

How to ask the right questions: Giving analysts time to analyse

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Route to Impact: Using examples of data to drive and enable change in decision-making

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Format of today's workshop

- ▶ Share some of my reflections and our experience in Surrey on how to craft good questions
- ▶ Group work to develop some questions which are only answerable using data from multiple organisations or linked data
- ▶ Feedback

Surrey's Advancing Applied Analytics Hackathons

- ▶ Consult with decision makers on actionable questions before the Hackathon
- ▶ Assemble the relevant datasets before
- ▶ Create data visualisations to show to decision makers
- ▶ Joint review about whether analysis is answering question or whether it prompts refinement of question
- ▶ Analysis/visualisation refreshed

Reflections on what makes for a good question

- ▶ Triple A (not Advancing Applied Analytics)
 - ▶ Actionable
 - ▶ Apt
 - ▶ Answerable

Actionable

What would you do differently if you had the answer to this analytic question?

www.nesta.org.uk/blog/public-sector-data-analytics-four-steps

Version 1 - Can we see details of admissions to hospital from care homes in our area, and reason for ambulance call outs?

NOT an *Actionable* question

Version 2 - Which care homes should I target first with work led by the Primary Care Network to reduce ambulance callouts and emergency admissions from care homes?

Action-related question

Version 2 - Which care homes should I target first with work led by the Primary Care Network to reduce ambulance callouts and and emergency admissions from care homes?

Apt - “appropriate or suitable in the circumstances”
Is this really the question you want to ask?

Version 3 - Which care homes have the highest number of avoidable conveyances to hospital?

Answerable - is the question sufficiently specific to be able to answer it?

Which conveyances/admissions *are* avoidable?

Which care homes have the highest proportion of conveyances to hospital which do not result in admission?

What *is* the work needed to reduce avoidable conveyances?

What are the reasons for the conveyances which do not result in admission?

Final version of question

Version 4 - Which care homes have the highest number of conveyances to hospital which do not result in an emergency admission and what are the most common reasons for these conveyances?

Actionable: PCN can use reason for conveyance to develop action plan to reduce

Apt: Have refined question to conveyances rather than admissions because Clinical leaders thought could influence

Answerable: Vague terms have been clarified so question sufficiently specific that analysts can answer

Group work

1. What problem are you trying to address?
2. What would you do differently if you had the right information?
3. What AAA question do you want answered?
4. What data do you need to answer this question?

Group work - worked example (1)

What problem are you trying to address?

1/3 of permanent admissions to care homes are previously unknown to social care but presumably known to health. Can we avoid or delay these?

What would you do differently if you had the right information?

Develop processes to ensure that patients at risk of a permanent admission to a care home are referred for a social care assessment at an early stage.

Group work - worked example (2)

What AAA question do you want answered?

How do patients/residents permanently admitted to a care home without prior contact with social care differ from those who have been in contact and what contacts have they had with the NHS?

What data do you need to answer the question?

Person level linked health and social care data or bespoke collected audit data

Potential Questions

1. Where do Children and Young People in Mental health access care when the crisis line shut?
2. Can we reduce hip and knee replacements for osteoarthritis?
3. Can we use predictive analytics to prevent predict domestic abuse?
4. Which primary care networks should be prioritised for community mental health pilots?

Group work

1. What problem are you trying to address?
2. What would you do differently if you had the right information?
3. What actionable/apt/answerable question do you want answered?
4. What data do you need to answer this question?

Group feedback

How did you refine the question?

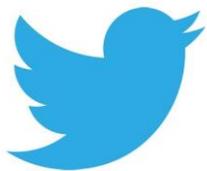
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