



# PRE-TESTING WITH COGNITIVE INTERVIEWING HIGHLIGHTS UNANTICIPATED DECISION MAKING IN A DCE

ALISON PEARCE, LINDA SHARP, PAMELA GALLAGHER,  
AILEEN TIMMONS, VERITY WATSON

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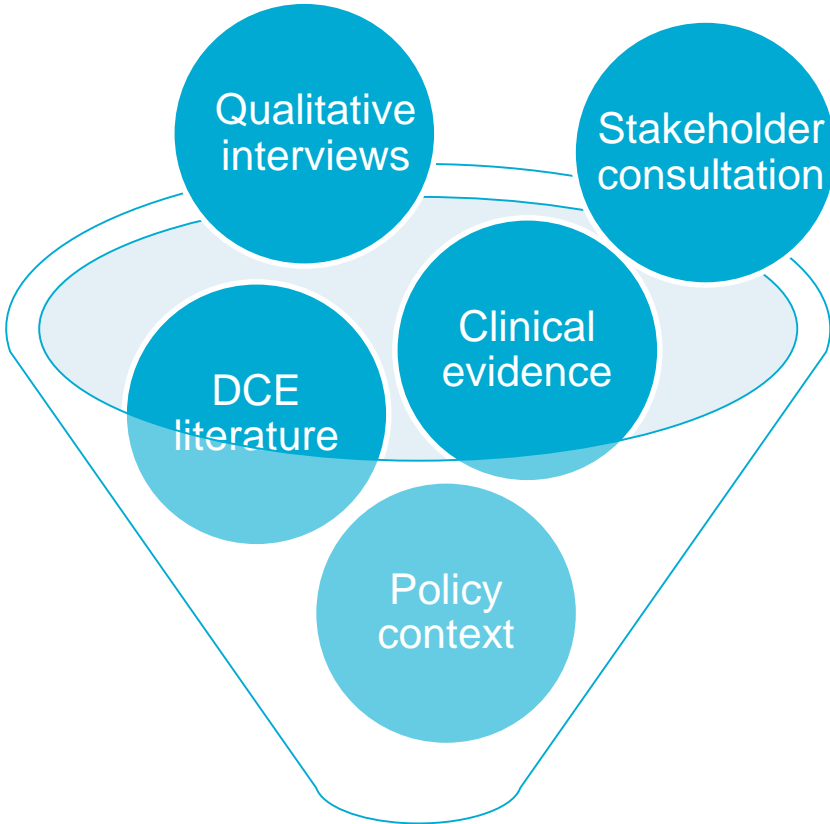
**UTS BUSINESS SCHOOL**

# CANCER FOLLOW-UP

- After finishing cancer treatment patients have ongoing follow-up
- Follow-up services are moving to GP or nurse led care, which is effective & efficient
- Previous DCE's suggest that patients strongly prefer the status quo



# DCE DEVELOPMENT



Prostate and colon cancer survivor preferences for follow-up services



# ATTRIBUTES & LEVELS

Attribute	Level 1	Level 2	Level 3	Level 4
<b>Provider &amp; location</b>	Local GP practice	Specialist nurse by phone	Specialist nurse in the hospital	Specialist clinician in the hospital
<b>Continuity</b>	Same person each time	Different person		
<b>Emotional support</b>	Not asked	Asked	-	-
<b>Practical issues</b>	Not asked	Asked	-	-
<b>Healthy living info</b>	Not asked	Asked	-	-
<b>Cost</b>	€20	€50	€100	€150

OMEF with shifted design – 4 or 8 choice sets per respondent

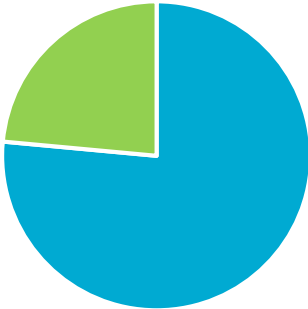
# PRE-TESTING

- Testing survey instrument for:
  - Wording, formatting
  - General task comprehension
  - Usefulness of debriefing questions
    - comprehension, engagement and attribute non-attendance
  - Cheap talk script & opt out – *not discussed today*
- Face to face “think aloud” interviews with 17 prostate and colorectal cancer survivors



# PARTICIPANT DEMOGRAPHICS

## Gender



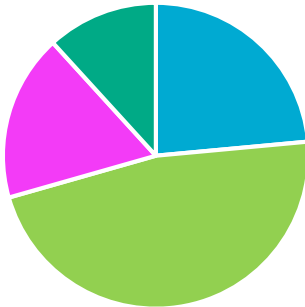
■ Males ■ Females

## Age



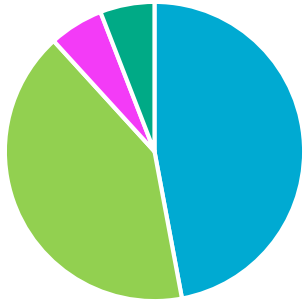
■ <50 ■ 50-59 ■ 60-69 ■ 70+

## Education



■ Primary ■ Secondary  
■ Third level ■ Post grad

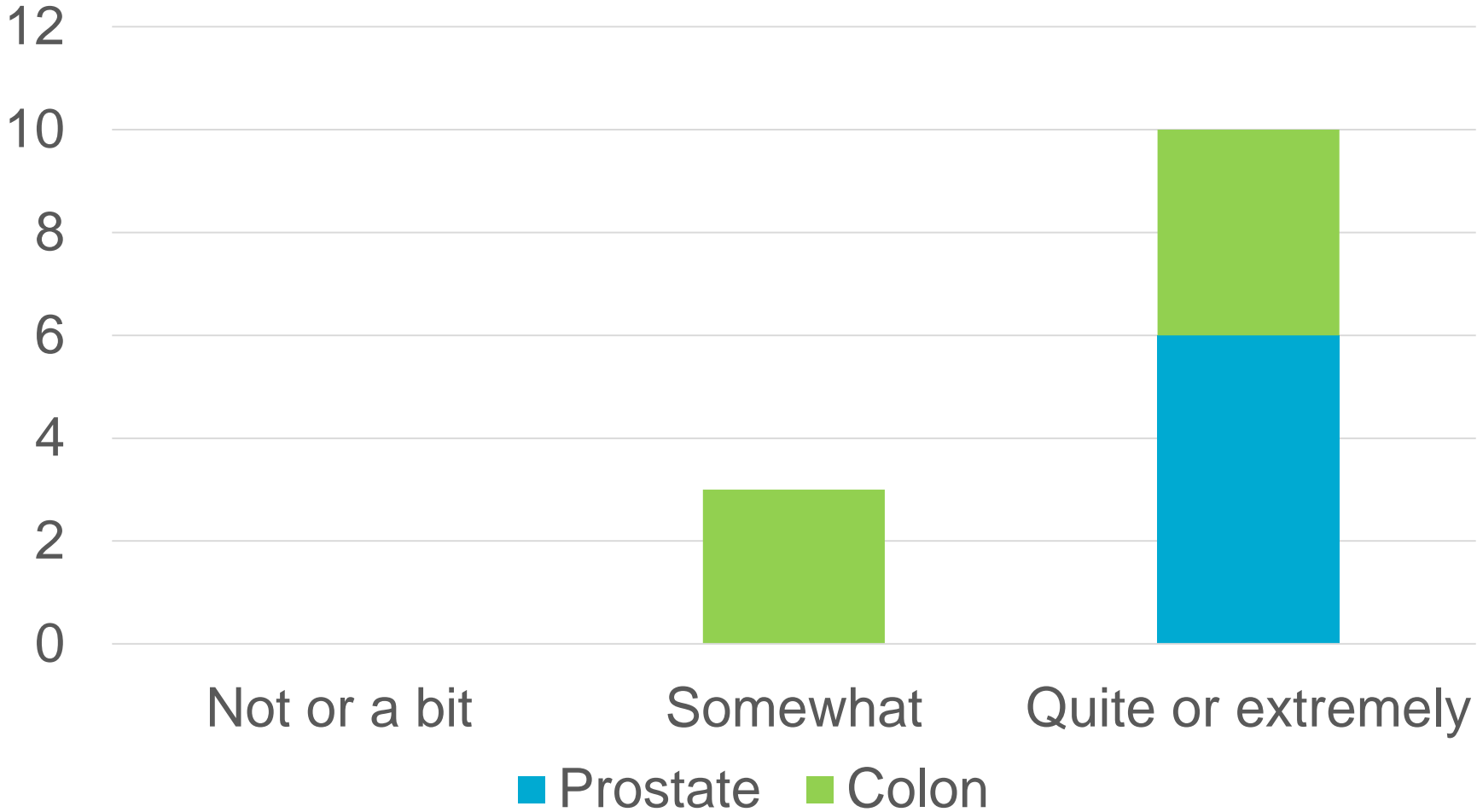
## Health insurance



■ Private insurance ■ Health care card  
■ Both ■ Neither

# HEALTH LITERACY

## Confidence filling out medical forms



# RESULTS


- Cognitively challenging
- Responses inconsistent with utility maximizing assumptions
- Many would not return the survey
- Coded transcripts using an iterative process to assess decision making within and across participants (framework approach)



Group A:  
Dominated  
choices



Group B:  
Reported  
facts



Group C:  
Task  
unclear



# GROUP A: DOMINATED CHOICES

- Compared the packages and made trade offs
- Strong status quo bias, with choices dominated by provider
- Often recoded 'unrealistic' attributes / levels (hypothetical bias)
- Confusion: choice sets look the same if only comparing one or two attributes...

*Well the packages are ok, but... mmm... they seem to be the same questions in the whole lot. [C114]*

## GROUP B: REPORTED FACTS

- Appeared to misunderstand the choice task
- Thought we were asking them to report the facts of their follow-up
- Appeared strongly influenced by the biomedical model – difficult to imagine they might have a choice of treatment

*...Well after three years now I won't have any follow-up so that will be the option I'll be taking... Mmm the others won't apply to me... [CI01]*

## GROUP C: TASK UNCLEAR

- Task was unclear
- Skipped choice sets, selected multiple options in each choice set, or wrote long-form answers next to choice sets

*...If you want my honest reaction... I find, and maybe I'm not that bright, but I would find that mind boggling. Because, I'm trying to, I'm trying to... I'm sure that could be simplified a lot... [CI01]*

# COST ATTRIBUTE

- Almost everyone ignored the cost attribute to some extent
  - “You can’t put a price on health”
  - “I won’t have to pay”
  - “You’d never have to pay that”
  - “It’s not a lot of money”
- Social norm not to admit inability to pay?

# IMPLICATIONS FOR ANALYSIS

- **Group A:** Status quo would appear to be their preference
- **Group B:** Fact based choices would look like hypothetical choices, with preference for status quo
- **Group C:** 'incorrect' completion would usually lead to removal
- **All groups:** cost would appear insignificant

# CAN WE IDENTIFY THESE GROUPS?

- Debriefing questions couldn't discriminate between groups

Example debriefing questions	Aspect of decision making
Did you find making a choice between the different options confusing?	Understanding & preferences completeness
Did you find that the more questions you answered the easier it was to make a choice?	Using simplifying heuristics; Learning
Do you believe your choices will have an impact on [topic] in the future?	Consequentiality and task engagement
Did you consider all of the different factors that varied between the options?	Attribute non-attendance; Monotonicity of preference

# DISCUSSION

- Cancer survivors appear to find it difficult to think hypothetically about their care
  - Issues of agency
  - Status quo bias resulting from labelling effect, hypothetical bias, endowment effect (Salkeld, 2000)
- Previous DCEs of cancer follow-up may have been effected by these same issues
- There is a need to develop and test debriefing questions that address the assumptions of decision making

# CONCLUSIONS

- Cognitive interviews are a useful and appropriate way to explore decision making within the DCE context
- Pre-testing DCE survey instruments prior to implementation is essential



# QUESTIONS

