

Balanced communication of risks and evidence

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E-Cigarette Summit 2016

E-cigarettes

- High profile
- Contested science
- Strong industry involvement
- Accusations of bias
- Potential impact on children
- Multiple perspectives
- 'Values' are crucial
- Calls for 'precaution'

...but there are many similar subjects



...but there are many similar subjects



...but there are many similar subjects



...but there are many similar subjects



...but there are many similar subjects



The crucial role of trust

Onora O'Neill's requirements –

- Competence

2012 PRESIDENTIAL RUN

GOP CANDIDATES



FOX

47*

SOURCE: OPINIONS

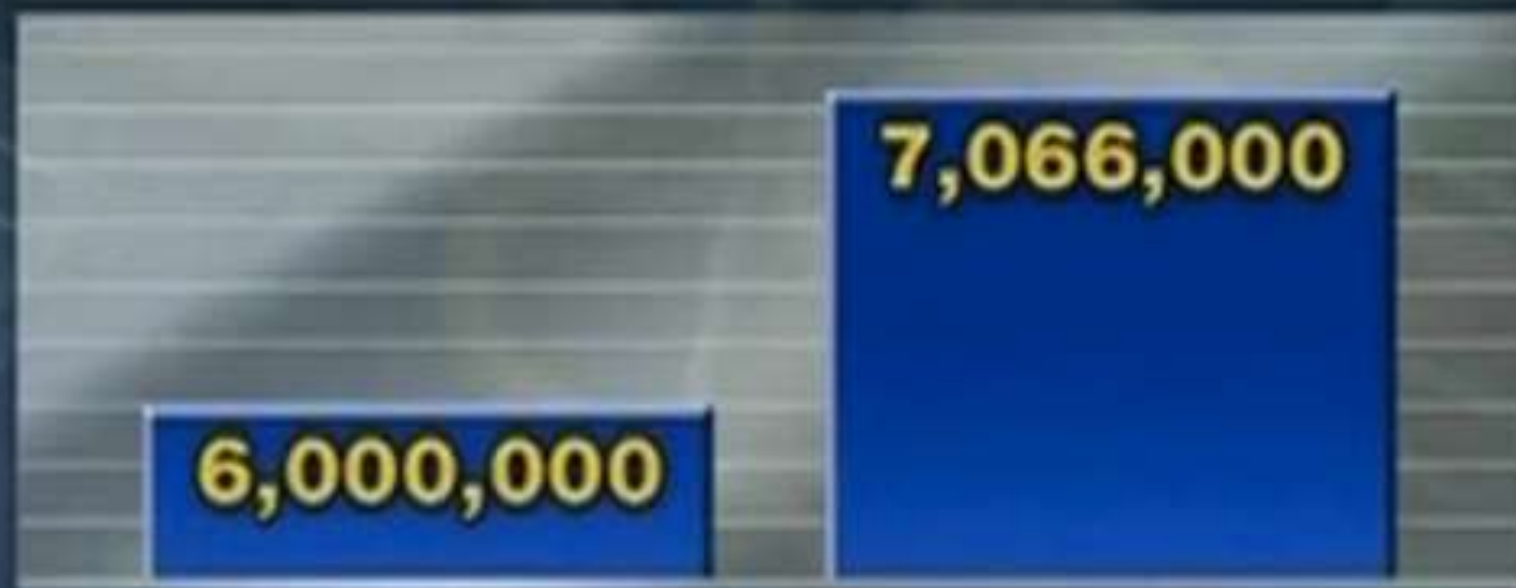
DYNAMIC

The crucial role of trust

Onora O'Neill's requirements –

- Competence
- Honesty

OBAMACARE ENROLLMENT



AS OF
MARCH 27

MARCH 31
GOAL



SOURCE: HHS

Fox news

OBAMACARE ENROLLMENT



SOURCE: CBO



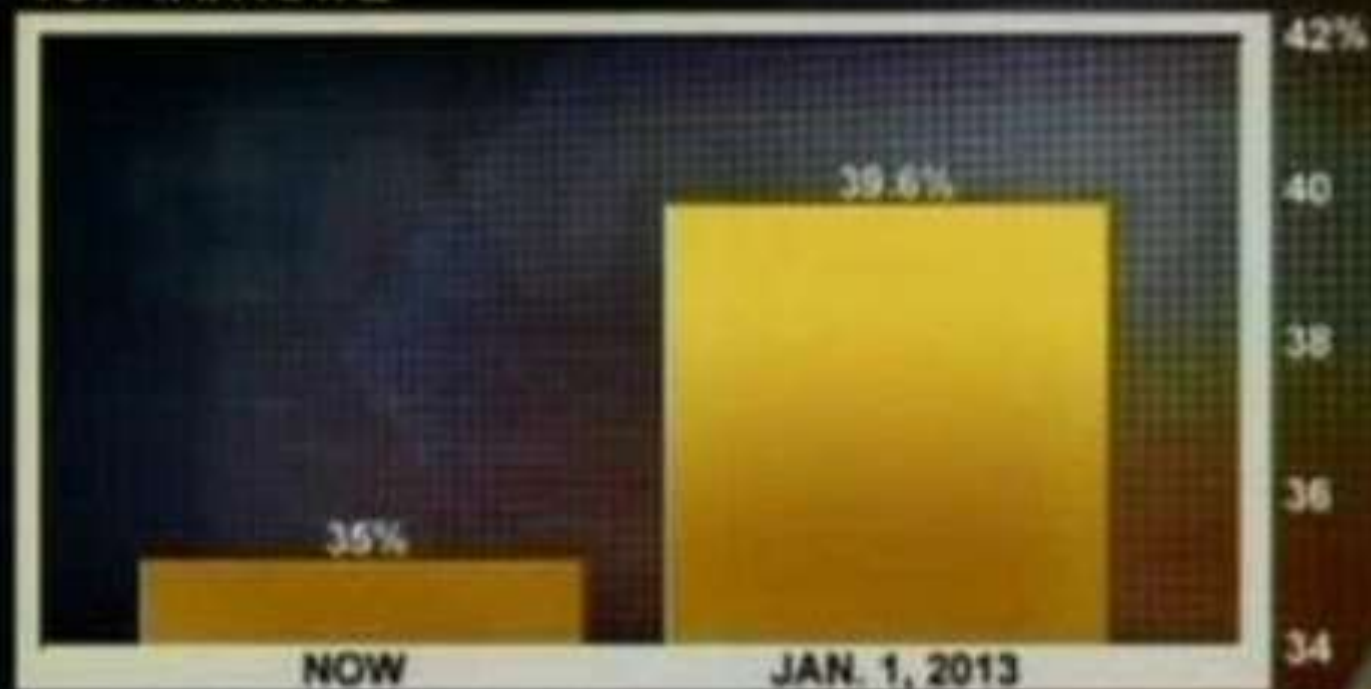
The crucial role of trust

Onora O'Neill's requirements –

- Competence
- Honesty
- Reliability

IF BUSH TAX CUTS EXPIRE

TOP TAX RATE



8:01 p ET

FOX
BUSINESS

TOP STORIES

TECHNOLOGY

CONSUMER

WITH THE JUSTICE DEPARTMENT AND ACQUIRES FULL T

DOW 13008.68 ∇ 64.33

S&P 1379.32 ∇ 5.98

NASDAQ 2939.52 ∇ 6.32

Suspicious signs when using scientific evidence to inform policy

- Not making the population under discussion clear
- Cherry-picking metrics / data
- Ignoring aspects that some people find vitally important
- Unclear sources/quality of evidence
- Framing to make numbers high and low
- Trying to reduce a complex argument to a single number, rather than acknowledging inevitable trade-offs

The Montgomery Judgement

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Doctors

Patients must understand options, says Royal College of Surgeons

New guidance represents end of 'paternalistic' approach to inform-and-consent between surgeon and patient, after law change

Sarah Boseley
Health editor

Thursday 27 October
2016 00.01 BST

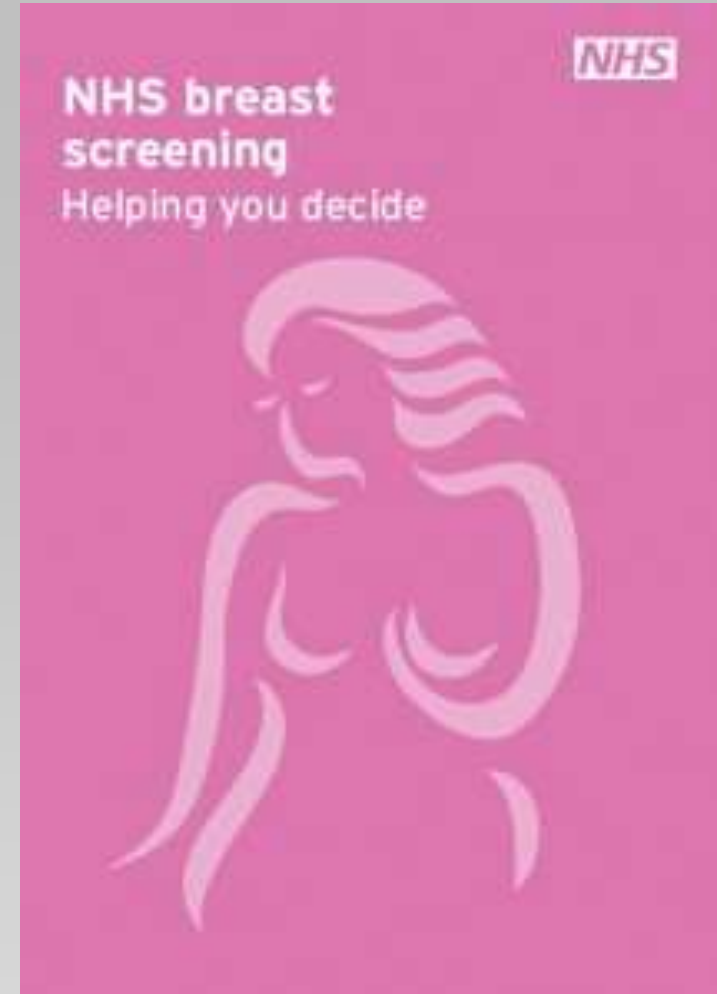
   

Shares 190 Comments 189



- Patients must have clear info about potential benefits and harms of treatments
- That relate to what *they* feel is important

*New UK Cancer Screening
leaflets, 2013*



- *"Consider the offer"*
- Presents pros and cons
- Does not make recommendation
- 'Uniform reporting of harms and benefits'

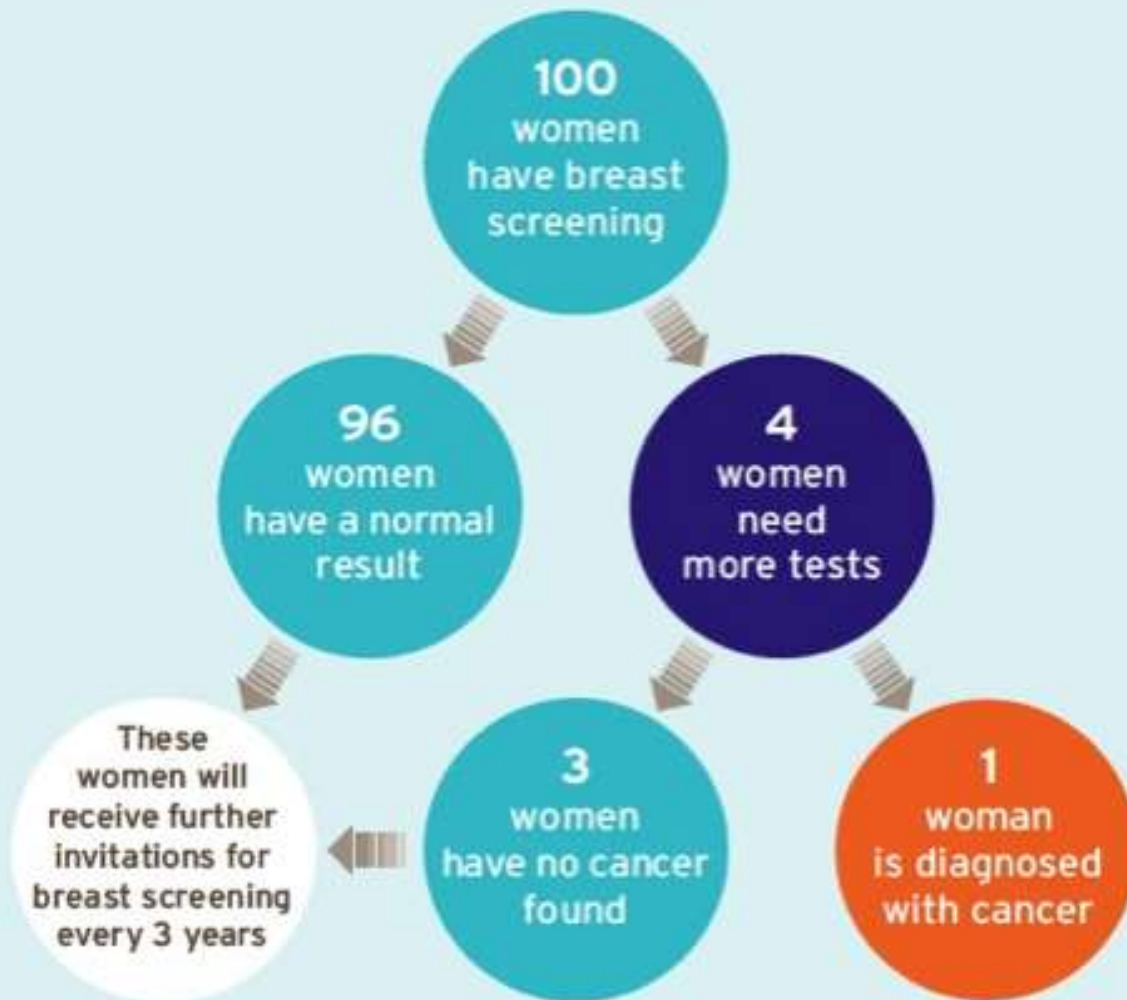


Citizens' Jury on information for women about breast screening

Report to Informed Choice about Cancer Screening

Public engagement through *Citizens' Jury*

What happens to 100 women
each time they have breast screening



Drug Facts Box

Woloshin
and
Schwartz

Prescription Drug Facts: **AMCID** (amoditine)

What is this drug for?	To relieve heartburn
Who might consider taking it?	Men and women bothered by heartburn or acid reflux disease
Who should NOT take it?	Women who are pregnant or breastfeeding
Recommended testing	None
Other things to consider doing	Eat frequent small meals; avoid fatty foods (and others which trigger your symptoms); excessive alcohol and eating close to bedtime; don't smoke; look into other medications.

AMCID STUDY FINDINGS BOX

500 people with bothersome heartburn were given AMCID or a sugar pill for 2 weeks. Here's what happened:

What difference did AMCID make?	People given a sugar pill	People given AMCID (20 mg a day)
Did AMCID help? Fewer people taking AMCID had heartburn (17% fewer)	81% 810 in 1000	64% 640 in 1000
Did AMCID have side effects? <i>Life threatening side effects</i> No difference between AMCID and a sugar pill	None observed	
<i>Symptom side effects</i> No difference in headache	About 5% in both groups 50 in 1000	
No difference in diarrhea	About 2% in both groups 20 in 1000	
No difference in dizziness	About 1% in both groups 10 in 1000	

How long has the drug been in use?

Amcid was approved by FDA in 1991 - Studies show that most serious side effects or recalls of new drugs happen during their first 5 years of approval.

Communicating the strength/quality of evidence

- Onora O'Neill again: *Intelligent openness* means that info must be both
 - *accessible*
 - *assessable* (need to be able to assess its trustworthiness)
- *eg What Works Centres* report
 - estimated effect sizes
 - **and** a rating of the strength/quality of evidence



Cost ▾

Evidence Strength ▾ Months Impact

Arts participation

Low impact for low cost, based on moderate evidence.



+2

Aspiration interventions

Very low or no impact for moderate cost based on very limited evidence.



0

Behaviour interventions

Moderate impact for moderate cost, based on extensive evidence.



+4

Block scheduling

Very low or no impact for very low or no cost, based on limited evidence.



0

Collaborative learning

Moderate impact for very low cost, based on extensive evidence.



+5

Home / Crime Reduction Toolkit

Our effect scale

Our quality scale

About the Crime Reduction Toolkit

Key

Quality of evidence

- No information
- Limited quality
- Moderate quality
- Strong quality
- Very strong quality

Filters

Impact on Crime

(select a range using the markers below)



Crime Reduction Toolkit

Intervention	Impact on crime	How it works	Where it works	How to do it	What it costs
	Effect	Mechanism	Moderator	Implementation	Economic cost
Alcohol ignition interlock					
Alcohol tax and price policies					
Alley gating					
Alternative education programmes					
CCTV					

Interactive Cochrane Summary of Findings Tables

Oxman, Rosenbaum et al

GRADE DECIDE interactive Summary of Findings Home | About | Help | Login | Register | Language (English)

Dabigatran versus warfarin for atrial fibrillation May 2014

Question details
Participants: Patients with atrial fibrillation and a risk of stroke (CHADS2 score = 1 or higher)
Interventions: Dabigatran (150 mg twice daily)
Comparison: Warfarin

Source

Table Bottom line

Plain language statements Absolute effect Relative effect Visual overview

Outcomes	Plain language statements	Absolute Effect		Relative effect	Certainty of the evidence
		Without Dabigatran	With Dabigatran	(95% CI) N° of participants & studies	GRADE
Death Follow-up: 2 years	<i>Dabigatran probably reduces the risk of dying.</i>	76 per 1000	68 per 1000	RR 0.89 (0.79 to 1.01) Based on data from 12098 patients in 1 study	++++ Moderate
Nonfatal stroke Follow-up: 2 years	<i>Dabigatran reduces the risk of a nonfatal stroke.</i>	34 per 1000	23 per 1000	RR 0.64 (0.51 to 0.81) Based on data from 12098 patients in 1 study	++++ High

What about contested data?

ipcc
INTERGOVERNMENTAL PANEL ON climate change



Guidance Note for Lead Authors of the IPCC Fifth Assessment Report on Consistent Treatment of Uncertainties

**IPCC Cross-Working Group Meeting on Consistent Treatment of Uncertainties
Jasper Ridge, CA, USA
6-7 July 2010**

What about contested data?

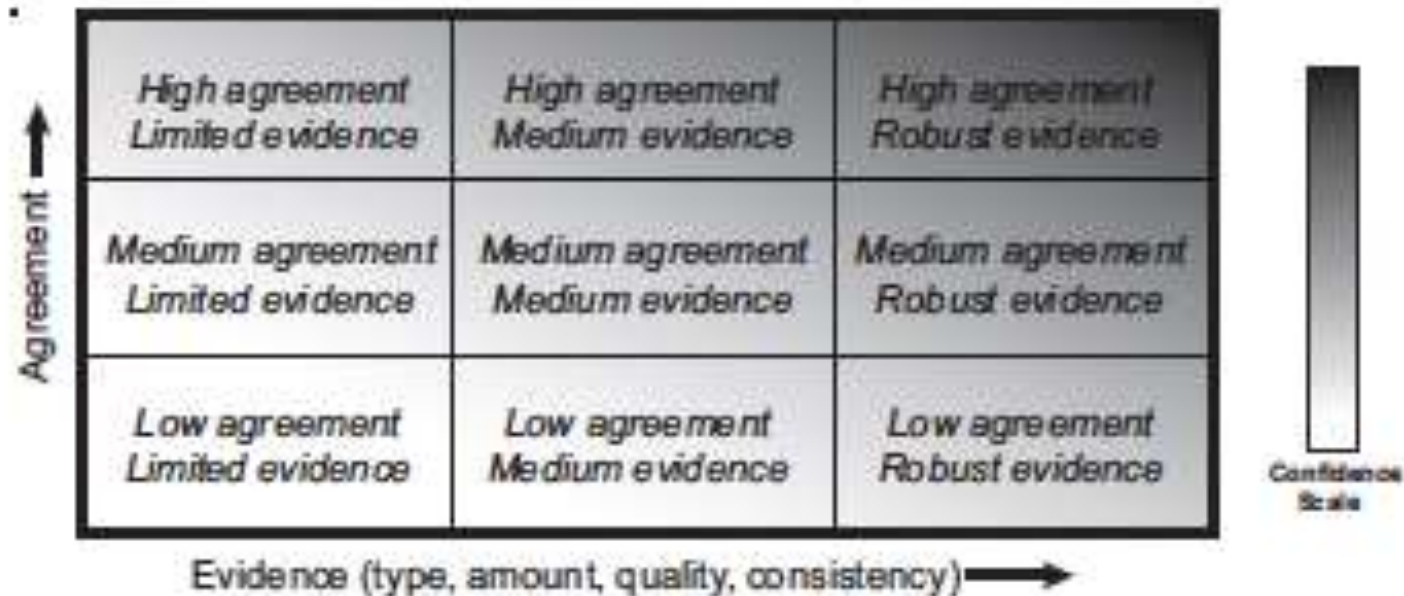


Figure 1: A depiction of evidence and agreement statements and their relationship to confidence. Confidence increases towards the top-right corner as suggested by the increasing strength of shading. Generally, evidence is most robust when there are multiple, consistent independent lines of high-quality evidence.

Facts Boxes for policies?

- Potential benefits and harms shown in a balanced format
- Not trying to persuade, just inform
- Relate to specific groups
- Includes features of 'popular' interest
- Report, say, in terms of what would we expect for 1,000 in each group
- 'Star-rating' on quality/strength of evidence

group of interest e.g.	Features of interest	Metrics	Policy 1	Policy 2	Strength/quality of evidence
Under 18s non-smokers	uptake etc				
Under 18s smokers	cessation/ long-term effects				
Under 18s vapers	long-term outlook				
Adult non-smokers	uptake				
Adult smokers	cessation/ long-term effects				
Adult smokers who want to quit	cessation				
Adult vapers	long-term effects				
Those exposed to second-hand 'smoke'	impact				
Major tobacco industry	profits				
Independent producers					

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