



# Literacy Promotion: An Essential Component of Primary Care Pediatric Practice: Policy Statement

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Reading together often with infants and young children strengthens their relationships with parents and caregivers at a critical time in child development, stimulating brain circuitry and early attachment. A positive parenting practice, shared reading helps build the foundation for healthy social-emotional, cognitive, language, and literacy development, setting the stage for school readiness and providing enduring benefits across the life course.

Pediatric physicians and advanced care providers have a unique opportunity to encourage parents and caregivers to establish routines and enjoy conversations around books and stories with their children beginning in infancy. Research has demonstrated that parents read and children learn when pediatricians offer literacy promotion as a practical and evidence-based primary prevention strategy in primary care practice to support early brain and child development. This supports families with a strengths-based approach, shaping a child's life trajectory and helping mitigate stress and adverse experiences.

The American Academy of Pediatrics (AAP) recommends that pediatricians encourage shared reading, beginning at birth and continuing at least through kindergarten, as a strategy for supporting parents and caregivers, enhancing foundational relationships, promoting positive language-rich interactions, and helping families create nurturing and stimulating home environments. The integration of literacy promotion into pediatric resident education is crucial to achieve that goal and thus is also essential. The AAP supports advocacy toward establishing public and private funding for diverse high-quality, developmentally appropriate children's books in the languages preferred by the family to be provided at pediatric health supervision visits to all children but especially to children living in underresourced

## abstract

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## STATEMENT OF NEED

Reading aloud with young children, starting at birth, offers parents and caregivers strength-based strategies that promote positive, intimate, and language-rich interactions. The foundational relationships with parents and caregivers formed in infancy and early childhood, early relational health, are crucial in shaping children’s trajectories, including their cognitive, language, and social-emotional development. Early experiences, exposures, and above all, activities that foster early relationships affect a young child’s capacities for sustained attention, executive function, self-esteem, and social behavior, which profoundly shape school readiness and success. Shared reading is a positive parenting practice, which exposes young children to enriched language and encourages specific early literacy skills and social-emotional strengths during a period when neuroplasticity is high. Positive childhood experiences (PCEs) buffer the impact of adverse childhood experiences on children in stressful circumstances, promote children flourishing, and support lasting family resiliency.<sup>1–3</sup> Indeed, early regular parent-child reading may be an epigenetic factor associated with later reading success.<sup>4,5</sup>

There is growing understanding of how PCEs and family support can enhance early trajectories of children’s development<sup>1,3</sup> and the consequent importance of supporting foundational relationships in medical homes, as recommended in the revised American Academy of Pediatrics (AAP) policy statement “Preventing Childhood Toxic Stress: Partnering With Families and Communities to Promote Relational Health (AAP relational health policy).”<sup>6</sup> Literacy promotion in pediatric primary care offers a practical primary prevention strategy for strengthening safe, stable, nurturing relationships that can be applied universally and reinforced at every visit to the medical home and with community partners.

Reading proficiency by third grade is a significant predictor of high school graduation and career success, but even before the coronavirus disease 2019 pandemic, approximately two-thirds of children in the United States and 80% of those living below the poverty threshold failed to develop reading proficiency by the end of third grade.<sup>7</sup> There is increased concern that the pandemic resulted in learning loss and reading delays while exacerbating disparities.<sup>8,9</sup> Children from underresourced families have fewer literacy resources within the home, are less likely to be read to regularly, and more likely to experience childhood adversity and toxic stress even before they have access to preschool interventions.<sup>6,10–12</sup> These inequities do not reflect individual parental preferences but rather systemic and structural

barriers, including racism, the lack of family time when economic pressures force parents to work long hours and multiple jobs, which creates a kind of “time poverty,” as well as inequities in access to health, education, housing, and other resources, which create significant constraints for families.<sup>13,14</sup> Socioeconomic disadvantage is associated with reduced vocabulary and word processing skills from a very early age, generating disparities that increase toward school age and contribute to cycles of marginalization and economic disadvantage.<sup>15–17</sup> Reading difficulties and related struggles in school negatively affect children’s sense of self-worth and educational trajectories, with particular risk to children from communities facing economic adversity and systemic racism.<sup>18,19</sup> Literacy is a social driver of health, with lifelong effects on health, educational opportunity, and socioeconomic status.

The 2020–2021 National Survey of Children’s Health found that 54% of American children birth to 5 years of age with family incomes 400% of the federal poverty threshold or greater were read to daily, compared with only 24% of children in families living below the poverty threshold.<sup>20</sup> Thus, across socioeconomic groups, many children miss the enhanced engagement, enriched language exposure, and joyful adult-child interactions of daily shared reading.

All families face issues of limited time, limited parental understanding of the key role of reading aloud, and competition for the child’s interest and attention from other sources of entertainment, especially electronic media.<sup>21</sup> Touchscreens and other electronic devices are passive or solitary experiences for children, whereas reading with children is interactive, tactile, language-rich, and nurturing.<sup>22</sup> Shared reading promotes adult-child conversations and joyful interaction, social-emotional development, and language and literacy skills during this critical period of early brain and child development.

## DEVELOPMENTAL DISPARITIES, READING ALOUD, AND RESILIENCE

By reading regularly with young children, parents and caregivers support multiple developmental domains. Specific literacy skills, evident years before children learn to decode print, are affected by genetic, medical, and environmental factors; the eco-bio-developmental model of emergent literacy emphasizes the importance of the home literacy environment,<sup>23</sup> manifested in the presence of children’s books in the home, the frequency and quality of reading with children, and family attitudes. Pediatric primary care providers can guide parents in reading aloud starting soon after birth,

provide high-quality books, model interactive dialogic reading, and emphasize book-related rather than screen-based entertainment with young children, in accordance with AAP guidance.<sup>24</sup> Early literacy promotion in the medical home supports and promotes the 5 R's of early education—reading, rhyming, routines, rewards, and relationships (Box)—described in the AAP school readiness policy.<sup>25</sup>

The AAP relational health policy statement emphasizes PCEs, including building nurturing relationships, that mitigate children's stress responses and support resiliency.<sup>6</sup> Shared reading and a literacy-rich home environment foster secure early relationships and are associated with less harsh parenting and with greater parental empathy.<sup>26–28</sup> Shared reading and play are linked to reduced problem behaviors, such as hyperactivity, mediated by reduced parenting stress and improved parent coping.<sup>29</sup>

Shared reading offers comforting routines, calming strategies, and a sense of security to children and parents, which can enhance adults' sense of self-efficacy and competence.<sup>30,31</sup> MRI studies show significant, positive associations between home reading and measures of brain structure and function in preschool-age children.<sup>32–35</sup> More advanced language skills, both receptive and expressive, help children express their emotional needs and understand the emotional meaning of family moments. Thus, cognitive development, language development, and social-emotional development can benefit from shared reading—and support each other.<sup>26,36,37</sup>

Reading with children from infancy and through the preschool years is associated with higher language skills at school entry and improved childhood literacy<sup>36,38</sup>; earlier age of initiation of reading aloud is associated with better preschool language skills and increased interest in reading.<sup>39,40</sup> In a sentinel study, 60% of the variance in children's vocabulary by third grade was explained by home language environment before preschool.<sup>10</sup> Reading aloud with young children increases the richness of the vocabulary to which they are exposed as well as the complexity of syntax.<sup>41</sup> Books and shared reading stimulate increased interactions, which build nurturing relationships, enhancing the early relational health critical for the child's cognitive, language, and social-emotional development.<sup>42,43</sup>

### LITERACY AS A SOCIAL DRIVER OF HEALTH

Children's literacy skills at school entry and in kindergarten and first grade often predict their later reading success.<sup>40,44,45</sup> Children living in poverty are significantly more likely to have reading problems, to repeat a grade, and to have learning disabilities diagnosed.<sup>46,47</sup> Children from underresourced communities, including underresourced schools, and children from non-English-speaking families may also be at higher risk for experiencing reading difficulty.<sup>39</sup> Poor reading skills in adults are associated with poor economic

potential and with the perpetuation of cycles of poverty, poor health, and dependency across the life course.<sup>48</sup>

Personal health literacy is “the degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others.”<sup>49</sup> Low literacy skills leading to low health literacy in parents and caregivers of young children pose additional risks, with studies showing increased developmental risk for children associated with reduced reading aloud and increased health risk related to medication dosing errors and lower adherence with medical regimens.<sup>50–54</sup>

### LITERACY PROMOTION IN THE MEDICAL HOME: EVIDENCE FOR EFFECTIVE PRIMARY PREVENTION

Reach Out and Read (ROR) is the most widely studied and disseminated model of literacy promotion in the child's medical home. Studies in high-risk populations demonstrate the efficacy of the ROR model. ROR emphasizes early relationships by encouraging parents of infants, toddlers, and preschool-aged children to build positive routines around books and shared reading, discussing developmentally appropriate interactive dialogic reading strategies, modeling in the examination room, including using the book as a developmental surveillance tool, and providing diverse and culturally and developmentally appropriate books in the languages preferred by the family to children at health supervision visits, addressing the individual child's developmental trajectory. Bilingual books may be particularly welcome when older siblings or adults in the home are learning English.

Literacy promotion following this model results in parents being more likely to read with their children regularly.<sup>55–61</sup> Children show significant improvements in inexpressive and receptive language,<sup>59,62</sup> compared with peers who did not participate.<sup>4,5</sup> One study found a 6-month developmental increase in receptive language skills of preschool children participating in ROR, and children with more contacts with ROR had larger increases in their language skills.<sup>5</sup> In another study, intervention children had larger expressive and receptive vocabularies by 18 to 25 months of age.<sup>4</sup> Recent systematic reviews find pediatric literacy promotion among very few interventions delivered in primary care in the first 3 years of life, with strong evidence of positive effect on developmental outcomes.<sup>63,64</sup>

ROR contributes positively to a child's home literacy environment,<sup>57,65</sup> with parents reporting more positive attitudes toward books and reading in both English- and Spanish-speaking families, including recent immigrant populations, with parents encouraged to read and tell stories in the language most comfortable for them.<sup>56,59,61,66</sup> Parents and caregivers who received ROR in primary care were more likely to report using interactive reading styles with their

children, practices that build family relationships, early learning, and early relational health.<sup>58</sup>

PlayReadVIP (formerly VIP), which integrates real-time video-feedback of reading and play during health care visits with ROR, has documented increased reading aloud, improved early relational health, and enhanced development across language, literacy, and social-emotional development.<sup>63,64,67-71</sup> ROR may be associated with increased adherence to the *Bright Futures* well-child visit schedule,<sup>72</sup> and with improved clinic morale and clinician satisfaction.<sup>73,74</sup> A 2020 study comparing 3 “book giveaway” programs concluded that the book giveaway alone was not enough. A 2-generation approach including counseling parents, as practiced in the ROR model, is needed to benefit the home environment and the literacy-related behaviors and skills of children,<sup>75</sup> with modeling by ROR pediatric clinicians in the examination room particularly associated with improvements in the home literacy environment.<sup>76</sup>

### **INTEGRATING LITERACY PROMOTION INTO PRIMARY CARE: SCALE, SUSTAINABILITY, AND ADVOCACY**

The ROR model has been adopted by 6450 pediatric primary care sites serving 4.6 million children each year. The model, including robust, accessible, engaging, and evidence-based training in the techniques for using books to enrich and expedite primary care visits, has been incorporated into the great majority of pediatric residency programs, reflecting the evidence base supporting the efficacy of the intervention and previous AAP recommendations. Special initiatives, many in partnership with the AAP, have expanded the program in specific geographic locations, and adapted it to serve distinct populations emphasizing those at increased risk (Table 1).

State funding for primary care literacy promotion programs provides paradigms for program sustainability. In Oklahoma, federal Health Services Initiative funding for ROR expansion was associated with a significant increase in developmental screening at well-child visits.<sup>79</sup> North Carolina followed by expanding ROR using Health Services Initiative funding.<sup>80</sup> State-level advocacy by AAP chapters, with central support from the AAP, can develop this financial support to sustain literacy promotion in the medical home.

Many pediatricians believe their patients could benefit from this intervention but maintaining a supply of books is often a barrier. The time pressures crowding the primary care visit are also barriers, but incorporating books can help meet *Bright Futures* priorities through direct observation of developmental skills, including emergent language and parent-child interactions around shared reading, and stimulating supportive discussions with parents and caregivers around language, development, and daily routines, including bedtime routines. In addition, the books and guidance improve families’ perception that the care and

advice they receive are helpful and may strengthen their bond with their pediatrician and medical home.<sup>81</sup>

Literacy promotion in pediatric primary care is evidence-based, cost-efficient, and scalable. It provides parents and caregivers tools to enhance nurturing relationships with young children, promotes early learning and school readiness, offers pediatric physicians and advanced care providers an enjoyable way to screen for developmental progress and differences while modeling enriching interactions around books, and enhances families’ satisfaction with the care they receive.

Thus, the AAP has recommended literacy promotion as an essential component of pediatric primary care since 2014. Increased evidence supports the benefits of the model for caregivers as well as children and for reinforcing relationships between primary care clinicians and families. This intervention aligns with high-level goals for pediatric primary care, including toxic stress prevention and promotion of early relational health, and with health equity goals. However, although this is scalable, practical, and takes advantage of special relationships and opportunities in primary care, funding remains a barrier for many practices. Advocacy is essential to obtain the financial support necessary for program sustainability so that children receive the intervention consistently and with fidelity to the model across primary care visits in their early years of life.

### **SUMMARY AND RECOMMENDATIONS**

#### **Summary**

Providing all families with young children with developmentally appropriate guidance encouraging reading together as a joyful component of their everyday routines and offering high-quality, developmentally and linguistically appropriate, and culturally diverse books at health supervision visits (with the highest priority on providing books for children from underresourced families), is an effective evidence-based primary prevention strategy that promotes early relational health and improves the home environment of children starting at birth. Pediatric physicians and advanced care providers can support PCEs, which can positively shape the life course trajectories of children and help support family resiliency. Shared reading benefits language development and the love of books and reading, major factors in school readiness, during the critical period of early brain development, and fosters healthy social-emotional development, helping children thrive in school and in life.

All families need to hear the important message that reading aloud to their children is crucial, starting at birth, especially in an era in which competing entertainment imperatives, such as screen time, may limit family interactions and everyday conversations for even very young children.<sup>82-86</sup> This guidance supports the recommendations

**TABLE 1** Reach Out and Read Expansion Initiatives; Emphasizing Equity, Justice, Diversity, Inclusion, and Belonging in Early Literacy Promotion**Expansion Initiatives**

1. *Leyendo Juntos!*—created materials for clinicians serving Spanish-speaking families by working directly with parents to explore the messages they find most effective.
2. Book diversity initiatives, in partnership with the AAP Council on Early Childhood, promote diversity of book selection for all children as “mirrors and windows”<sup>77</sup> to ensure that books depicting diversity of race, ethnicity, language, and developmental differences are affordable and easily available for clinics to order through ROR partner publisher catalogs and support clinicians using books in conversations about cultural pride, race, ethnicity, identity, and belonging.
3. Partnership with AAP Section on Uniformed Services, developed strategies to foster literacy promotion for military families.
4. Developmentally focused initiative created protocols, training materials, and parent information materials for literacy promotion for children with developmental differences.
5. Partnership with the Institute for Museum and Library Services developed materials to help link families with community resources, including those to improve adult literacy skills.
6. Beginning at Birth initiative emphasizes the importance of literacy promotion, emotional connection, and early relational health in the first 6 months of life. Neonatologists have found strategies for bringing literacy promotion into the NICU with a goal of involving NICU parents in reading to their infants while they are hospitalized.<sup>78</sup>

This list focuses on initiatives which include creating local and national partnerships, which may include public libraries, adult and family literacy programs, child care clinicians, schools, and other community partners to elevate communities.

of the AAP around electronic media<sup>87</sup> by offering parents a positive alternative for entertaining young children, for nurturing early relationships, and for developing healthy bedtime routines.

ROR is the only program cited as a universal primary preventive strategy in the revised AAP statement on promoting relational health,<sup>6</sup> indicating it can help children flourish across multiple developmental domains. Participation in ROR is associated with markedly more positive attitudes toward reading aloud, more frequent reading aloud by parents, improved parent-child interactions, improvements in the home literacy environment, including greater use of the library and community resources, and significant increases in expressive and receptive language in early childhood.<sup>88</sup> Implementation in clinics is associated with improved compliance with well-child visits, improved relationships between families and clinicians, and improved satisfaction for both.

Literacy promotion reminds parents again and again of the importance of their “face time,” “lap time,” responsive and reciprocal conversations, and their own evolving and essential relationships with their children. Both parents and clinicians report finding joy in these interactions—with families in the examination room, with infants in the NICU, and with children at home—and the program remains a strengths-based expression of faith in the power of the bonds that families build. As an early book-mark given out with a baby board book said, “Your baby will love books because your baby loves you!”

### Recommendations for Pediatricians

The AAP recommends that pediatric physicians and advanced care providers promote literacy development as an important evidence-based intervention, with anticipatory guidance at health supervision visits for children

beginning in the newborn period and continuing at least through kindergarten by:

1. Encouraging all parents and caregivers to read aloud with their young children with engaging and interactive styles that enrich early relationships, enhancing social-emotional development and supporting resiliency and building the brain circuits children use to learn language and early literacy skills.
2. Supporting parents to initiate reading together, starting in the newborn period, including, when possible, in the NICU.
3. Developing skills to discuss with all parents and caregivers strategies for mutually joyful and developmentally appropriate reading activities that offer meaningful, language-rich engagement with books, pictures, and the written word, and modeling techniques, such as dialogic reading that use books to prompt reciprocal, responsive, positive experiences.
4. Providing high-quality, developmentally and linguistically appropriate, and culturally diverse books at health supervision visits for all young children; placing the highest priority on provision of books for children from underresourced families who may lack access to them.
5. Supporting the AAP recommendation of limited screen use in early childhood, with an emphasis on print books for young children because digital books do not foster equivalent parent-child interactions. If screen-based reading or audiobooks are used, recommending parents include reciprocal interactions with their children around these digital activities to promote relational connection and enhance child learning.
6. Identifying parents and caregivers with low literacy skills and tailoring book guidance to emphasize

language-rich interactive activities that do not require reading print but may include conversations about colors, numbers, shapes, characters, or actions depicted. Supporting parents who want to improve their own literacy skills and referring to community-based programs.

7. Reinforcing these messages with posters and parent information materials about interactive reading, public libraries, and book distribution programs. All materials should be diverse, culturally responsive, inclusive, and accessible to those with limited literacy skills.
8. Emphasizing the value of books representing diverse cultures, characters, and themes for all children and supporting the use of these books to generate conversations about cultural pride, inclusion, belonging, and equity.
9. Incorporating guidance and encouragement about reading aloud even in visits when books may not be readily available, including when primary care is provided virtually.
10. Partnering with other child advocates to influence national messaging and policies that support promoting reading aloud starting in infancy as an important component of positive parenting; emphasizing that shared reading benefits school readiness and cognitive, brain, and social-emotional development as it enriches children's language world, enhances the home literacy environment, and strengthens early nurturing and foundational relationships.

### Recommendations for Policy Makers

The AAP recommends that policy makers at the federal, state, local, and institutional or corporate levels support early literacy promotion as an essential component of pediatric primary care by:

1. Funding children's books, pediatrician time, and program support to allow for the provision of this intervention for all pediatric health supervision visits, beginning at birth through at least kindergarten entry for all children by public and commercial insurance programs and hospital systems as an evidence-based and "value-added service."
2. Investing federal and state funding for technical assistance supporting program fidelity to the available evidence base to allow for provision of this intervention at pediatric health supervision visits for all children birth through at least kindergarten entry.
3. Developing methods to track and provide payment for all early literacy promotion components during pediatric health supervision visits as essential elements

of primary care services at no cost to the patient. Payment to the pediatric physician or advanced care provider should not be in a bundled payment with the well visit as there is a significant practice expense associated with it.

4. Advocating for the integration of early literacy promotion as an essential component of primary care so that it is taught in residency training and evaluated as an element of competency-based pediatric medical education.
5. Funding research on the effects of pediatric early literacy promotion on child health and education outcomes, including early relational health, school readiness, social-emotional, cognitive, and language development.
6. Supporting research to inform the design and implementation of best practices for early literacy promotion in the context of both pediatric practice and residency education.
7. Championing innovative partnerships that incorporate early literacy promotion beginning at birth and extending at least through kindergarten entry through cross-sector investments among the pediatric medical home, early intervention, child care, Head Start, libraries, home visiting agencies, community-based organizations, schools, and others to improve kindergarten readiness.

### Box: The 5 R'S of Early Education

1. Reading together as a daily fun family activity;
2. Rhyming, playing, talking, singing, and cuddling together throughout the day;
3. Routines and regular times for meals, play, and sleeping, which help children know what they can expect and what is expected from them;
4. Rewards for everyday successes, particularly for effort toward worthwhile goals like helping, realizing that praise from those closest to a child is a very potent reward; and
5. Relationships that are reciprocal, nurturing, purposeful, and enduring, which are the foundation of healthy early brain and child development.

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## ABBREVIATIONS

AAP: American Academy of Pediatrics  
PCE: positive childhood experience  
ROR: Reach Out and Read

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