



Are we asking the right questions about e-cigarettes?

Linda Bauld, Professor of Health Policy,
University of Stirling & Chair in Behavioural
Research for Cancer Prevention, CRUK



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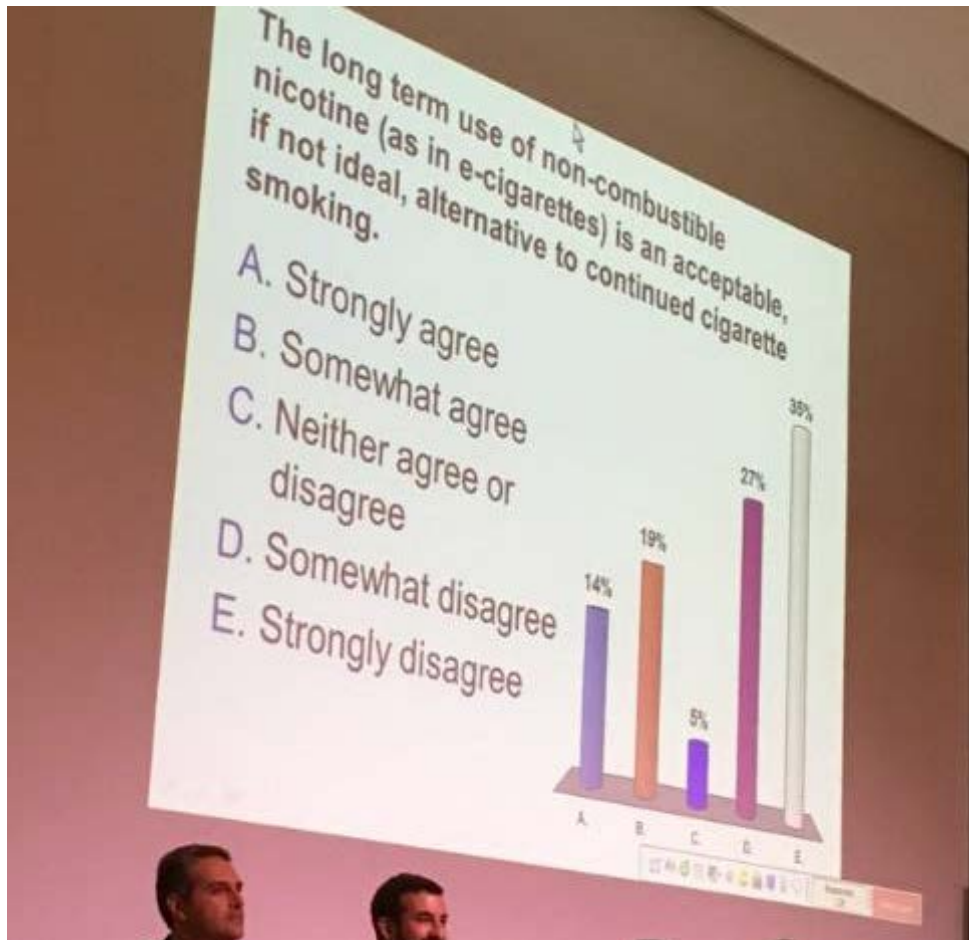
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A recent question

The long-term use of non-combustible nicotine (as in e-cigarettes) is an acceptable, if not ideal, alternative to continued cigarette smoking.

- A. Strongly agree
- B. Somewhat agree
- C. Neither agree or disagree
- D. Somewhat disagree
- E. Strongly disagree

An American View

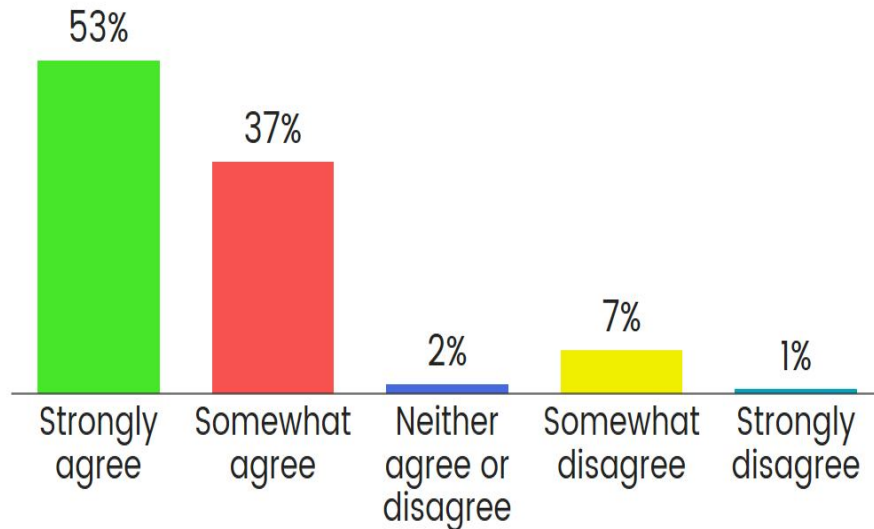


At the Global Tobacco Dependence Treatment Summit 2016...only 33% of attendees agreed

But in the UK...

The long-term use of non-combustible nicotine is an acceptable, if not ideal, alternative to smoking

Mentimeter

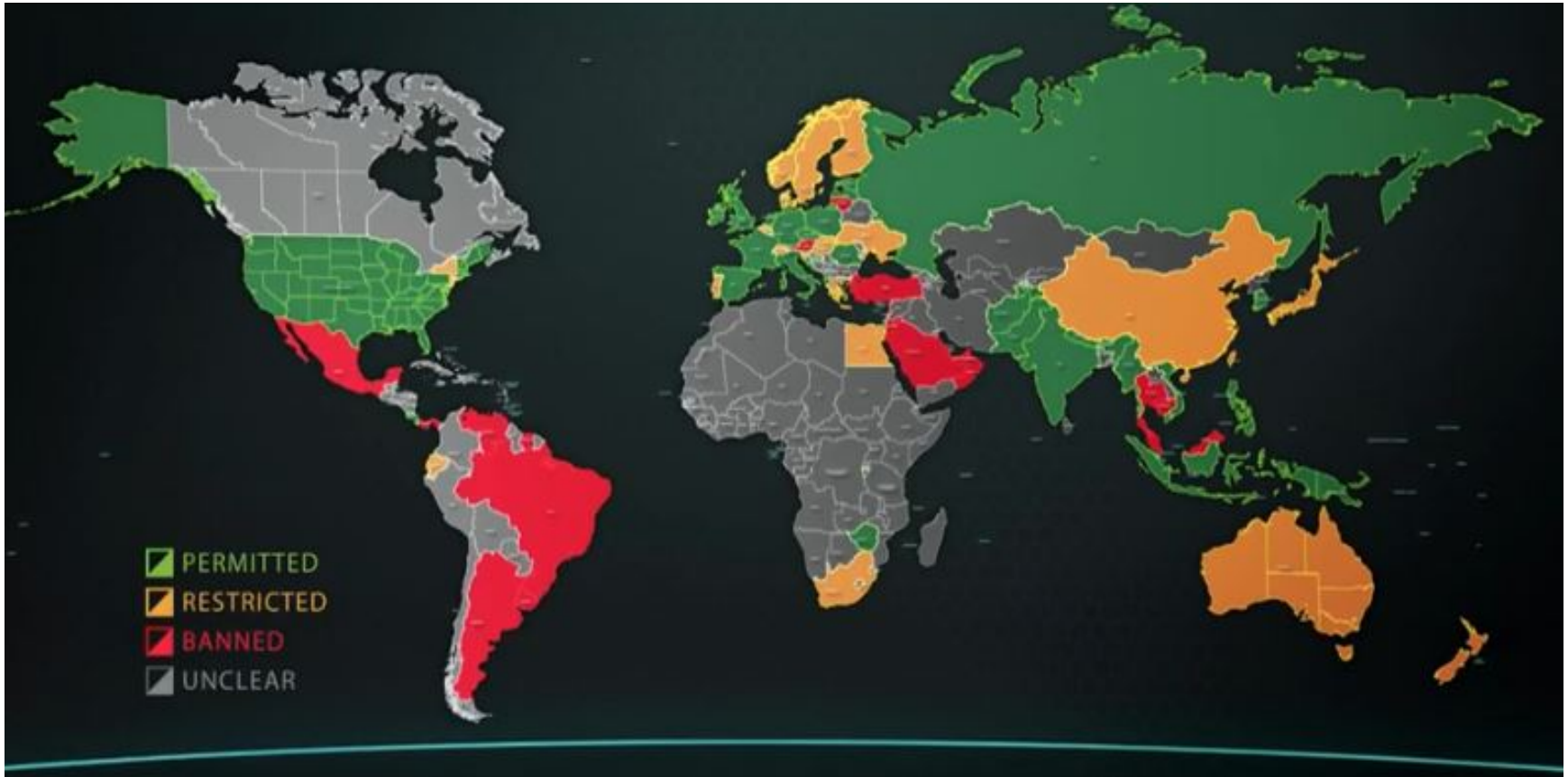


At the UK Nicotine and Smoking Cessation Conference in June 2016...

90% agreed

Votes: 129

The Global Picture



Various policy or regulatory frameworks in different countries. This provides an opportunity for research, but also means we need to ask the right questions to inform policy, rather than creating (more) confusion and alarm.

Asking the right questions

- Research on e-cigarettes covers a very wide range of issues
- In this presentation I'll focus on studies that assess prevalence (use) and then these studies go on to draw conclusions about the relationship between use and different outcomes (i.e cessation).

Asking the wrong questions

- A range of recent studies have drawn conclusions about e-cigarette use that are simply not supported by the study's findings
- Sometimes this is 'spin' (leaping from a finding to a spurious conclusion)
- But sometimes it is because the wrong questions were asked in the first place, response categories were combined or important distinctions were not understood by the researchers.

Some recent examples

Youth Studies

- Top stories
- News archive
- 2014

Young people's exposure to e-cigarette marketing in shops investigated

Daily Scottish Mail

Marketing makes children more likely to try smoking e-cigarettes

MASS advertising of e-cigarettes in shops is making school children more likely to smoke them, researchers have found. By Victoria Allen, Scottish Health Reporter

already smoke tobacco. However it found they are hugely exposed to adverts for the devices online and in small shops and

THE SCOTSMAN

E-cigarette ads spark rise in uptake among teens

Evening News
THE EDINBURGH PAPER

Shops' e-cigarette displays spark vaping in young

Aims and Conclusions

- To examine the relationship between e-cigarette point of sale (POS) exposure and e-cigarette use in young people
- 3,808 secondary school pupils in Scotland completed one cross sectional survey
- This study found a cross-sectional association between self-reported recall of e-cig POS displays and use of, and intention to use, e-cigarettes

The 'use' question

- Respondents were asked whether they had heard of e-cigarettes. If they had, then asked 'Which one of the following is closest to describing your experience of e-cigs':
 - I have never used them, I have tried them once or twice, I use them sometimes (more than once a month), I use them often (more than once a week)
- This variable was dichotomised to 'ever tried' or 'never tried'
- Range of questions asked on advertising including whether in the past 30 days they could remember seeing e-cigs displayed for sale in large supermarkets or small shops

The 'use' answers

- 730 of the 3,808 young people didn't answer the e-cigarette use question
- In the paper, it's actually difficult to determine use as it is not reported in the text and differences by current smokers and non smokers are not reported as frequencies.
- Overall, 18.8% of those who answered had ever tried an e-cigarette (Table 1 in the paper).
- The authors sent me a table not included in the paper. It showed that only 6 of the 3,808 participants were never smokers who regularly used e-cigarettes. **This seems a fairly fatal omission to me, given the press release and headlines the paper generated.**

Studies with adults

 CBSNEWS

Study: E-cigarettes don't help smokers quit

 REUTERS

E-cigarettes tied to reduced odds of quitting smoking

WebMD

E-cigarettes Don't Help Smokers Quit
Tobacco: Study

Devices actually lower chances of quitting by
28 percent, researchers say

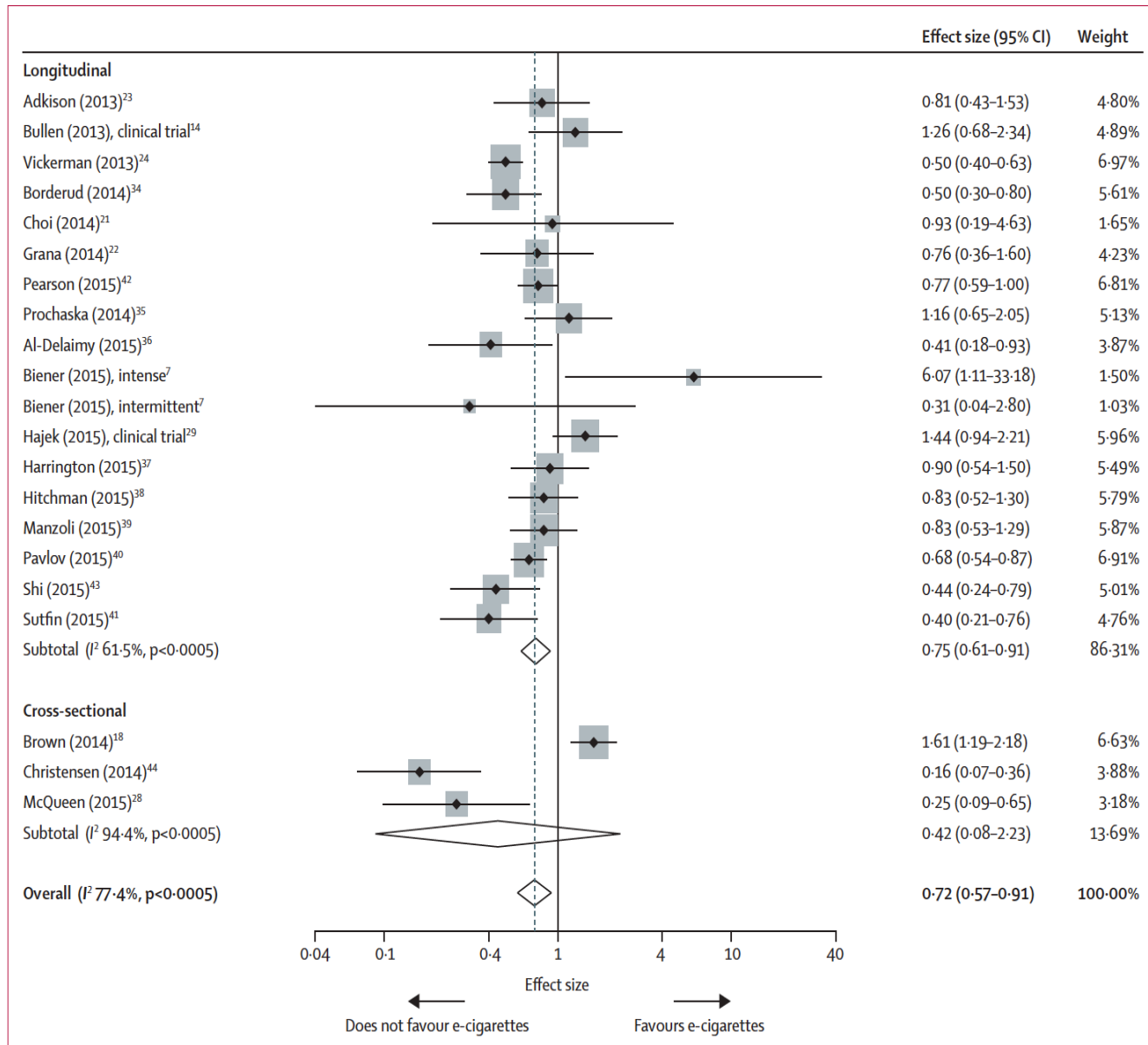
 U.S. News & WORLD REPORT HEALTH

E-cigarettes Don't Help Smokers Quit
Tobacco: Study

Aim and Conclusion

- To assess the association between e-cigarette use and smoking cessation among adult cigarette smokers, irrespective of their motivation for using e-cigarettes
- Systematic review and meta-analysis
- Conclusion: As currently being used, e-cigarettes are associated with significantly less quitting among smokers

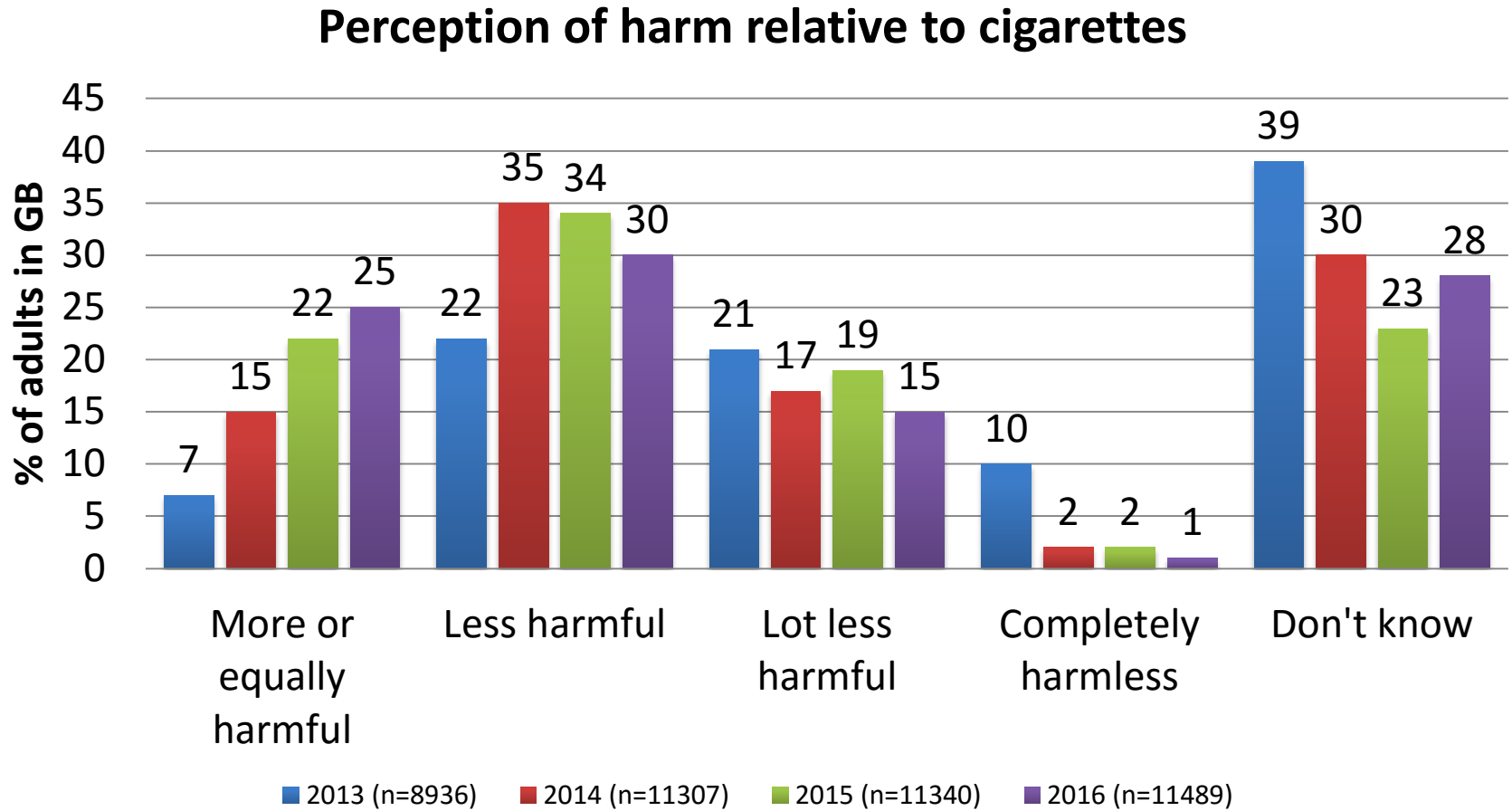
Kalkhoran & Glantz. Lancet Respir Med. 2016 Feb;4(2):116-28



The 'use' questions

- Use of e-cigarettes was not measured in any consistent way in the 38 studies included
- Ever use (or past 30 day use) was the only measure in some studies
- Outcome measures were not consistent
- Bates, Phillips, the Truth Initiative and others have already provided comprehensive critiques of this review

Poor research contributes to confusion



Source: ASH Fact Sheet on the use of electronic cigarettes among adults in Great Britain, May 2016

Smoking vs. e-cigarette measurement

Source	Smoking	E-cigarette use
Al-Delaimy et al, 2015, AJP	<p>Current smokers: at least 100 cigarettes in their lifetime and smoked cigarettes on at least some days at the time of the survey.</p> <p>Smoking status categorized according to frequency: daily or nondaily.</p>	<p>What describes you best regarding your use of e-cigarettes:</p> <ul style="list-style-type: none">• you have used e-cigarettes• you might use e-cigarettes• you will never use e-cigarettes?
National Youth Tobacco Survey, US	<p>Have you ever tried cigarette smoking, even one or two puffs?</p> <p>During the past 30 days, on how many days did you smoke cigarettes?</p> <p>Smoking frequency was recoded as having smoked 1–9 days, 10–19 days, or ≥20 days in the past month.</p>	<p>Current e-cig users: Students who selected “Electronic Cigarettes or E-cigarettes, such as Ruyan or NJOY” to the question “In the past 30 days, which of the following products have you used on at least one day?”</p>

How can we improve?

- We can't get rid of bias and particular agendas but we can have better questions
- For surveys, trials, cohort studies etc. a group of UK and US researchers are proposing a set of core questions
- These will need to be adapted as devices, preferences and markets change
- However, it's a start.

What should we ask?

- Get the terminology right
- Ask about awareness only in countries where it's not obvious most people will know about e-cigarettes
- Lifetime use is still relevant
- Frequency of use is key (ask about ever use, and then a standard question on frequency of current use)

What else?

- Ask about device characteristics (obviously...)
 - Including nicotine content
 - Type of device (standard categories that can be updated)
 - Flavours
- Consumption (probably most difficult to capture simply)
- In some cases asking about reasons for use is also important
- Our paper focuses on adults but we also need agreement on standard measures for youth.

THE UK ELECTRONIC CIGARETTE RESEARCH FORUM

cruk.org

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- One way to improve the science is for researchers to meet to talk about methods
- Cancer Research UK, Public Health England and UKCTAS have formed a national forum in the UK
- We also provide a monthly evidence briefing of the latest studies
- Would be great to see similar developments in other countries.

Summary

- There's a lot of poor research out there – and I've only talked about problems with assessing use
- Standard questions are helpful to allow comparison and also replicability
- The research community is making progress in agreeing some core questions
- We need to keep working with vapers and others, however, to make sure what we are asking makes sense.

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Linda.Bauld@stir.ac.uk

Linda.Bauld@cancer.org.uk



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