Attachment 3: Overview of Experimental Design

Each respondent will be asked to compare 2 hypothetical CRC tests, “A” and “B” and to state whether they would choose “A” or “B.” This process will be repeated 5 times for each respondent (i.e., each respondent will be asked to make 5 choices). The attributes of test “A” and test “B” will vary for each hypothetical scenario according a D-efficient, fractional factorial, orthogonal design created using NGene (ChoiceMetrics, 2012).

Each group of 5 conjoint questions is called a block. The study design is based on 10 blocks. Each block will be viewed by approximately 200 respondents. Each respondent will be randomly assigned to a block.

Exhibit A lists the attributes of the tests and the possible levels each attribute can take on using the full text to describe the attribute levels that will appear in the survey (see Attachment 2 for survey text and screen shots). Exhibit B shows the ten blocks of 5 questions (using abbreviated descriptions of the levels). The first block of questions is also contained in the screen shots in Attachment 2.

The first two attributes, “What can the test find?” and “How often do you take the test?”, are presented as separate rows in the questions to make it easier to read, however in the experimental design they are combined into 1 attribute with 3 levels:

- Some colorectal cancer (50% - 70%) / Very few pre-cancerous polyps (10% - 25%) / Once every year
- Some colorectal cancer (50% - 70%) / Some pre-cancerous polyps (50% - 70%) / Once every 5 years
- Most colorectal cancer (90% to 95%) / Most pre-cancerous polyps (90% to 95%) / Once every 10 years

Exhibit A. Summary of Attributes and Levels (in abbreviated form)	
Attributes	**Levels**
What can the test find?	• Some colorectal cancer (50% - 70%) / Very few pre-cancerous polyps (10% - 25%) • Some colorectal cancer (50% - 70%) / Some pre-cancerous polyps (50% - 70%) • Most colorectal cancer (90% to 95%) / Most pre-cancerous polyps (90% to 95%)
How often do you take the test?	• Once every year • Once every 5 years • Once every 10 years
Can the test remove cancer and polyps?	• Yes • No
Preparation before the test	• No preparation • 2 days diet restrictions • 2 days diet restrictions and laxative use
Discomfort and activity limitations during and after the test	• No pain or discomfort during the test. / All activities as usual after the test. • Discomfort like intense cramps during the test. / All activities as usual after the test. • During test, **sedative** so no discomfort / After test, no driving and limited activity rest of day
Out of pocket cost to you per test	• $0 (no cost to you) • $10 • $50 • $200 • $500

Exhibit B. Blocks

Block 1

	Choice 1		Choice 2		Choice 3		Choice 4		Choice 5	
	Test A	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**
What can the test find?	Some cancer, very few polyps	Most cancer, most polyps	Most cancer, most polyps	Some cancer, some polyps	Some cancer, very few polyps	Some cancer, some polyps	Most cancer, most polyps	Some cancer, some polyps	Some cancer, very few polyps	Most cancer, most polyps
How often should you get the test?	Once per year	Every 10 years	Every 10 years	Every 5 years	Once per year	Every 5 years	Every 10 years	Every 5 years	Once per year	Every 10 years
Can the test remove cancer and polyps?	Yes	No	No	No	No	No	No	Yes	Yes	No
Preparation before the test	Diet restrictions and laxative use	Diet restrictions and laxative use	No preparation	Diet restrictions and laxative use	Diet restrictions	Diet restrictions	No preparation	No preparation	Diet restrictions	No preparation
Discomfort and activity limitations during and after the test	Sedative for test, no driving and limited activity	None	None	Sedative for test, no driving and limited activity	Discomfort like cramps, all activities after test	None	Discomfort like cramps, all activities after test	Sedative for test, no driving and limited activity	Discomfort like cramps, all activities after test	None
Out-of-pocket cost to you	$0 (no cost to you)	$200	$200	$0 (no cost to you)	$50	$200	$200	$500	$500	$200
Which test would you choose?										

Block 2

	Choice 1		Choice 2		Choice 3		Choice 4		Choice 5	
	Test A	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**
What can the test find?	Some cancer, very few polyps	Most cancer, most polyps	Some cancer, some polyps	Some cancer, very few polyps	Some cancer, some polyps	Some cancer, very few polyps	Most cancer, most polyps	Some cancer, some polyps	Some cancer, some polyps	Some cancer, some polyps
How often should you get the test?	Once per year	Once per years	Every 5 years	Once per year	Every 5 years	Once per year	Every 10 years	Every 5 years	Every 5 years	Every 5 years
Can the test remove cancer and polyps?	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes
Preparation before the test	No preparation	Diet restrictions	Diet restrictions and laxative use	Diet restrictions	Diet restrictions and laxative use	Diet restrictions and laxative use	No preparation	Diet restrictions	Diet restrictions and laxative use	No preparation
Discomfort and activity limitations during and after the test	Discomfort like cramps, all activities after test	None	Sedative for test, no driving and limited activity	None	Sedative for test, no driving and limited activity	None	None	None	Discomfort like cramps, all activities after test	Discomfort like cramps, all activities after test
Out-of-pocket cost to you	$500	$500	$0 (no cost to you)	$200	$50	$500	$10	$0 (no cost to you)	$200	$10
Which test would you choose?										

Block 3

	Choice 1		Choice 2		Choice 3		Choice 4		Choice 5	
	Test A	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**
What can the test find?	Some cancer, very few polyps	Some cancer, some polyps	Most cancer, most polyps	Most cancer, most polyps	Most cancer, most polyps	Some cancer, very few polyps	Some cancer, some polyps	Some cancer, some polyps	Some cancer, some polyps	Most cancer, most polyps
How often should you get the test?	Once per year	Every 5 years	Every 10 years	Every 10 years	Every 10 years	Once per year	Every 5 years	Once per year	Every 5 years	Every 10 years
Can the test remove cancer and polyps?	No	No	Yes	Yes	No	No	No	Yes	Yes	Yes
Preparation before the test	No preparation	Diet restrictions and laxative use	Diet restrictions	Diet restrictions and laxative use	Diet restrictions and laxative use	Diet restrictions and laxative use	Diet restrictions and laxative use	Diet restrictions and laxative use	Diet restrictions	Diet restrictions and laxative use
Discomfort and activity limitations during and after the test	Sedative for test, no driving and limited activity	Sedative for test, no driving and limited activity	Discomfort like cramps, all activities after test	Discomfort like cramps, all activities after test	None	Sedative for test, no driving and limited activity	None	Discomfort like cramps, all activities after test	None	Discomfort like cramps, all activities after test
Out-of-pocket cost to you	$200	$50	$10	$50	$0 (no cost to you)	$500	$200	$10	$10	$0 (no cost to you)
Which test would you choose?										

Block 4

	Choice 1		Choice 2		Choice 3		Choice 4		Choice 5	
	Test A	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**
What can the test find?	Some cancer, some polyps	Some cancer, very few polyps	Most cancer, most polyps	Most cancer, most polyps	Some cancer, very few polyps	Most cancer, most polyps	Some cancer, some polyps	Some cancer, very few polyps	Some cancer, very few polyps	Some cancer, some polyps
How often should you get the test?	Every 5 years	Once per year	Every 10 years	Every 10 years	Once per year	Every 10 years	Every 5 years	Once per year	Once per year	Every 5 years
Can the test remove cancer and polyps?	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
Preparation before the test	Diet restrictions	Diet restrictions	Diet restrictions and laxative use	No preparation	Diet restrictions	Diet restrictions	Diet restrictions	Diet restrictions and laxative use	No preparation	No preparation
Discomfort and activity limitations during and after the test	None	Discomfort like cramps, all activities after test	None	Sedative for test, no driving and limited activity	Discomfort like cramps, all activities after test	Sedative for test, no driving and limited activity	Discomfort like cramps, all activities after test	Sedative for test, no driving and limited activity	Sedative for test, no driving and limited activity	Discomfort like cramps, all activities after test
Out-of-pocket cost to you	$10	$50	$200	$200	$10	$10	$500	$10	$0 (no cost to you)	$0 (no cost to you)
Which test would you choose?										

Block 5

	Choice 1		Choice 2		Choice 3		Choice 4		Choice 5	
	Test A	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**
What can the test find?	Most cancer, most polyps	Some cancer, very few polyps	Some cancer, some polyps	Some cancer, some polyps	Some cancer, very few polyps	Some cancer, very few polyps	Most cancer, most polyps	Some cancer, very few polyps	Most cancer, most polyps	Some cancer, very few polyps
How often should you get the test?	Every 10 years	Once per year	Every 5 years	Every 5 years	Once per year	Once per year	Every 10 years	Once per year	Every 10 years	Once per year
Can the test remove cancer and polyps?	No	No	No	No	No	No	No	No	No	Yes
Preparation before the test	Diet restrictions and laxative use	Diet restrictions and laxative use	Diet restrictions and laxative use	No preparation	No preparation	Diet restrictions and laxative use	Diet restrictions and laxative use	No preparation	Diet restrictions	No preparation
Discomfort and activity limitations during and after the test	Sedative for test, no driving and limited activity	None	Discomfort like cramps, all activities after test	Discomfort like cramps, all activities after test	Discomfort like cramps, all activities after test	Sedative for test, no driving and limited activity	Discomfort like cramps, all activities after test	None	None	None
Out-of-pocket cost to you	$500	$500	$10	$50	$10	$0 (no cost to you)	$500	$0 (no cost to you)	$0 (no cost to you)	$500
Which test would you choose?										

Block 6

	Choice 1		Choice 2		Choice 3		Choice 4		Choice 5	
	Test A	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**
What can the test find?	Some cancer, very few polyps	Some cancer, some polyps	Some cancer, very few polyps	Some cancer, very few polyps	Some cancer, some polyps	Most cancer, most polyps	Most cancer, most polyps	Some cancer, some polyps	Some cancer, very few polyps	Some cancer, very few polyps
How often should you get the test?	Once per year	Every 5 years	Once per year	Once per year	Every 5 years	Every 10 years	Every 10 years	Every 5 years	Once per year	Once per year
Can the test remove cancer and polyps?	No	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Preparation before the test	Diet restrictions and laxative use	Diet restrictions	Diet restrictions	Diet restrictions and laxative use	Diet restrictions and laxative use	Diet restrictions and laxative use	No preparation	No preparation	Diet restrictions and laxative use	Diet restrictions
Discomfort and activity limitations during and after the test	Sedative for test, no driving and limited activity	Sedative for test, no driving and limited activity	None	Discomfort like cramps, all activities after test	Discomfort like cramps, all activities after test	Sedative for test, no driving and limited activity	Discomfort like cramps, all activities after test	None	None	None
Out-of-pocket cost to you	$50	$500	$200	$50	$200	$10	$10	$500	$50	$200
Which test would you choose?										

Block 7

	Choice 1		Choice 2		Choice 3		Choice 4		Choice 5	
	Test A	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**
What can the test find?	Most cancer, most polyps	Some cancer, some polyps	Most cancer, most polyps	Most cancer, most polyps	Some cancer, very few polyps	Most cancer, most polyps	Most cancer, most polyps	Some cancer, very few polyps	Most cancer, most polyps	Most cancer, most polyps
How often should you get the test?	Every 10 years	Every 5 years	Every 10 years	Every 10 years	Once per year	Every 10 years	Every 10 years	Once per year	Every 10 years	Every 10 years
Can the test remove cancer and polyps?	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Preparation before the test	No preparation	Diet restrictions and laxative use	No preparation	No preparation	Diet restrictions	Diet restrictions	No preparation	No preparation	Diet restrictions and laxative use	Diet restrictions
Discomfort and activity limitations during and after the test	Sedative for test, no driving and limited activity	Discomfort like cramps, all activities after test	None	Sedative for test, no driving and limited activity	Discomfort like cramps, all activities after test	Discomfort like cramps, all activities after test	Sedative for test, no driving and limited activity	None	Discomfort like cramps, all activities after test	Discomfort like cramps, all activities after test
Out-of-pocket cost to you	$0 (no cost to you)	$50	$50	$200	$200	$50	$0 (no cost to you)	$0 (no cost to you)	$10	$10
Which test would you choose?										

Block 8

	Choice 1		Choice 2		Choice 3		Choice 4		Choice 5	
	Test A	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**
What can the test find?	Most cancer, most polyps	Some cancer, some polyps	Most cancer, most polyps	Most cancer, most polyps	Some cancer, very few polyps	Some cancer, some polyps	Some cancer, very few polyps	Most cancer, most polyps	Some cancer, very few polyps	Some cancer, very few polyps
How often should you get the test?	Every 10 years	Every 5 years	Every 10 years	Every 10 years	Once per year	Every 5 years	Once per year	Every 10 years	Once per year	Once per year
Can the test remove cancer and polyps?	No	Yes	No	No	No	No	Yes	No	No	Yes
Preparation before the test	Diet restrictions and laxative use	Diet restrictions and laxative use	Diet restrictions	Diet restrictions and laxative use	No preparation	Diet restrictions and laxative use	Diet restrictions and laxative use	No preparation	Diet restrictions	No preparation
Discomfort and activity limitations during and after the test	None	Sedative for test, no driving and limited activity	Discomfort like cramps, all activities after test	Sedative for test, no driving and limited activity	Discomfort like cramps, all activities after test	Sedative for test, no driving and limited activity	Discomfort like cramps, all activities after test	Sedative for test, no driving and limited activity	None	None
Out-of-pocket cost to you	$0 (no cost to you)	Discomfort like cramps, all activities after test	$50	$10	$10	$500	$0 (no cost to you)	$50	$500	$500
Which test would you choose?										

Block 9

	Choice 1		Choice 2		Choice 3		Choice 4		Choice 5	
	Test A	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**
What can the test find?	Some cancer, some polyps	Some cancer, some polyps	Some cancer, very few polyps	Some cancer, some polyps	Most cancer, most polyps	Some cancer, very few polyps	Most cancer, most polyps	Most cancer, most polyps	Some cancer, very few polyps	Some cancer, some polyps
How often should you get the test?	Every 5 years	Every 5 years	Once per year	Every 5 years	Every 10 years	Once per year	Every 10 years	Every 10 years	Once per year	Every 5 years
Can the test remove cancer and polyps?	Yes	No	Yes	No	Yes	No	No	No	Yes	No
Preparation before the test	Diet restrictions	Diet restrictions and laxative use	Diet restrictions	Diet restrictions	Diet restrictions and laxative use	No preparation	No preparation	Diet restrictions and laxative use	No preparation	Diet restrictions and laxative use
Discomfort and activity limitations during and after the test	Sedative for test, no driving and limited activity	None	Sedative for test, no driving and limited activity	Discomfort like cramps, all activities after test	Discomfort like cramps, all activities after test	Discomfort like cramps, all activities after test	Discomfort like cramps, all activities after test	None	Discomfort like cramps, all activities after test	Sedative for test, no driving and limited activity
Out-of-pocket cost to you	$200	$500	$10	$200	$200	$500	$500	$200	$50	$0 (no cost to you)
Which test would you choose?										

Block 10

	Choice 1		Choice 2		Choice 3		Choice 4		Choice 5	
	Test A	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**	**Test A**	**Test B**
What can the test find?	Most cancer, most polyps	Some cancer, some polyps	Some cancer, very few polyps	Most cancer, most polyps	Most cancer, most polyps	Some cancer, very few polyps	Some cancer, some polyps	Some cancer, some polyps	Some cancer, very few polyps	Some cancer, very few polyps
How often should you get the test?	Every 10 years	Every 5 years	Once per year	Every 10 years	Every 10 years	Once per year	Every 5 years	Every 5 years	Once per year	Once per year
Can the test remove cancer and polyps?	No	No	Yes	Yes	No	Yes	Yes	No	Yes	No
Preparation before the test	Diet Restrictions	Diet restrictions and laxative use	No preparation	No preparation	Diet restrictions and laxative use	No preparation	Diet restrictions and laxative use	Diet restrictions and laxative use	Diet restrictions	Diet restrictions and laxative use
Discomfort and activity limitations during and after the test	None	None	None	Sedative for test, no driving and limited activity	Sedative for test, no driving and limited activity	None	None	None	Sedative for test, no driving and limited activity	None
Out-of-pocket cost to you	$0 (no cost to you)	$200	$10	$500	$500	$200	$50	$0 (no cost to you)	$50	$0 (no cost to you)
Which test would you choose?										