or, if the data are skewed, the median values and the interquartile range (IQR). A couple of examples are provided here:

- EQ-5D-3L data from the National Health Services Survey 2008 (n=120,709, aged 15–103 years) in China were reported by Sun et al (2015).[9] In this study, the mean (SD) EQ VAS score was reported as 80.1 (14.1).
- A study from the Netherlands reported EQ-5D-3L data for patients (n=110) with gout.[10] For EQ VAS, the mean (SD) and median (IQR) were reported to be 66.1 (15.4) and 70 (57–77), respectively.

EQ VAS data can also be presented graphically, such as in frequency charts (Figure 2).

Figure 2 / EQ-5D-3L VAS frequency distribution (hypothetical data)



6.3 EQ-5D values

Information about EQ-5D values, derived using a value set, can be presented in much the same way as the EQ VAS data, i.e. using measures of central tendency and dispersion, such as mean values and the SD (or standard error). If the data are skewed, the median values and the 25th and 75th percentiles could be presented. Note, when reporting EQ-5D values, a maximum of three decimal places is usually sufficient.

Table 4 provides an example where EQ-5D-3L values are given for a total patient population and by age group using pooled (2000 –2002) data from the Medical Expenditure Panel Survey (MEPS) to create a data set of 38,678 adults.[11]

Table 4 / EQ-5D-3L index scores by age group[11]

AGE GROUP	MEAN EQ-5D	STANDARD ERROR EQ-5D
18 – 29	0.922	0.0019
30 – 39	0.901	0.0021
40 – 49	0.871	0.0024
50 – 59	0.842	0.0028
60 – 69	0.823	0.0034
70 – 79	0.790	0.0036
≥80	0.736	0.0062

Table 5 gives a hypothetical example of how to present EQ-5D values results for an intervention study. The improvement in health state utility associated with treatment with Drug A versus Drug B was 0.08 ($p<0.05$) at Week 12.

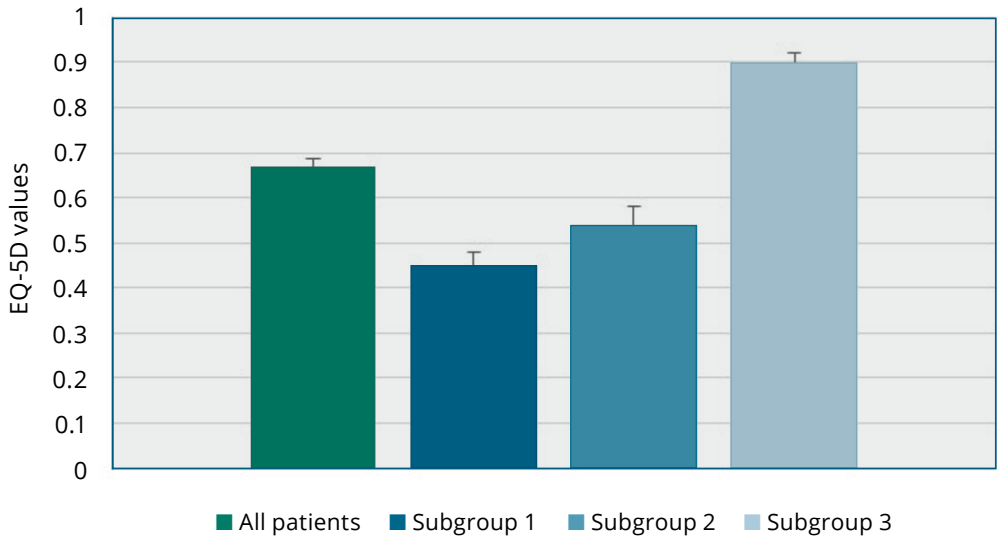
Table 5 / Impact of treatment on EQ-5D-3L index score (hypothetical data)

VISIT	DRUG A		DRUG B		P-VALUE[a]
	N	Mean (SD)	N	Mean (SD)	
Baseline	229	0.59 (0.30)	227	0.60 (0.28)	0.6345
Week 12	194	0.57 (0.32)	186	0.65 (0.29)	0.0149

[a] Using *t*-test.

Data can also be presented graphically; here is a hypothetical example where the group highest mean health status, using EQ-5D-3L values, is subgroup 3. Subgroup 1 reported the worst health. The differences between all subgroups were statistically significant ($p<0.05$).

Figure 3 / **Mean EQ-5D-3L values and 95% confidence intervals for the total patient population and three subgroups (hypothetical data)**



ANALYSIS OF UTILITY DATA FOR ECONOMIC EVALUATION

When analysing data to inform an economic evaluation, the approach will generally need to be different from an analysis that has been undertaken for regulatory purposes – i.e. which reports a comparison between treatment arms. Typically, EQ-5D-3L data will be analysed to estimate the difference between health states (defined in an economic model) or the effect of specific events (e.g. a stroke, exacerbation or relapse). Such an analysis should also control for the effect of treatment arm, but the treatment arm may not be the primary focus of the analysis. For further insight on this topic, please refer to the ISPOR Good Research Practices Task Force report on 'Estimating Health-State Utility for Economic Models in Clinical Studies' by Wolowacz et al, 2016.[12]

EXAMPLE TEXT FOR DESCRIBING THE EQ-5D-3L AND REPORTING AND ANALYSING EQ-5D-3L DATA FOR STUDY PROTOCOLS / PROPOSALS

Study protocols and project proposals often require information to be included describing the EQ-5D-3L instrument and how the results will be reported and analysed. Below is an example outline of the kind of information that could be provided on the EQ-5D-3L for an intervention study.

About the EQ-5D

- The EQ-5D-3L[1] is a widely used generic measure of health status consisting of two parts. The first part (the descriptive system) assesses health in five dimensions (**MOBILITY**, **SELF-CARE**, **USUAL ACTIVITIES**, **PAIN / DISCOMFORT**, **ANXIETY / DEPRESSION**), each of which has three levels of response (no problems, some problems, extreme problems/unable to). This part of the EQ-5D questionnaire provides a descriptive profile that can be used to generate a health state profile. For example, a patient in health state 11232 indicates no problems with mobility and self-care, some problems with performing usual activities, extreme pain and discomfort, and moderate anxiety or depression. Each health state can potentially be assigned a summary EQ-5D-3L value based on societal preference weights for the health state. These weights, sometimes referred to as 'utilities', are often used to compute QALYs for use in health economic analyses. Health state EQ-5D values generally range from less than 0 (where 0 is the value of a health state equivalent to dead; negative values representing values as worse than dead) to 1 (the value of full health), with higher scores indicating higher health utility. The health state preferences often represent national or regional values and can therefore differ between countries/regions. The second part of the questionnaire consists of a visual analogue scale (VAS) on which the patient rates his/her perceived health from 0 (the worst imaginable health) to 100 (the best imaginable health). The EQ-5D questionnaire is cognitively undemanding, taking only a few minutes to complete. Instructions to patients are included in the questionnaire.

Reporting and analysis of results

- A health profile will be generated by visit and by treatment. Summary statistics will be derived, including numbers of patients and proportions of categorical responses for the five EQ-5D-3L dimensions.
- If relevant (i.e. if results are to be used in an economic evaluation of the intevention[s] under investigation), a health state EQ-5D value will be calculated from individual health profiles using [insert country / region specific value set and reference here – where a value set is not available for your country/region, it may be possible to use a value set for a country/region that most closely approximates yours or use a crosswalk value set[a]]. Mean, standard deviation (SD), minimum, median, and maximum scores will be provided for the study population by visit and by treatment.
- The EQ VAS score (between 0 and 100) will be summarised using mean, SD, minimum, median and maximum scores by visit and by treatment.
- For the health state EQ-5D values and EQ VAS scores, mean, SD, minimum, median and maximum will be provided for change from baseline to [enter questionnaire assessment time points here, e.g. Week 12, Week 24] and [final study assessment, e.g. Week 52].
- The type of model used and the covariates and fixed effects will be study-dependent. As an example, an ANCOVA model could be conducted for the changes from baseline to [assessment time points], with country and treatment as fixed effects and baseline as a covariate. In this example, significance of change within each treatment group and significance of the difference between the treatment groups would be reported.

[a] *See EuroQol website FAQs section on choosing a value set, for more information.*

7. EQ-5D-3L translations and modes of administration

7.1 EQ-5D-3L translations

The EQ-5D-3L (paper self-complete version) is available in more than 180 official language versions. All translations / adaptations of EQ-5D-3L are produced using a standardised translation protocol that conforms to internationally recognised guidelines. The translation process itself is based on forward and back translation, and in-depth cognitive debriefing.[13] New translations can be produced by submitting a new request to use/registration form on the EuroQol website. The EuroQol office manages the production of new translations and in general, translation costs are covered by the user requesting a translation. For more information on the EQ-5D-3L translation process, consult the EuroQol website or contact the EuroQol Office.

Developing unofficial translations of EuroQol instruments
Users are not permitted to translate EuroQol instruments, such as EQ-5D, without permission. Using tools such as Google Translate or generative artificial intelligence (e.g., ChatGPT) to create a translation is a breach of copyright. It may also jeopardise the quality and compromise publication of any resulting research. If you need a language version that is not currently available (see website for **available versions**), you can request a new translation by submitting a **new registration** on the EuroQol website.

7.2 Modes of administration

The EQ-5D-3L is available in several modes of administration including:

- Self-complete versions (paper, digital and digital survey platforms)
- Proxy versions (paper and digital)
- Interviewer-administered versions (paper, digital, proxy, and digital survey platform versions)

Please see Table 6 in the section below for a summary of the different modes of administration and check the EuroQol website for a list of all currently available versions (by country/region, language, mode of administration and platform).

Note: You can also check whether the language version you need is available by completing the EQ-5D registration form on the EuroQol website. If it is not available, please select the unavailable language versions you would like to receive in the availability matrix. You will be provided with a quote and timelines for producing the translations.

8. Other EuroQol Group instruments

8.1 EQ-5D-5L

The EQ-5D-5L has a descriptive system that comprises the same five health dimensions as in the EQ-5D-3L but each dimension has five levels of severity: no problems, slight problems, moderate problems, severe problems and extreme problems. The EQ-5D-5L is currently available in more than 150 different language versions (for the self-complete versions), across several modes of administration (Table 6).

Please check the EuroQol website for the latest list of available language versions and modes of administration.

A growing number of value sets are available for the EQ-5D-5L, derived using a standardised valuation study protocol. A list of published value sets for the EQ-5D-5L is available on the EuroQol website.

8.2 EQ-5D-Y-3L (formerly EQ-5D-Y)

The EQ-5D-Y-3L was the first child-friendly version of the EQ-5D-3L questionnaire that was developed specifically for children and adolescents (Table 7). The EQ-5D-Y-3L (Paper Self-Complete version) is available in more than 100 language versions for use in over 60 countries. EQ-5D-Y-3L is available in several modes of administration (Table 6). Please check the EuroQol website for the latest list of available language versions and modes of administration. A valuation protocol is now available for the EQ-5D-Y-3L for use by research teams to generate value sets. A number of EQ-5D-Y-3L value sets have already been published, with more in development around the world. For a list of available EQ-5D-Y-3L value sets, please see the EuroQol website.

8.3 EQ-5D-Y-5L

The EQ-5D-Y-5L has been developed to provide child and adolescent respondents with a wider range of options to describe their health (Table 7). This newer youth version of EQ-5D includes five response levels in each of the five EQ-5D-Y dimensions of the descriptive system. A number of EQ-5D-Y-5L language versions are available in several modes of administration (Table 6), with more in development. Please check the EuroQol website for the latest list of available versions.

At present, value sets for the EQ-5D-Y-5L are not available. The EuroQol Group is currently working on a protocol for the valuation of EQ-5D-Y-5L health states as well as a crosswalk function. Users are recommended not to use adult EQ-5D-5L value sets to generate values for EQ-5D-Y-5L health states, as societal preferences for adult (5L) health states may differ considerably from societal preferences for child/adolescent (Y) health states.

Table 6 / **Available EQ-5D modes of administration.**

MODES OF ADMINISTRATION	EQ-5D-3L	EQ-5D-5L	EQ-5D-Y-3L	EQ-5D-Y-5L
SELF-COMPLETE VERSIONS				
• Paper Self-Complete	✔	✔	✔	✔
• Digital Self-Complete	✔	✔	✔	✔
• Digital survey platforms[a]	✔	✔	✔	
• British Sign Language version (for use in REDCap)		✔		
PROXY VERSIONS				
• Paper Proxy 1	✔	✔	✔	✔
• Digital Proxy 1	✔	✔	✔	✔
• Digital survey platforms[a], Proxy 1		✔	✔	
INTERVIEWER-ADMINISTERED VERSIONS				
• Paper Interviewer Administration	✔	✔	✔	✔
• Digital Interviewer Administration	✔	✔	✔	✔
• Paper Proxy 1 Interviewer Administration	✔	✔	✔	✔
• Digital Proxy1 Interviewer Administration	✔	✔	✔	✔
• Digital supported platforms[a], Interviewer Administration & Proxy Interviewer Administration	✔	✔	✔	

[a] Digital survey platforms include REDCap, Qualtrics and LimeSurvey. More information is available on the **EuroQol website**.

Note: Digital platforms
The ready-to-use modules for the digital supported platforms are for non-commercial use only. If a commercial user would like to use one of these platforms, they will receive the regular Digital version and should arrange their own permissions to use the platform and create their own reproduction on the platform.

*Information about available versions of these digital platforms can be found on the **EuroQol website**.*

Table 7 / **Broad guidance on the use of EQ-5D versions by age range**[a]

AGE RANGE	RECOMMENDATION
0–3 years	▪ There are no versions of EQ-5D currently available for this age range[b]
4–7 years	▪ For children aged 4-7, researchers should consider using an ***interviewer-administered or proxy version of the EQ-5D-Y-3L or EQ-5D-Y-5L***
8–11 years	▪ ***Use EQ-5D-Y-3L or EQ-5D-Y-5L*** The self-complete version is recommended in this age group. If a child or children in a study are expected to have difficulty responding to the self-complete version, researchers should consider using an interviewer-administered or proxy version.
12–15 years	▪ ***Both the youth (EQ-5D-Y-3L or EQ-5D-Y-5L) and adult (EQ-5D-3L and EQ-5D-5L) versions can be used*** An overlapping area. Generally, EQ-5D youth versions are recommended in this age group. However, depending on study design, it might be preferable to use one of the EQ-5D adult versions. For example, if a study includes a mix of adult respondents and respondents between the ages of 12 and 15 it may be preferable to use an adult version of EQ-5D for all respondents, for the sake of consistency, ease of adminstration and analysis.
16 years and older	▪ ***Adult version (EQ-5D-3L or EQ-5D-5L) may be preferred*** Although it is generally recommended to use an adult version of EQ-5D in respondents aged 16 and over, in studies where all respondents are 18 or under it may be preferable to only use a youth EQ-5D version for the sake of consistency and ease of administration and analysis.

[a] It is important to note that this table only provides general recommendations and that various factors need to be taken into account when deciding which version (self-complete, interviewer-administered, proxy) of the youth or adult EQ-5D to use, including children's literacy level, age range for inclusion, disease characteristics, etc.

[b] A new instrument, EQ-TIPS, is in development to measure and value health in children aged 0-3 years.

9. How to obtain EQ-5D-3L

- The EuroQol Research Foundation is a registered charity in the Netherlands and serves as the single point of distribution for the family of instruments.
- If you would like to use EQ-5D-3L in your study/trial/project, you must first complete the registration form on the EuroQol website. Registering does not commit you to purchasing a license.
- After your request to use EQ-5D-3L has been approved, it can be used free of charge for academic, educational, public health, and other non-commercial purposes.
- Commercial users are charged a license fee, which is calculated by the EuroQol office based on the user information provided in the registration form. Fees charged are used to fund the activities of the EuroQol Research Foundation in line with its vision and mission.
- The EQ-5D licensing policy and standard timelines for licensing and receiving the instrument are available on the EuroQol website.
- For more information on how to obtain the EQ-5D is available on the EuroQol website.

10. Additional resources on the EuroQol website

Throughout this User Guide, weblinks to relevant resources on the EuroQol website have been provided. Here is a selection of additional web resources that the reader may find useful:

- Answers to frequently asked questions
- EQ-5D terms explained
- Key EQ-5D-3L references
- EQ-5D books
- EQ-5D working papers
- EQ-5D-3L population norm data
- Explanation of EQ-5D version numbering and quality control
- Educational material (animations, presentations and infographics)
- Further information and support

11. Sample digital version of the EQ-5D-3L Self-Complete

11.1 Digital representation guidelines

The EQ-5D-3L can be used on any digital device. A library of EQ-5D-3L representations is available from the customer portal, consisting of example approved screenshots of digital EQ-5D-3L versions for every requested language. These enable customers and vendors to check that their digital implementation of EQ-5D-3L conforms to EuroQol's Digital Representation Design Guidelines. In summary, the Design Guidelines require that:

- The digital reproduction should be responsive and should not require scrolling at any point during the completion of the EQ-5D-3L.
- Every dimension of the EQ-5D-3L should be displayed on a separate screen with the instruction above the dimension and the levels listed below each other.
- The copyright line should be displayed on every screen.
- The VAS should be vertical with the VAS instructions next to the scale.

Please note, the user is responsible for implementing the EQ-5D Digital format on the platform of choice based on the Digital Representation Design Guidelines and the EuroQol Office Representations. Any deviation from these Design Guidelines and the Representations is at User's own risk.

Additional resources are available on the EuroQol website:

- Digital data collection requirements
- Digital Representation Design Guidelines
- EQ-5D sample demo

11.2 Sample EQ-5D-3L digital self-complete (UK, English, v1.2)



Please choose the ONE answer that best describes your health TODAY.

MOBILITY

I have no problems in walking about ☐

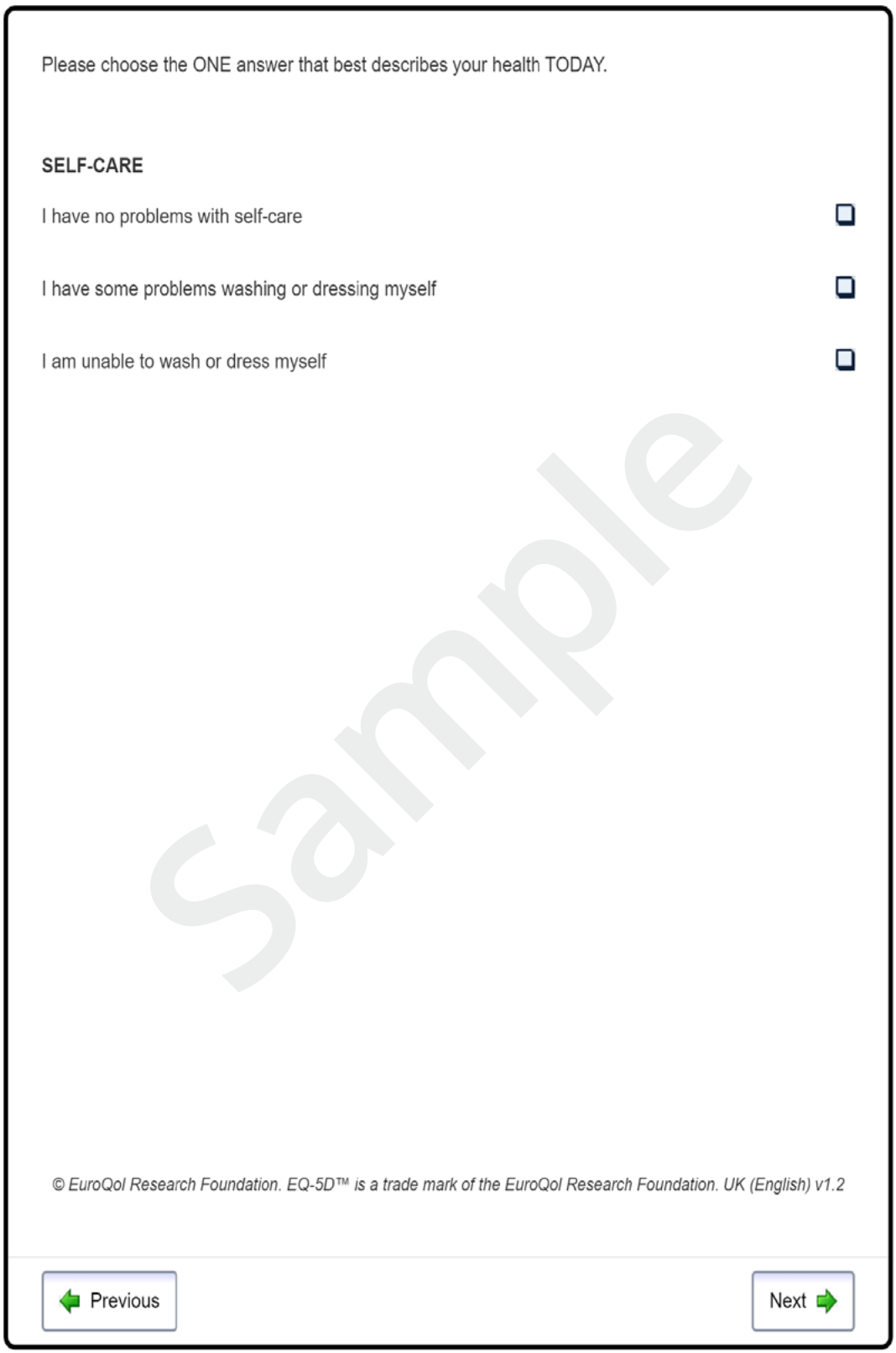
I have some problems in walking about ☐

I am confined to bed ☐

Sample

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Previous Next


Please choose the ONE answer that best describes your health TODAY.
SELF-CARE
I have no problems with self-care
I have some problems washing or dressing myself
I am unable to wash or dress myself
Sample
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Previous
Next

Please choose the ONE answer that best describes your health TODAY.

USUAL ACTIVITIES *(e.g. work, study, housework, family or leisure activities)*

I have no problems doing my usual activities ☐

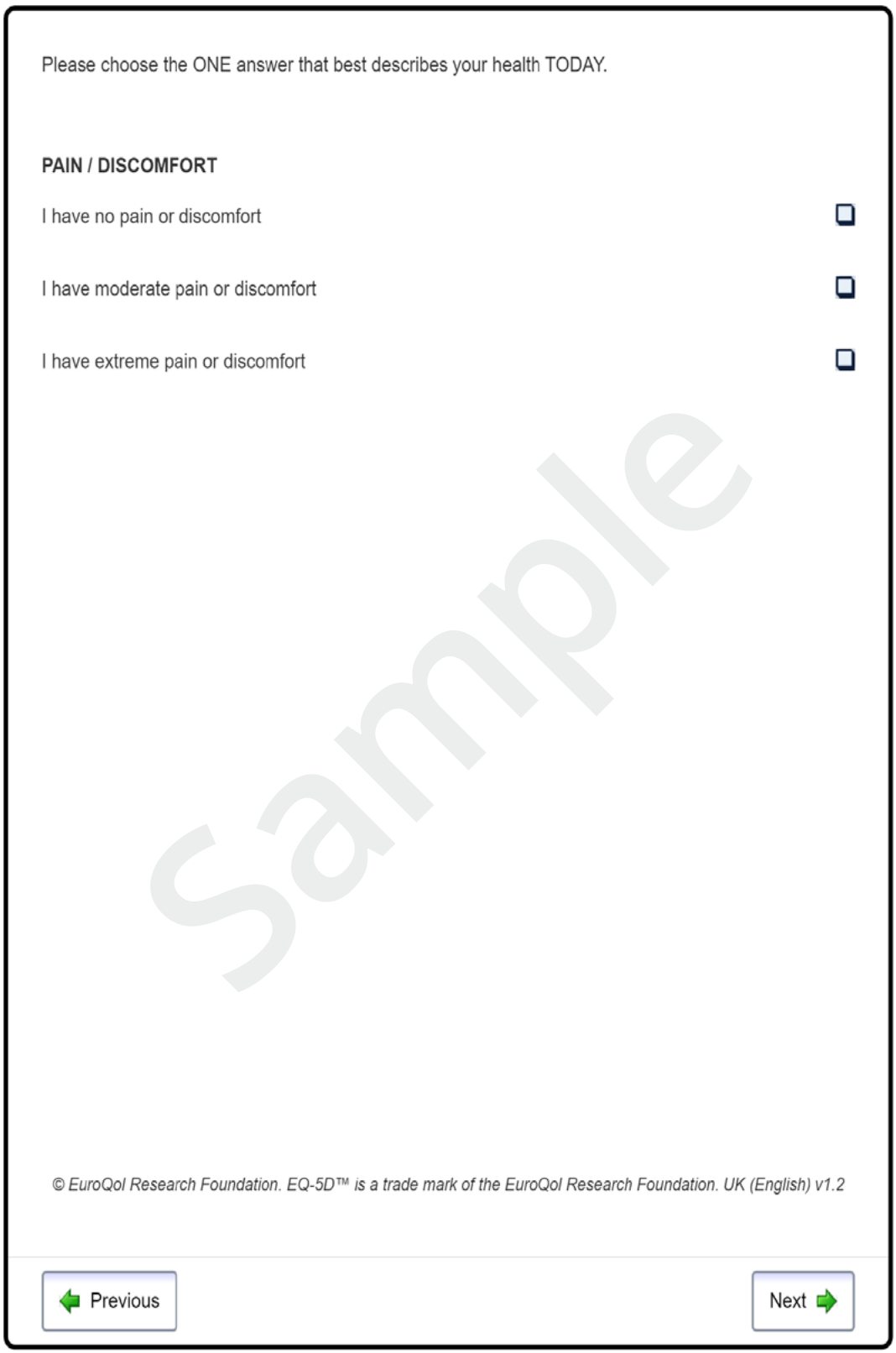
I have some problems doing my usual activities ☐

I am unable to do my usual activities ☐

Sample

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Please choose the ONE answer that best describes your health TODAY.
PAIN / DISCOMFORT
I have no pain or discomfort
I have moderate pain or discomfort
I have extreme pain or discomfort
Sample
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Next

Please choose the ONE answer that best describes your health TODAY.

ANXIETY / DEPRESSION

I am not anxious or depressed ☐

I am moderately anxious or depressed ☐

I am extremely anxious or depressed ☐

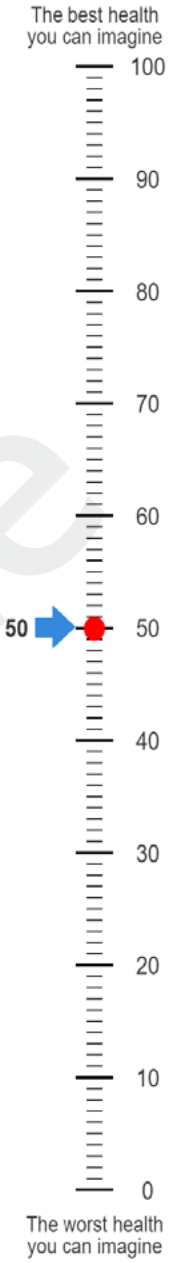
Sample

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- We would like to know how good or bad your health is TODAY.
- You will see a line numbered from 0 to 100.
- 100 means the best health you can imagine.
  0 means the worst health you can imagine.
- Please indicate on the line how your health is TODAY.





Sample

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12. References

1. Kennedy-Martin M, Slaap B, Herdman M, van Reenen M, Kennedy-Martin T, Greiner W, Busschbach J, Boye KS. Which multi-attribute utility instruments are recommended for use in cost-utility analysis? A review of national health technology assessment (HTA) guide lines. Eur J Health Econ 2020;21:1245-1257.
2. EuroQol Group. EuroQol – a new facility for the measurement of health-related quality of life. Health Policy 1990;16:199–208.
3. Drummond MF, Sculpher MJ, Claxton K, Stoddart GL, Torrance GW. Methods for the economic evaluation of health care programmes, 4th ed. Oxford: Oxford University Press, 2015.
4. Jonsson B. Ten arguments for a societal perspective in the economic evaluation of medical innovations. Eur J Health Econ 2009;10:357–359.
5. Neumann PJ, Sanders GD, Russell LB, Siegel JE, Ganiats TG, eds. Cost-effectiveness in health and medicine. Oxford: Oxford University Press, 2016.
6. Devlin N, Parkin D, Janssen B. Methods for Analysing and Reporting EQ-5D Data. Springer International Publishing. 2020. (ebook ISBN: 978-3-030-47622-9).
7. Scalone L, Cortesi PA, Ciampichini R, Cesana G, Mantovani LG. Health related quality of life norm data of the Italian general population: results using the EQ-5D-3L and EQ-5D-5L instruments. Epidemiology, biostatistics and public health. 2015;12(3): e11457.1–e11457.15.
8. Devlin NJ, Parkin D, Browne J. Patient-reported outcome measures in the NHS: new methods for analysing and reporting EQ-5D data. Health Econ 2010;19:886–905.
9. Sun S, Chen J, Kind P, Xu L, Zhang Y, Burström K. Experience-based VAS values for EQ-5D-3L health states in a national general population health survey in China. Qual Life Res 2015;24:693–703.
10. Spaetgens B, Tran-Duy A, Wijnands JM, van der Linden S, Boonen A. Health and utilities in patients with gout under the care of a rheumatologist. Arthritis Care Res (Hoboken) 2015;67:1128–1136.
11. Sullivan PW, Ghushchyan V. Preference-based EQ-5D index scores for chronic conditions in the United States. Med Decis Making 2006;26:410–420.
12. Wolowacz SE, Briggs A, Belozeroff V, Clarke P, Doward L, Goeree R, Lloyd A, Norman R. Estimating health-state utility for economic models in clinical studies: An ISPOR Good Research Practices Task Force report. Value in Health 2016;19:704–719.
13. Rabin R, Gudex C, Selai C, Herdman M. From translation to version management: a history and review of methods for the cultural adaptation of the EuroQol five-dimensional questionnaire. Value Health 2014;17:70–76.

EQ-5D-3L

User Guide

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