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 \((1/5) \times (1/5) \times (1/5) \times (1/5) = .0016\).
- 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