WSIPP's Decision Tree for Evidence-Based, Research-Based, and Promising Practices Inventories

Number of outcome evaluations

0

Promising*

1

p-value on desired outcomes ≤ 0.20

No → **Promising***

Yes → **Research-based**

>1

p-value on desired outcomes ≤ 0.20

No → **Promising***

Yes →

Odds benefits ≥ costs ≥ 75%

No → **Research-based**

Yes →

Tested on heterogeneous or targeted population

No → **Research-based**
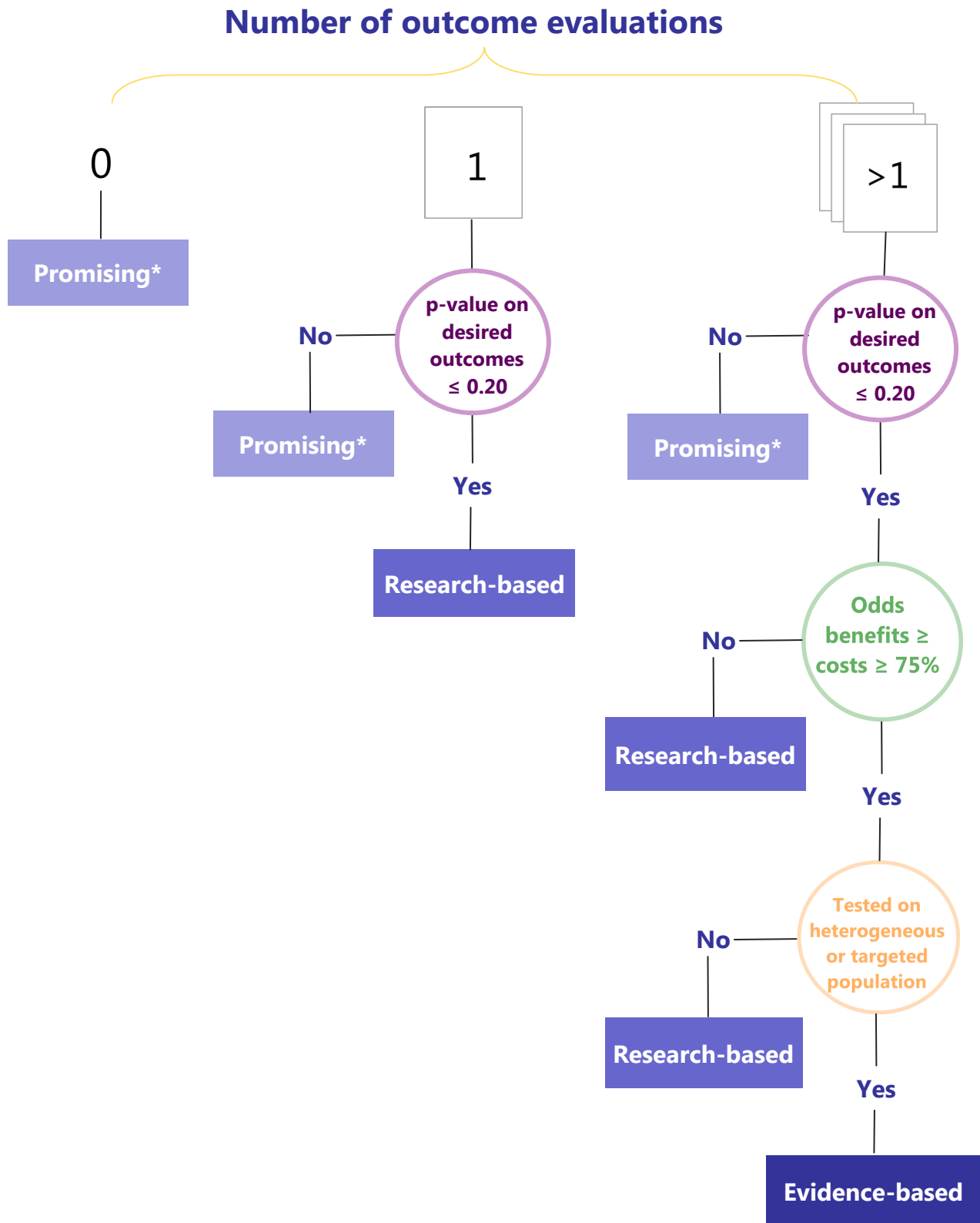
Yes → **Evidence-based**

*Considered promising if based on a logic model or well-established theory of change.
RCW 71.24.025

When the legislature directs WSIPP to compile inventories of evidence-based, research-based, and promising practices, we use the definitions in RCW 71.24.025:

> Evidence-based: *a program or practice that has been tested in heterogeneous or intended populations with multiple randomized, or statistically controlled evaluations, or both; or one large multiple site randomized, or statistically controlled evaluation, or both, where the weight of the evidence from a systemic review demonstrates sustained improvements in at least one outcome. "Evidence-based" also means a program or practice that can be implemented with a set of procedures to allow successful replication in Washington and, when possible, is determined to be cost-beneficial.*

> Research-based: *a program or practice that has been tested with a single randomized, or statistically controlled evaluation, or both, demonstrating sustained desirable outcomes; or where the weight of the evidence from a systemic review supports sustained outcomes.*

> Promising practice: *a program or practice that, based on statistical analyses or a well-established theory of change, shows potential for meeting the evidence-based or research-based criteria, which may include the use of a program that is evidence-based.*

WSIPP has published inventories in the following policy areas: children's mental health, child welfare, juvenile justice, adult criminal justice, adult behavioral health, and K–12 learning assistance. For each inventory, we use a consistent four-step research approach.

1. The first step is to estimate the probability that various public policies and programs can achieve desired outcomes, such as improving high school graduation rates or reducing crime. For each topic, we carefully analyze all high quality studies from the United States and elsewhere to identify interventions that have been tried, tested, and found to either achieve or not achieve improvements in outcomes. We look for research studies with strong evaluation designs and exclude studies with weak research methods. Using all credible evaluations we can locate on a given topic, we then conduct a meta-analysis to determine the average effect of the program and a margin of error for that effect.

2. The second step is to use the results from our analysis of the program effects to determine whether the lifetime benefits of the program exceed the costs to Washington's taxpayers. That is, we conduct a formal benefit-cost analysis.

3. The third analytical step involves testing the robustness of our results. Any tabulation of benefits and costs involves some degree of uncertainty about future performance. This uncertainty is expected in any investment analysis, whether in the private or public sector. To assess the riskiness of our conclusions, we perform a "Monte Carlo simulation" in which we vary the key factors in our calculations. The purpose of the risk analysis is to determine the odds that the benefits of a particular policy option will exceed the costs.

4. In the fourth and final step, we use information from the first three steps to categorize programs and policies as evidence-based, research-based, or promising. As illustrated on the flip side of this handout, according to statute, to be evidence-based, a program or policy must have:

   - Two or more scientifically rigorous evaluations;
   - Sustained improvements in at least one outcome (WSIPP decision rule: p-value of 0.20 or lower);
   - Be cost-beneficial (WSIPP decision rule: benefits exceed costs at least 75% of the time); and
   - Been tested on a heterogeneous population (WSIPP decision rule: at least as diverse as Washington's population).

   To be research-based, a program or policy must have at least one scientifically rigorous evaluation and sustained improvements in at least one outcome. To be promising, a program or policy must have a well-established theory of change.