JDRF Artificial Pancreas Project Randomized Clinical Trial
Treatment Related Utilities Survey- Subject Version
tblASurveyTxS

Patient ID: ____ ____ ____ ____ ____ ____ **PtID**

TREATMENT-RELATED UTILITIES

Throughout this study we have evaluated your quality of life using time tradeoff questions. It is important for us to understand how the different testing choices being studied in this trial might affect your quality of life. We will again ask you to make some imaginary choices. Again, you may stop if these questions make you uncomfortable.

Use the "Time frame" that corresponds to the age of the patient to select the correct the hierarchical diagrams beginning on page 3. The hierarchical diagram must be used in conjunction with every question below.

Age of patient	Time frame*
8-15	50
15-25	40
25-35	30
>35	20

TimeFrameS

The first question is simply a choice between the full time in current health vs. the full time in perfect health. If subject chooses full time in current health then discuss answer, determine if subject intends answer and go to next question. All questions are a choice between 1) "X years in perfect health" 2) "Y years with condition" or 3) "No preference, because these seem about the same". Every questions must be asked six different times using the hierarchical diagram flow or until the patient chooses "No preference".

If this section is unclear please see example at the end of this document.

TREATMENT-RELATED UTILITIES

Look at the chart below. The chart describes the differences in life experience with continuous glucose monitoring and life with traditional self monitoring of blood glucose. There are differences in the experience with the testing device, the period of time spent in different sugar levels, and your awareness of your sugar levels.

	Continuous Glucose Monitoring	Traditional Self Monitoring of Blood Glucose
Experience with the device	You wear a real-time continuous glucose monitor which includes a small probe inserted into your skin.	You prick your finger *4-8* times per day in order to measure your pre-meal or post-meal glucose levels.
	You replace the monitor probe every 3-7 days	

	You still use traditional self monitoring to determine insulin doses	
Time spent in a good blood sugar range (70-180 mg/dL)	14.5 hours	12.5 hours
Sugar level awareness	You are notified of low and high blood sugar levels by an alarm throughout the day, including when you are sleeping.	You are unaware of low and high blood sugar levels throughout the day and night without using the glucose monitor.

Interviewer: The time tradeoff questions begin at this point.

Continuous Glucose Monitor

Now I am going to ask you an imaginary question. Imagine you had the following choice, which would you prefer?

- ☐ ____ *years* living with the continuous glucose monitor
- ☐ ____ *years* in perfect health without diabetes
- ☐ No preference, because these seem about the same to you

TxChoiceCGM1S, TxChoiceCGM2S, TxChoiceCGM3S, TxChoiceCGM4S, TxChoiceCGM5S, TxChoiceCGM6S

☐ Subject refuses to continue 'continuous glucose monitoring' question **RefContCGMS**

Self Monitoring Of Blood Glucose

Now I am going to ask you an imaginary question. Imagine you had the following choice, which would you prefer?

- ☐ ____ *years* living with the traditional self monitoring of blood glucose
- ☐ ____ *years* in perfect health without diabetes
- ☐ No preference, because these seem about the same to you

TxChoicesSMBG1S, TxChoicesSMBG2S, TxChoicesSMBG3S, TxChoicesSMBG4S, TxChoicesSMBG5S, TxChoicesSMBG6S

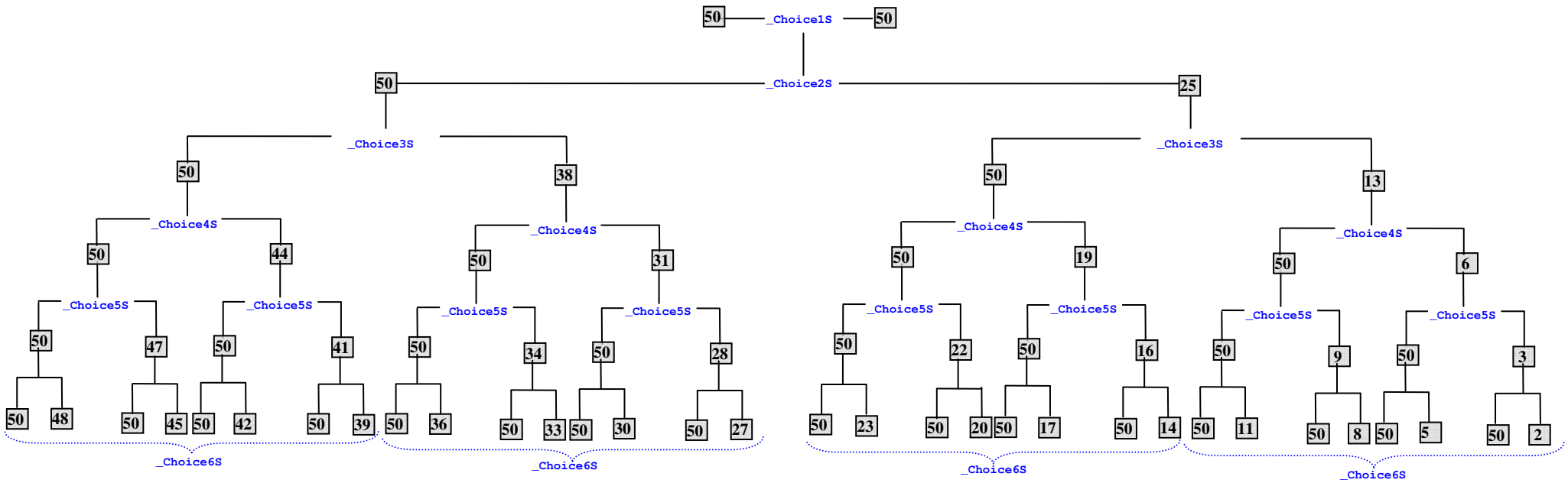
☐ Subject refuses to continue 'traditional self monitoring of blood glucose' question **RefContSMBGS**

☐ Subject refuses to continue survey **RefContS**

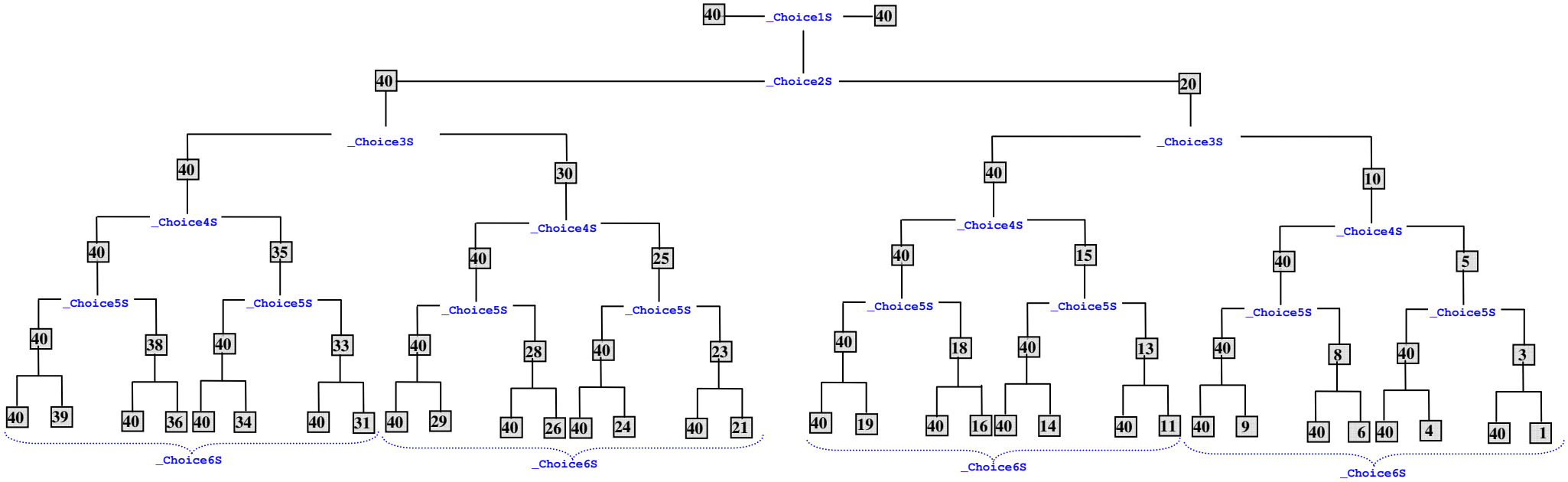
Interviewer: If subject does not choose living in perfect health then discuss answer, determine if subject intends answer and go to next question.

Hierarchical Diagrams

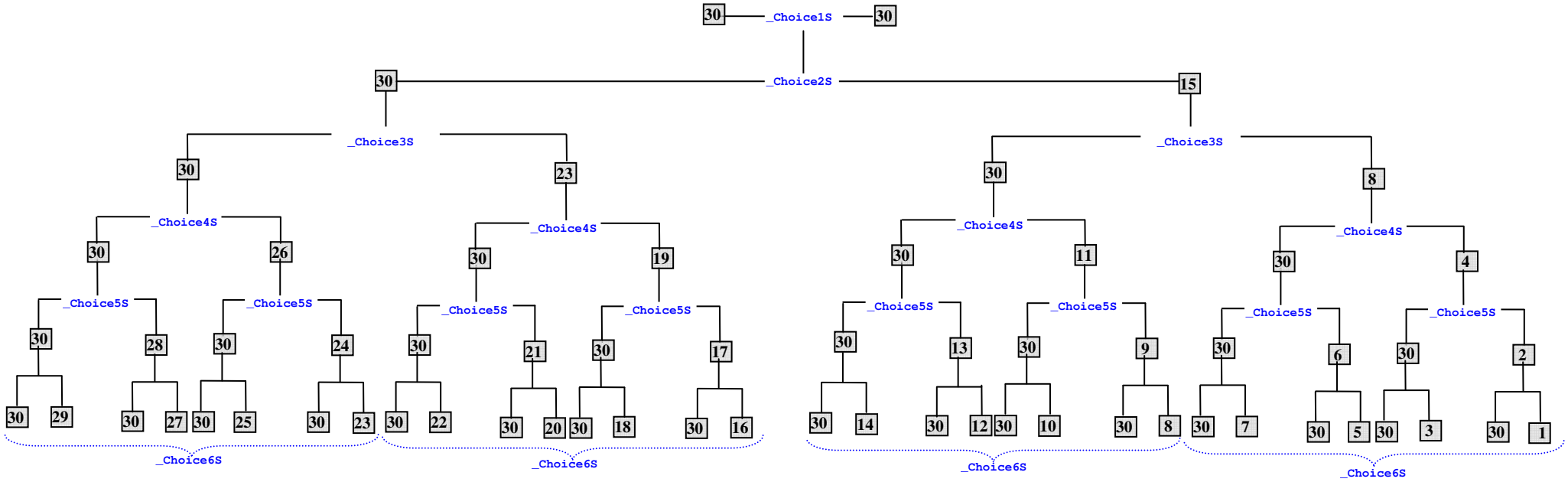
Time Frame = 50



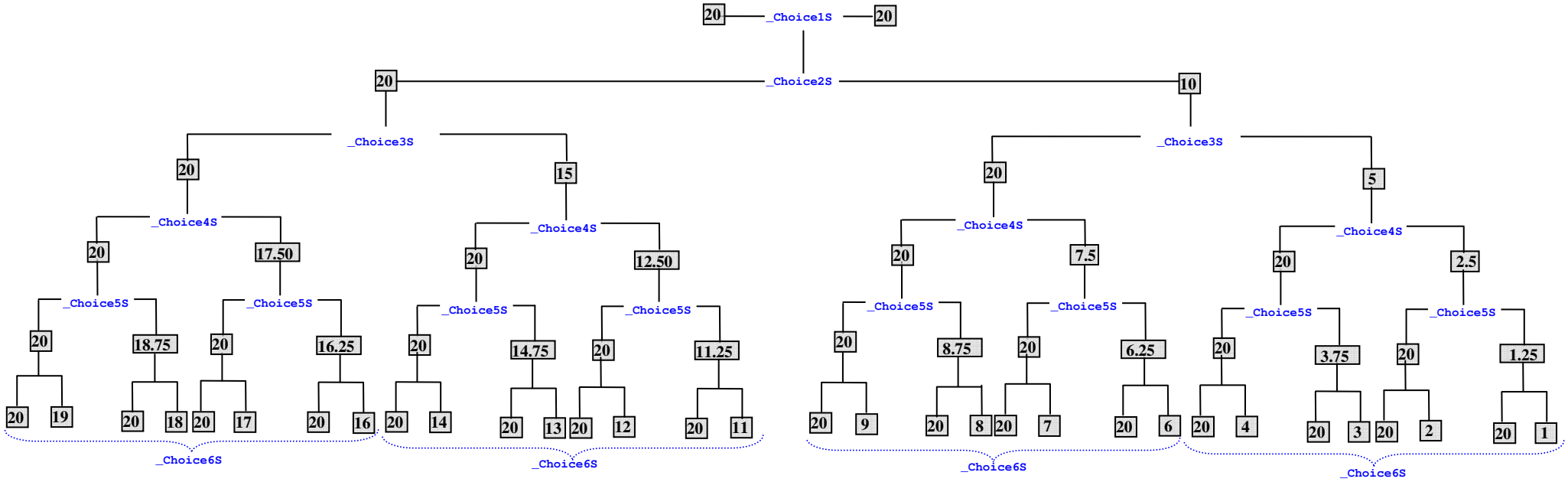
Time Frame = 40



Time Frame = 30



Time Frame = 20



Fictitious example for the Continuous Glucose Monitor section:

An investigator is asking John this survey. John is a 15 years old boy which puts his "**Time Frame**" equal to **50**. The investigator asks John the following question using the hierarchical diagram flow to plot the number of years for each question.

Question 1: Imagine your have the following choice, which would you prefer; **50 years living with the continuous glucose monitor or 50 years in perfect health? _Choice1S**
Answer: **50 years in perfect health**

Question 2: Which would you prefer; **50 years living with the continuous glucose monitor or 25 years in perfect health? _Choice2S**
Answer: **50 years living with the continuous glucose monitor**

Question 3: Which would you prefer; **50 years living with the continuous glucose monitor or 38 years in perfect health? _Choice3S**
Answer: **38 years in perfect health**

Question 4: Which would you prefer; **50 years living with the continuous glucose monitor or 31 years in perfect health? _Choice4S**
Answer: **31 years in perfect health**

Question 5: Which would you prefer; **50 years living with the continuous glucose monitor or 28 years in perfect health? _Choice5S**
Answer: **50 years living with the continuous glucose monitor**

Question 6: Which would you prefer; **50 years living with the continuous glucose monitor or 30 years in perfect health? _Choice6S**
Answer: **30 years in perfect health**

The red boxes represent John's choices for this question. Please note that if John had chosen "No Preference" at any point this section would be over.
The same approach must be applied to all questions in this survey.