

# Key Question for Systematic Review of Mindfulness-Based Interventions for Mental Health in Children and Adolescents

## Background (Decisional Dilemmas)

- The Patient-Centered Outcomes Research Institute (PCORI) is partnering with the Agency for Healthcare Research and Quality (AHRQ) to develop a systematic evidence review on Mindfulness-Based Interventions for Mental Health in Children and Adolescents. The Academic Consortium for Integrative Medicine and Health (ACIMH) and the American Academy of Pediatrics (AAP) intend to use the systematic evidence review to inform clinical practice guidance related to the topic.
- Pediatric mental health is often a pressing issue for patients, families, and healthcare providers. Emerging evidence indicates that the prevalence of mental health conditions in youth has risen during the COVID-19 pandemic, with one recent estimate reporting that up to 1 in 5 children and adolescents experience clinically significant depression, and about 1 in 4 may experience anxiety.[1]
- Recommendations for the treatment of anxiety and depression in youth are often limited to conventional therapies, including medication and two forms of psychotherapy.[2, 3] However, integrative therapies, which are complementary or alternative therapies used alongside conventional treatment, are often used among children in the United States, with nearly 12% of parents reporting the use of these therapies.[4]
- A common type of integrative therapy is mindfulness-based interventions, such as mindfulness meditation or guided imagery.[4, 5] These interventions seek to improve wellbeing and health through self-regulation and attention to the present moment.[5, 6]
- A variety of mindfulness-based interventions are available, and patients, families, and healthcare providers need clarity on the range of safe and effective options.
- The lack of a guideline or recent and comprehensive systematic review, paired with accumulating evidence, indicates the need for a new review of the effectiveness of mindfulness-based interventions.

## Draft Key Questions

**KQ 1.** What are the benefits and harms of mindfulness-based interventions for mental health and well-being in the general child and adolescent populations?

**KQ 2.** What are the benefits and harms of mindfulness-based interventions for mental health and well-being in children and adolescents diagnosed with anxiety or depression?

**KQ 3.** What are the benefits and harms of mindfulness-based interventions for mental health and well-being in children and adolescents with a chronic physical health condition who are at risk for symptoms of anxiety and depression?

**Figure 1. Draft analytic framework for Systematic Review of Mindfulness-Based Interventions for Mental Health in Children and Adolescents**

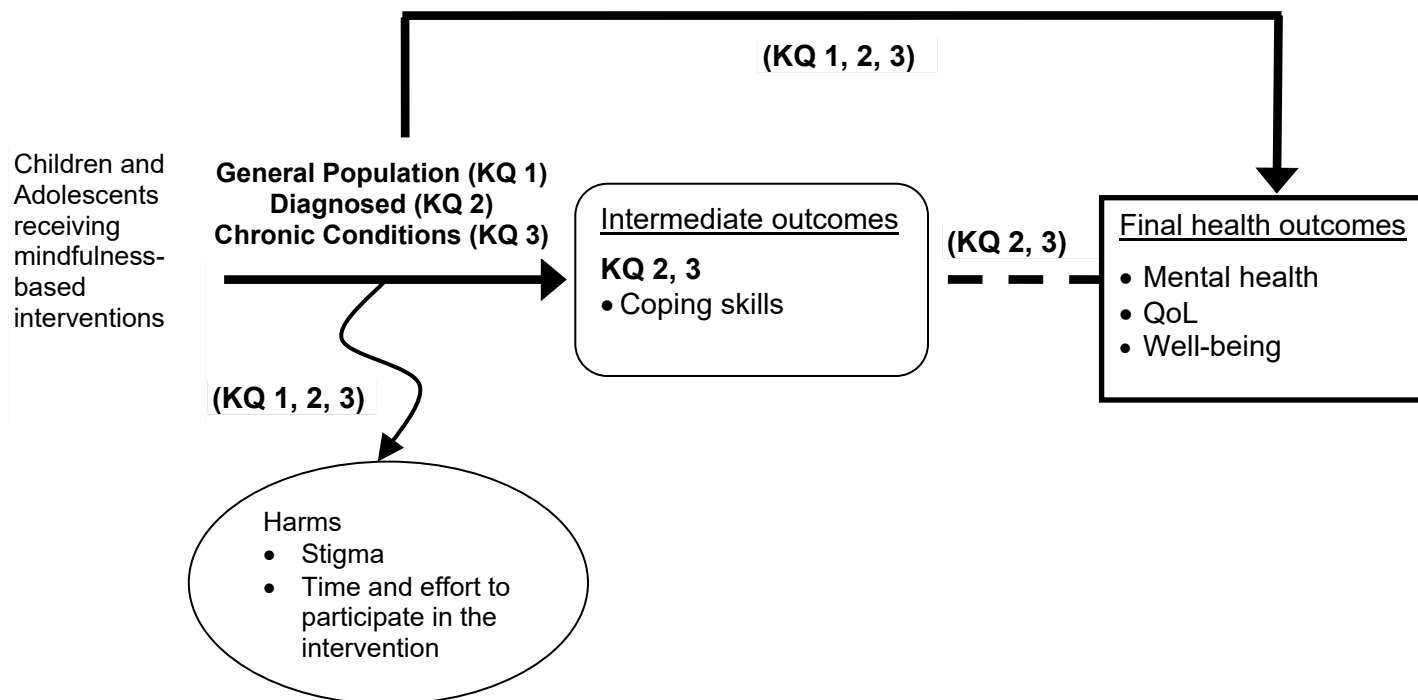


Figure 1: This figure depicts the analytic framework of key questions within the context of the PICOTS described below. In general, the figure illustrates how all children and adolescents receiving mindfulness-based interventions versus other intervention or control may lead to health outcomes including mental health, quality of life, and well-being. Among children and adolescents diagnosed with anxiety or depression or having a chronically illness, there may also be an improvement in intermediate outcomes such as coping skills. Also, harms such as stigma, and time and effort to participate in the intervention may occur at any point during or after the intervention.

**PICOTS**

**Table 1.** Questions and PICOTS (population, intervention, comparator, outcome, timing and setting)

<b>Questions</b>	1) What are the benefits and harms of mindfulness-	2) What are the benefits and harms of mindfulness-based interventions	3) What are the benefits and harms of mindfulness-based interventions for mental health and well-being in children and
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	based interventions for mental health and well-being in the general child and adolescent populations?	for mental health and well-being in children and adolescents diagnosed with anxiety or depression?	adolescents with a chronic condition who are at risk for symptoms of anxiety and depression?
<b>Population</b>	Children and adolescents (<22 years of age)	Children and adolescents (<22 years of age) with a diagnosis of depression or anxiety disorder	Children and adolescents (<22 years of age) with chronic physical health condition(s), including cancer and diabetes, who experience or are at elevated risk for increased symptoms of their chronic condition or depression, anxiety, or stress
<b>Interventions</b>	Mindfulness-based interventions for mental health, provided alone or in addition to a conventional therapy, including: <ul style="list-style-type: none"> <li>- Mindfulness-based stress reduction</li> <li>- Mindfulness-based cognitive therapy</li> <li>- Relaxation techniques</li> <li>- Meditation</li> <li>- Acceptance and commitment therapy</li> <li>- Mindful breathing</li> <li>- Guided imagery</li> <li>- Visualization</li> </ul>		
<b>Comparators</b>	Usual care, conventional therapies (including medications), another active mindfulness intervention, waitlist control, sham, placebo, or attention control.		
<b>Outcomes</b>	<ul style="list-style-type: none"> <li>- Any validated measure of mental health status, quality of life, or well-being</li> <li>- Coping skills, self-regulation</li> <li>- Any harms such as stigma, time, and effort needed</li> </ul>		
<b>Timing</b>	Any follow-up duration.		
<b>Setting</b>	Administered in health care or general population settings (e.g., schools), individually or in groups.  Studies conducted in countries rated as high on the Human Development Index. <sup>a</sup>		

a. United Nations Development Programme. Human Development Index. Retrieved from <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>.

## References

1. Racine, N., et al., *Global Prevalence of Depressive and Anxiety Symptoms in Children and Adolescents During COVID-19: A Meta-analysis*. JAMA Pediatr, 2021. **175**(11): p. 1142-1150.
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5. *Mind-Body Therapies in Children and Youth*. Pediatrics, 2016. **138**(3).
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## Definition of Terms

AF Analytic Framework

KQ Key Question

PICOTS Populations, Intervention Comparison, Outcomes, Timing, Setting