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#### Reach Out and Read Awareness and Utilization at the Community Health Centers of Burlington

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Reach Out and Read Awareness and Utilization at the Community Health Centers of Burlington

Catrina Hood, Larner College of Medicine Class of 2023 Family Medicine Rotation: April 5, 2021-May 7, 2021 Community Health Centers of Burlington-South End Mentor: Dr. Jacob Shaw



## 2A: Identification of Problem and Need

- 27.1% of VT children ages 0-5 years are read to by family members zero to three days per week.
- Children living in VT households who were income eligible for free and reduced lunch (FRL) were less likely to be ready for kindergarten (76%) compared to children from higher income households (89%) in the 2019-2020 school year.
- Only 50% of all third graders in VT were proficient or above in reading assessments in the 2018-2019 school year.
- Burlington School District
  - Kindergarten Readiness, Fall 2019: 76.9%
  - Third Grade Reading Proficiency, Spring 2019: 47.5%

# How can Primary Care Providers seeing pediatric patients help to promote early childhood education and literacy?

The University of Vermont

(National Survey of Children's Health, 2019; Building Bright Futures, 2021) <sup>2</sup>

#### **2B: Identification of Problem and Need**

- Reach Out and Read (ROR) is a national model of literacy promotion and family engagement used to deliver <u>anticipatory literacy guidance</u> and <u>books</u> to parents and caregivers of children, ages 6 months through 5 years, at well child visits with Primary Care Providers.
- In 2014, the American Association of Pediatrics (AAP) issued a policy statement declaring literacy promotion to be an essential part of pediatric care.
- "ROR is the most widely studied and disseminated model of literacy promotion in the child's medical home."
- Observed varying provider familiarity with ROR and integration of ROR books into age-eligible well child visits at CHCB South End clinic



(American Academy of Pediatrics, 2014)

## **3A: Public Health Cost**

 Children who are read an average of 5 books per day will enter kindergarten having heard more than **1.4 million more words** during book reading than their peers who were never or seldom read to.

Children who are <u>never read to</u> are exposed to **300,000 fewer** words than children who are read to once per day from birth to
 5 years of age.



#### **3B: Public Health Cost**

- Over half of US adults ages 16-74 (54%; 130 million people) lack literacy proficiency.
- Getting all US adults to at least Level 3 of literacy proficiency (fully literate) would generate an additional \$2.2 trillion in annual income for the US.
- Practicing reading at home is one of the most dominant predictors of literacy in adulthood.
- The number of books in the childhood household carries a positive impact over the entire adult life, providing stronger supports for reaching higher literacy levels.



(Rothwell, 2020; Kyröläinen & Kuperman, 2021)

## 4A: Community Perspective Dr. Nicholas Bonenfant

Chief Resident, UVMMC Pediatrics

- Currently, UVMMC Pediatric Residents are oriented to the ROR program without completing the ROR provider training.
- Estimates ROR is used at 80-90% of well child exams within UVMMC clinics
- Ample anticipatory guidance counseling is provided on importance and value of reading during well child visits

"It 's easier to integrate ROR into visits with the book in hand."

#### Remembering to grab a book before the visit is key!

# **4B: Community Perspective Rebecca Goldberg**

- Youth Services Librarian, Fletcher Free Library (FFL)
- Programs at FFL to promote early childhood literacy
  - 1000 Books Before Kindergarten [https://1000booksbeforekindergarten.org/]
  - Early Literacy Outreach Program [https://www.fletcherfree.org/elop]
- Families have been eager to access books and STEAM materials from the FFL throughout the COVID pandemic

"I was impressed and glad the AAP was connected to ROR and realized reading is an important part of a child's overall health."



"Sharing books boosts social, emotional, and language development in kids."

# **5A: Intervention and Methodology**

#### • Survey

- Sent to all CHCB Primary Care Providers for anonymous completion
- Goal: Exploratory survey to assess CHCB PCP general awareness of the ROR program, familiarity of the program at their clinic site, and provider engagement with the program



Reach Out and Read Provider Survey

- 1. I am a provider at the following CHCB site:
  - a. Riverside Health Center
  - b. South End Health Center
  - c. Champlain Islands Health Center
  - d. Winooski Family Health
  - e. Other (please specify)
- 2. Are you familiar with the Reach Out and Read program?
  - a. Yes
  - b. No
- 3. Have you completed Reach Out and Read provider training?
  - a. Yes
  - b. No
- 4. Do you know where the books are at your clinic?
  - a. Yes
  - b. No
  - c. To my knowledge, we do not have books to hand out as part of the Reach Out and Read program
- 5. Do you see pediatric patients ages 6 months to 5 years for well child visits?
  - a. Yes
  - b. No
- 6. How often do you hand out a book at a child well exam visit?
  - a. Always
  - b. Most of the Time
  - c. Some of the Time
  - d. Rarely
  - e. Never
  - f. I do not see pediatric patients for well child visits
- 7. Do you ever distribute Reach out and Read books at other patient visits?
  - a. No
  - b. Yes, to age-eligible children of adult patients
  - c. Yes, to age-eligible children seeing me for a reason other than a well exam
  - d. Yes, Other (please specify)



## **5B: Intervention and Methodology**

#### Interventions

- Added ROR signage in lobby and exam rooms
  - Literacy Milestone Chart [<u>Milestones of Early Literacy Development</u>]
  - Family Reading Tips [Reading Tips for Your Family (English)]
- Added ROR signage to the CHCB bookshelf
  - Age-specific book guidelines [What Children Like In Books]
  - Tally sheet for book distribution documentation
- In Progress: Integrate a reminder message about ROR to age-eligible well child checks in the CHCB EHR



## **6A: Results**

Sample Size: N=14

- 86% of providers (12/14) are familiar with ROR program.
- 71% of providers (10/14) know where the ROR books are in their clinic.
- Some providers at Safe Harbor (1/2), CHCB South End (2/4), and CHCB Riverside (1/5) are unaware that their clinics have ROR books to hand out.



## **6B: Results**

- 71% of providers (10/14) see pediatric patients ages 6 months to 5 years for well child exams.
  - 60% of these providers (6/10) **always** hand out ROR books
  - 10% of these providers (1/10) hand out ROR books most of the time
  - 30% of these providers (3/10) **never** hand out ROR books
- Only 20% of providers who see pediatric patients ages 6 months to 5 years for well child visits (2/10) have completed the ROR provider training.
  - ROR Provider Training is free for providers at registered ROR Sites
    to access



## **7A: Effectiveness and Limitations**

#### Effectiveness: Proposed Assessment

- A follow-up survey to reassess provider ROR training completion and frequency of ROR integration into age-eligible well child exams
- Monitor ROR provider training completion rates
  - Goal per ROR guidelines: 75% of providers who see age-eligible pediatric patients for well child visits



## **7B: Effectiveness and Limitations**

#### Limitations

- Small number of provider survey responses (N=14)
- Total ROR book distribution count not currently available from CHCB
- Small age-eligible patient panel at CHCB South End site limits the total patient number that can be reached
  - Further justification for collaborative efforts across all CHCB sites
  - The ROR model includes book distribution at well child visits. However, book distribution to children at other visits is encouraged if clinics have enough books!



#### **8A: Future Recommendations**

- CHCB to re-assign site coordinator role
  - Will facilitate ROR provider training → cannot access training w/out coordinator managing ROR site portal
- Expand provider survey to include UVMMC sites
- Longitudinal data collection on the frequency of ROR material integration into child well exams and ROR provider training completion rate



#### **8B: Future Recommendations**

- Follow-up information for providers [ROR Quick Quide]
  - Background of ROR
  - Guidelines for literacy milestones and age-based book selections
  - Fletcher Free Library programs that support the ROR mission



#### **9: References**

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- Kyröläinen, A.-J., & Kuperman, V. (2021). Predictors of literacy in adulthood: Evidence from 33 countries. *PLOS ONE*, *16*(3). <u>https://doi.org/10.1371/journal.pone.0243763</u>.



#### **10: Interview Consent Forms**

Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work. The interviewer affirms that he/she has explained the nature and purpose of this project. The interviewee affirms that he/she has consented to this interview.

Consented X		
Name:	Dr. Nicholas Bonenfant	May 5, 2021
Name:	Rebecca Goldberg	May 5, 2021

Did NO	T Consent
Name:	
Name:	

