




## 4.8 Best evidence versus other things (and how to get the most from other things)

Many individuals and groups bring forward what they call evidence to address societal challenges. ‘Best evidence’ in a given national (or sub-national) context – in the form of national (or sub-national) evidence drawn from the best available studies (i.e., what has been learned in that context) and global evidence drawn from the best available evidence syntheses (i.e., what has been learned from around the world, including how it varies by groups and contexts) – needs to be differentiated from ‘other things’ that are sometimes presented as evidence, such as a single study, expert opinion, an expert panel, a research interest group, an anecdote ‘dressed up as a case study,’ a white paper, and a jurisdictional scan. Each of these other things brings with them a risk (column 2 below). At the same time, there are ways to get more value from them (columns 3 and 4 below).

We do not consider here ‘other things’ beyond those typically presented as research evidence, such as people’s lived experiences (which we discuss in **section 2.3** in the context of co-designed interventions) or Indigenous ways of knowing (which we discuss in **section 4.10** as part of a broader discussion about Indigenous peoples).





If presented with...	...which brings with it a risk of...	...then...	...or better yet...
<p><b>Single study</b> <i>(including preprints)</i></p> 	<p>‘Hubcap chasing,’* or giving attention to each study that is actively promoted by the authors, their media-relations office or others (as happened with the high-risk-of-bias study about hydroxychloroquine discussed in <b>section 3.7</b> and the now retracted study** about a link between vaccines and autism)</p>	<p>Ask for a critical appraisal of the study using widely accepted quality criteria (to understand the risk of bias) and recognize that a statistically significant finding (at the 0.05 level) may be found by chance in one in 20 studies</p>	<p>Add the study to a ‘living’ evidence synthesis where it can be understood alongside other studies addressing the same question (or consider it as one of many types of national or sub-national evidence to be put alongside the best global evidence)</p>
<p><b>Expert opinion</b></p> 	<p>‘Squeaky wheel getting the grease’ / ‘eminence-based’ (rather than evidence-informed) decision-making, or giving attention to those who command the greatest attention by virtue of persistence, reputation or other factors (as happened with widely viewed television shows about the Scared Straight crime-prevention program even after evidence syntheses*** had found evidence of harm and no evidence of benefit)</p>	<p>Ask the expert to share the evidence (ideally evidence syntheses) on which the opinion is based, as well as the methods used to identify, assess, select and synthesize it</p>	<p>Engage the expert in working through what specific evidence syntheses mean for a specific jurisdiction, or in challenging ways of thinking with different forms of evidence**** (or ask the expert what evidence would convince them they were wrong)</p>
<p><b>Expert panel</b></p> 	<p>GOBSATT, or ‘good old boys sitting around the table’ offering their personal opinion</p>	<p>Ask the panel members to share the evidence (ideally evidence syntheses) on which their input and recommendations are based, as well as the methods used to identify, assess, select and synthesize it</p>	<p>Add methods experts to the panel (or secretariat), pre-circulate the best local (national or sub-national) and global evidence, support robust deliberation, and make explicit which recommendations are based on what strength of evidence</p>

\* We use the term ‘hubcap chasing’ (i.e., dogs repeatedly barking at and chasing cars) as a metaphor for sharing and commenting upon each new study that captures one’s attention.

\*\* [www.nature.com/articles/nm0310-248b](http://www.nature.com/articles/nm0310-248b)

\*\*\* [onlinelibrary.wiley.com/doi/10.4073/csr.2013.5](http://onlinelibrary.wiley.com/doi/10.4073/csr.2013.5)

\*\*\*\* Such challenges have been called ‘red teaming’ in the military.

<p>Jurisdictional scan</p> 	<p>'Groupthink,' or people in many jurisdictions relying on people in one jurisdiction who are willing to share their experiences and innovations, but haven't yet evaluated them</p>	<p>Ask or look for any available supporting evidence or plans for generating it</p>	
<p>Research interest group*****</p> 	<p>Researchers advocating for action based on their personal values and preferences or their professional interests</p>	<p>Ask groups why their values and preferences should count more than the citizens we all serve</p>	<p>Encourage them to base their requests on high-quality evidence syntheses</p>
<p>'Case study'</p> 	<p>Anecdotal experiences given a name that implies a rigorous approach underpins it</p>	<p>Ask the writer what criteria were used to select the case, what mix of data-collection approaches were used, and what analytic and other approaches were used to ensure rigour</p>	
<p>White paper</p> 	<p>Taking at face value the implicit or explicit assertion that evidence was used in arriving at a statement of policy preferences</p>	<p>Ask government leaders or advisors to share the evidence they used as a basis for their input and recommendations, as well as the methods used to identify, assess, select and synthesize it</p>	

\*\*\*\*\* Note that societal interest groups may also invoke evidence in advocating for action based on their values and preferences, in which case the same response as in column 4 may be appropriate.