

BANFF, CANADA September 7-11, 2014

# The International School on Research Impact Assessment

### Questionnaires

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Hosted by:

In partnership with:







# Learning Outcomes

- When to use surveys
- Types of surveys
- How to design surveys
  - High level using a framework
  - Low level writing the questions
- How to deploy surveys

### Types of survey



# Why surveys?

	Surveys	Interviews	Document review
Sampling	can be representative	selective	unknown
Comparability of responses	good	good	unknown
Cost	med	high	low
Participation	hard to control, maybe patchy	high	na
Information collected	selected but depth limited	selected with depth	determined by documents avail
Analysis	closed - easy open - hard	time consuming	depends on volume of documents



## Why not surveys?

- Self report
- Biased responses
- Low engagement
- Lack of nuance

### Question order

- Give the questionnaire a narrative (if possible)
- Group questions logically (e.g., payback framework)
  - But will your audience understand the logic
- Introduce your questions, but not too much introduction
- Put demographic and personal questions at the end

## Types of question

- Closed/option questions mapping
- Open questions exploratory
- Questionnaire structure aims to make it easier to provide the necessary information, easier to leave out the irrelevant information, clarify whether omitted things were not experienced or ignored
- Tension between response rate and detail

## Types of question: examples

- Open question
  - Tell me about your dinner?
  - If you don't mention the starter, is it because you didn't have it or because you didn't think it important?

Am I asking about the food or the ambiance?

## Types of question: examples

- Structured, open
  - What did you like about your starter?
  - What did you like about your main course?
  - What did you like about your dessert?
  - Clearly talking about the food
  - Stepping through the different stages

# Types of question: examples

- Structured, closed
  - How would you rate your starter? 1-5
  - How would you rate your main course? 1-5
  - How would you rate your dessert? 1-5
  - Clearly talking about the food
  - Stepping through the different stages
  - Requesting a numerical rating Likert
  - Could ask did you have starter? Y/N

### Response Format

# Will the question elicit the type of response desired?

Open questions	Closed questions
Encourage respondents to explain	Limit respondents' answers to the
their answers and reactions	questionnaire
Elicit 'rich' qualitative data.	Elicit quantitative data
Encourage thought and freedom of	Can encourage 'mindless' replies
expression	
Take longer to answer and may put	Are quick to answer and may
some people off	improve your response rate
Are more difficult to analyse –	Are easy to 'code' and analyse
responses can be misinterpreted	



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### A tale of three surveys

- MRC Unit Review Consultation
  - Open questions
- RAISS
  - Structured Y/N
- ResearchFish
  - Structured controlled vocabulary
  - Persistence

### MRC Unit Review Consultation

- Project to evaluate the review process for MRC units
- Units are wholly funded by the MRC, but based in universities
- Quinquennial review process by external reviewers to assess progress
- Decision of future of units by MRC council

### MRC Unit review consultation

#### Went through 5 drafts

- Please provide your answer as bullet points, for example: Effective review of science, Light burden
  - What do you consider the most important strengths of this approach?
  - What do you consider the most important weaknesses of this approach?
  - What would you see as the most important consequences of this approach for the behaviour of units?
  - What would you consider the most significant consequences of this approach for extra mural MRC funding and other researchers outside MRC units?



### **RAISS Intro**

- Attempt to provide tick-list of impacts
- Over 33 revisions
- Provided low burden survey tool to capture diversity of research impacts

### **RAISS**

5.4: Dissemination - Other Dissemina 98. Dissemination to health professionals?  OYes ONo ONot Known  If yes, has this included (If no, go to question 5):  99. Websites for health professionals?  OYes ONo ONot Known  100. Printed material (such as booklets) for health professionals?  OYes ONo ONot Known	ation	
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190 N. S.		
O Yes O No O Not Known		
.01. If yes, what was the distribution of this printed material? If no, go to	to question 5.	
Yes	ec No	Not nown
Local	0 0	0
National	0 0	0



If yes, has this included (If no, question 9):

OYes ONo ONot Known

103. Websites?

- Knowledge production
- Research targeting and capacity building
- Informing policy and product development
- Health and health sector benefit
- Broader economic benefit

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- Research targeting and capacity building
  - Further funding
  - Interactions with academia
  - Interactions with industry
  - Research training
  - Research careers
  - Research tools

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- Research targeting and capacity building
  - Interactions with academia
    - Have you had initial discussions about collaboration of informal knowledge exchange?
    - Did these discussions lead to co-applications for funding?
    - Were these successful?
    - And/or, did these discussions lead to co-publications?
    - And/or, did the discussions lead to Material Transfer Agreements (MTAs)?
    - And/or, did these discussions lead to sharing of reagents without MTAs?



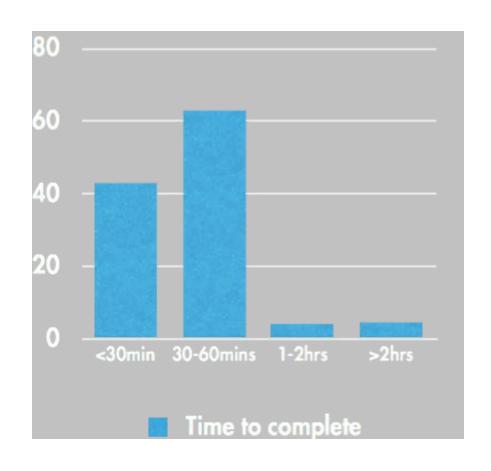
- Research targeting and capacity building
  - Interactions with academia

•	Have you had <b>initial discussions</b> about collaboration of informal knowledge exchange?	Yes
•	Did these discussions lead to <b>co-applications</b> for funding?	Yes
•	Were these successful?	Yes
•	And/or, did these discussions lead to co-publications?	Yes
•	And/or, did the discussions lead to Material Transfer Agreements (MTAs)?	No
•	And/or, did these discussions lead to sharing of <b>reagents</b> without MTAs?	No



### Burden on researchers is lower

- Research grants that ended in 2002 (76) and 2006 (60)
- Response rate of 87% for both/each year. 118 responses in total.



- Research targeting and capacity building
  - Interactions with academia
    - Have you had initial discussions about collaboration of informal knowledge exchange?
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Yes

Yes

Yes

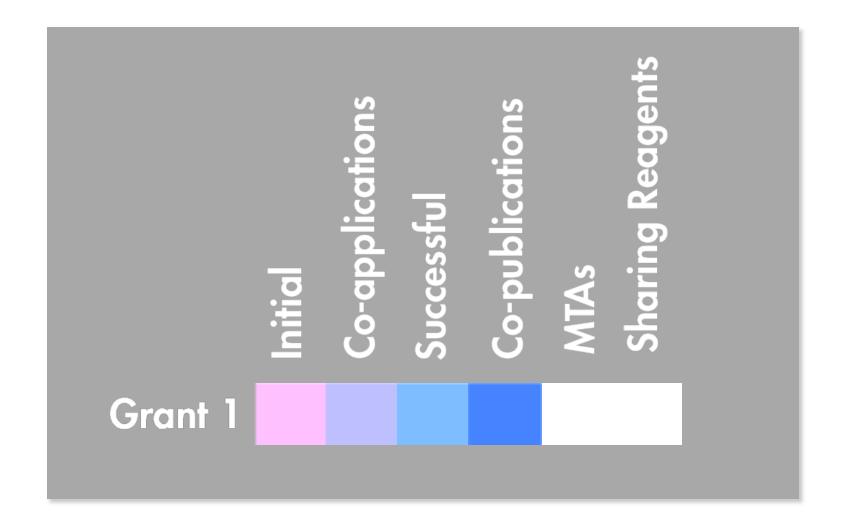
Yes

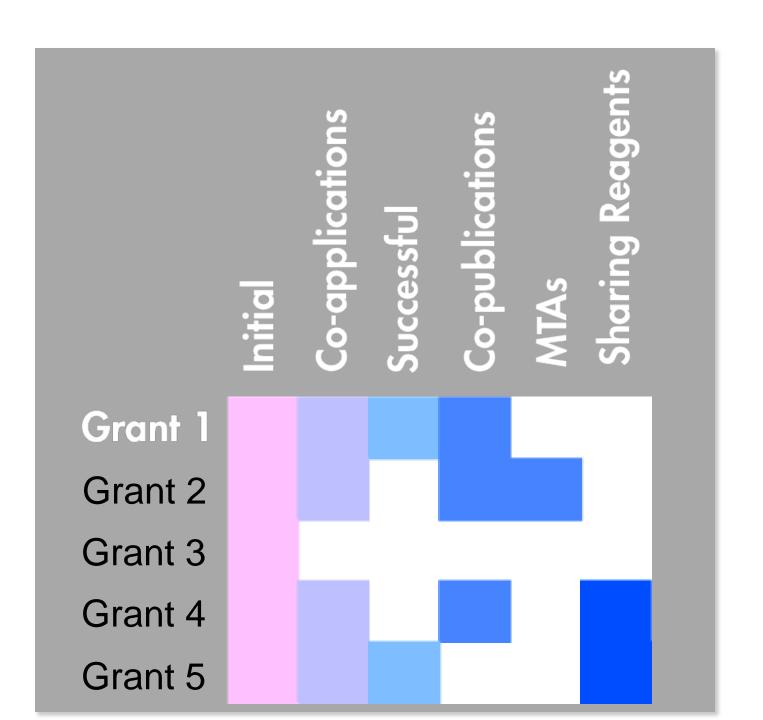
No

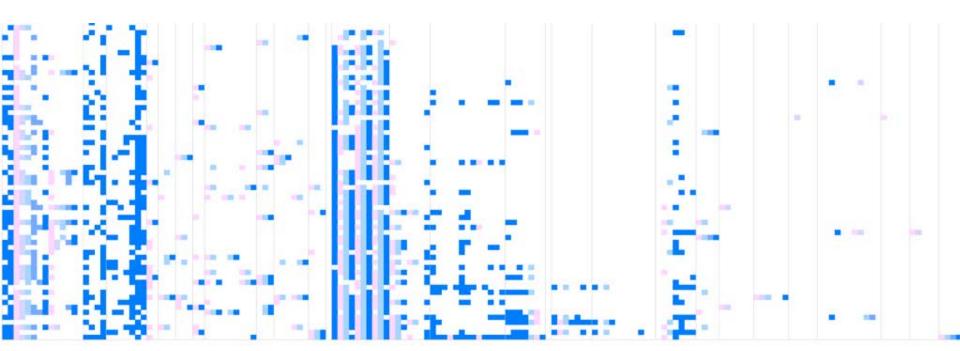
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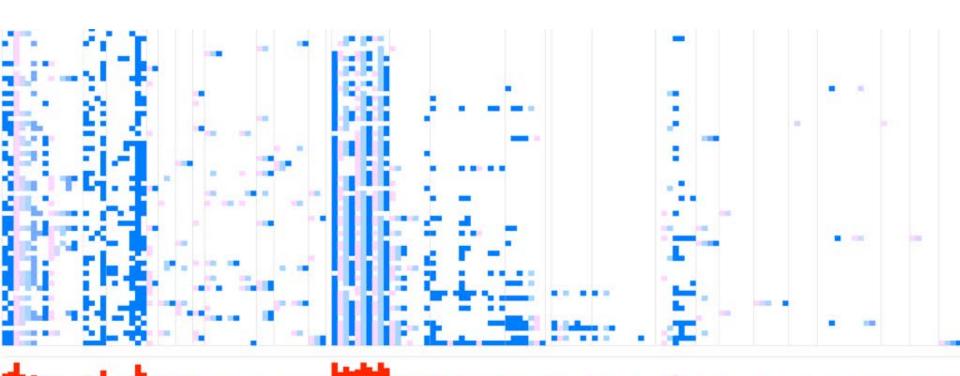


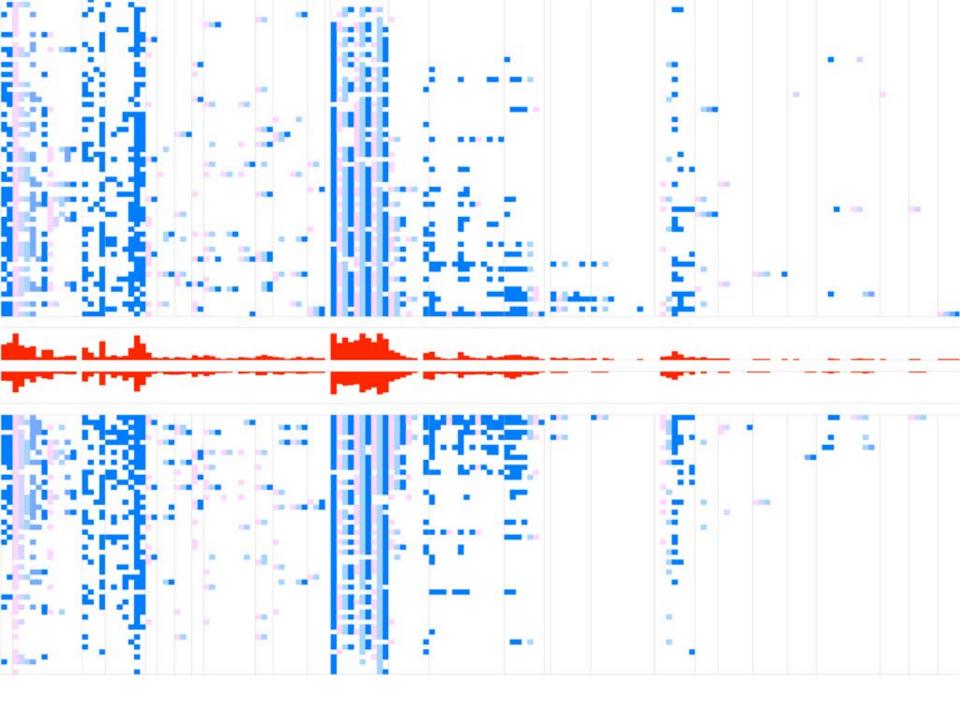
Initial **Co-applications** Successful Co-publications **MTAs Sharing Reagents** 

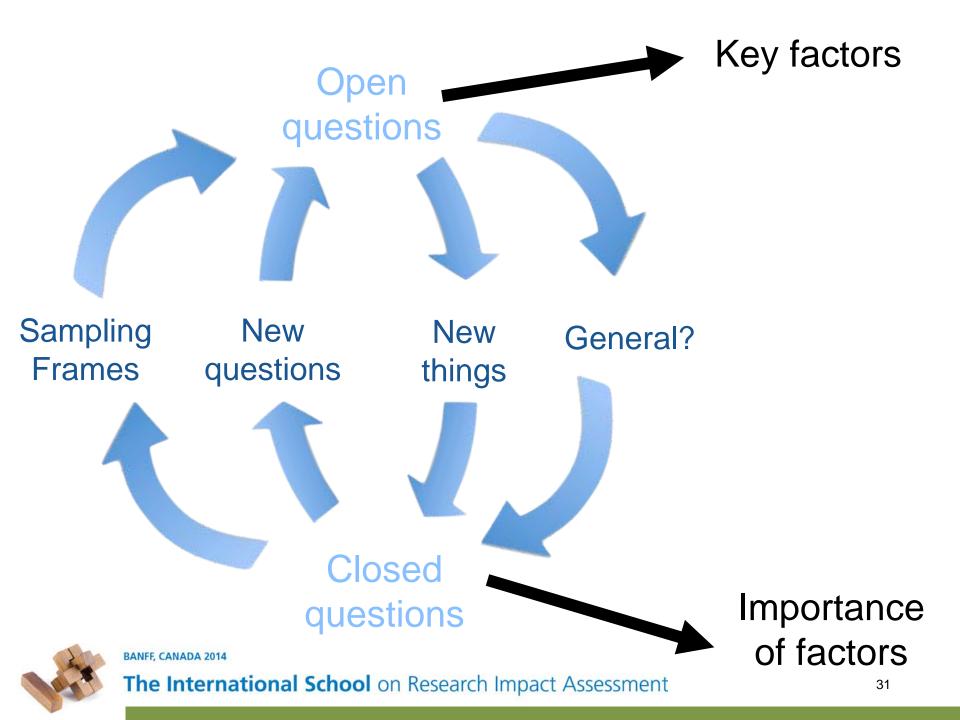












### ResearchFish 1

- Developed from RAISS structure
- Captures more detail
  - E.g., who is collaboration with, how much money
- Backend standardisation of vocabulary and auto-complete suggestions

### ResearchFish 2

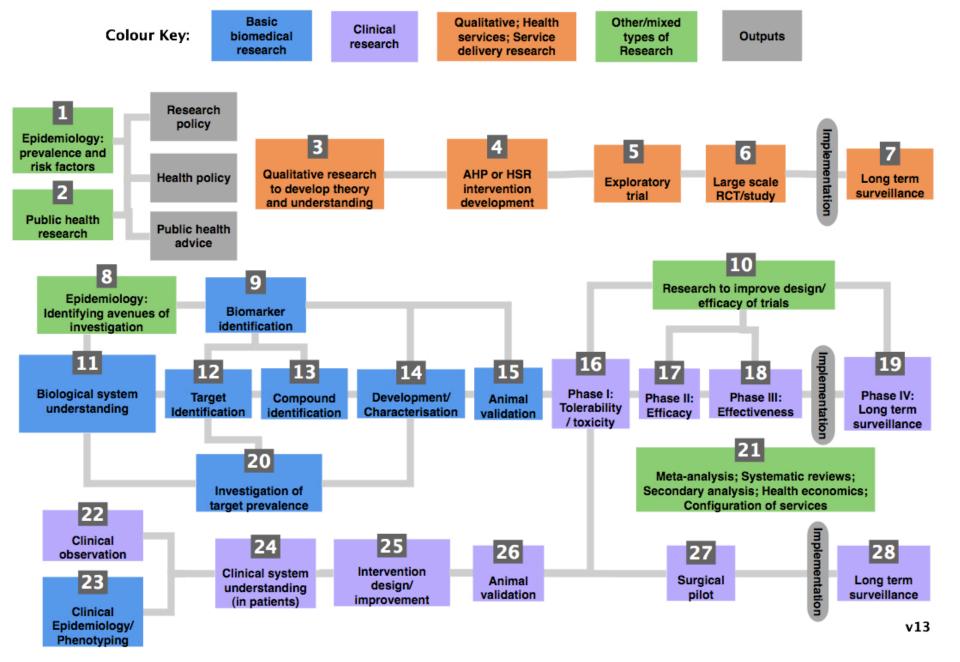
- Enter once and then assign impacts to funders
- Persistent builds up portfolio of impacts over time

### **Question design**



### Looks easy, is hard

- Hard to get questions that are unambiguous
- Need to do 'cognitive interviewing' to test questions
- Always provide 'Other' option in development
- May need graphical explanation



5.	When you think of Cambridge, what are the top 6 things that you associate with the city? Rate these features of
	Cambridge in order of importance (with 1 being the most important and 6 the least important).
	Rank the items below, using numeric values starting with 1.

University town	4
History	6
Tourism	5
Science and technology	3
Home	2
Family	1

# Most important to who?



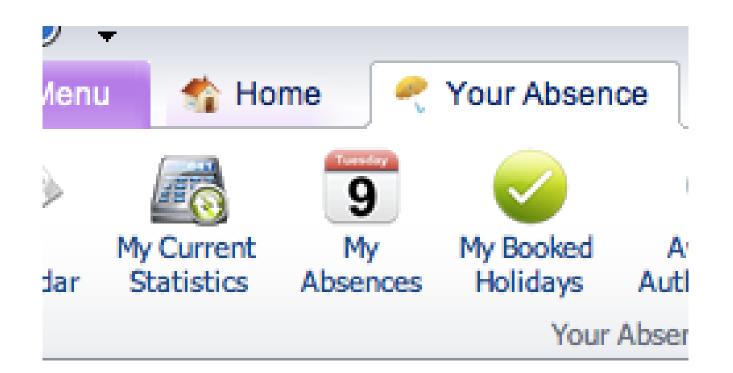
22. In the last 12 months, how often did you visit any of the following in Cambridge:

	Never	Rarely	Sometimes	Often	not apply
Theatre	•				
Museum	<u> </u>	<u></u>	•	$\bigcirc$	<u> </u>
Concerts	•				
Sporting events (e.g. football, rugby, cricket)	0	0	0	0	0
Cinema					
Restaurants	$\bigcirc$	$\bigcirc$	<u></u>	$\bigcirc$	<u></u>
	Never	Rarely	Sometimes	Often	Does not apply

# Left to right or right to left?



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#### Whose absence?



#### **Consistent order**

#### **Deploying surveys**



### Tips for deploying surveys

- Never require a username and password give users unique URL
- Pre-populate whatever you can
  - E.g., publications
- Responses come after reminders, not length of time
- Use dummy end date
- Send specific reminders, and 'thank you's'
- Use data collection for burden, etc.

#### Before you deploy your survey

- Do you really need all the questions?
  - Don't ask what you can get though other means
- What will each question tell you and how will you analyse the results?
- Have you tested the questions and the options with people like the respondents?
- How long will the survey take? Is that realistic?

#### Other types of survey

### Other types of survey

- Telephone surveys/structured interviews
  - Greater engagement
  - More resource intensive
- Postal surveys
  - Are there going to be postal strikes?

## **Learning Activity**



- In pairs identify aspects of your programme that you could ask about with each of the three types of questions
- Write an example of each question
- Try and come up with alternatives ways of interpreting the questions
- 15 minutes

## Key Messages

- Worry about who will respond
- Ask people to do as little as possible
- Test understanding

#### Thank you!

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