

# WHAT IS EVIDENCE IN HEALTH CARE?

## From Evidence to Action

### What is evidence?

Evidence is information that comes closest to the facts of a matter. Because research is often incomplete and sometimes contradictory or unavailable, other kinds of information, such as professional judgment and experience, values and stakeholder opinions are necessary supplements to or stand-ins for research. (Adapted from CHSRF)

#### 10 Reasons to Use Evidence in Health Care

1. Facilitate decisions
2. Avoid costly mistakes
3. Increase choices
4. Save time
5. Proven effective
6. Less stressful
7. Its Best Practice
8. Provides broader perspective
9. Helps gain consensus
10. Public expects it

### Evidence is more than research:

Because research may not be available, or locally relevant evidence may be needed, other information is often required. Other good sources of evidence include community consultations, program evaluation, local surveys or results of quality improvement initiatives. The challenge for decision-makers is to ensure that more weight is given to sources of evidence that reflect research rigour, and minimize the influence of other factors (e.g. habit, individual preference, lobbying).

### Evidence is more than just “numbers”:

There is a difference between *data driven* and *evidence informed* decision-making. If only quantitative data is used to make decisions, this eliminates many other good sources of data and places decision-making about currently under-resourced areas at a disadvantage. Good qualitative research and evaluation is often an excellent source of evidence.

*As Albert Einstein noted:*

*“Not everything that counts can be counted and not everything that can be counted counts.”*

### Is evidence-based planning really possible?

The concept of “evidence-based” comes from clinical medicine and implies that the best answer lies in research findings. There are a number of concerns that this is not an appropriate approach for planning and decision making with the result that an *evidence-informed* approach has been proposed as an alternative.

An *evidence-informed* approach recognizes that:

- Research may be lacking for the questions facing decision-makers,
- Research findings may not be available in a timely way,

- There is often a need for locally relevant information, and the results from health services research may not always be applicable in other settings

*Evidence-informed* approaches also recognize that there are other factors affecting decisions making-these include values, resource availability, political judgment and professional experience.

### Not all information is good evidence:

Both the quality of the evidence and its applicability to a specific situation must be considered.

Three important questions to use in this process are:

1. Is it relevant to the purpose?
2. Is it credible or trustworthy?
3. Is it sufficient to draw conclusions or to act on?

### What is the best source of evidence for evidence-informed decision-making?

Findings of high quality, methodologically appropriate research are the strongest and most accurate evidence. There are many different sources of scientific evidence.

STRONG SOURCES OF EVIDENCE	WEAKER SOURCES OF EVIDENCE
<ul style="list-style-type: none"> <li>▪ Systematic reviews of evidence on a topic (e.g. Cochrane Reviews)</li> </ul>	<ul style="list-style-type: none"> <li>▪ One single article on a topic</li> </ul>
<ul style="list-style-type: none"> <li>▪ Consensus of expert opinion (e.g. clinical guidelines)</li> </ul>	<ul style="list-style-type: none"> <li>▪ One expert's opinion</li> </ul>
<ul style="list-style-type: none"> <li>▪ Findings from well-designed qualitative studies</li> </ul>	<ul style="list-style-type: none"> <li>▪ Anecdotes: stories about what happened, especially if not verifiable</li> </ul>
<ul style="list-style-type: none"> <li>▪ Comparison of validated indicators over time</li> </ul>	<ul style="list-style-type: none"> <li>▪ Use of indicators that have not been validated, are not comparable over time or location, or can be “gamed”</li> </ul>
<ul style="list-style-type: none"> <li>▪ Results of well-designed, objective program evaluations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Results of poorly designed evaluations, or those conducted by someone too close to one side of an issue</li> </ul>
<ul style="list-style-type: none"> <li>▪ Strategies for systematic input from all stakeholders (e.g. values and experience of people affected)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Opinions of a few non-representative individuals</li> </ul>

### Program evaluation and Quality Improvement initiatives can combine research rigour and the need for locally relevant evidence:

Well designed evaluations can bridge the gap between academic research (that may not be relevant to the local situation) and decisions made on anecdotes or opinions. Program evaluation uses research methodology to answer local questions. Well-designed quality improvement strategies can also provide important local evidence.