

**Pediatrics · Educational evidence summary**

Anticholinergic exposure in medically complex children

This pediatric review addresses anticholinergic exposure in medically complex children.

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A complex regimen often serves several important needs

For a medically complex child, medicines may address the underlying condition, comfort, function, and episodic problems. An anticholinergic review should make that regimen easier to understand without assuming that complexity means inappropriate care. The review needs the purpose of each treatment and the child's current goals as well as the source evidence.

This guide is an organizational framework, not a deprescribing protocol. It does not set a maximum medicine count or a pediatric burden target. Its aim is to produce an accurate account that can support a focused clinical discussion.

Identify the concern and the child's baseline

Begin with the change or difficulty that prompted review. Describe the child's usual function and how the concern differs, using the child's report and caregiver observations as appropriate. A nonspecific change should not be assigned an anticholinergic cause merely because several medicines are classified by a source.

Feinstein and colleagues studied parent-reported symptoms in children with severe neurological impairment. Their work provides a reason to examine symptom burden in a defined medically complex population, but does not establish a universal threshold for all complex pediatric care.

[Feinstein et al., 2023](#)

Make a map of treatment purposes

For every current medicine, identify the clinical goal and the clinician or service responsible. Distinguish ongoing disease treatment, symptom-directed therapy, rescue use, and products for another condition. These categories organize accountability; they do not replace the actual indication.

If a purpose is uncertain, record it as a question. A medication can remain clinically important even when its history is difficult to reconstruct. The evidence tool should not fill that gap with either a presumed benefit or a presumed lack of need.



Reconcile what is actually administered

Record the exact product, formulation, concentration or strength, route, and actual pattern of use. If several caregivers or care settings administer medicines, distinguish the prescription from the administration history. An occasional order should not be counted as a daily dose without evidence that it was used that way.

When lists disagree, preserve the discrepancy until reconciled. The goal is a reliable exposure record, not a complete-looking table assembled from assumptions. A concentration, route, or product ambiguity can change the clinical question even when the ingredient is recognized by the search tool.

Review source observations without losing missingness

UnifiedACB can show the original source classifications and provenance. Keep each source separate and retain route or formulation limitations. If a medicine is not represented, report that gap rather than assign zero or remove it from the clinical regimen.

The amount of available evidence should accompany the summary. A total based on only part of a complex list can otherwise appear to measure the entire regimen. This is particularly misleading when an adult source is being used to organize pediatric information without population-specific validation.

Distinguish benefits, symptoms, and mechanisms

The same medicine can have an intended effect and an unwanted experience that both matter. A review should state each separately. It should also distinguish a caregiver-observed symptom from a diagnosis or proposed pharmacologic explanation.

For example, a change in participation, bowel pattern, or comfort needs its own clinical assessment. The category can support a medication question, but it does not determine which medicine caused the change or whether changing it would improve the outcome. The underlying condition and other interventions may also be relevant.

Prioritize the uncertainty that changes interpretation

The most useful clarification may be actual rescue use, an unclear formulation, or the current purpose of an adjunct. Address the question that affects the evidence match or clinical assessment first. A long list of generic questions can add work without resolving the uncertainty that matters.

The care plan should identify who will clarify the issue and what will be reviewed afterward. When several specialties are involved, a source summary should support communication rather than create conflicting instructions. Treatment decisions remain with the clinical team and family, informed by the child's goals.



Follow outcomes beyond the number

If the team changes care, record the actual intervention and follow both the concern and the treatment benefit. A lower medicine count or burden category is not itself evidence of better comfort or function. Conversely, a stable category does not mean the review produced no benefit if it clarified administration or resolved a duplication.

Limits

The cited symptom evidence covers selected populations, and medication histories may remain incomplete. This framework does not establish a validated pediatric risk score or a universal strategy for reducing medicines. Its value is a transparent, child-specific medication record that preserves both clinical purpose and scientific uncertainty.

References

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2. Vennard O, Stewart C, Tolia M, Soiza RL, Myint PK. Anticholinergic Medication Burden Scales: A Systematic Review. *J Am Geriatr Soc*. 2026;74(6):1771-1784. [Source](#)
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4. Ghezzi E, Chan M, Kalisch Ellett LM, et al. The effects of anticholinergic medications on cognition in children: a systematic review and meta-analysis. *Sci Rep*. 2021;11:219. [Source](#)

Explore the evidence

[Ask UnifiedACB](#) about a medication or source, browse the [Medication Library](#), or read the [methodology](#).

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Educational evidence summary. This content does not provide patient-specific medical advice and does not replace clinical judgment, medication reconciliation, or prescribing guidance.