Similarity and the Reliability of Moral Choices
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Appendix A1: Subjects' instructions and choices

What follows are the introductory text and alternatives that subjects faced, as they appeared on their screens, except for the animation.

Any text that is added by way of explanation and that did not appear in the original screens appears between square brackets.

Subjects were welcomed and informed that they would be paid a flat fee of £13 (roughly USD 20 at the time) for participating in an experiment on making difficult choices in the use of health care resources which would take around 40 minutes to complete. They were also informed that a further £5 (USD 8) would be donated to a health care charity of their choice at the end of the experiment.

Introduction

The National Health Service (NHS) faces difficult choices in the allocation of resources for alleviating a wide range of illnesses. Those working in the NHS must decide, for example, which types of treatments should be prioritised over others. It is important that we learn how people would like these decisions to be made.

The following questionnaire is meant to find out your views on how such priorities should be established. You will be presented with a series of choices between two treatment programmes. You will be asked to indicate which of the two treatments you think the NHS should prioritise.

The treatments will be described along two dimensions. First, in terms of the number of patients that the treatment will cure. Second, in terms of the health-related quality of life of the patients without and with the treatment. The health-related quality of life of the patients will be described using a measure known as the **Health Utilities Index**. This index has been developed by experts and is used to assess health-related quality of life in many countries. We will now explain this measure.

1. The Health Utilities Index

<u>What does it measure?</u>

The Health Utilities Index is a way of measuring the health-related quality of life of a period of time in a particular health state. It is based on a system which categorises almost 1 million health states, based on 8 attributes of health status: vision, hearing, speech, ambulation, dexterity, emotion, cognition, and pain.
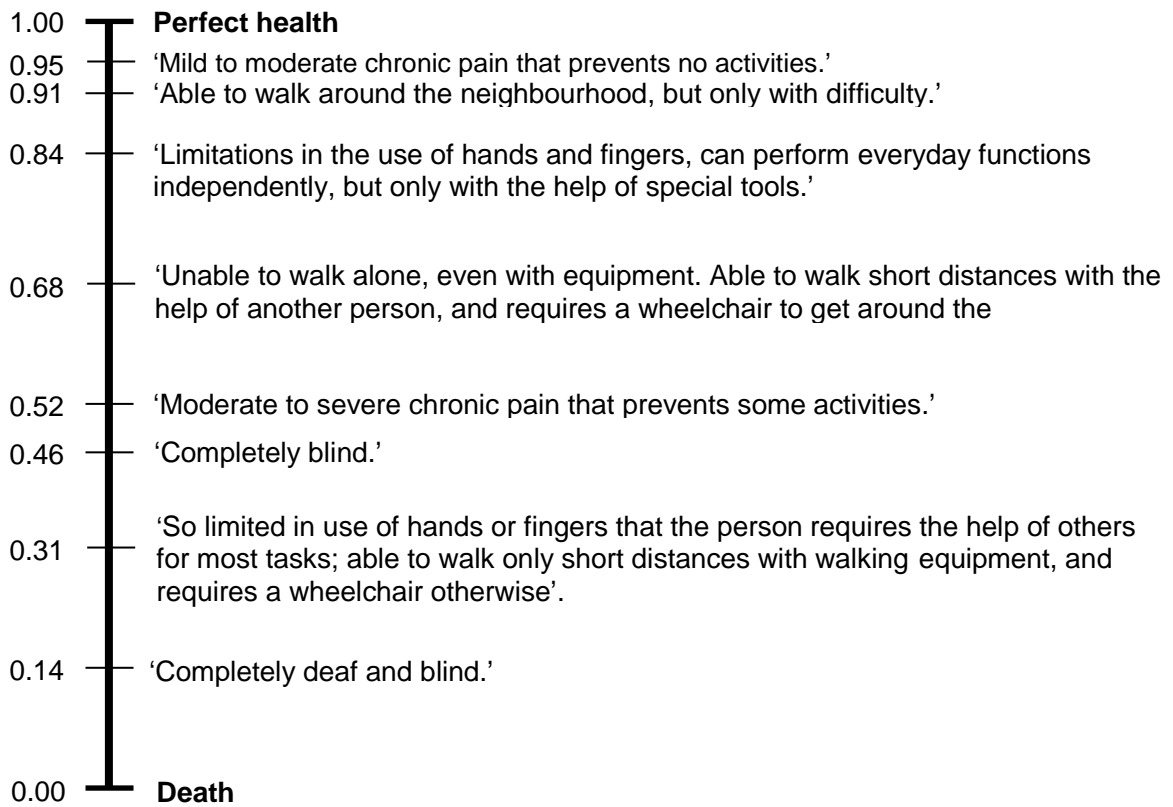
Each of these attributes has various levels. So, for example, 'vision' ranges over 6 levels from 'able to see well enough to read newsprint and recognise a friend on the other side of the street without glasses or contact lenses' (the best state) to 'total blindness' (the worst state). The attribute 'ambulation' ranges over 6 levels from 'able to walk around the neighbourhood without difficulty and without walking equipment' (the best state), to 'cannot walk at all' (the worst state).

Using questionnaires, researchers establish how a **representative person** would value living the rest of a normal human lifespan in a condition described by various levels of these 8 attributes, rated on a scale on which '**perfect health**' is 1.00 and **death** is 0.00. (A state worse than death is valued below 0.00, but we will focus on cases no worse than death.)

Figure 1 contains some examples of the representative numbers associated with health states (besides the problems mentioned, the individuals in question are fully healthy).

Of course, these figures are only **approximations**: they are the best estimates of how representative people value these health states.

Figure 1: The values of several health states on the Health Utilities Index
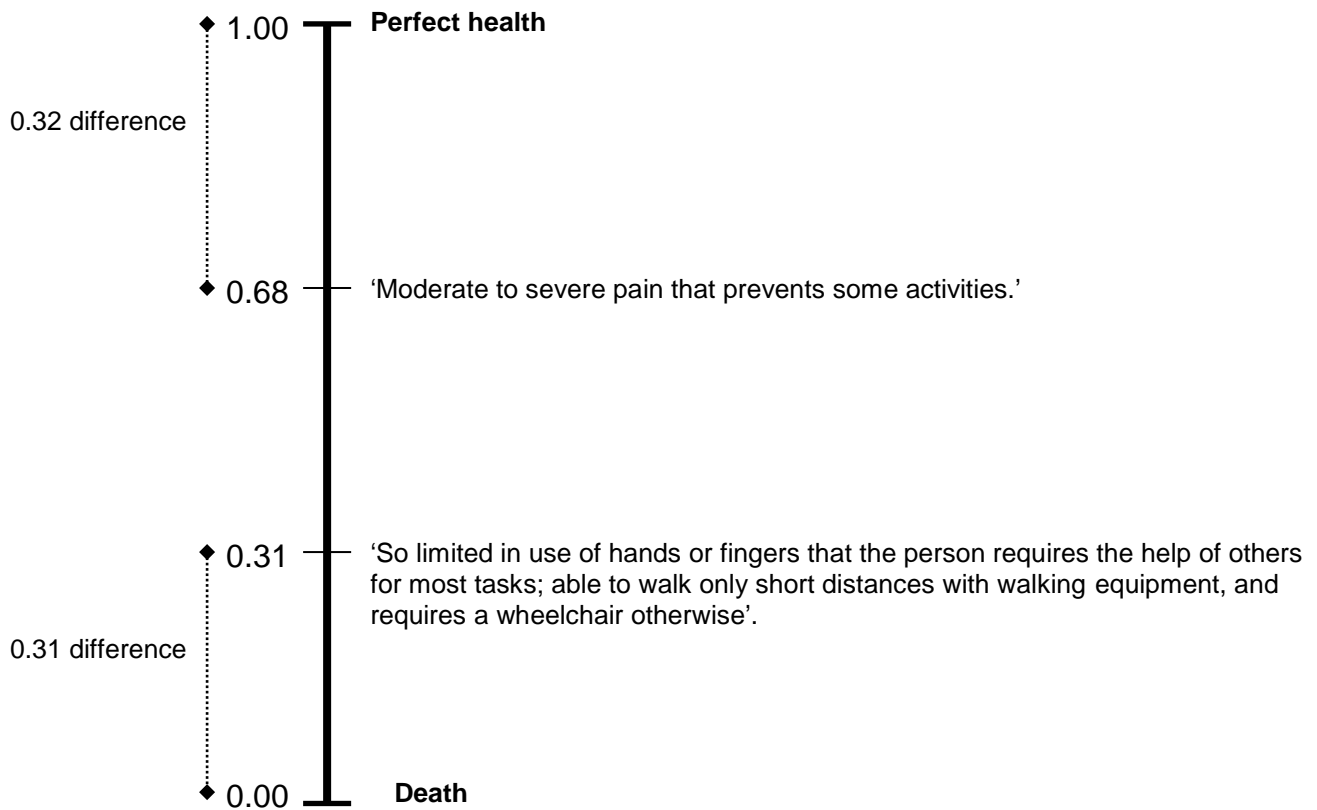
1.00 — **Perfect health**

0.95 — 'Mild to moderate chronic pain that prevents no activities.'

0.91 — 'Able to walk around the neighbourhood, but only with difficulty.'

0.84 — 'Limitations in the use of hands and fingers, can perform everyday functions independently, but only with the help of special tools.'

0.68 — 'Unable to walk alone, even with equipment. Able to walk short distances with the help of another person, and requires a wheelchair to get around the

0.52 — 'Moderate to severe chronic pain that prevents some activities.'

0.46 — 'Completely blind.'

0.31 — 'So limited in use of hands or fingers that the person requires the help of others for most tasks; able to walk only short distances with walking equipment, and requires a wheelchair otherwise'.

0.14 — 'Completely deaf and blind.'

0.00 — **Death**

What do these numbers mean?

First, they are a **measure of the severity of a person's health problems**. The lower the number, the worse a health state is. So, for example, a condition in which a person is otherwise healthy but is able to walk only with difficulty is valued at 0.91, is better than a state in which that person experiences moderate to severe chronic pain that prevents some activities, which is valued at 0.68.

Second, the measure is constructed so that an **improvement of a given amount anywhere along the scale is valued equally by the person who could undergo that improvement**. A person will value an improvement by 0.10 just as much when it takes him from 0.50 to 0.60 as when it takes him from 0.80 to 0.90. So, saving a person from death, which is valued at 0.00, and bringing them to a state of severe limitations in dexterity and ambulation valued at 0.31 is typically regarded by the person concerned as approximately just as great an improvement in his situation as saving him from a state of moderate to severe chronic pain valued at 0.68 and bringing him to a state of perfect health, which is valued at 1, because the size of the improvement is approximately the same (an improvement of 0.31 units in the first case, and of 0.32 units in the second). (See Figure 2.)

Figure 2: Two approximately equally large improvements in health

1.00 — Perfect health

0.32 difference

0.68 — 'Moderate to severe pain that prevents some activities.'

0.31 — 'So limited in use of hands or fingers that the person requires the help of others for most tasks; able to walk only short distances with walking equipment, and requires a wheelchair otherwise'.

0.31 difference

0.00 — Death

2. The alternatives you will choose between

In what follows, we will only look at health states better than death (health score is better than zero).

We will assume that all the people whose treatment you are considering have reached their mid-thirties and have been in perfect health up to now, but have a health problem which has caused a loss of some part of their health status.

If they do not receive treatment, they will live to the end of a normal human lifespan with the indicated health problem.

We will represent the patients' state **without treatment** by the **solid** part of the line from 0.00 (death) to 1.00 (perfect health).

We are assuming that treatment will always lead to a complete cure.
If they receive treatment, they will therefore live to the end of a normal human lifespan in perfect health (1.00 on the scale)**.**

We will represent the **possible improvement** patients' state by the remaining **dotted** of the line from the top of the green line to 1.00 (perfect health).

Figure 3 gives an example of this representation.

Figure 3: Patients' health without treatment ━━━ and possible health gain with treatment ▪▪▪▪▪
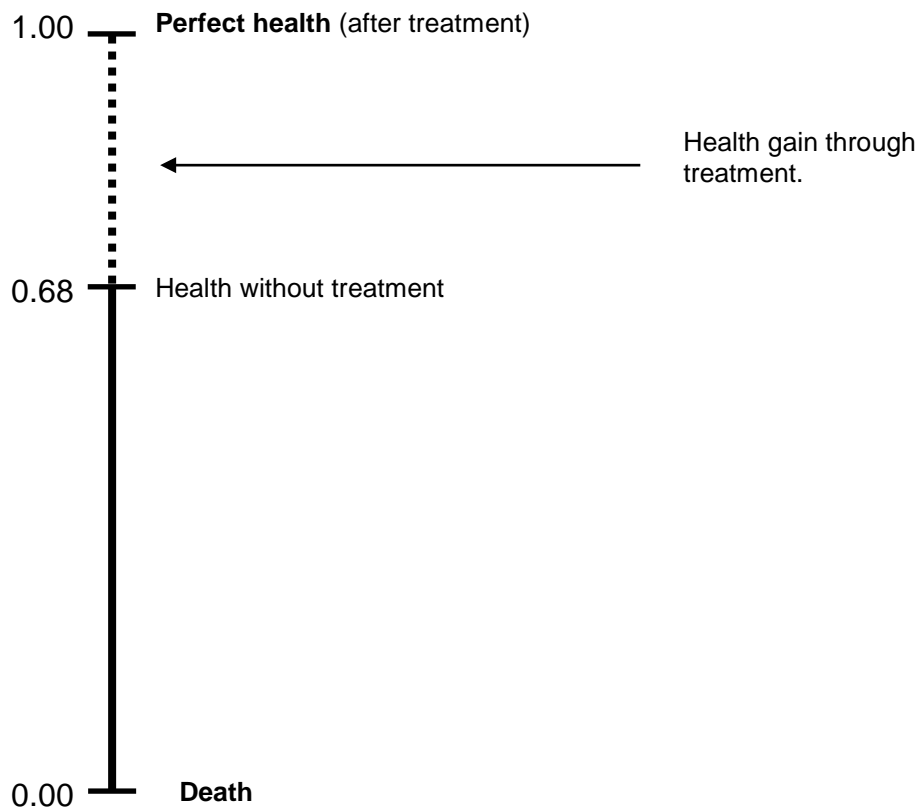
Each treatment will also maintain the health of some number of people. This will be indicated by a large number next to the line.

So, a treatment which will move **10** people from a condition valued at **0.68** to **1.00** (full health) will be represented as follows:

Figure 4: Number of patients, and their health without treatment and possible health gain with treatment.

1.00	Their health if you decide to treat them.
	Their gain in health due to treatment.
0.68 **10**	The number of people you can treat.
	Their health if you do not treat them.
0.00	
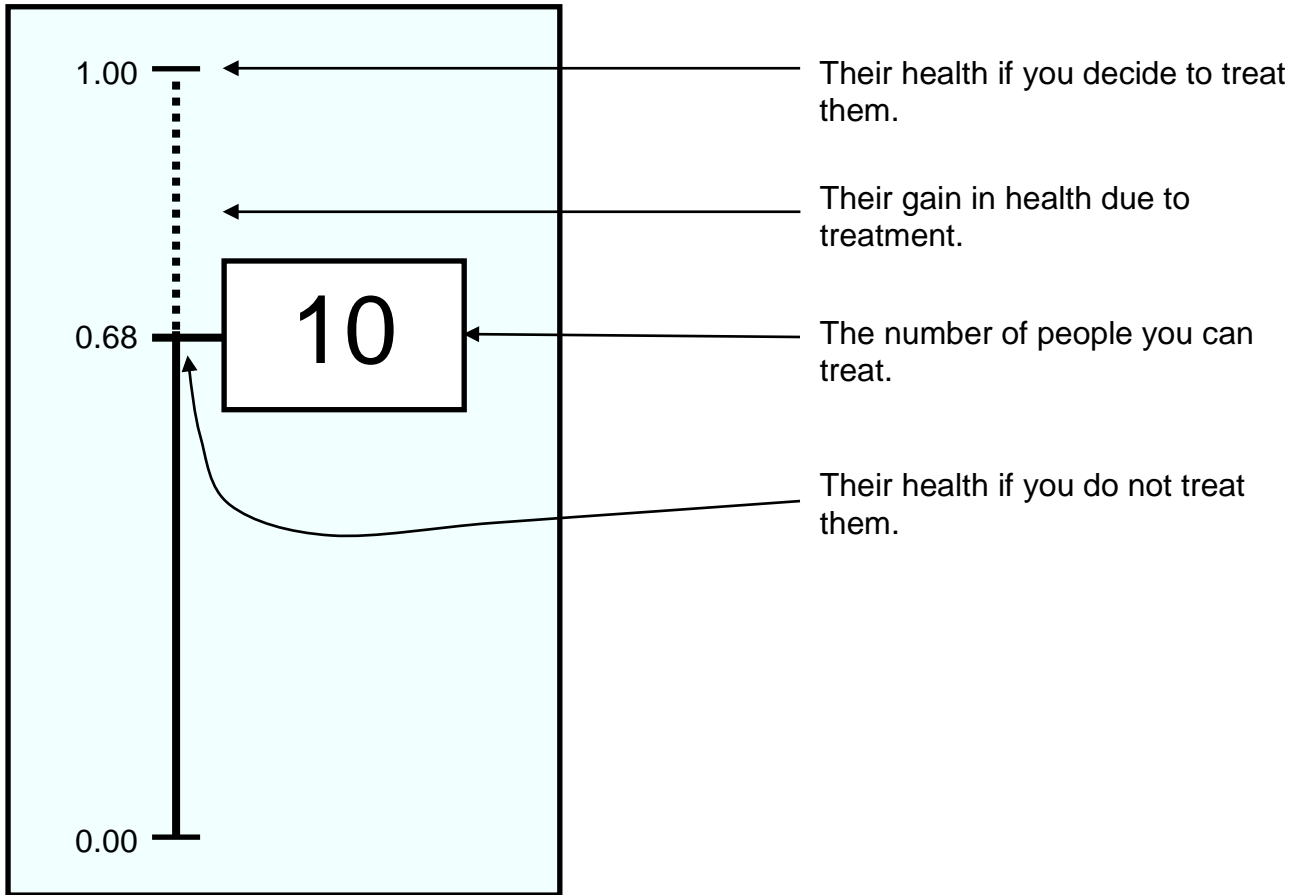
3. A brief practice session.

We will now ask you to make four practice choices. We will ask you to choose which of two groups containing different people and different numbers of people, should receive treatment, given that we have the resources to treat only one of these two groups. We will not use your answers to this question in our results.

Some choices may seem straightforward, because one of the options will seem clearly better to you.

Others may be more difficult, for example because you must choose between giving a relatively small number of people a relatively big improvement in health, or giving a relatively large number of people a relatively small improvement in health. There are no 'right' or 'wrong' choices in such cases; we are simply interested in your best judgment.

PRACTICE CHOICE 1.

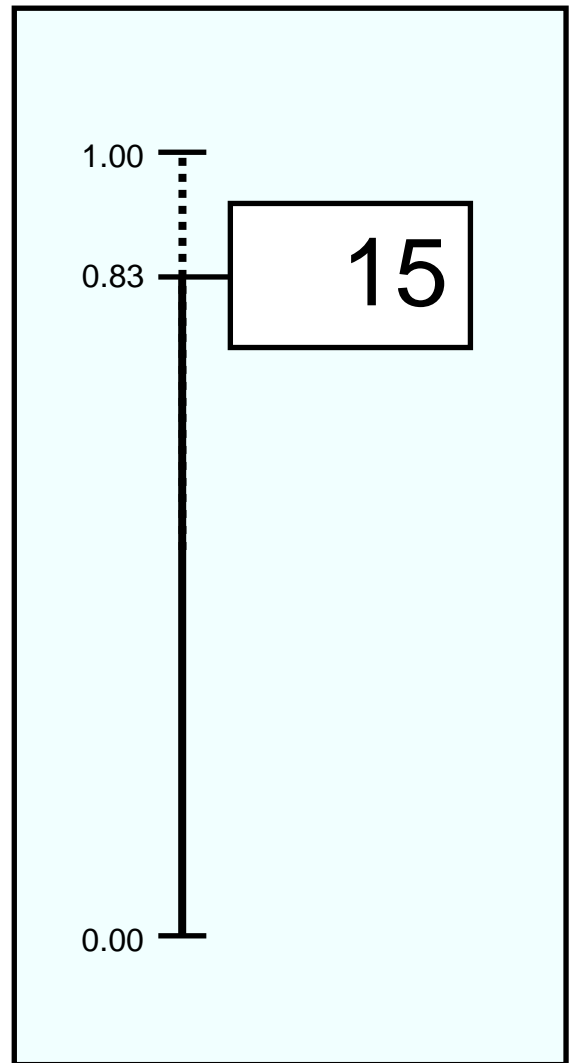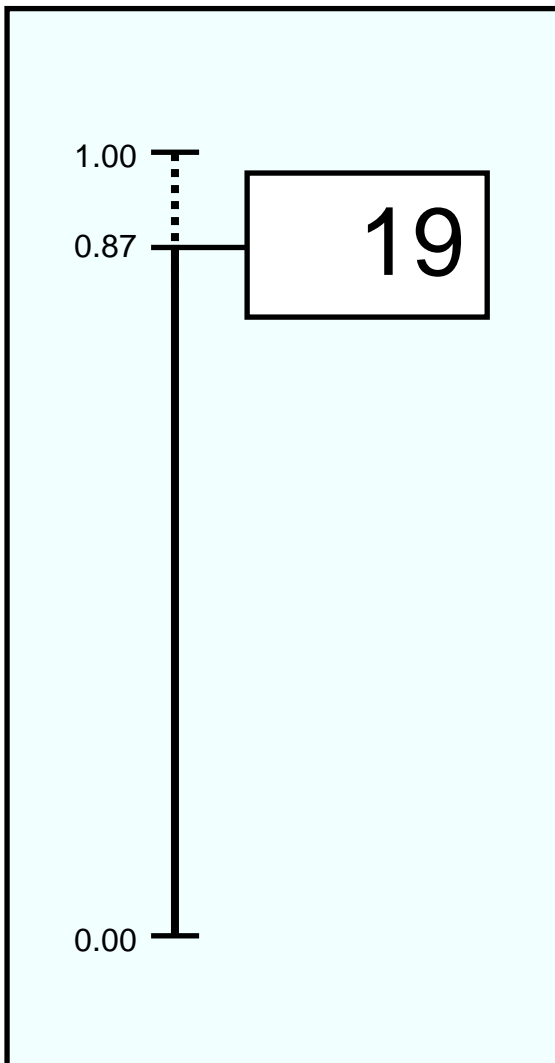You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.

[If a subject did not move it all the way up, it would slide back down; once a choice was made, the screen would go a semi-transparent grey and a text box would appear, saying "you have chosen to save <number of people for chosen alternative> from <harm for chosen alternative> rather than <number of people for unchosen alternative> from <harm for unchosen alternative>. Are you sure?"]
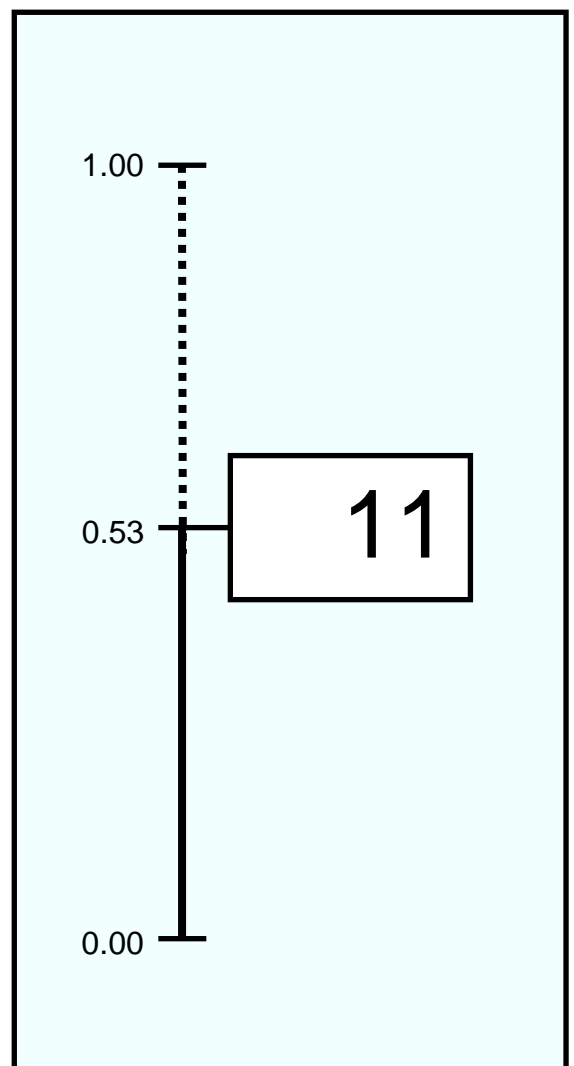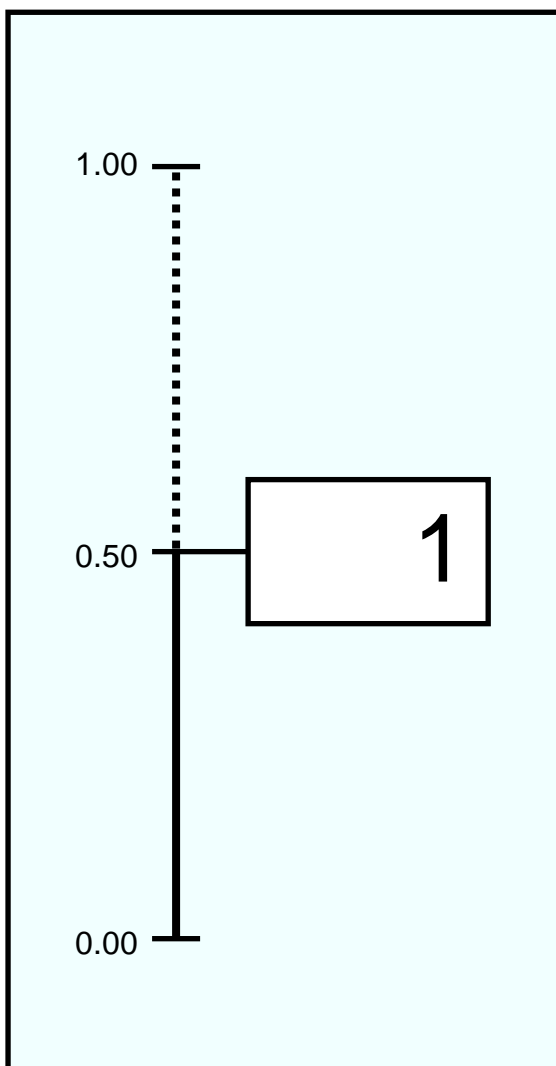
PRACTICE CHOICE 2.

You can offer treatment to only one of the two following groups.
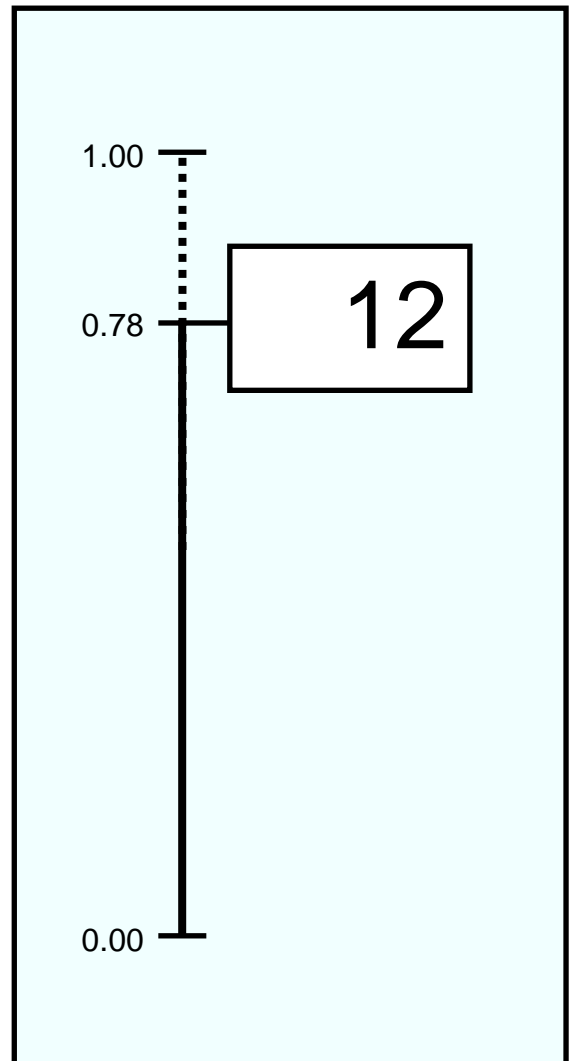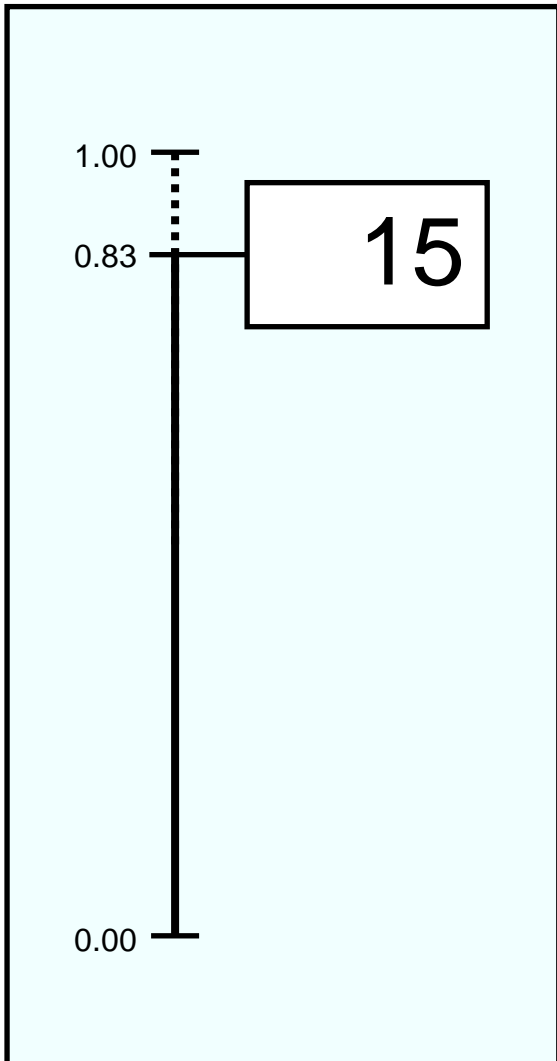
You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.
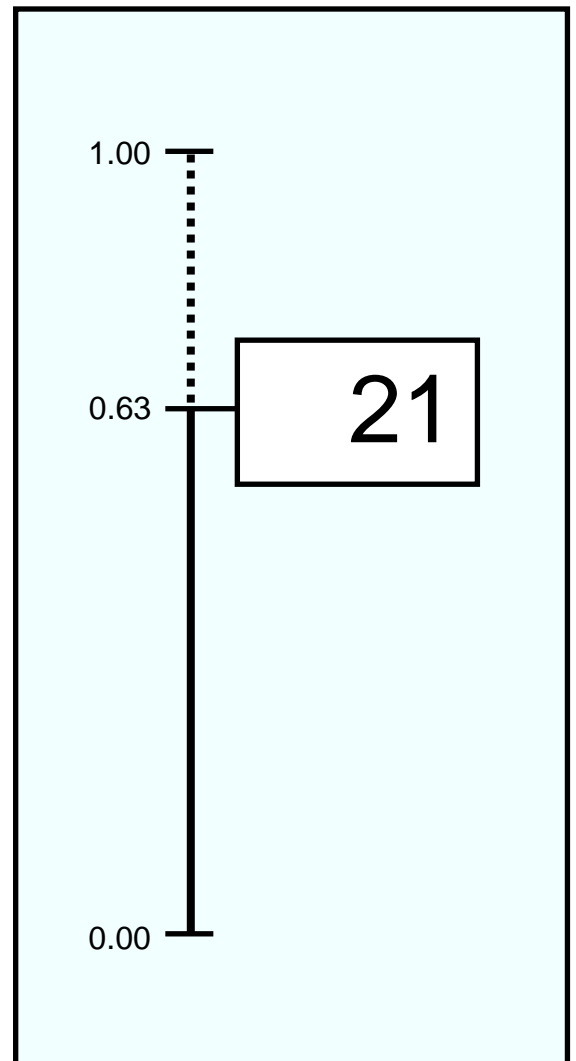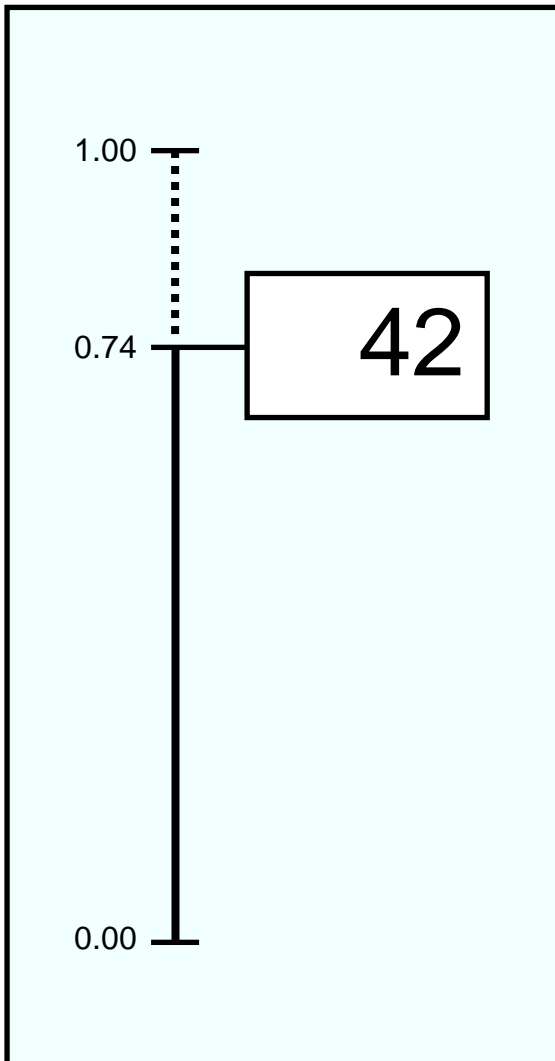
PRACTICE CHOICE 3.

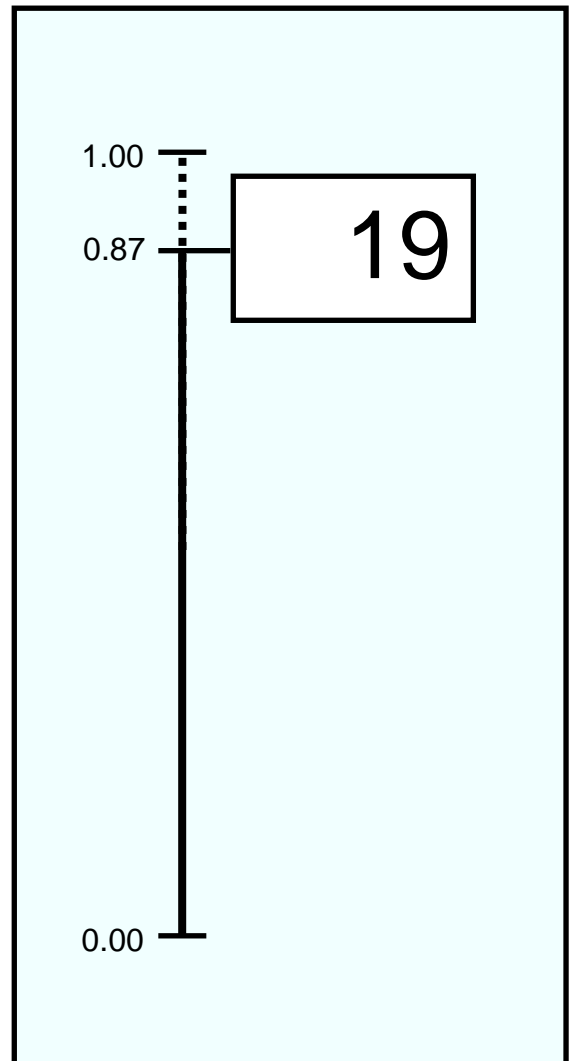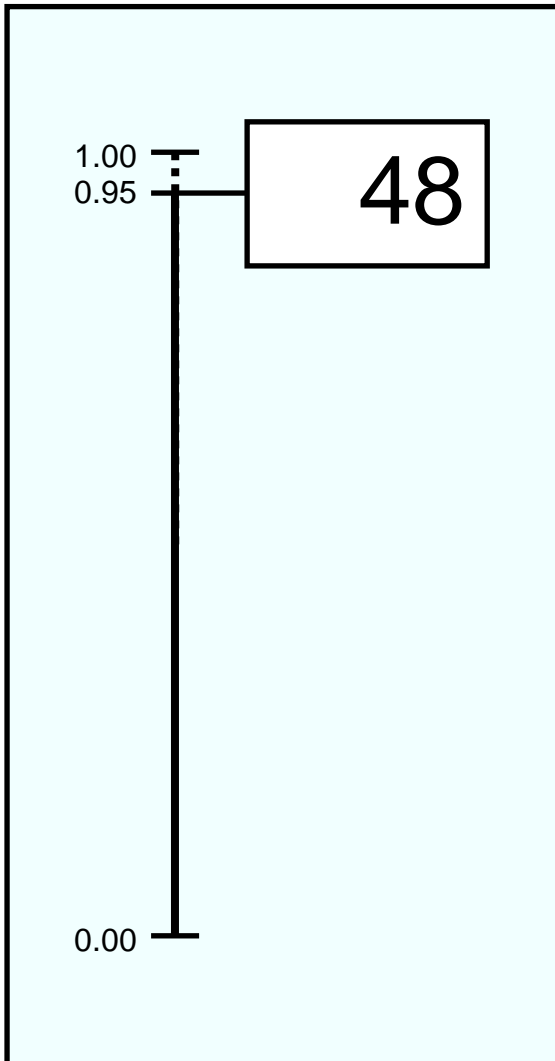You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.
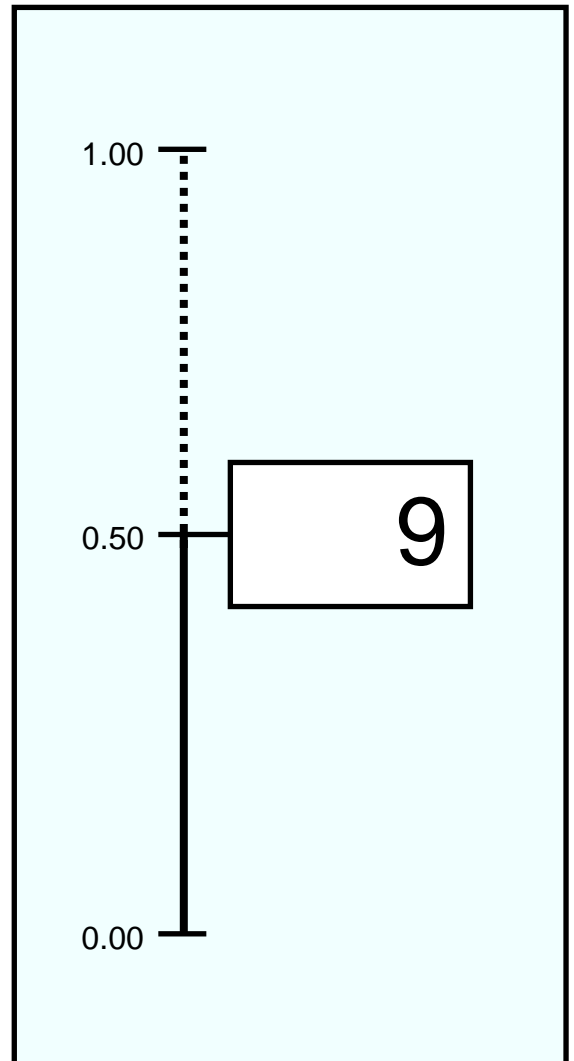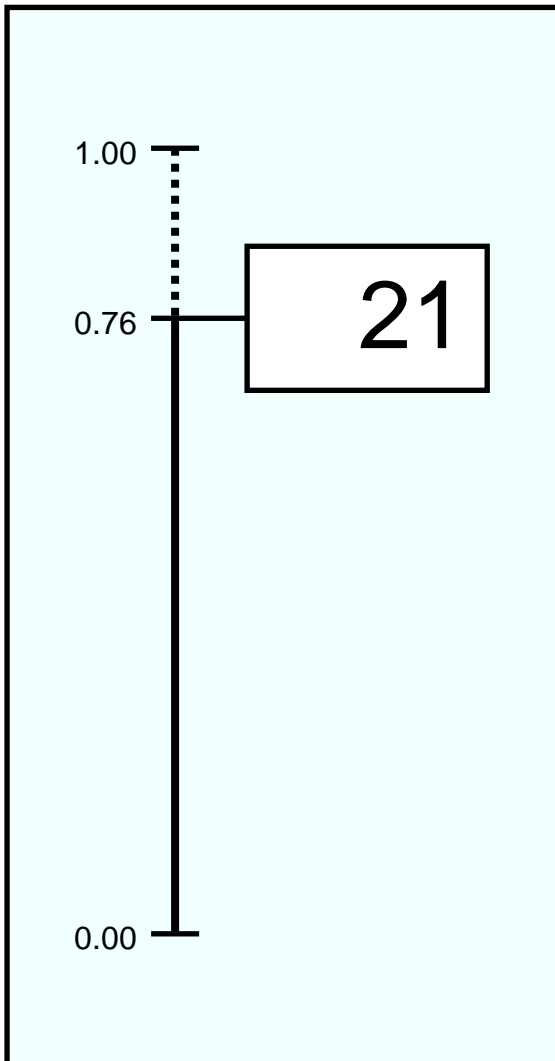
PRACTICE CHOICE 4.

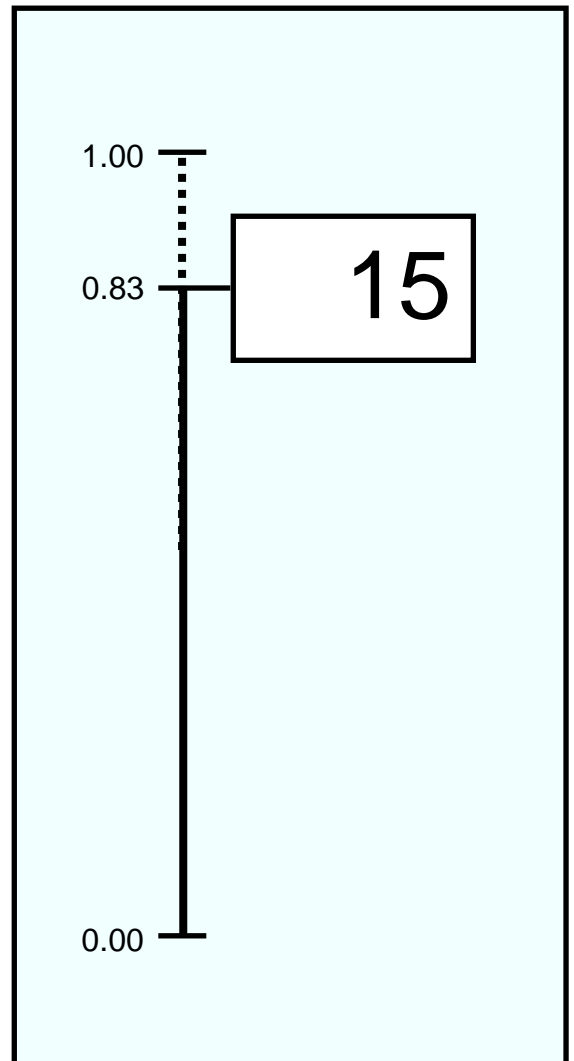You can offer treatment to only one of the two following groups.
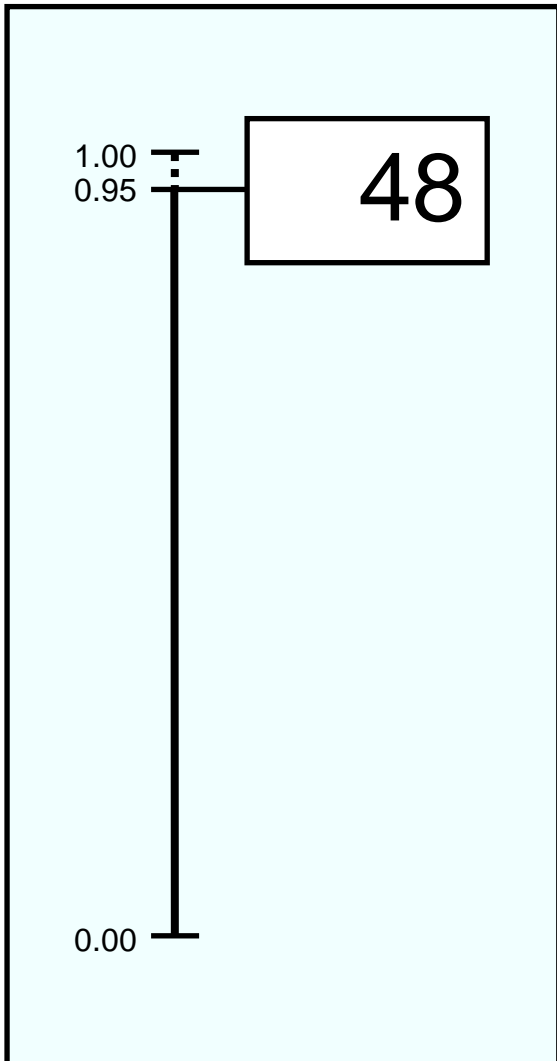
You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.
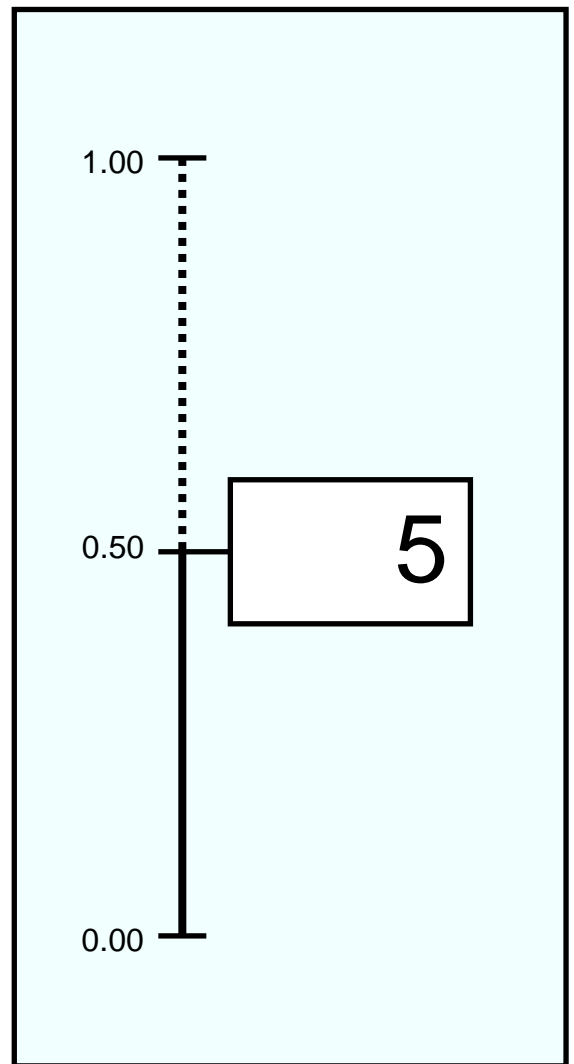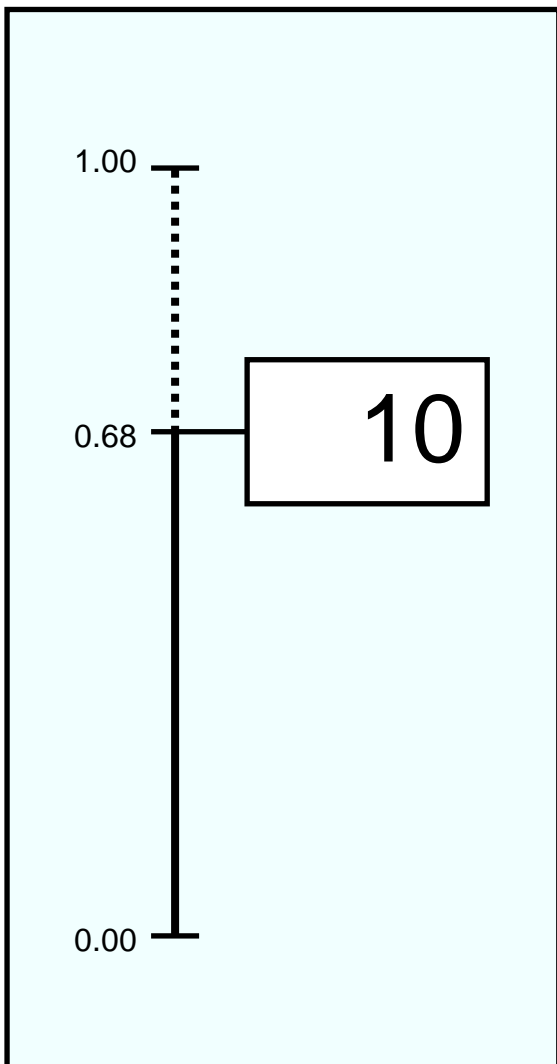
4. The questionnaire

We will now ask you to make forty-eight choices of the kind you've just practiced.

Some choices may be repeated.

You may take up to one minute for each choice and the explanation for your choice.

When you are done, please choose a medical charity from our list to determine where your donation of £ 5 will be sent.

Please remain seated if you are done before the others; when you are done, you are free to read material you have brought along or the magazines provided.

[A v B]

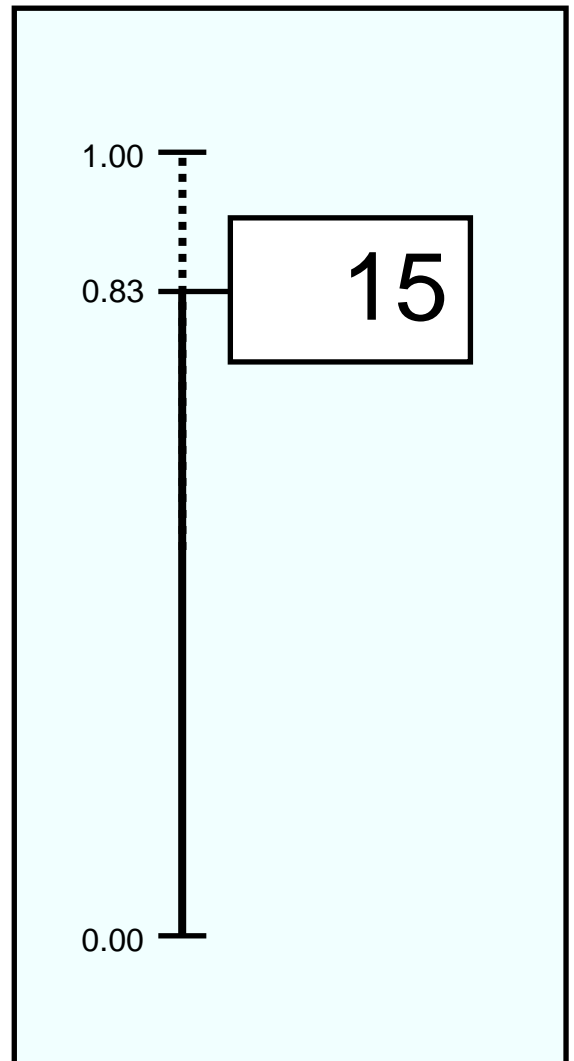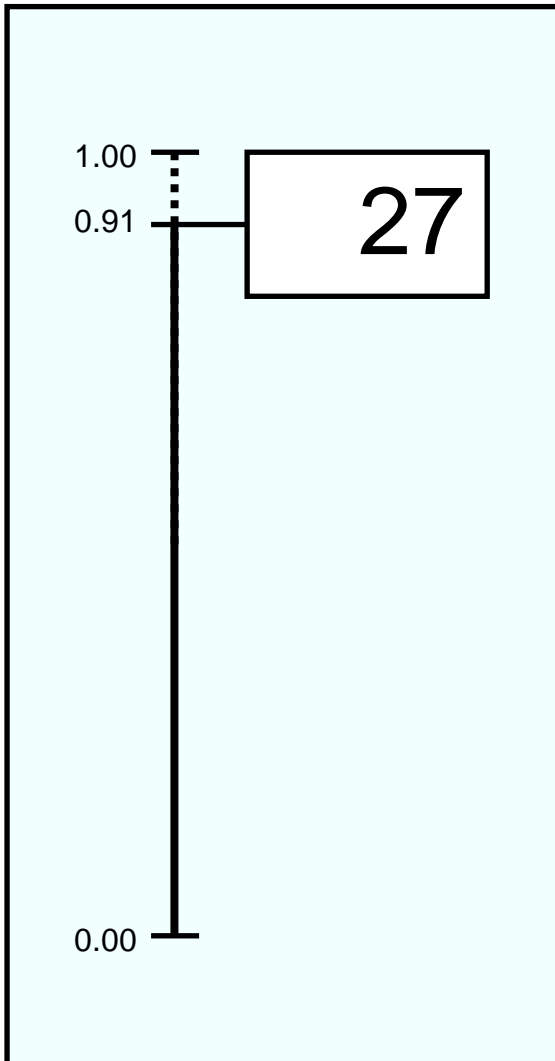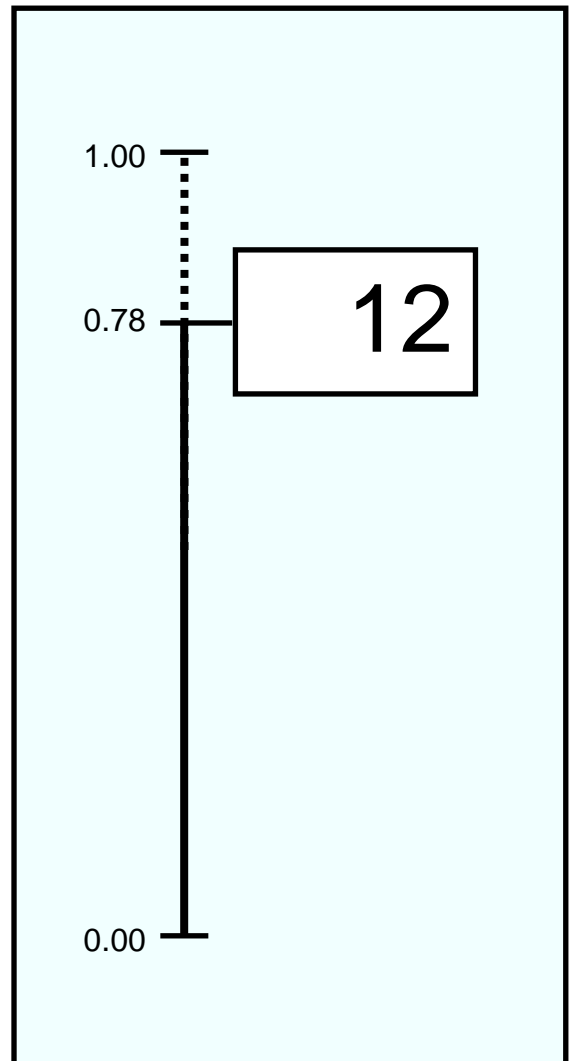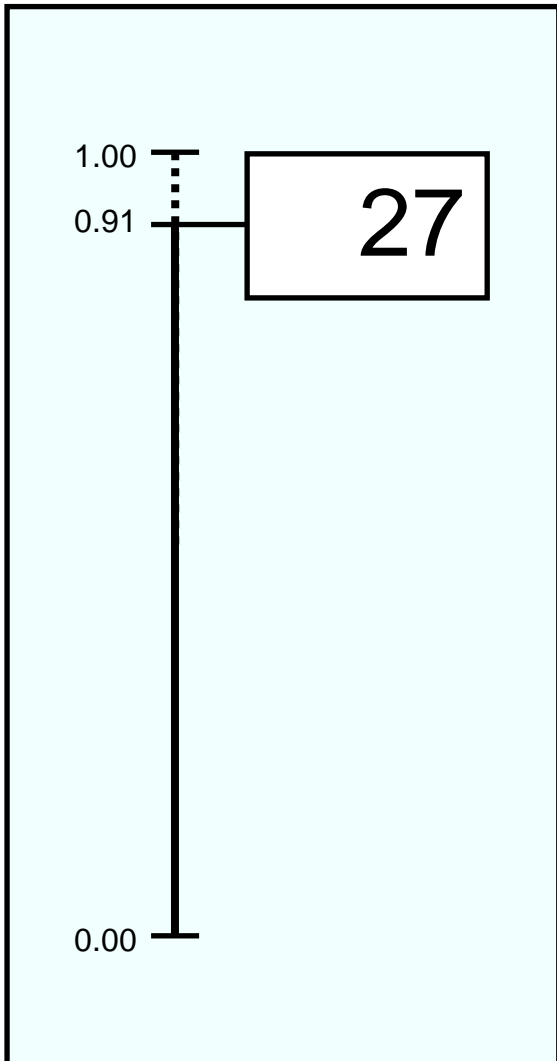You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.
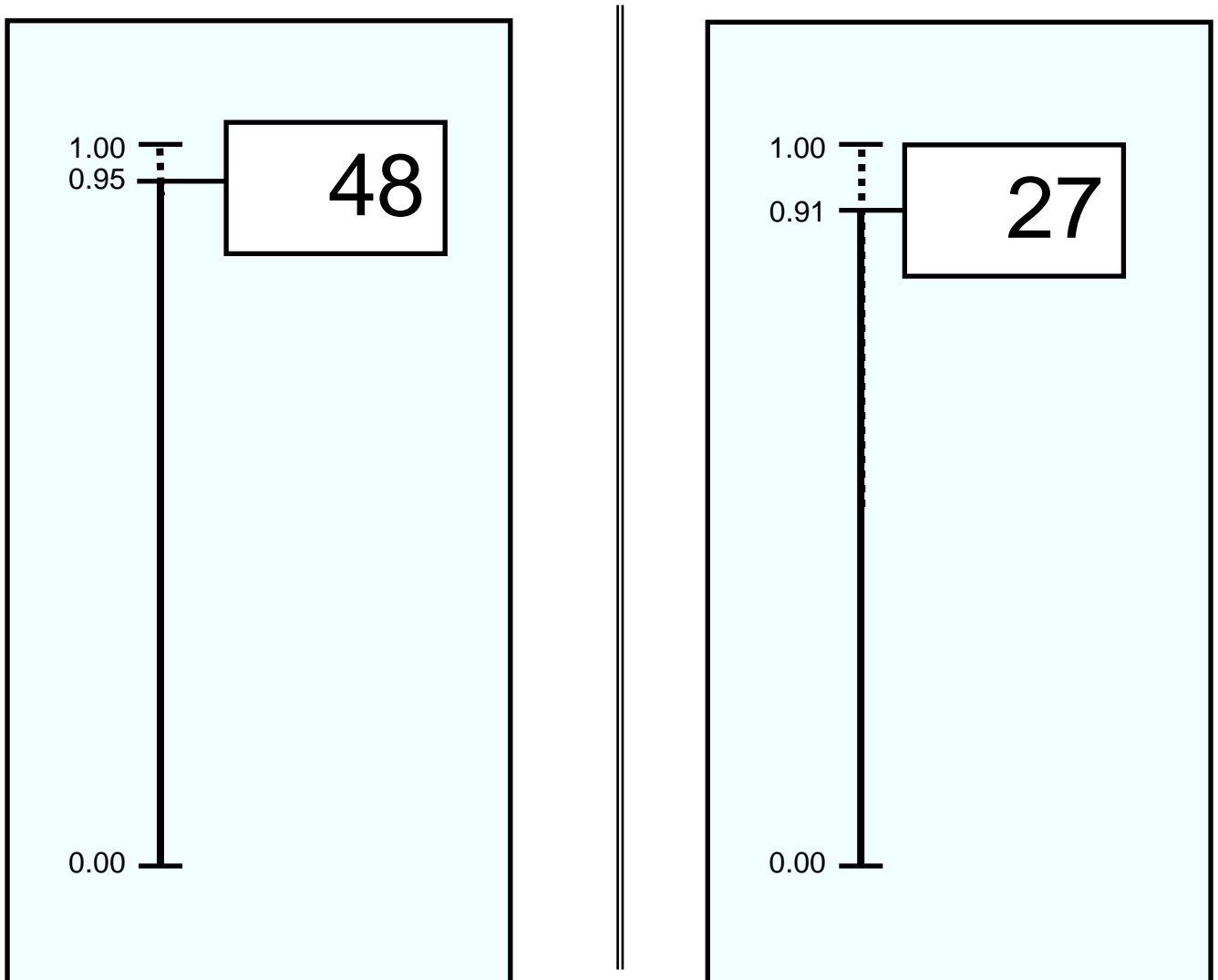
[After each choice, a grey semi-transparent screen would appear over the alternatives, with a text box in the middle, saying:

"you have chosen to move [number of people] from [numerically described health state] to full health rather than move [number of people] from [numerically described health state] to full health. Is this correct?" Followed by boxes with "yes" and "no".

If subjects clicked "no", they returned to the same choice. If they clicked "yes", their choice was recorded and they moved to a subsequent choice.

[B v C]

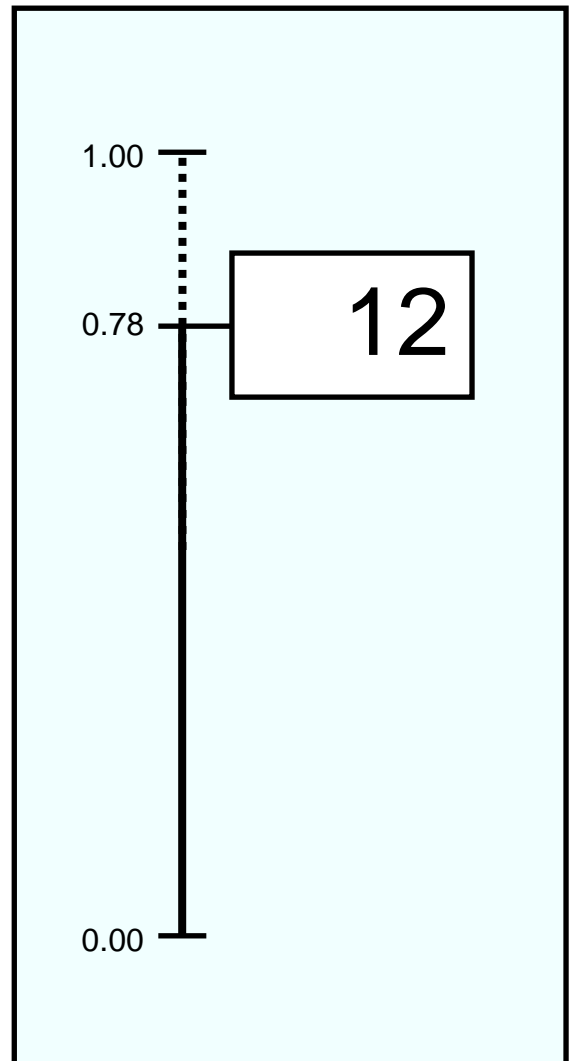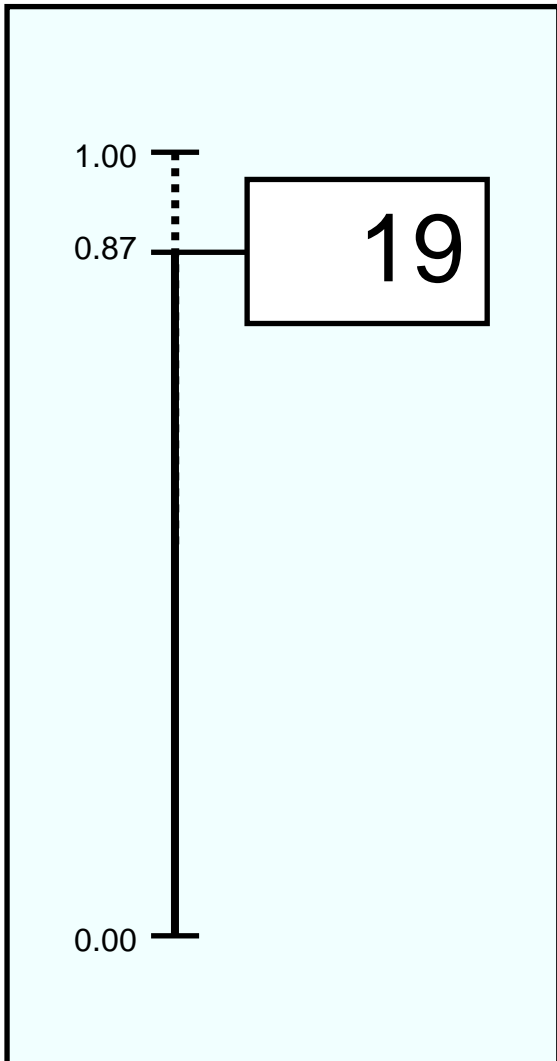You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.

[C v D]

You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.
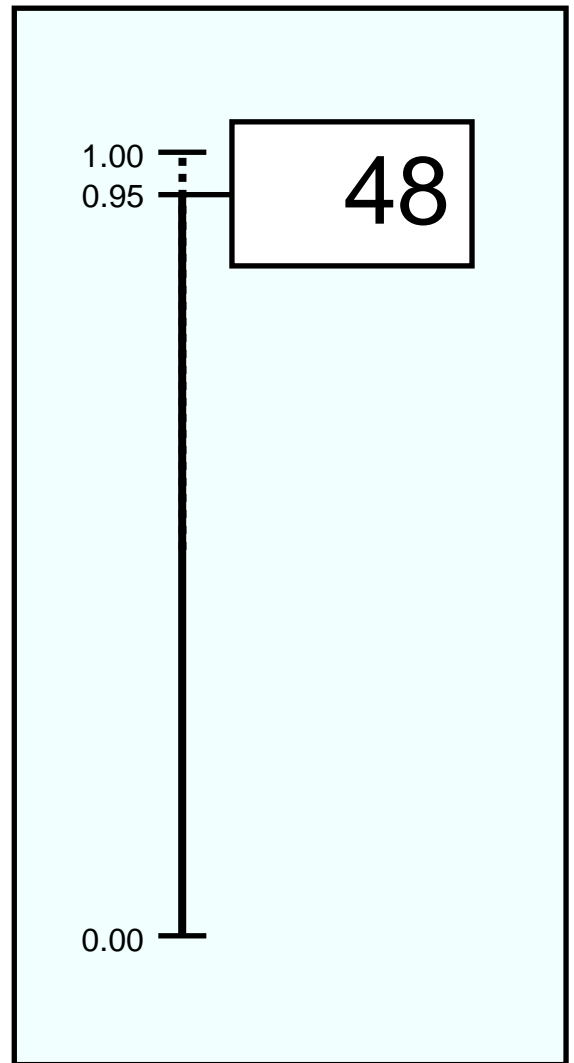

1.00

0.87

19

0.00

1.00

0.83

15

0.00
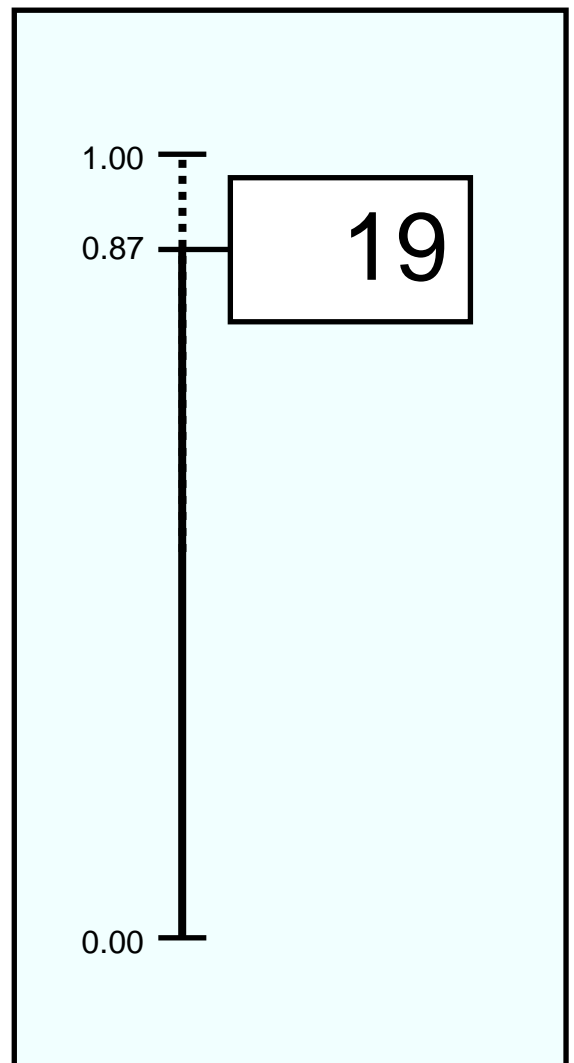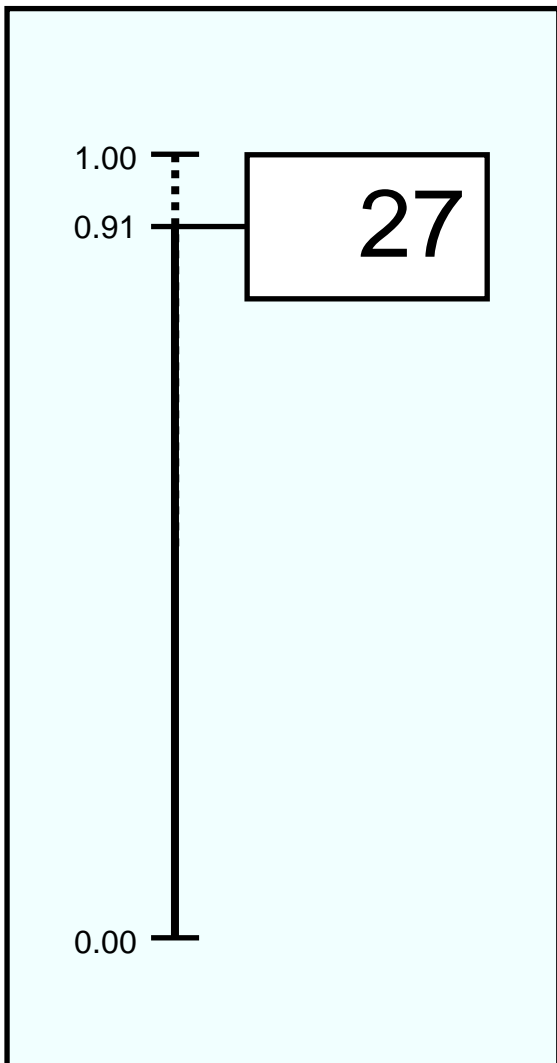
[D v E]

You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.
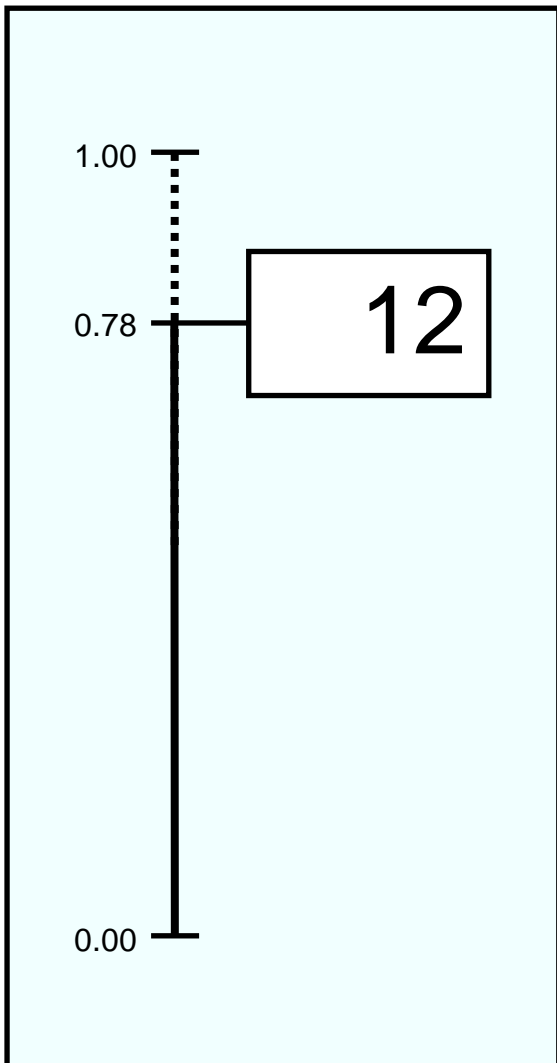
[A v C]

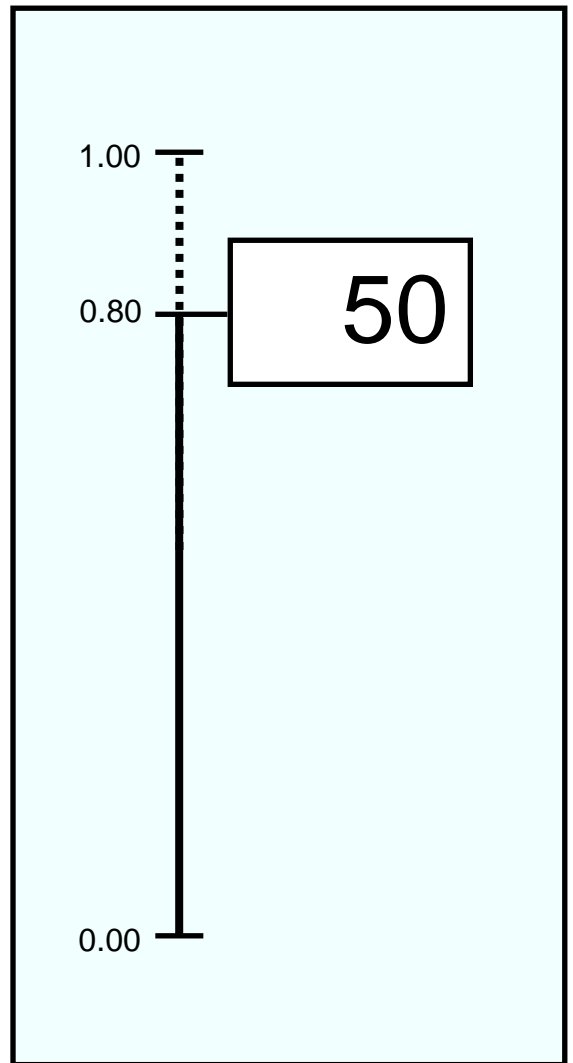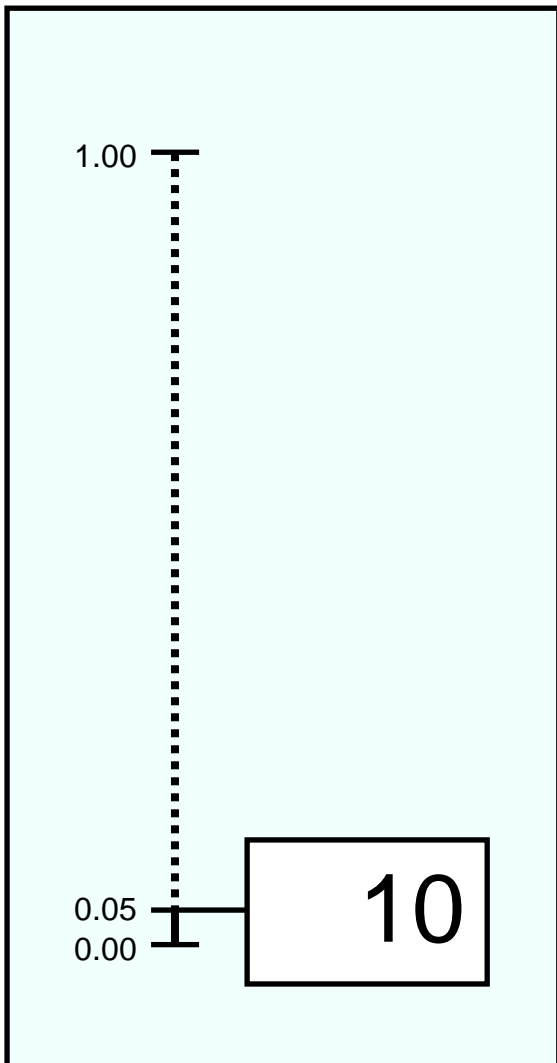You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.

[A v D]

You can offer treatment to only one of the two following groups.
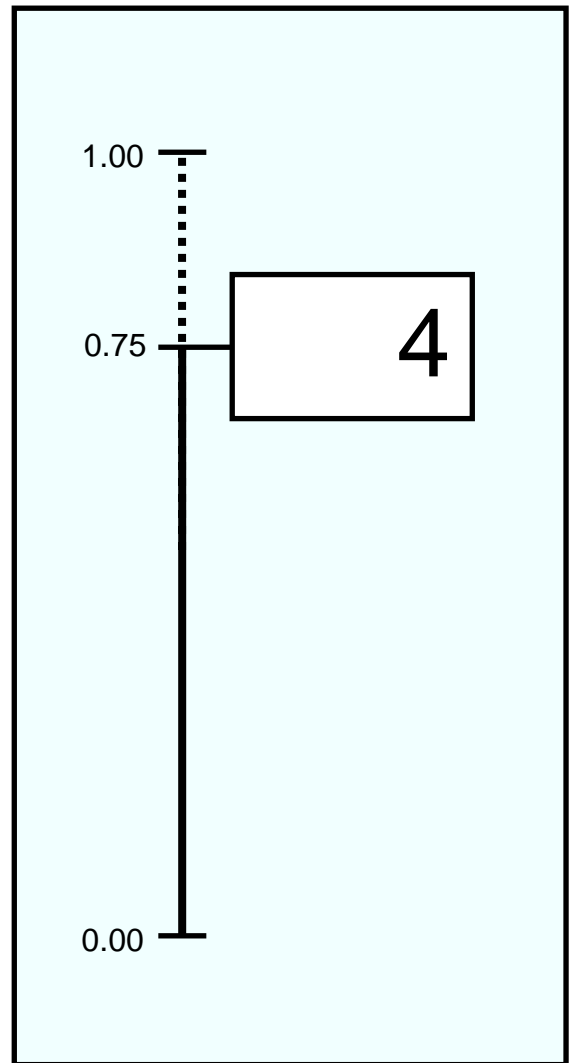
You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.

1.00
0.95
48

0.00

1.00
0.83
15

0.00

[B v D]

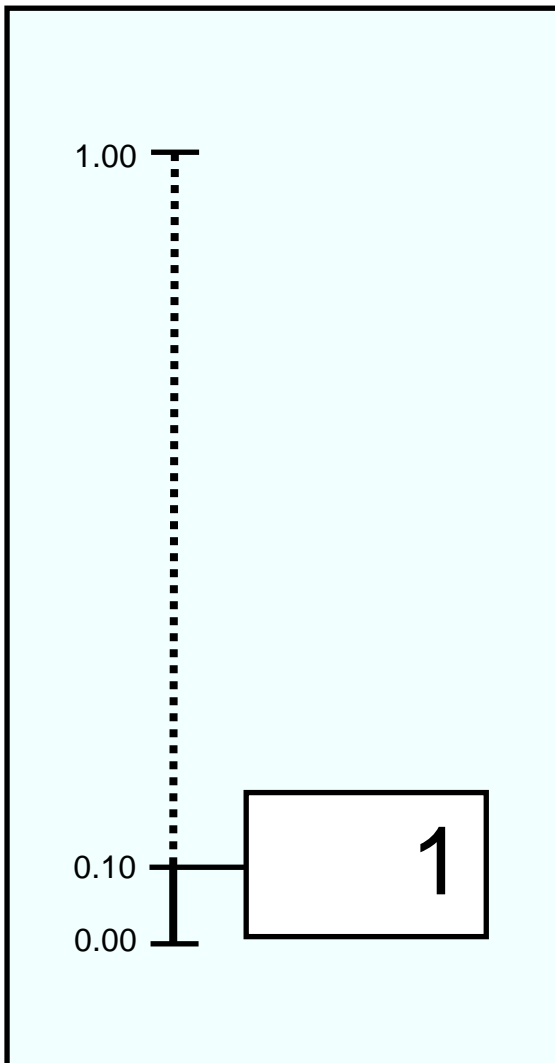You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.

1.00

0.91 [27]

0.00

1.00

0.83 [15]

0.00

[B v E]

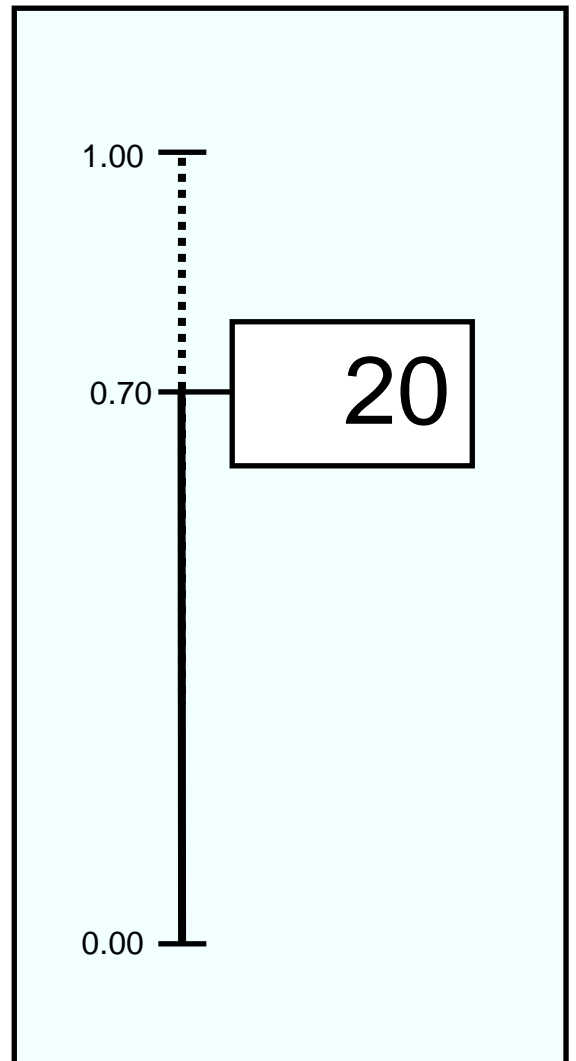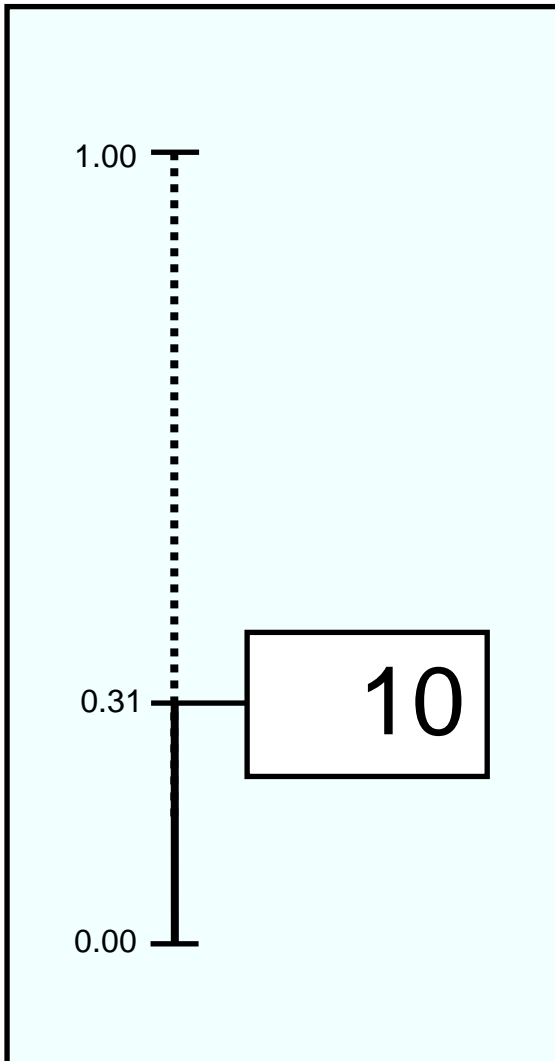You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.

[C v E]

You can offer treatment to only one of the two following groups.
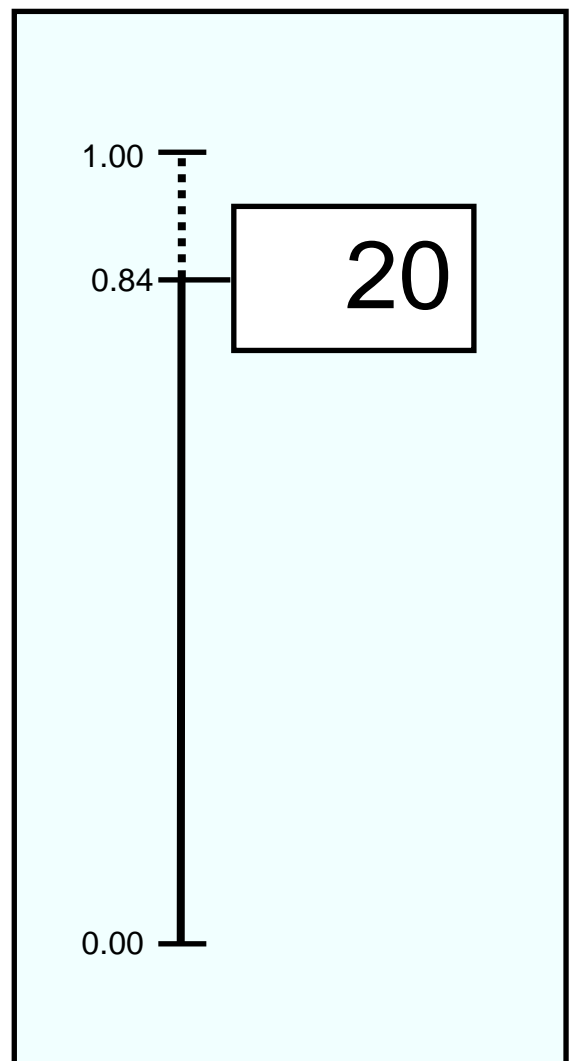
You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.

1.00	1.00
0.87 — 19	0.78 — 12
0.00	0.00

[A v E]

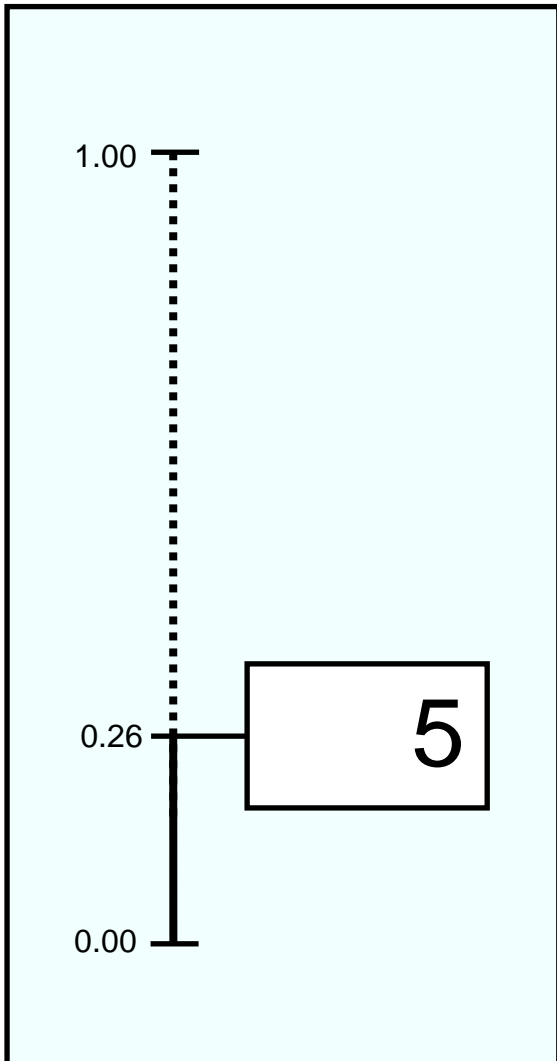You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.

[F v G]

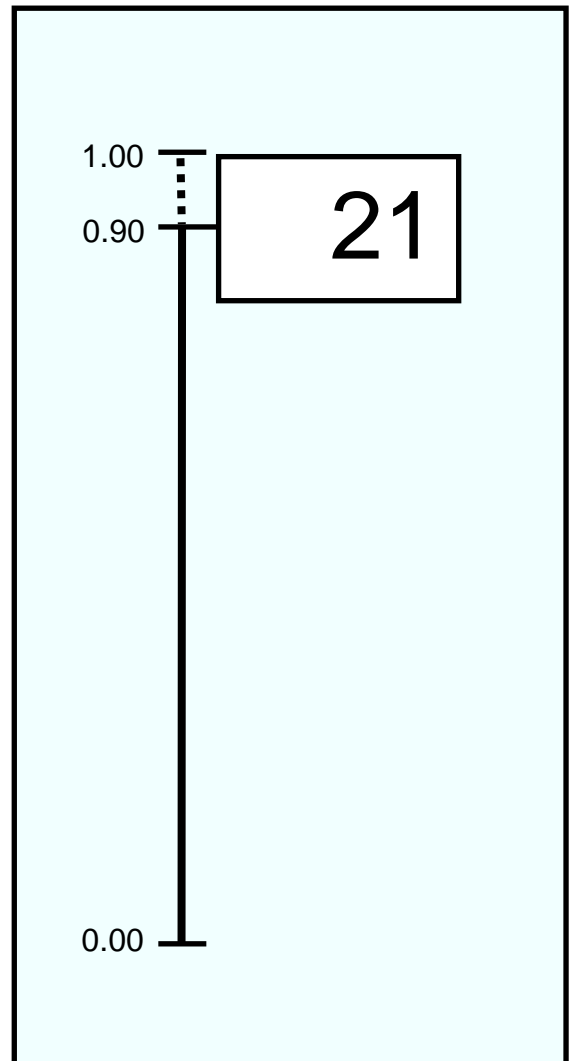You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.

[P v Q]

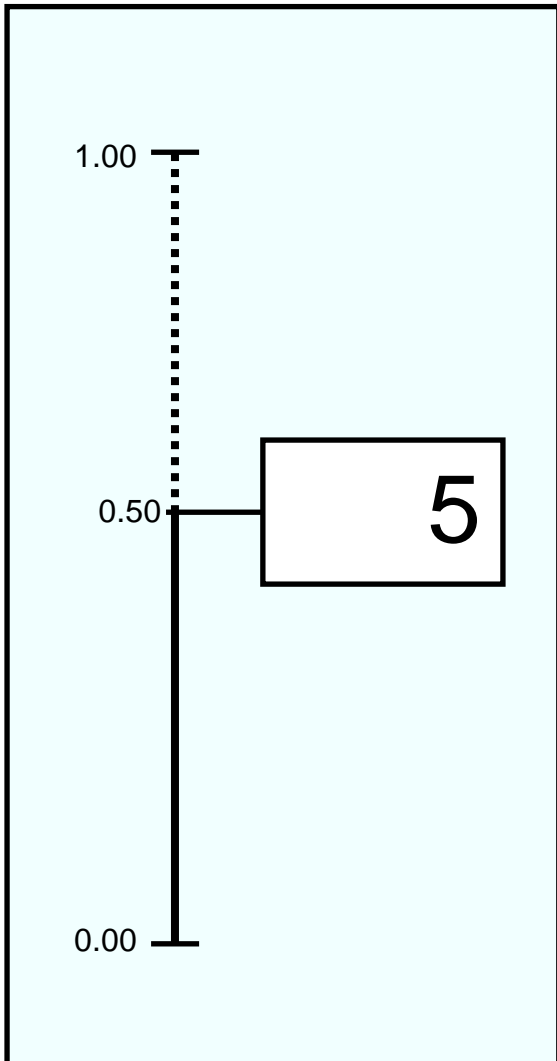You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.

[R v S]

You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.

[T v U]

You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.

You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.

[N v O]

You can offer treatment to only one of the two following groups.

You choose to treat a particular group by clicking on the block with the number of patients in that group and moving them up to full health.
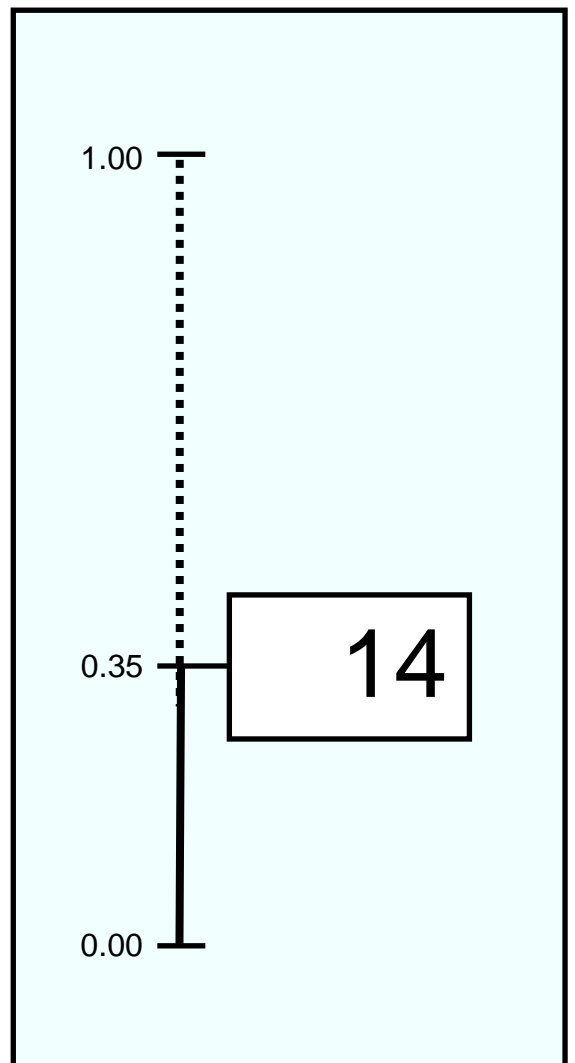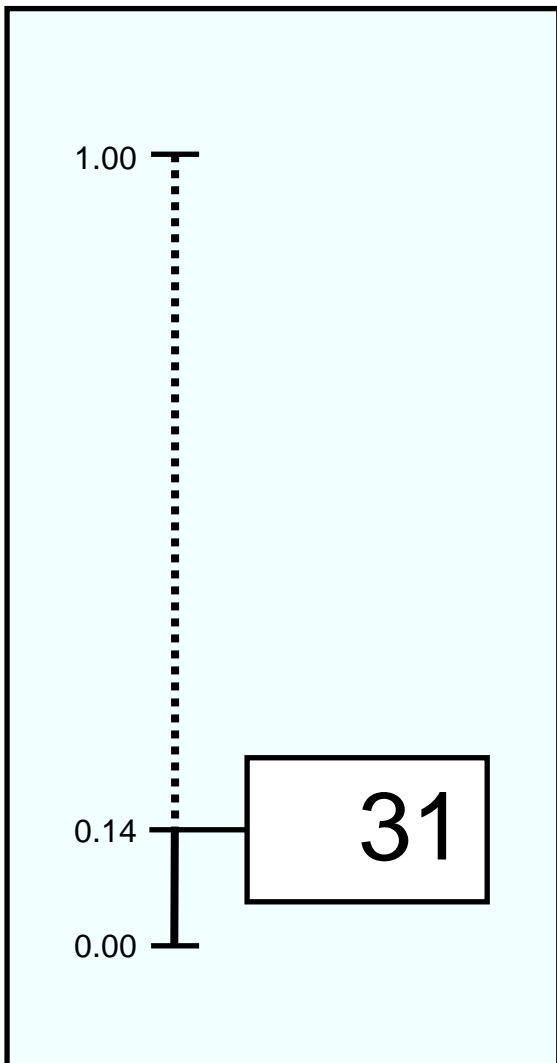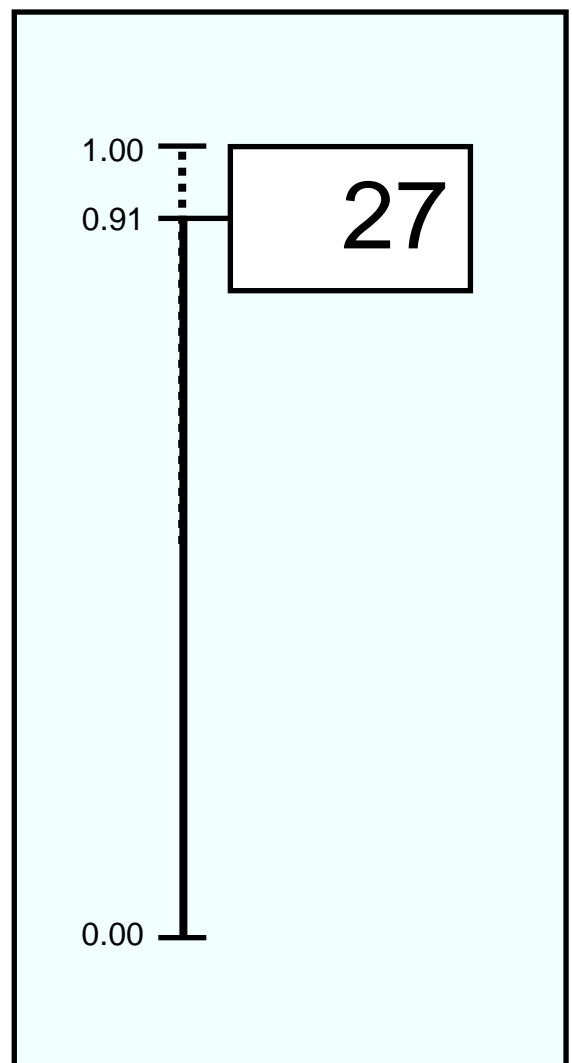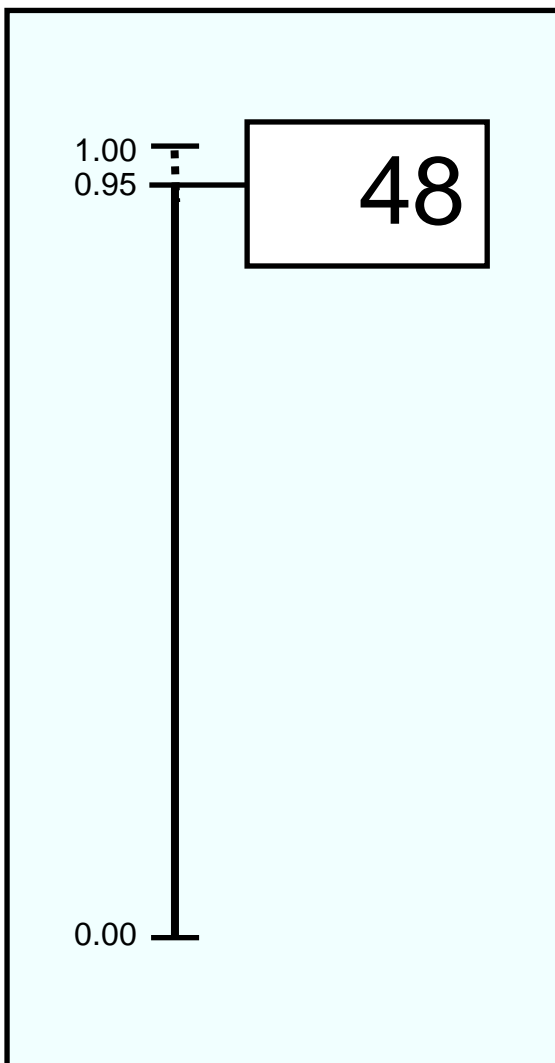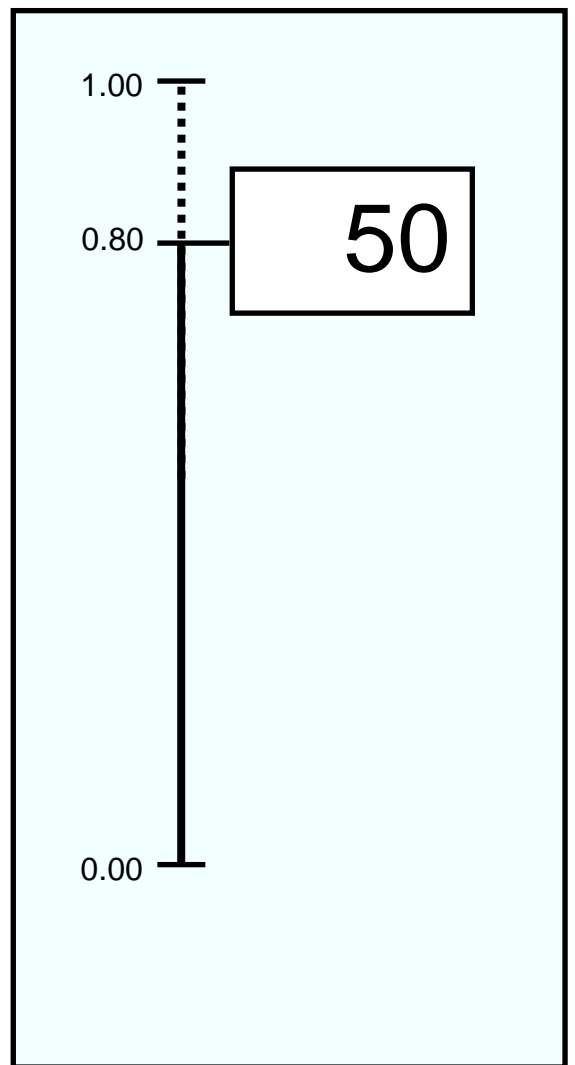
5. Explaining your choices

[A v B]

In this choice, you chose to move [number of people] from [level of well-being]. [This choice was also highlighted in the image below.]

Please indicate in the box below why you chose this way:

How confident were you of your choice:

1	2	3
(not confident)	(moderately confident)	(very confident)

1.00
0.95

48

1.00
0.91

27

0.00

0.00
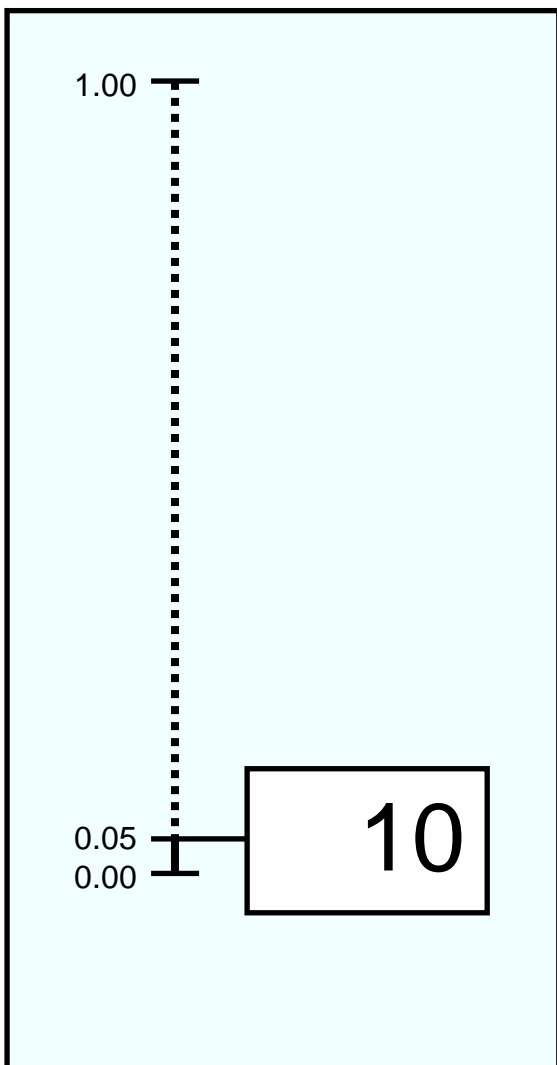
In this choice, you chose to move [number of people] from [level of well-being]. [This choice was also highlighted in the image below.]

Please indicate in the box below why you chose this way:

How confident were you of your choice:

1	2	3
(not confident)	(moderately confident)	(very confident)

1.00

0.05
0.00

10
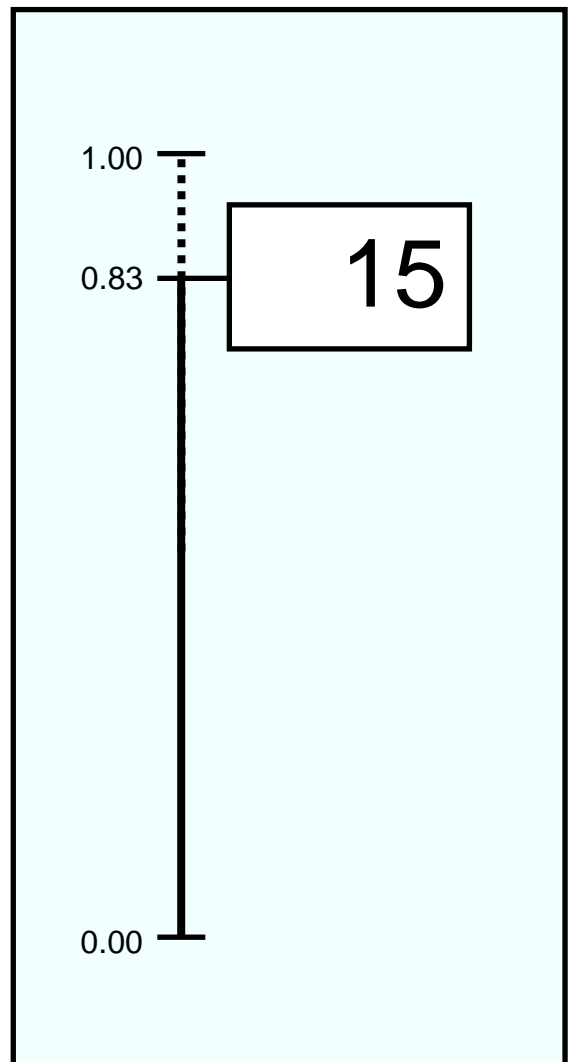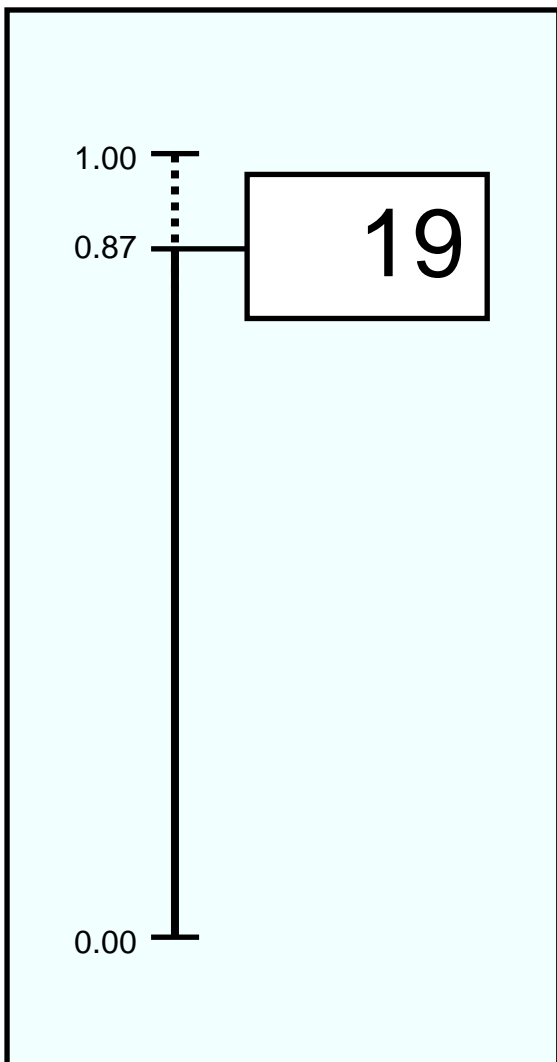
1.00

0.80

50

0.00

[C v D]

In this choice, you chose to move [number of people] from [level of well-being]. [This choice was also highlighted in the image below.]

Please indicate in the box below why you chose this way:

How confident were you of your choice:

1	2	3
(not confident)	(moderately confident)	(very confident)

1.00
0.87
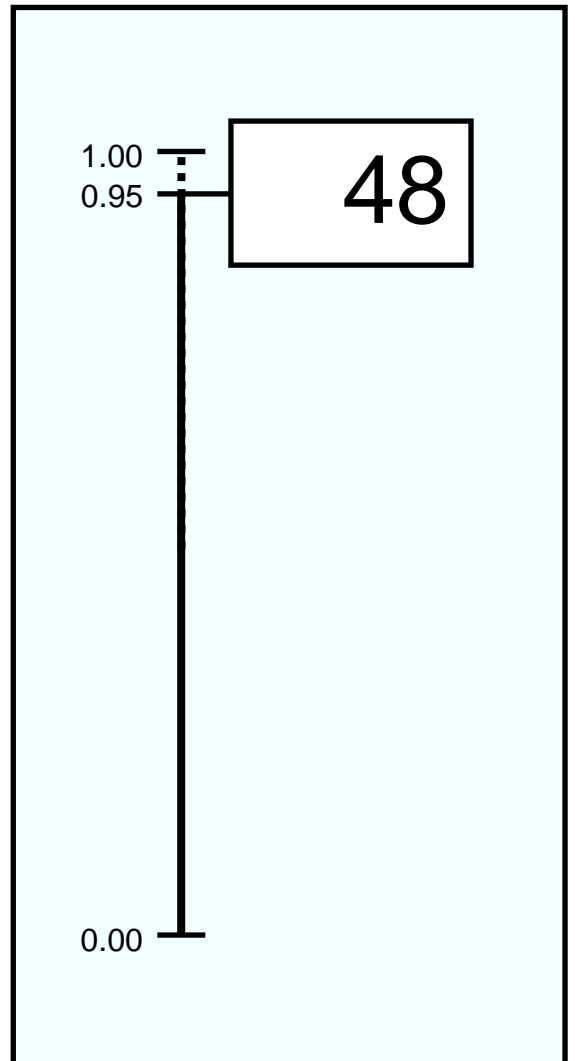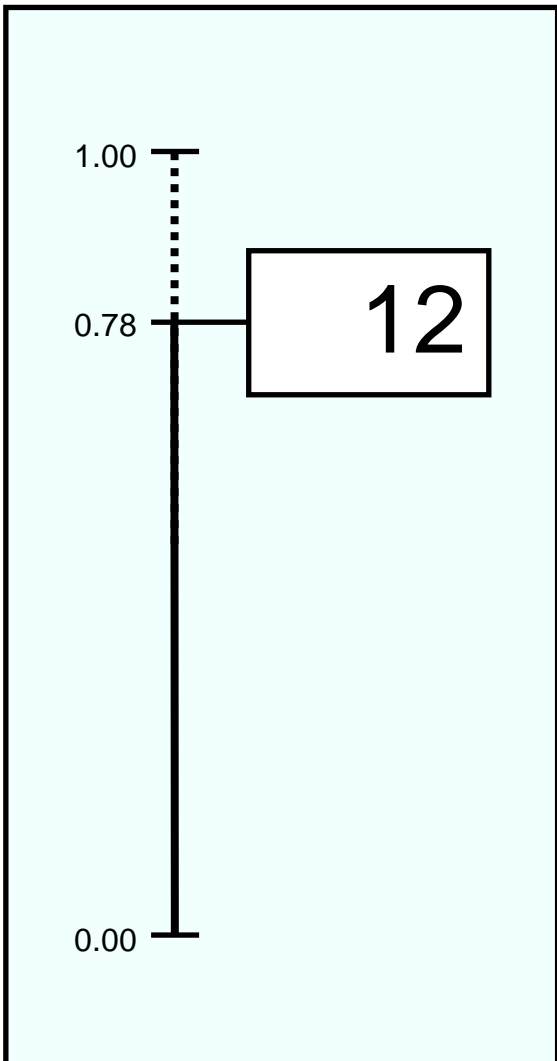19

0.00

1.00
0.83
15

0.00

[A v E]

In this choice, you chose to move [number of people] from [level of well-being]. [This choice was also highlighted in the image below.]

Please indicate in the box below why you chose this way:

How confident were you of your choice:

1	2	3
(not confident)	(moderately confident)	(very confident)

1.00

0.78 — **12**
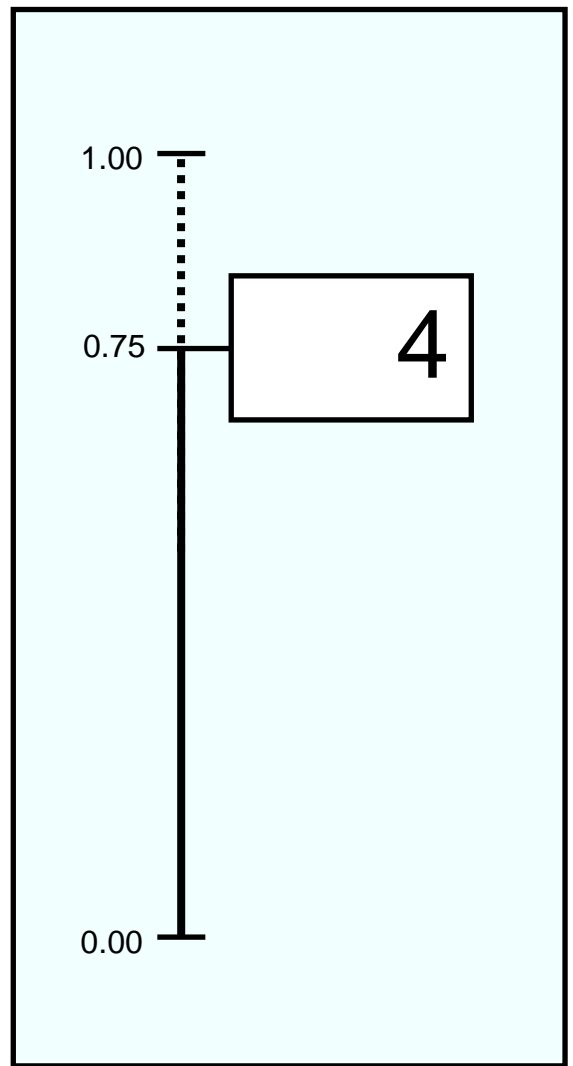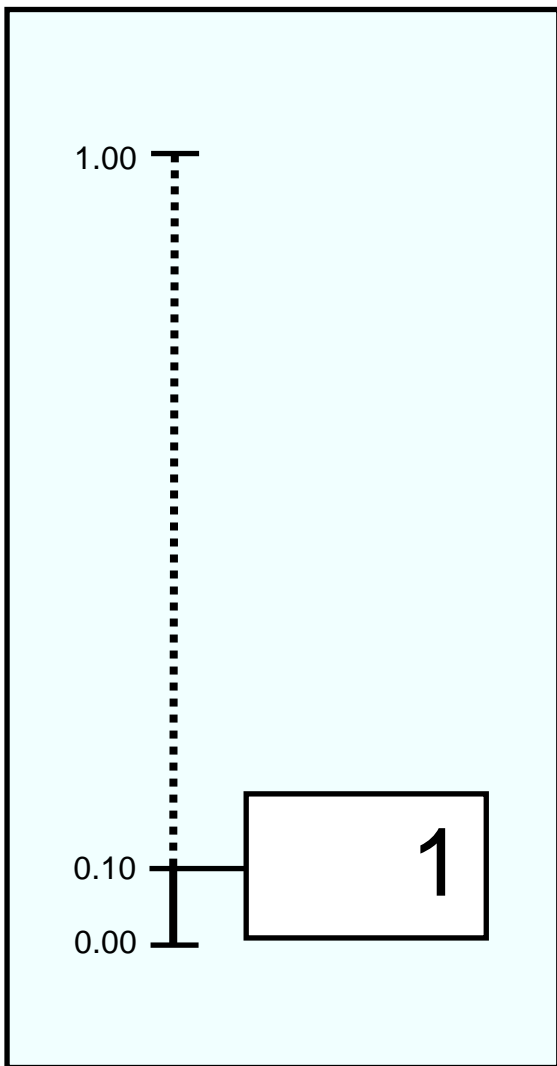
0.00

1.00
0.95 — **48**

0.00

[Q v P]

In this choice, you chose to move [number of people] from [level of well-being]. [This choice was also highlighted in the image below.]

Please indicate in the box below why you chose this way:

How confident were you of your choice:

1	2	3
(not confident)	(moderately confident)	(very confident)

1.00

0.10

0.00

1

1.00

0.75

0.00

4

[Subjects were then asked their gender, whether they were a student and their field of study if so, their current and past health status, whether they had experienced any problems in doing the survey, and which charity they wanted to direct their £5 to.]