



FAMILY-CENTERED STRATEGIES TO ACHIEVE BETTER ASTHMA CONTROL IN SCHOOL-AGE CHILDREN

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Abstract

Asthma control in school-age children depends on more than prescribing the “right inhaler.” Day-to-day outcomes are shaped by family routines, symptom recognition, inhaler technique, adherence to controller therapy, trigger management, school coordination, and timely step-up or step-down decisions. Because children rely on adults for medication access, environmental changes, and healthcare navigation, asthma management must be family-centered and partnership-based rather than clinician-directed only. This article summarizes practical family-centered strategies to achieve better asthma control in children aged approximately 6–12 years, integrating stepwise treatment principles, structured assessment of control and risk, and shared decision-making.

Keywords: Pediatric asthma; school-age children; family-centered care; asthma action plan; inhaler technique; adherence.

INTRODUCTION

School-age asthma is a “systems problem wearing a medical mask.” The airway inflammation is real, but so are the real-life barriers: rushed mornings, lost spacers, inhalers living in three different backpacks, caregivers working multiple jobs, children who feel embarrassed using inhalers at school, and families who are unsure whether coughing at night is “just a cold” or an asthma flare. Guidelines consistently emphasize that good asthma outcomes require both appropriate pharmacotherapy and effective self-management support, including regular review of control, risk, inhaler technique, and adherence [1], [2]. Yet in routine practice, the gap between guideline intent and daily implementation is wide. Children may receive inhaled corticosteroids but use them intermittently; families may receive advice about triggers but lack resources to reduce smoke exposure or dampness; and schools may not have a current action plan on file. In this context, asthma control improves when clinicians treat the family as the central unit of care and build a plan that fits the child’s lived environment, not an idealized clinic scenario.





MATERIALS AND METHODS

A family-centered asthma visit begins with a disciplined, repeated method for assessing control and risk, because families cannot manage what is not clearly defined. Guidelines recommend evaluating recent symptoms, activity limitation, night waking, reliever use, and exacerbation history, along with identifying risk factors for future flare-ups and checking inhaler technique and adherence at every review [1]. Many “uncontrolled asthma” cases are actually “uncontrolled systems”: the child is prescribed controller therapy, but the family is uncertain about its purpose, the technique is incorrect, doses are missed, or the plan for early worsening is unclear. A structured control assessment—kept consistent from visit to visit—helps families see patterns, measure progress, and understand why treatment is stepped up or stepped down. It also prevents a common trap: changing medications repeatedly without first repairing the basics.

Shared decision-making is the engine of family-centered care. The clinician brings evidence-based options; the family brings values, fears, constraints, and priorities. National asthma updates explicitly frame management around informed shared decision-making between clinicians and patients/caregivers [2]. In practice, shared decision-making means offering choices when clinically appropriate—device type, dosing schedule, reminder strategies, and follow-up format—while clearly explaining what is non-negotiable for safety, such as recognizing severe symptoms and seeking urgent care. It also means addressing caregiver beliefs. Some families worry about inhaled steroids “stunting growth” or “weakening immunity.” A family-centered clinician does not dismiss these concerns; instead, they explain benefit–risk, clarify that inhaled corticosteroids reduce exacerbation risk and improve control when used correctly, and agree on monitoring (including growth tracking) so the family feels both heard and protected [1], [2]. Trust is not a soft outcome—it is an adherence intervention.

RESULTS AND DISCUSSION

Written asthma action plans are among the most practical tools for family-centered control because they translate abstract advice into “if–then” steps. Guidelines emphasize self-management education and action plans as part of effective asthma care [1], [2]. The plan should be written in clear language, aligned with the child’s medications, and shared across settings—home, grandparents’ home, school. The highest-yield content includes green/yellow/red zones, early warning signs personalized to the child, how to adjust reliever and controller use during worsening (as appropriate within the clinician’s plan), and explicit thresholds for urgent care.





Family-centered refinement matters: ask caregivers to describe typical flare patterns (“first it’s cough at night, then fast breathing”), then embed those signs into the plan. Finally, use teach-back: have the caregiver (and the child, if developmentally ready) explain what they will do in the yellow zone. If they can’t explain it, the plan is not yet a plan—it’s paperwork.

Inhaler technique is another “small detail” that decides outcomes. Even motivated families may fail if the medication is not delivered effectively. A family-centered strategy is to treat technique coaching as a standing clinical ritual, not an optional extra. Demonstrate, observe, correct, and re-check—every time. Children often need spacers, and they often use them incorrectly. Technique coaching works best when it is brief, hands-on, and repeated. Pair it with an explanation that gives meaning: “This is how the medicine reaches the small airways.” When families see technique as the mechanism of success rather than as a test, they engage more fully. Document technique competence as part of the clinical record so progress is tracked like any other vital sign.

Adherence is the most common reason controller therapy fails, and improving adherence requires empathy plus engineering. A family-centered approach assumes that missed doses are usually not laziness; they are friction. Families forget, children resist, routines change, caregivers disagree, and devices run out. A practical method is “adherence troubleshooting by category”: forgetting, misunderstanding, fear of side effects, access barriers, child refusal, and competing priorities. Then match interventions to the cause. For forgetting, use habit stacking (medicine after brushing teeth), reminders, and visible placement. For misunderstanding, re-teach the difference between reliever and controller using simple metaphors and color coding aligned with the action plan. For fear, address the specific worry and agree on monitoring. For access, prescribe affordable options when possible, reduce device complexity, and synchronize refills. Reviews of pediatric asthma across childhood emphasize how adherence and communication barriers vary by age and context, reinforcing the need for tailored strategies rather than generic advice [5]. A family-centered clinic can also use low-burden digital supports—texts, app reminders, or brief check-ins—when these fit the family’s preferences and privacy comfort.

Trigger management should be reframed from “avoid everything” to “reduce the highest-impact exposures you can realistically change.” Guidelines emphasize identifying triggers and risk factors and addressing them as part of control [1]. The family-centered move is to prioritize. Tobacco smoke exposure is a major priority: families need nonjudgmental counseling and concrete cessation support. Indoor dampness and mold, dust mite exposure, strong fragrances, and air pollution can





also contribute. However, telling families to “remove all carpets” is not realistic for many households. Instead, agree on one or two feasible changes per month: smoke-free home rules, mattress covers if available, improving ventilation, reducing scented products, or simple dampness mitigation steps.

CONCLUSION

Better asthma control in school-age children is achieved when clinical care is built around family-centered execution, not only pharmacologic selection. Guidelines emphasize routine assessment of symptom control and future risk, checking inhaler technique and adherence, and providing self-management education with written action plans. In a family-centered model, the action plan becomes a shared decision tool; technique coaching becomes a routine ritual; adherence becomes a solvable systems issue; triggers are prioritized into realistic household goals; and schools become active partners rather than invisible bystanders. Evidence from school-based self-management research supports skill-building and coordination across settings as meaningful contributors to improved outcomes.

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