

OIPRC Best Practices Criteria

1. Theory/Theoretical Basis of Program
2. Outcome
3. Breadth of Research Support/Strength of Evidence
4. Methodology
5. Cost Effectiveness
6. Portability and Translatability
7. Sustainability
8. Overall Impression of Program

Theory/Theoretical Basis of Program

- Premise underlying the program is founded on sound theoretical ideas which themselves are based on valid injury prevention ideas and which extend from existing knowledge. Theory provides background information on how the program was designed and how the program functions. This theoretical basis is also linked to relevant research models (such as the stages in the Health Belief Model).
 - a. **Strong** = Underlying hypothesis is solidly and credibly linked to the practice or research idea in question using a relevant research model;

Example: Large number of fatal and non-fatal injuries on roadways are caused from crashes by alcohol-impaired drivers (Situation) → Reducing the number of impaired drivers on roadways will reduce the number of crashes, and thus injuries, caused by impaired drivers on roadways (Underlying hypothesis) → To reduce the number of impaired drivers on roadways, legislation to criminalize blood alcohol concentrations above the legal limit is introduced and implemented (Premise of the program/intervention) → Decrease in number of injuries resulting from crashes by impaired drivers on roadways (expected logical outcome).
 - b. **Moderate** = Some mention made of the model or theory underlying the program practice to be implemented but explicit connections to the program design are not provided;

Example: Health Belief Model is being used as the underlying theoretical basis of the program to achieve increased injury

awareness and the subsequent expected decreases in injury numbers but explicit connections are not formed when the program design is presented.

- c. **Weak** = No mention made of the theory or models used in introducing the premise of the program and no links provided to the program design.

Example: A relevant research model is not mentioned as being used as the basis of the program and the program design is not linked to a relevant research model when it is presented.

Outcome

- Program realized the expected or desired results based on the underlying hypothesis – essentially, the results obtained as a result of the program being implemented.
 - a. **Strong** = Positive results of one or more gauges of injury indicators using comprehensive methods of data analysis. Results are statistically significant or clinically relevant, with applicable figures pertaining to reductions in the numbers or rates of injuries being provided;

Example: Table with number of hospital admissions for a specific injury type before the program was implemented and after the program was implemented.
 - b. **Moderate** = Positive results obtained but either results were not quantifiable and/or results were related to precursors of injury indicators;

Example: Program did not evaluate the number of hospital admissions for injuries before and after the implementation of the program; instead, measures were only taken of subjects' knowledge, attitudes, and behaviours, before and after program implementation.
 - c. **Weak** = Program had no reported and/or measurable effect on injury indicators or an impact assessment was not conducted for the program.

Example: Outcome evaluation was not conducted.

Breadth of Research Support/Strength of Evidence

- Evidence, excluding the program under examination, which forms a broader whole of the research in the relevant injury domain.

- a. **Strong** = Practice used in the program is supported by existing evidence;
Example: Systematic review(s) or multiple studies with or without meta-analysis have also been conducted to assess the practice implemented in the program.
- b. **Moderate** = Practice was established by a single, strong research study;
Example: An additional research study that used a similar or the same practice was conducted and demonstrated the efficacy of the practice.
- c. **Weak** = Practice established by weak or no other studies or programs.
Example: Practice that was proposed as the premise of the program has not been adequately examined in several studies or not at all.

Methodology

- Program adheres to established practices of rigorous scientific methods to produce the strongest possible unbiased results within the context of the domain and research question(s) being examined.
 - a. **Strong** = Best possible approaches to answer the specific research question(s) and to ensure that scientific methods are followed by using comparison groups (such as double-blind randomized controlled trials (RCT) or matched/equivalent comparison groups), by establishing the appropriate controls to ensure that biases or the effects of confounding factors are minimized or eliminated, and by using comprehensive data analysis methods;
Example: Program with excellent pre- and post-test design and in which biases are removed – such as a double-blind RCT study.
 - b. **Moderate** = Good research design noted but clearly established or comparative comparison groups are absent, data analysis was not comprehensive enough, and/or the effects of biases and confounding factors were not controlled;
Example: Pre- and post-test study without controls for confounding variables.
 - c. **Weak** = No indication is provided of equivalent comparison groups and no clear way of assessing research design as not

enough information provided and data analysis was not complete.

Example: Post-test study only with a control group being absent.

Cost Effectiveness

- The overall impression that the cost of the study or program interventions were practical and not prohibitive.
 - a. **Strong** = Evidence presented that the program was at least cost or revenue neutral and that a cost-benefit analysis was conducted and presented in the study;

Example: Program had more overall benefits than costs as shown in the cost-benefit analysis.
 - b. **Moderate** = Some evidence of the benefits of the program outweighing the costs but no cost-benefit analysis conducted;

Example: Benefits appear to outweigh costs but was not supported by a cost-benefit analysis.
 - c. **Weak** = No evidence presented within study that benefits outweighed costs and that the program was cost effective or this aspect of the program was not examined by the researchers.

Example: Cost-effectiveness of the program was not examined.

Portability and Translatability

- Sufficient details and guidelines are provided within the program design and evaluation to enable its implementation or adoption in other settings or environments.
 - a. **Strong** = Applications of the program model to other settings are provided in sufficient detail to enable its easy implementation in other settings (including those recommended by the researchers) with no possible barriers and/or the program has been tested or implemented in several other settings;

Example: Program model has been used in another setting (such as in another community) with no barriers to its adoption and implementation.

- b. **Moderate** = Sufficient details are provided to implement the program in other settings but only under specific circumstances as identified by the researchers, such as when identified limitations or barriers to portability and translatability are acknowledged and explained by the researchers;

Example: A program that can be adopted and implemented in smaller communities only.

- c. **Weak** = Program does not appear to be translatable to other settings due to the presence of significant barriers to its implementation in those settings.

Example: Program requires a large staff with specialized training that is not readily available in many communities.

Sustainability

- Program can be self-sustaining beyond the initial pilot project conducted.
 - a. **Strong** = Sustainability plan has been developed and program has been sustained after the initial project with no significant barriers;

Example: Program granted funding for a specific time with future funding being provided through a health unit/community network as such a body would adopt the program.
 - b. **Moderate** = Some sustainability plan was developed by the researchers with advice on the implementation of the program so that it can be sustained in the future;

c. Example: Program is still in the initial phases but a sustainability plan was developed.
 - d. **Weak** = No information provided for program implementation beyond the initial work or significant barriers exist to implement the program beyond the initial work.

Example: The program was a pilot test only and prohibitive/exorbitant human and financial costs exist to limit its future use.

Overall Impression of Program

- All things considered and using your best judgement, would you recommend the program for use in a public health setting, strongly, moderately or weakly?
 - a. **Strong** = You would definitely recommend the implementation of program without reservation;
 - b. **Moderate** = You might recommend the program under certain conditions;
 - c. **Weak** = You would not recommend the program.