GIVING LITERACY A SHOT IN THE ARM

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In the U.S., fewer than half of young children (aged birth to 5 years) are read to daily. Low-income and minority children are significantly less likely to be read to daily than non-minority children and children who live in higher-income households.¹ This gap is associated with gaps in school readiness and achievement.

Reach Out and Read is a model that promotes early development and literacy through pediatric primary care so that children enter school ready to learn. Doctors implementing Reach Out and Read give new books to very young children aged 6 months through 5 years. During well-child checkups, they also incorporate advice to parents about the importance and joy of reading aloud to children. Focusing on children growing up in low-income households, Reach Out and Read builds on the unique relationship between pediatricians and parents to encourage daily book-sharing activities.

Reach Out and Read has been shown to increase parent/child book-sharing activities and has a positive effect on child-centered literacy orientation in the home.²⁻⁴ Similar results have also been found in Spanish-speaking and other non-English-speaking families.⁵⁻⁷ Recent research has additionally reported higher language scores in preschoolers who participated in Reach Out and Read than peers who did not.⁸⁻¹⁰ Since its founding in 1989 at Boston City Hospital, Reach Out and Read implementation has expanded into more than 3,200 pediatric medical sites across the country.

For the most part, Reach Out and Read has grown in a grassroots fashion—spreading regionally via word-of-mouth from practice to practice. Because the program has an emphasis on reaching children living in or near poverty, most sites are clinics and hospital-based practices that serve the target families. Very few private doctors participate in Reach Out and Read—even those physicians with significant numbers of low-income patients.

Running a Reach Out and Read program involves a variety of tasks, including selecting and ordering books,

tracking book distribution, submitting semiannual reports, and procuring ongoing funding to support book purchases. The Reach Out and Read National Center, which receives federal funding as well as support from foundations, corporations, and individuals, provides book funding to each new practice that serves a low-income population. Ongoing book purchases by sites are supported through a variety of means including private grants and donations, coalition contributions, and state funding. In June 2006, the Baltimore City Health Department (BCHD) launched the first citywide campaign for every pediatric practice serving low-income children to participate in Reach Out and Read.

INITIATIVE SUMMARY

Planning for the effort began in March 2006 between BCHD and the Reach Out and Read National Office, which provided funding to hire a part-time staff person. The Maryland Chapter of the American Academy of Pediatrics (AAP) was a founding partner and agreed to target its fundraising efforts on the initiative and reach out to its membership. Bonnie Copeland, then CEO of the Baltimore City Public School System, also joined this effort to increase children's exposure to books—an important component of school readiness.

Eligible practitioners were identified through their participation in Maryland's Vaccines for Children (VFC) program, which provides vaccines, free of cost, for Medicaid-eligible, uninsured, or underinsured children. It was noted that all of the existing Reach Out and Read sites in Baltimore were also VFC practices. The connection made sense as doctors who enroll in the VFC program typically see the children who would most benefit from Reach Out and Read. By targeting VFC providers, we could be sure that these were practices that had significant numbers of low-income patients. Nationally, there are more than 44,000 providers that participate in the VFC program.

In May 2006, BCHD sent each identified practitioner a packet of information about Reach Out and Read, which included letters from the Health Commissioner and the Maryland Chapter of the AAP, along with a DVD and a written summary of the program. These packets also introduced practitioners to the BCHD staff, which coordinated the coalition of Reach Out and Read sites in Baltimore and would be contacting them to discuss Reach Out and Read in more detail.

The effort was launched on June 14, 2006. In an editorial of the *Baltimore Sun*, the Health Commissioner issued a public health challenge. He wrote, “Today . . . I am asking every doctor and nurse serving low-income families to . . . counsel parents about how important reading aloud can be—and to give a new book to every child as part of every medical checkup between 6 months and 5 years old.” Concurrently, the BCHD held a press conference that included representatives from the Maryland Chapter of the AAP, Copeland of the Baltimore City Public School System, a national expert on early literacy, and a local pediatrician to get the word out about this initiative. There was wide local coverage.

Over the next 12 months, Reach Out and Read staff called each practice, making appointments to meet in person with the physician or office staff to discuss the program and assist in the application process. Weekly updates were developed and shared with key partners. As necessary, the Health Commissioner called practitioners and, in one memorable case, conducted a surprise visit to a reluctant physician to convince her of the program’s importance. Reach Out and Read staff also enlisted the help of leaders of the Maryland Chapter of the AAP to reach out to other pediatricians with phone calls to promote implementation.

RESULTS

Using the list of providers who participated in the VFC program, 72 practices were identified as potential Reach Out and Read sites. Of those 72 practices, 26 were already participating in Reach Out and Read. In calendar year 2006, these 26 practices distributed 34,600 books to approximately 20,750 young children. Of the remaining 46 practices, 24 submitted applications to Reach Out and Read as a result of the challenge and one clinic had started, but not completed, a Reach Out and Read application. Eight practices declined to implement Reach Out and Read due to:

pending retirement (2), serving a high-income population (1), having only a handful of pediatric patients (1), financial distress (1), and practice reorganization (2). One practitioner gave no reason. Almost all of the remaining 13 practices left the door open for possible future program implementation.

One year after the kick-off press conference, a second press conference was held to announce the results of the Public Health Challenge. Joined at that time by Dr. Andres Alonso (the new CEO of the Baltimore City Public School System), representatives from the Maryland Chapter of the AAP, and Dr. Barry Zuckerman (cofounder and chair of Reach Out and Read), the Health Commissioner announced that 24 pediatric primary care practices had signed up for Reach Out and Read in the past year, with the potential to distribute an additional 23,000 books each year to approximately 14,000 more children—increasing the reach of this program by more than 66% (Figures 1 and 2). Baltimore accounted for more than 7% of Reach Out and Read’s expansion nationwide.

Dr. Zuckerman supported this public health approach, announcing that, “Baltimore has made more progress on doctors and nurses promoting reading in primary care in the last year than any city in the country.”

LESSONS LEARNED

The Public Health Challenge was unique in its attempt to get all pediatric providers in a geographic area who served low-income children to participate in Reach Out and Read, including both clinics and private practitioners. It marked a citywide effort to take on early childhood literacy as a public health issue.

We learned that taking a provider from program admiration to actual implementation took longer than initially anticipated. Repeated outreach to targeted expansion sites was a crucial and time-intensive component of this initiative that contributed to the project’s

Figure 1. Practices in Baltimore participating in Reach Out and Read before and after public health challenge

Figure 2. Annual number of books distributed in Baltimore by Reach Out and Read programs before and after public health challenge

ultimate success. Some of the time lag can be attributed to the several steps necessary to officially start a Reach Out and Read program. Most of the delay, however, can be attributed to the nature of the work of the pediatric provider, who often operates a full-time practice with little staff support. With almost all of the new Reach Out and Read sites, it took multiple phone calls and in-person visits for an application to be submitted. For most sites, it was more a lack of time than a lack of interest that caused the delay.

It will be crucial to offer continuing support if we expect high-quality Reach Out and Read programs. While a few of the new Reach Out and Read sites function independently, most have a need for ongoing concrete assistance to sustain their program.

Name recognition was key to being successful in expanding Reach Out and Read. The more the name appeared in the newspaper and on television, the more the medical providers we contacted were able to connect to something they had heard. By keeping the program out in the public view, we achieved more success in recruiting physicians.

Doctor-to-doctor communication about Reach Out and Read also played a substantial role in the success of the Public Health Challenge. Hearing from the Health Commissioner or a fellow member of the AAP about the benefits of Reach Out and Read implementation was very powerful. If a physician heard from another physician that Reach Out and Read did not add time to a health visit, but was instead a tool that could be used to enhance the visit, he/she was more willing to consider incorporating Reach Out and Read into the practice.

It was clear, looking back at the process, that program expansion was closely associated with media exposure and peer-to-peer communication. Even with offers of financial and administrative assistance, many of the practices would not have implemented Reach Out and Read without the additional endorsement of a trusted colleague. In any future expansion efforts,

we will be sure to identify medical providers who would be willing to act as local Reach Out and Read ambassadors.

The Maryland Chapter of the AAP was successful in raising funds from corporations, including Verizon and Target. These grants will be used to purchase books for the Public Health Challenge sites. We will continue to work with the AAP to identify additional funding sources, including state funding, and apply for grants to sustain book purchases and salary support for the ongoing administrative needs of the new practices.

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REFERENCES

1. Russ S, Perez V, Garro N, Klass P, Kuo AA, Gershun M, et al. Reading across the nation: a chartbook. Boston: Reach Out and Read National Center; 2007. Also available from: URL: http://healthychild.ucla.edu/ROR/ROR_Chartbook_2007.pdf [cited 2007 Nov 1].
2. Needlman R, Fried LE, Morley DS, Taylor S, Zuckerman B. Clinic-based intervention to promote literacy. A pilot study. *Am J Dis Child* 1991;145:881-4.
3. High PC, Hopmann MR, LaGasse L, Linn H. Evaluation of a clinic-based program to promote book sharing and bedtime routines among low-income urban families with young children. *Arch Pediatr Adolesc Med* 1998;152:459-65.
4. Weitzman CC, Roy L, Walls T, Tomlin R. More evidence for Reach Out and Read: a home-based study. *Pediatrics* 2004;113:1248-53.
5. Golova N, Alario AJ, Vivier PM, Rodriguez M, High PC. Literacy promotion for Hispanic families in a primary care setting: a randomized, controlled trial. *Pediatrics* 1999;103(5 Pt 1):993-7.
6. Sanders LM, Gershon TD, Huffman LC, Mendoza FS. Prescribing

- books for immigrant children. *Arch Pediatr Adolesc Med* 2000;154:771-7.
7. Silverstein M, Iverson L, Lozano P. An English-language clinic-based literacy program is effective for a multilingual population. *Pediatrics* 2002;109:e76.
 8. High PC, LaGasse L, Becker S, Ahlgren I, Gardner A. Literacy promotion in primary care pediatrics: can we make a difference? *Pediatrics* 2000;105(4 Pt 2):927-34.
 9. Mendelsohn AL, Mogilner LN, Dreyer BP, Forman JA, Weinstein SC, Broderick M, et al. The impact of a clinic-based literacy intervention on language development in inner-city preschool children. *Pediatrics* 2001;107:130-4.
 10. Sharif I, Rieber S, Ozuah PO. Exposure to Reach Out and Read and vocabulary outcomes in inner-city preschoolers. *J Natl Med Assoc* 2002;94:171-7.