Communications and Credibility: NAS Roundtable January 21 2016

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Pedigree: NAS Work on the Use of and Credibility of Social Science Evidence

- John Graunt, 17th Century
- Ibn Khaldun, 14th Century
- Histories of US Census Bureau, BLS, BJS, NCES, NCHS etc.
- Recurrent Hearings, US Congress 1960s+
- Histories of controlled trials in medical, educational, criminological, social service, welfare sectors, etc.

Basic Questions

- Is the potential user aware of the evidence?

- Does the potential user understand the evidence?

- Does the potential user have the capacity/ability to use the evidence?

- Does the potential user have the incentives to use the evidence?

- Does the evidence get used in some sense?

Influences on Answers to the Basic Questions

- Each question's answer invites attention to factors that influence answers…

- E.g. Controllable versus uncontrollable factors

- E.g. Changing times, technology, societal interests and structures

- E.g. Who paid for the research?

Simplistic Statistical Theory of Use: Simple Answers to Basic Questions

- If the probability (P) of a "Yes" answer to each question at each level is 1/5, e.g. P of Awareness is 1/5, P of Awareness *and* understanding is 1/5, etc.

- The probability of the eventual use of evidence is (1/5)x(1/5)x(1/5)x(1/5)=.0016.

- Very discouraging and hopefully wrong.

- Empirical evidence on this would be good.

Credibility and Use

- Credibility is a function of, among other things…
- Stakeholder's engagement at front end in design and analysis, not merely Tech TWIGs, local, national and otherwise
- Systems such as Campbell and Cochrane Collaborations, WWC, etc. that screen evidence
- Able science writers, e.g. Kolata, EWA, Dyson
- A thoughtful and civil society

Thanks