

Operational Definition for Evidence-Based Practices
Addictions and Mental Health Division
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The Oregon Addictions and Mental Health Division (AMH) defines evidence-based practices as programs or practices that effectively integrate the best research evidence with clinical expertise, cultural competence and the values of the persons receiving the services. These programs or practices will have consistent scientific evidence showing improved outcomes for clients, participants or communities. Evidence-based practices may include individual clinical interventions, population-based interventions, or administrative and system-level practices or programs.

Population-based services are programs or services that work at the community level with civic, religious, law enforcement, and other government organizations to reduce risk factors for mental health and substance abuse problems. Substance abuse prevention programs that enhance anti-drug norms and pro-social behaviors are an example. Fidelity to the evidence-based structure, content and delivery of population-based programs will result in specific, intended, and measurable outcomes, such as reduction in drug abuse in the targeted population.

Administrative or service delivery system practices are clearly defined organizational models that, in combination with clinical interventions, produce specific, intended, and measurable outcomes. The type of scientific evidence applicable to these distinct categories may vary and AMH will apply the following evidence continuum to identify and promote evidence-based practices and programs in all the categories described above.

The research basis for clinical, administrative and population-based practices can be placed on an evidence continuum ranging from multiple studies using randomized assignment of patients in clinical settings to no evidence that supports the efficacy or efficiency of the practice. The following describes the levels of evidence that can be considered benchmarks along such a continuum. Each level defines the degree of evidence that a practice needs to be placed on the continuum. The first three levels (I-III) of evidence describe practices meeting the necessary scientific rigor to be defined as evidence-based.

Evidence Continuum

Evidence-Based Practice Levels:

- I.** A prevention or treatment practice, regimen, or service that is grounded in consistent scientific evidence showing that it improves client/participant outcomes in both clinically controlled and real world settings. The practice is sufficiently documented through research to permit the assessment of fidelity. This means elements of the practice are standardized, replicable, and effective within a given setting and for particular populations. As a result, the degree of successful implementation of the service can be measured by the use of a fidelity tool that operationally defines the essential elements of the practice.

Key points:

- Supported by scientifically sound randomized controlled studies that have shown consistently positive outcomes.
- Positive outcomes have been achieved in scientifically controlled and routine care settings.

- II.** A treatment or prevention service that is sufficiently documented through research studies (randomized controlled studies or rigorously conducted and designed evaluations). It is not necessary that research has been conducted in both a controlled setting and a routine care setting. The elements of the practice are standardized and have been demonstrated to be replicable and effective within given settings and for particular populations. As a result, the degree of successful implementation of the service can be measured by the use of a fidelity tool or some other means, such as a quality review based on a manual definition of the practice that defines the essential elements of the practice.

Key points:

- Supported by scientifically sound experimental studies that have demonstrated consistently positive outcomes.
- Positive outcomes have been achieved in scientifically controlled settings or routine care settings.

- III.** A practice or prevention service based on elements derived from Level I or II practices. The practice has been modified or adapted for a population or

setting that is different from the one in which it was formally developed and documented. Based on the results of the outcomes, elements of the service are continually adapted or modified to achieve outcomes similar to those derived from the original practice. Practices difficult to study in rigorously controlled studies for cultural and/or other practical reasons but have been standardized, replicated, and achieved consistent positive outcomes will also be considered for Level III. Given these conditions, research published in an appropriate peer reviewed journal is still required.

Key points:

- Modified from Level I or II practice and applied in a setting or for a population that differs from the original practice.
- Practice may be difficult to study in a controlled setting.

Non Evidence-Based Practice Levels:

IV. A treatment or prevention service or practice not yet sufficiently documented and/or replicated through scientifically sound research procedures. However, the practice is building evidence through documentation of procedures and outcomes, and it fills a gap in the service system. The practice is not yet sufficiently researched for the development of a fidelity tool.

Key point: Intended to fill a gap in the service system and supported through sound research, documentation of service procedures, and consistently measured outcomes.

V. A treatment or prevention service based solely on clinical opinion and/or non-controlled studies without comparison groups. Such a service has not produced a standardized set of procedures or elements that allow for replication of the service. The service has not produced consistently positive measured outcomes.

Key point Practice is currently not research-based or replicable.

VI. A treatment or prevention service which research evidence points to having demonstrable and consistently poor outcomes for a particular population.

Key point: Practice produces poor outcomes.

Operationalization of Evidence Levels

In order to place any particular practice on the evidence continuum, each level must be operationalized in terms of attributes the practice must possess to be placed at a certain level. The table below operationalizes each level of the continuum based on the presence of the following six attributes:

- **Transparency:** Both the criteria (e.g., how to find evidence, what qualifies as evidence, how to judge quality of evidence) and the process (e.g., who reviews the evidence) of review should be open for observation by public description. For example, results should be published in peer-reviewed journal.
- **Research:** Accumulated scientific evidence based on randomized controlled trials, quasi-experimental studies, and in some cases less rigorously controlled studies. Research should be published in appropriate peer reviewed journals and available for review.
- **Standardization:** An intervention must be standardized so that it can be reliably replicated elsewhere by others. Standardization typically involves a description that clearly defines the essential elements of the practice, as evidenced in a manual or toolkit.
- **Replication:** Replication of research findings means that more than one study and more than one group of researchers have found similar positive effects resulting from the practice.
- **Fidelity Scale:** A fidelity scale is used to verify that an intervention is being implemented in a manner consistent with the treatment model – or the research that produced the practice. The scale has been shown to be reliable and valid.
- **Meaningful Outcomes:** Effective interventions must show that they can help consumers to achieve important goals or outcomes related to impairments and/or risk factors.

Operational Matrix for Levels of Evidence (see information in matrix; changes are under research and fidelity scale):

						Meaningful	Fidelity
	Level	Transparency	Standardization	Replication	Research	Outcomes	Scale
Evidence-Based Practices	I	yes	yes	yes	>=3 studies in peer reviewed journal. Minimum of one study should be based on a randomized control trial.	yes	yes
	II	yes	yes	yes	>=3 studies in peer reviewed journal. Studies should be at least quasi-experimental.	yes*	in development or no
	III	yes	yes	yes	>=3 studies in peer reviewed journals. Less rigorously controlled studies will be considered.	yes*	no
Non Evidence-Based Practices	IV	yes	no	no	0-2 studies	yes	no
	V	no	no	no	None	no	no
	VI	yes	yes	yes	yes	no	no

***Prevention services** that can be described as environmental and/or community-based process strategies are waived from the need to demonstrate client level outcomes, as long as research is available to support the process as an effective way to plan for the implementation of specific prevention strategies in the community.