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The Montefiore Family Health Center Literacy Program



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Executive Summary

Research shows that higher levels of pediatric literacy can lead to better health outcomes later in life, yet many children living in low income areas have low literacy levels and limited reading materials at home. Given their unique access to local populations, community health centers can play a significant role in assessing pediatric literacy levels and educating parents about the importance of literacy and home literacy practices for healthy childhood development.

The Montefiore Family Health Center (FHC) in the Bronx, New York has laid the groundwork for an onsite child literacy assessment program by piloting a computer-based literacy screening for ages 7-13 over the last year. FHC commissioned a team from the School of International and Public Affairs (SIPA) at Columbia University to design a program that is sustainable as well as replicable across Montefiore's family practice network. This report is the outcome of this process.

Our team conducted background research and interviews to validate a series of hypotheses that justify the role of a health center in literacy interventions. We also researched various forms of intervention, including both simple assessment and assessment coupled with literacy training. Our conclusions indicate that the best course of action for FHC is to intervene through literacy level assessment in early childhood as part of a cognitive development assessment. We have designed a three-tiered, structured program that incorporates identification of children's literacy levels, education of parents on child literacy, appropriate referrals, and individual case follow up. We believe that this unified strategy of assessment, intervention and follow up provides an essential and replicable model for community health centers like FHC to positively affect pediatric literacy levels.

To assist with the implementation of the proposed literacy program, we have outlined an implementation plan spanning three and half years from July 2009 through December 2012. Under this plan, the program will be fully implemented at FHC and be ready for full roll out to other Montefiore sites, if appropriate, by 2012 or 2013. Given implementation of the project will require a dedicated program manager, as well as significant diverted practitioner time, the cost of the program will require up to \$200,000 per calendar year. Given the significant concerns regarding childhood literacy in the Bronx and the innovative approach of the project, we do not believe that this is overly ambitious. A budget summary appears in Appendix H. A list of potential donors appears in Appendix D.

Introduction

Education has been identified as “the most important factor in the preparation of people who are able to articulate their needs and to make choices that lead to better health and a higher quality of life.”¹ Literacy impacts health knowledge, health status, and access to health services.² Interventions to improve child literacy are essential because children who experience difficulty with basic literacy skills are far more likely to fall behind their peers in school, increasing “the risk of absenteeism, leaving school, juvenile delinquency, substance abuse, and teenage pregnancy — all of which perpetuate the cycles of poverty and dependency.”³

Research has established that children who are read to and exposed to print material during the first years of life are more likely to learn to read on schedule.⁴ U.S. statistics show that 60 percent of children aged 3 to 5 are read to daily by a family member. Yet, this figure is 10 percent lower for families living below the poverty level.⁵ This disparity is attributed to a lack of literacy resources as well as a lack of understanding of the value of reading to children among families living below the poverty line. The Montefiore Family Health Center (FHC) recognizes the link between education and literacy skills and long-term success and wellbeing in life. FHC also considers that in order to treat the ‘whole child,’ it is important to monitor and assess a child’s cognitive development including their literacy skills. With this in mind, FHC asked us, a group of graduate students at the School of International and Public Affairs at Columbia University, to review its current pediatric literacy activities and develop a formal program with expansion opportunities. This report sets out our findings, which we have divided into three sections:

- a) Establishing the need for a literacy program at FHC
- b) Recommended program design
- c) Proposed program implementation

¹ El Bindari Hammad A & C. Mulholland. “Functional Literacy, Health and Quality of Life” [Annals of the American Academy of Political and Social Science](#) 1992; 520:1, 103-120.

² *Ibid.*

³ Reach out and Read, http://www.reachoutandread.org/about_how.html

⁴ *Ibid.*

⁵ ChildStats.gov, <http://www.childstats.gov/americaschildren/edu.asp>

Establishing the Need for a Literacy Program at FHC

Demographics in the Bronx

The borough of the Bronx, New York is one of the most economically, medically, socially, and educationally disenfranchised communities in the nation. 30 to 45 percent of Bronx families and over 40 percent of children under 18 years of age live below the poverty level; the average income of residents in the borough is \$24,000.⁶ 48 percent of Bronx residents identify as Latino/Hispanic and 31 percent as African-American.⁷ The Bronx currently has the youngest population in New York State, with 30 percent of residents under the age of 18.⁸ Accordingly, it also has the highest share of school-aged children (ages 5 to 17) in New York City.

State of Health in the Bronx

Prevalence rates for poverty-related diseases such as substance abuse, HIV/AIDS, and mortality from HIV are over 50 percent higher in the Bronx than the citywide average.⁹ There are also disproportionately high rates of obesity, diabetes, psychological conditions, and drug-related deaths. Bronx residents are more likely to be without a regular physician and to smoke cigarettes than the New York City average, and are less likely to exercise.¹⁰ Over half the population is uninsured or on Medicaid.¹¹

State of Literacy and Education in the Bronx

One-third of the approximately 1.3 million Bronx inhabitants are foreign born and English is spoken as a second language in over half of Bronx households.¹² Literacy rates in the Bronx fall short of citywide averages. On average, children living near or below the federal poverty line — such as many children in the Bronx — have lower reading scores than their peers.¹³ Adults and children in recent immigrant families and those who continue to speak their language of origin at home often experience challenges with English, which may negatively impact academic achievement. Moreover, the increasing number of school-aged children has put a strain on school capacity. While elementary and junior high

⁶ US Census Bureau, Census 2000, <http://www.census.gov/main/www/cen2000.html>.

⁷ *Ibid.*

⁸ *Ibid.*

⁹ Summary of vital statistics 2007, the City of New York <<http://www.nyc.gov/html/doh/downloads/pdf/vs/2007sum.pdf>>

¹⁰ 2006 Community Health Profile, second edition, The City of New York

¹¹ *Ibid.*

¹² US 2007 Census, <http://www.census.gov/>.

¹³ Page Ahead Children's Literacy Program, www.pageahead.org.

school utilization rates have declined city-wide due to increased school seats and declines in enrollment, two out of five Bronx school districts have utilization rates greater than 105 percent.¹⁴ Finally, family and community problems bred by the socioeconomic environment may contribute to students' lack of focus on achievement at school.

The Link between Literacy and Health Status

It is well documented that literacy and education levels affect health status, along with other related socioeconomic factors such as income level, occupation, housing, and access to medical care.¹⁵ Adults with low literacy are more likely to be poor and to have physical, mental or other health conditions that limit their activities.¹⁷ Moreover, minorities and those for whom English is a second language are more likely than whites to have limited literacy skills.¹⁸ Adults with poor literacy are 1.2 to 4 times more likely to engage in health behaviors that negatively impact child health.¹⁹ Adolescents with poor literacy are at least twice as likely to have aggressive or antisocial behaviors and chronically ill children who have caregivers with poor literacy are twice as likely to use more health services, as well as to have poor health outcomes.²⁰

Health literacy — an individual's capacity to “obtain, process, and understand basic health information and services needed to make appropriate health decisions”²¹ — is widely recognized as critical to achieving and maintaining health. General literacy is a foundation of health literacy. The ability to access and use healthcare, communicate effectively with medical providers, and understand and adhere to important self-care guidelines are all positively correlated with adequate literacy levels.²² By contrast, low health literacy is linked to more frequent use of healthcare services, longer hospitalizations, increased use of the emergency room, longer recovery time, illness complications, and the rising costs of

¹⁴ Demographic and Enrollment Trends page 18, NYC Department of City Planning

¹⁵ Wilson F. The crucial link between literacy and health. *Annals of Internal Medicine*. 2003 Nov 13. 39(10): 875-8.

¹⁶ Literacy and Health Outcomes. Agency for Healthcare Research and Quality. 2004 Jan. AHRQ Publication No. 04-E007-2. Accessed 11 April 2009. <<http://www.ahrq.gov/downloads/pub/evidence/pdf/literacy/literacy.pdf>>

¹⁷ 1992 Adult Literacy Survey. National Center for Education Statistics, U.S. Department of Education.

¹⁸ *Ibid.*

¹⁹ Sanders LM, Federico S, Klass P, et al. Literacy and child health: a systematic review. *Arch Pediatr Adolesc Med*. 2009 Feb;163(2):131-40.

²⁰ *Ibid.*

²¹ Healthy People 2010. Office of Disease Prevention and Health Promotion. Accessed 11 April 2009. <http://www.healthypeople.gov/Document/pdf/Volume1/11HealthCom.pdf>.

²² Paasche-Orlow MK, Wolf MS. The causal pathways linking health literacy to health outcomes. *Am J Health Behav*. 2007 Sep-Oct;31 Suppl 1:S19-26.

healthcare.²³ These factors, along with patients' self-reported health status, tend to improve when literacy levels increase.²⁴

Improving Pediatric Literacy in Healthcare Settings

The strong link between health and literacy has led many primary care centers to develop literacy programs for children.²⁵ The *Reach Out and Read* program, for example, has shown that when healthcare practitioners become involved in literacy interventions, there is a marked effect on parental behavior, impacting beliefs and attitudes about reading aloud and ultimately improving children's preschool language scores -- a good indicator of later literacy success.²⁶ Many healthcare centers follow the *Reach Out and Read* model whereby providers give families age-appropriate children's books and handouts explaining the benefits of reading to children, as well as advice about promoting children's literacy practices. Program outcomes include: increases in parents' literacy orientation and in children's language scores,^{27, 28} increases in parents reading aloud to their children,^{29,30,31} doubling in book sharing among Spanish speaking, immigrant families,³² and improved self-reports of home reading attitudes and practices among English and non-English speaking families given English language books.³³ Studies also report direct benefits to children's health following literacy level enhancement, for example in asthma self-management practices.³⁴

²³ Betz CL, Ruccione K, Meeske K, et al. "Health literacy: a pediatric nursing concern." *Pediatric Nurs.* 2008 May-Jun;34(3):231-9

²⁴ Speros C. "Health literacy: concept analysis." *J Adv Nurs.* 2005 Jun;50(6):633-40.

²⁵ Bennett IM, Robbins S, Al-Shamali N, Haecker T. "Screening for low literacy among adult caregivers of pediatric patients." *Fam Med.* 2003 Sep;35(8):585-90.

²⁶ Reach Out and Read. Accessed 11 April 2009. <http://www.reachoutandread.org/about_research.html>

²⁷ High P, Hopmann M, 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 May;152(5):459-65.

²⁸ High PC, LaGasse L, Becker S, et al. "Literacy promotion in primary care pediatrics: can we make a difference?" *Pediatrics.* 2000;105(4 Part 2):927-34.

²⁹ Jones VF, Franco SM, Metcalf SC, et al. The value of book distribution in a clinic-based literacy intervention program. *Clin Pediatr (Phila).* 2000 Sep;39(9):535-41.

³⁰ Golova N, Alario AJ, Vivier PM, et al. Literacy promotion for Hispanic families in a primary care setting: a randomized, controlled trial. *Pediatrics.* 1999;103(5 Part 1):993-7

³¹ Needlman R, Toker KH, Dreyer BP, et al. Effectiveness of a primary care intervention to support reading aloud: a multicenter evaluation. *Ambul Pediatr.* 2005 Jul-Aug;5(4):209-15.

³² Sanders LM, Gershon TD, Huffman LC, Mendoza FS. Prescribing books for immigrant children: a pilot study to promote emergent literacy among the children of Hispanic immigrants. *Arch Pediatr Adolesc Med.* 2000 Aug;154(8):771-7.

³³ Silverstein M, Iverson L, Lozano P. An English-language clinic-based literacy program is effective for a multilingual population. *Pediatrics.* 2002 May;109(5):E76-6.

³⁴ Robinson LD Jr, Calmes DP, Bazargan M. The impact of literacy enhancement on asthma-related outcomes among underserved children. *J Natl Med Assoc.* 2008 Aug;100(8):892-6.

The primary role of a community health center is to address and resolve its community members' health concerns. This does not mean, however, that literacy should not be of concern to health centers. It is our position that all community institutions should dedicate attention to improving the overall welfare of the individual. Particularly in a borough like the Bronx where childhood literacy levels and health outcomes are disproportionately poor, we believe there is strong justification for a community health center doing 'whatever it takes' to improve the total wellbeing of its patient population.

Community health centers are well positioned to participate in literacy interventions based on advantages of access, reach and quality. The over 6,000 health centers in the U.S. serve as the "health care home" for 17 million people, including one in five low-income uninsured individuals, almost one in three people in poverty, and one in four low-income minorities.³⁵ In general, "[n]umerous independent studies show that health centers provide high-quality and cost-effective care, reduce racial and ethnic health disparities and generate large costs savings to the health care system."³⁶ The health center-based family practitioner, who plays a key role in monitoring children's development, is well positioned to identify and address early learning problems. Family practitioners often have close and trusting relationships with the whole family and thus also may have greater influence in persuading parents to take action to address any early literacy problems identified.

An existing major activity of health centers is to screen for diseases and make recommendations for healthier living. By approaching healthcare in a more holistic fashion, this process can include screening for literacy as part of a patient's overall health assessment. By intervening in literacy, the health center acknowledges the critical role literacy plays in future health. In the case of FHC in particular, this broader outlook also aligns with its larger departmental position that "health is a state of physical, social, economic, psychological, and political well-being" and that to promote health, it is important to "support community action and progressive change in public policy and social structure, both at a local level and more broadly."³⁷ The departmental mission statement additionally supports working "collaboratively with patients and their families...to provide excellent patient-centered care, explor[ing] innovations in primary care, and support[ing] a context that fosters health by providing culturally sensitive and

³⁵ "Talking Points about Health Centers." National Association of Community Health Centers. <http://www.nachc.com/talkingpoints.cfm>

³⁶ Ibid

³⁷ "Mission Statement." Department of Family & Social Medicine, Albert Einstein College of Medicine/Montefiore Medical Center. http://www.aecom.yu.edu/dfsmpage.aspx?id=446&ekmense=176_submenu_480_link_3

respectful care that empowers all those involved.”³⁸ It is our belief that assessing and promoting the literacy skills of patients matches these objectives.

The Montefiore Family Health Center (FHC)

FHC is part of the Montefiore Medical Group’s Ambulatory Care Network, which consists of 21 community-based practices and health centers. Montefiore Medical Center is one of the largest non-profit health care systems and teaching hospitals in the nation, and is a leading healthcare resource for minority and low-income residents of the Bronx.

FHC is located in the Fordham/Bronx Park area of the Bronx. The New York City Community Health Profiles³⁹ characterizes this three zip code area as the home of 250,491 residents who are generally younger in age than New York City as a whole. Over 54 percent of the population is Latino, with one of three people born outside the U.S. (primarily in the Dominican Republic, Jamaica and Mexico).⁴⁰ Death rates for most causes are higher in the Fordham/Bronx Park area than in New York City as a whole, particularly for AIDS and homicide. In a recent survey, 30 percent of Fordham/Bronx Park adults rated their own health as “Fair” or “Poor.”⁴¹

As a community health center, FHC plays an important role in supporting the surrounding community’s health and promoting access to high quality healthcare. FHC provides comprehensive primary care and supportive services, including Family Medicine, Cardiology, Obstetrics/Gynecology, Podiatry, and Nutrition. Serving both adults and children, FHC offers care for the whole family at one central location. FHC is organized around health teams and accountable to an advisory board of patients and community activists. Staff includes a Medical Director, a team of physicians, medical residents, psychosocial residents, nurses, and clerical staff. FHC also staffs a nutritionist, health educator and two social workers.

Approximately half of FHC’s patients receive Medicaid; around 15 percent are covered by other health insurance plans, while the remainder do not qualify for Medicaid but often cannot afford healthcare costs. FHC thus provides services to the uninsured on a sliding fee scale. The major ethnic groups represented in the patient population are Latino and African American. Other groups represented are

³⁸ Ibid

⁴⁰ 2006 Community Health Profile, second edition, the city of New York

⁴¹ Ibid

Southeast Asian immigrants from Cambodia and Vietnam and working class whites of many ethnic backgrounds. Many staff members are bilingual in Spanish and several are bilingual in Vietnamese or Khmer.

FHC leadership and staff have already taken steps towards creating a pediatric literacy assessment program and support the goal of improving children's reading skills. FHC leadership has observed a decline in children's eagerness for education when they are experiencing difficulty at school. Given that this difficulty often results from inadequate preparation in pre-literacy and literacy skills, FHC leadership recognizes the importance of intervening as early as possible, starting from early childhood. Trouble with literacy would then be addressed in a timely manner, preventing children from falling further behind their peers and risking the negative consequences of poor school performance. Children served at FHC have been found to be particularly receptive to assistance with literacy offered by FHC personnel. Attention to adult English as a Second Language is also ultimately needed.

Recommended Program Design

Program Objectives

The literacy program we have designed aims to meet the following objectives:

- Provide early identification of literacy levels among FHC's pediatric patient population
- Improve literacy outcomes in target population
- Promote a better understanding of the importance of literacy for health outcomes among patients, healthcare providers and local schools
- Promote better literacy practices within families

In the long run, improved literacy levels have the potential to lead to improved health outcomes in FHC's patient population.

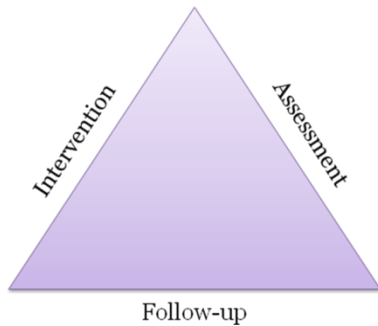
Key Program Steps

The proposed program has three key elements:

1. *Assess and identify* child literacy levels
2. Provide appropriate *intervention* depending upon the outcome of the assessment
3. Take *follow up action* where required and continue to monitor the patient's literacy level

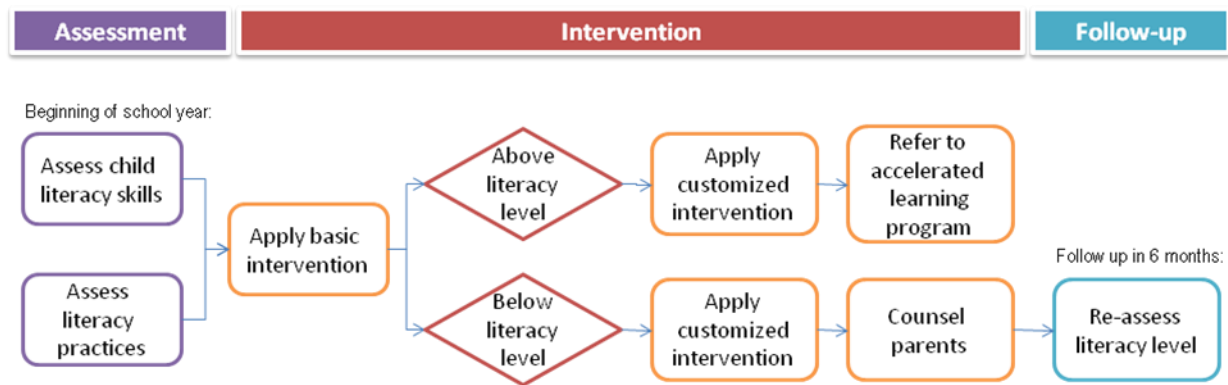
Each of these elements is essential to achieving the program objectives and all three must be implemented for each child to provide an effective solution to a child’s literacy challenges.

Figure 1: Key Program Steps



The remainder of this section of the report provides further details of the following program overview.

Figure 2: Overview of Program Design



I. Assess Child Literacy Levels

The first step involves conducting a formal assessment of a child’s literacy levels at their annual health checkup. When an appointment for a child’s annual checkup is made, parents will be informed that the checkup now incorporates a literacy assessment. Additional time will be scheduled so that the literacy assessment can be conducted prior to meeting with the physician. A communications strategy will be necessary particularly in the early stages of the program, to ensure that existing patients and potential patients understand the purpose and content of the program. This is discussed further in the

implementation stage: however, a proactive approach to increasing participation in the literacy program will be required.

There are two good indicators of a child's literacy level, namely:

1. The child's existing literacy skills and stage of cognitive development
2. The family's literacy practices

The first indicator is the most direct method of assessing literacy levels and is "a scientifically based practice that is used to assess students' academic performance and evaluate the effectiveness of instruction."⁴² However, identifying and assessing family literacy practices is also especially important given that there are easy ways to improve literacy levels by tapping into potential literacy practices in the home. The idea of literacy practices comes out of the school of New Literacy Studies, and is based on the idea of literacy as part of a social context. In this case the literacy practice of focus is on how parents can engage their children in literacy around daily events, such as cooking, taking the bus, reading a magazine, etc. Assessing literacy practices at FHC will consist of a discussion between the healthcare provider or Literacy Program Manager⁴³ and parents about home literacy practices including questions such as:

- Do you read to/with your child?
- How many books are in the home?
- Do you read the newspaper and discuss the news with your child?
- When using cookbooks, do you read them with your child?

We recommend that clinicians work with a literacy specialist to develop a set of questions for parents to help inform doctors of the strength of a families literacy practices. Parents who may have difficulty reading are encouraged to invent their own stories to go with picture books, to spend time naming objects with their children and to engage their children in daily language activities such as reading street signs or subway maps.

Assessing both literacy skills and practices will provide the information needed for FHC staff to determine whether intervention is required. Family literacy practice assessment is more dynamic and

⁴² National Center on Student Progress Monitoring, <http://www.studentprogress.org>

⁴³ See Implementation Plan for definition of the role of the proposed Literacy Program Manager.

recommendations will depend on the individual family situation. The following section discusses selection of a formal child literacy assessment tool.

Literacy Skills Assessment Tool

There are numerous tools used to assess childhood literacy skills, including Accelerated Math and Reader, AIMSweb, Dynamic Indicators of Basic Early Literacy Skills, and EdCheckup. In general, these tools require the child to answer a series of questions. The tool then records the results and provides the assessor with a report of the child’s literacy level as benchmarked against children in the same age bracket. In 2004, the U.S. Department of Education commissioned a review of available literacy monitoring tools. The 12 tools assessed are not the only literacy assessment tools available but it is helpful to have a government assessment of each. Appendix A provides an overview of these tools and Appendix B outlines their key parameters. Each one was designed to be implemented in schools, with the outcomes report aimed at teachers.

To determine the appropriate assessment tool for FHC, we outlined a number of key design parameters and FHC’s requirements for each one.

Tool Design Variable	FHC Requirements
Time to Administer	Less than 30 minutes, target of 15 minutes
Output	Report that can be readily understood by health professionals and parents
Cost of Tool	Relatively low
Technology Requirements	Basic PC with internet access
Content Area & Grade Level	Pre-K to grade 3
Staff Training Required	Minimal so that a paraprofessional can administer
Frequency of Testing	Annually or twice a year depending on literacy skill level

We recommend that FHC investigate the tools available to make an informed decision on the one most appropriate considering goals, available resources and setting. Such an evaluation may not be possible immediately and, as such, we envision in the short to medium term FHC will continue to use the program it currently has as its assessment tool. The module being used at FHC is the STAR Reading module,

which assesses English literacy for children in grades 3 to 8 (ages 7 – 13). As noted, we consider it crucial that the literacy program identify literacy deficiencies as early as possible. We therefore highly recommend that the STAR Early Literacy (Pre K to grade three) module be used in addition to the STAR Reading module. To get a full picture of a child’s development, it may also help to understand their numeracy levels through the STAR Math module (grades 2 to 8).

In our preliminary research, we have identified two specific tools, including STAR, we believe are promising options to consider. Below, we provide a brief overview of those two tools.

- **Option 1: STAR Reading**

FHC currently uses Renaissance Learning’s STAR Reading tool in a pilot literacy program aimed at assessing literacy levels among patients in grades 3 to 8. As noted above, we propose targeting children in the Pre-K to grade 3. The STAR Early Literacy tool is one option for this purpose. The STAR program meets all the requirements outlined above except for the fact that it was designed for implementation in schools. As well, there is no outcomes report specifically designed for parents, in a simple format they could easily understand. STAR is also English specific and not available in Spanish.

On a positive note, on April 2, 2009, Renaissance Learning announced that STAR Reading and STAR Early Literacy, the company’s reading assessment products, received the highest ratings among screening reading tools reviewed by the National Center on Response to Intervention.

- **Option 2: Children’s Progress**

We have identified only one assessment program, developed by Children’s Progress, which is currently being piloted in a healthcare setting. The core product is a computerized academic progress assessment for Pre-K to grade 3, which can be administered in approximately 20 to 30 minutes. A child’s responses are automatically tabulated and a narrative report is generated. The assessment is intended to be formative in that it seeks to guide achievement in the right direction, as opposed to a summative assessment which merely measures achievement.

The Children’s Progress outcomes report was also designed for teachers but the organization more recently developed a report which proposes intervention actions parents can take. This parent report was specifically designed for Boston Medical Center which is in the early stages of developing a pilot project to implement Children’s Progress in a number of its pediatric offices. Children’s Progress also has

a Spanish-language version of its Mathematics and Language Arts Assessment in which all questions, hints and feedback are in Spanish. Recommended activities are delivered in both English and Spanish. Children’s Progress believes this element of the tool “can help teachers determine whether a potential learning difficulty is simply a language acquisition issue.”⁴⁴

The following provides a comparison of the two assessment tools:

Tool Design Variable	STAR	Children’s Progress
Time to Administer	10 minutes. Scoring is automated.	20-30 minutes. Scoring is automated.
Output	Report is designed for teachers but can be given to parents and explained.	Beta version of report developed for parents with targeted teaching activities so parents can begin to work with child immediately to improve literacy skills.
Cost of Tool	The one-time fee for STAR Reading is \$1,499 plus \$7.89 per student for the first year, followed by \$0.39 per student per additional year	There is a one-time fee of \$1,500, which includes 3 hours on-site training for staff. Fees are set at \$15-20 per child for 3 tests a year. This fee is negotiable based upon the number of children tested and the number of times per year each child is assessed.
Technology Requirements	Computer access is required, with headphones (preferred) or speakers for sound.	Computer access is required with headphones and high speed broadband internet connection. Assessments will also work with most touch screen Monitors.
Content Area & Grade Level	Literacy Pre-K to grade 8 (requires two modules).	Developmental Pre-K to grade 3.
Staff Training Required	Testers will require less than 1 hour of training. Paraprofessionals can administer the test.	Testers will require approximately 4 hours of training. Paraprofessionals can administer the test.
Frequency of Testing	As often or as little as necessary.	Designed to be administered three times a year, although possible to administer annually.
Current Users	Adopted by more than 47,000 schools.	Adopted by public and independent schools in 39 states.

This leads us to a comparison of the major advantages and disadvantages of each tool.

	STAR	Children’s Progress
Strengths	<ul style="list-style-type: none"> • Proven product at FHC • Meets the majority of FHC design requirements • Lower cost on per child basis particularly after first year of implementation plus existing grant for 	<ul style="list-style-type: none"> • Meets the majority of FHC design requirements • Formative rather than summative assessment • Report being developed for parents • Spanish-language version

⁴⁴ Children’s Progress, <http://www.childrensprogress.com/products/spanish.shtml>

Weaknesses	<ul style="list-style-type: none"> • Continuation of grant heavily dependent on volume • May include higher costs to implement additional modules • Output designed for teachers • No Spanish-language version 	<ul style="list-style-type: none"> • No secured funding and expensive model • Use in hospital systems is still in pilot phase • 20-30 minutes to administer • Designed to be administered three times a year
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II. Intervention

The intervention process can be divided into two levels:

1. *Basic Intervention*: Reward the child/family for participating in the assessment. Goal to incentivize further participation.
2. *Customized Intervention*: Dependent on the skill level of the child and literacy practices of the family.

○ Basic Intervention

The basic intervention will consist of three key elements:

- Provide and explain child’s outcomes report to parents
- Give each child a book at appropriate reading level
- Send outcomes report to the child’s school

Armed with the Literacy Skills Outcomes Report as well as questions on family literacy practices, healthcare providers will be able to identify whether a child is at, above or below the expected literacy level. Providers will provide verbal feedback to parents on their child’s literacy level, highlighting any concerns related to literacy skills or family literacy practices. As per the Reach Out and Read model already in place at FHC, at every well-child check-up, doctors and nurses will encourage parents to read aloud to their young children, and offer age-appropriate tips and encouragement. In addition, a copy of the skills assessment report will be provided to parents. As noted above, it is important to ensure that the report is easily comprehensible and clearly states the child’s reading level.

All children who participate in the testing will be given a gift of a reading-level-appropriate book or an educational toy that promotes literacy skills. With parental consent, the provider will direct the Literacy Program Manager to send a copy of the assessment report to the child’s school if applicable.

- **Customized Intervention**

In addition to the basic intervention, we recommend that medical practitioners, having identified a child's literacy level, tailor an intervention as follows.

If the child's literacy level is:

- **Above Grade Level:** Recommend to accelerated learning program
- **On Par with Grade Level:** Implement basic intervention only
- **Below Grade Level:**
 - Provide parents a resource guide to literacy programs in the community
 - Counsel parents on the importance of literacy, reading at home, etc.
 - Guide parents on how to discuss child development with teachers
 - For cases of identified developmental impairment recommend follow up tests

It is recommended that a program coordinator be appointed to implement the customized intervention. This coordinator, entitled the Literacy Program Manager, will act as a literacy counselor to parents and children, as well as fostering relationships with schools and other community groups. Accordingly, s/he will have full knowledge of the literacy resources available in the community and key contacts related to remedial and accelerated learning programs. If a child is above level, the coordinator will provide the parent with information regarding accelerated programs and assist in preparing admissions applications if needed. If the child is identified as below level, the coordinator will schedule an appointment with the parent to provide advice and information on local literacy resources and beneficial family literacy practices.

- **Complementary Interventions Add-ons**

The basic and customized interventions described above are the core elements of the proposed program. In addition to those, the FHC should plan to also incorporate the following activities as a compliment to the literacy program:

- Work with the local library to organize reading sessions in the waiting room and assist with library enrollment
- Work with Screen Actors Guild to run literacy programs at FHC and help generate interest and enrollment in the program
- Work with other community organizations to develop a *community literacy day* to raise awareness of the importance of literacy

- Implement monthly group literacy workshops at the Center, working with the whole family to improve literacy practices

Given the resource constraints of the FHC, we recommend focusing on developing the basic and customized intervention before complementary interventions are implemented.

III. Follow-Up

The follow-up stage consists of:

- Relationship management with families and schools
- Periodic retesting to monitor children that tested below literacy levels
- Engagement with other literacy programs on performance of referred FHC patients

This stage potentially will be the most challenging and will require a diligent program coordinator. The coordinator will be responsible for designing the most appropriate follow up plan for each family. The following is a proposed follow up schedule:

<i>Timing</i>	<i>Action</i>	<i>Literacy practices</i>	<i>Literacy skills</i>
3 months	Contact parents whose children are identified as above and below benchmark levels to ensure referrals were appropriate and followed	Yes	Yes
3 months	Contact school to see if further action is required	No	Yes
3 months	Contact literacy program a child was referred to in order to monitor attendance and identify problems	Yes	Yes
6 months	Retest	Yes	Yes

Process Manual

In terms of tasks required to deliver the program, there are four key stages:

1. Pre-Assessment
2. Assessment
3. Intervention
4. Follow-Up

The Process Manual in Appendix C sets out the tasks involved in each stage, including who is responsible for the task, time and resources required to complete the task.

Implementation Plan

We envisage that within three years, the program will be fully implemented and evaluated at FHC and the ground work laid for roll out to other Montefiore Health Centers. If program development and implementation begins in July 2009, a fully functioning program will be in place by 2010. By 2012, the program will have been running for two years and roll out to other health centers can begin. Depending on the success of the program, roll out to other sites could happen as early as 2011. Below is a detailed Implantation Plan which will allow FHC to meet this goal. This section contains:

1. The key factors necessary for successful implementation
2. An overview of key implementation activities in five key categories:
 - a. Program Staffing
 - b. Communication and Change Management
 - c. Sourcing Program Finance
 - d. Commencing Program Activities
 - e. Ongoing Program Operations
3. A proposed timeline detailing when the implementation activities should be undertaken
4. A budget providing an overview of the likely cost of implementing the program for the first 3 years of the program
5. Descriptions of the roles and responsibilities of key program staff

Key Success Factors

Before we break down the key implementation tasks, we highlight four factors associated with implementation which we consider are crucial to program success. These factors should be priorities during implementation.

1. **100% attendance rate for annual check-ups and scheduled appointments.** The program is dependent on children attending their regular, annual checkup. Parents of children aged 0-4 are likely to comply based on required shots for this age group, but attendance decreases as children get older. Children do need, however, to have health forms completed at the end of each summer to go back to school. Part of the program coordinator's responsibilities would be to call parents in the summer to remind them to schedule these appointments and to schedule the literacy assessments at these same appointment times.
2. **100% parental consent for program.** Parental consent will be required to assess children and there may be unforeseen challenges in obtaining parental consent.

3. **Dedicated program coordinator.** Due to resource constraints, there are significant restrictions in the FHC's ability to engage in an involved follow up process, particularly if a dedicated program coordinator is not appointed. Without follow up some of the effectiveness of the program may be lost.
4. **Well defined metrics for evaluation.** There are limitations in FHC's ability to evaluate the program's effectiveness given that the program is restricted to assessment with indirect intervention. Moreover, many of the socioeconomic and educational factors that impact children's literacy levels will be difficult to control for, for evaluation purposes. Even if a longitudinal study would be designed to control for other impacts on literacy, it would remain challenging to attribute improvements in literacy levels to this program per se, given that the program does not provide direct literacy intervention.

Implementation Activities

- **Program Staffing**

Hire Literacy Program Manager

In order to facilitate implementation of the program within the FHC, we recommend that a Literacy Program Manager be hired as soon as the project is initiated. He/She will be responsible for ensuring the successful implementation of the program as well as overseeing day-to-day program operations. As the program becomes more established, he/she should have the spare capacity to begin rollout implementation at other pediatric and family medicine health centers in the Montefiore network.

Mobilize volunteer / Patient Navigators

As the summer is about to start, the FHC needs to be proactive in getting parents to schedule appointments for annual check-ups prior to the commencement of the school year. To this end, the FHC needs to mobilize people to assist with calling patients and scheduling appointments for the annual exam, which will include additional time for literacy assessments. This can be done through volunteers or the Patient Navigator Program⁴⁵.

⁴⁵ The Patient Navigator Program is operated through the Bronx Community Health Network (BCHN) and recruits volunteers, who are given a stipend of \$10 for 9 hours a week. For more information about the Patient Navigator Program, please contact Eleanor Larrier at the BCHN for further information

Volunteers can be mobilized through the Volunteer Office at Montefiore Medical Center and be oriented in HIPAA confidentiality regulations and office protocol. The Patient Navigator program is potentially a more reliable source of volunteers as they are paid a stipend for their time. Patient Navigators will also be used to conduct literacy assessments, thus the earlier they become involved in the program, the better.

Conduct Trainings

All staff members and volunteers/Patient Navigators that will participate in this program will need to be trained on their various tasks. Those directly involved with the assessment software will require specific training on how to use the software, how to guide children through the assessments, and how to analyze the results of the assessment. In order to minimize the cost of the required training, we recommend training just the Literacy Program Manager. He/She will then be responsible for training the providers on how to understand the results from the assessment, as well as disseminate relevant trainings and information to other staff members, volunteers and Patient Navigators involved on relevant tasks.

Hire Counselor

In the medium to long-term, a Family Counselor will be engaged to do formal family literacy counseling. This person will also conduct monthly group literacy workshops at FHC, working with the whole family to improve literacy practices. As a potential substitute, the FHC could partner with a family counseling service at a local community center, essentially outsourcing the counseling component of the intervention.

○ **Communication and Change Management**

Program Approval

This program needs to be approved by all relevant managers at Montefiore as well as the Board of the FHC.

Engaging providers and staff

Getting FHC health care providers and staff on board is key to the success of this program. We propose a proactive communications strategy to inform providers and staff about the program,

provide clear instruction and training on their unique roles, and reassure them that participation in this process will be non-disruptive to their regular clinical duties or that the program will be streamlined to their regular clinical duties. The following steps are designed to secure buy-in:

- Develop a 1-page overview of the program
- Dedicate time in a meeting to explain the program and the role of each health care provider
- Dedicate time in a staff meeting to explain the program and the role of nursing and reception staff
- Identify the Literacy Program Manager as the point person for future questions

Conduct outreach to parents

Winning the support and involvement of parents is another critical step, both in terms of assessing children's literacy levels and increasing family literacy practices. The Literacy Program Manager will develop an information pack for parents with children of the targeted age range. The pack should inform parents that FHC is including a literacy assessment as part of the regular annual check-up. This will make clear that participation is voluntary, that parents will be asked to sign a consent form prior to testing, and that appointments will include an additional 20 minutes to conduct the assessment. The Literacy Program Manager's contact information should be included.

Conduct outreach to the community

The Literacy Program Manager should develop a marketing campaign within the FHC as well as in the community. Visual promotional advertising at FHC will create awareness of the initiative and communicate that literacy is an FHC priority. We recommend placing posters on the walls in the waiting areas and treatment rooms, as well as creating catchy buttons for providers to wear on their lab coats. The posters should feature culturally appropriate images of Latino and African American children and families reading, and should be in English and Spanish. In addition, posters, flyers and information about the program should be available at other community centers, schools and the public library to drive awareness and build support for the program.

Develop Website

The Literacy Program Manager will oversee the development of a website for this program. An external developer may be engaged to design and prepare the website. Parents, doctors, educators

and other stakeholders can learn about the program via the website. The website developer, in consultation with the assessment vendor, should also look at creating a portal whereby the test can be taken remotely, and data can be accessed by parents in the home.

- **Sourcing Program Financing**

- Renew Carmel Hill grant**

- In the first year of this program, the FHC will need continued support from Carmel Hill, to provide STAR licenses for an additional year. This will enable to the FHC to start testing children this year and ensure initial continuity of the program. Carmel Hill's commitment will require a formal assessment of the previous grant as well as a detailed plan for the next year. The Literacy Program Manager should develop a grant proposal based on this plan to send to Carmel Hill and other potential supporters.

- Source for funding**

- FHC's ability to fully implement this program is highly dependent on external funding. Thus, a primary immediate goal is to identify and apply to potential funding sources. These could come in the form of government grants, corporate and private donations. The Literacy Program Manager should develop a fundraising plan and work with the Department of Family Medicine's Manager of Program Development and the Montefiore Development Office to secure grant funding for this program as soon as possible. The budget is summarized below and a list of foundations whose funding priorities include child literacy is attached in Appendix D.

- Formalize book donations**

- As part of the fundraising plan and program operations, the Literacy Program Manager needs to formalize the system of receiving book donations from diverse donors to ensure continuity of this aspect of the program. The Literacy Program Manager should also look at other avenues for in-kind donations and serve to formalize that process as well.

- **Commencing Program Activities**

- Develop Literacy Patient Contact List**

- As the program begins, the Literacy Program Manager will target parents with a child of the right age group that have had their annual checkup at FHC within the last two years. In order to

accomplish this step, he/she will require a contact list with addresses and phone numbers. This information is required for the initial information pack as well as to begin scheduling appointments and should be kept up to date constantly. The Literacy Program Manager may require the assistance of volunteers in order to compile and update this list.

Schedule Appointments for Assessments

Using the Literacy Patient Contact List, the Literacy Program Manager should mobilize the receptionist, volunteers and/or patient navigators to begin proactively contacting families to schedule appointments for annual check-ups, ensuring there is built in time for literacy assessment. This may involve a general mailing to all people on the Literacy Patient Contact List, as well as individually contacting the parents.

Develop questionnaire for literacy practices

In preparation for upcoming literacy assessments, the Literacy Program Manager should consult with a literacy specialist to develop the literacy practices questionnaire/interview protocol for parents who are bringing their child in for testing.

Develop relevant guides and information packs

The Literacy Program Manager, with assistance from volunteers and/or Patient Navigators, will compile three Resource Guides for parents: one detailing all current literacy programs in the Bronx, another detailing all Gifted and Talented programs and a third containing an information pack for parents on how to improve literacy practices in the home. For this particular project, the Center can engage a full time intern for one month in the summer from a university. A preliminary list of potential literacy programs in the Bronx, attached in Appendix E, has been compiled to provide a starting point for the resource guide.

The resource guides must be updated at least annually to ensure that the information is up to date and relevant.

Categorize books

Books received need to be stored and catalogued in preparation for assessments. The Literacy Program Manager should be knowledgeable on how to categorize books received from donors for different age groups and literacy stages.

○ **Ongoing Program Operations**

Develop performance management system

The Literacy Program Manager should ensure that a performance management framework is in place where he/she can track the performance of the program in meeting its goals. This activity will greatly facilitate the annual performance review. Some examples of potential metrics have been proposed in Appendix F.

Develop relationships with education organizations

The Literacy Program Manager should compile a list of local schools and reach out to their principals and reading specialists (if applicable) to discuss how each school will be connected to FHC's literacy program. Issues to ascertain include whether FHC should provide teachers with children's STAR outcomes reports, the best way to transmit this information, and what type of follow-up should occur among FHC, the school and parents. The Literacy Program Manager could also explore whether schools would be interested in participating in shared activities or events to promote literacy practices. The Literacy Program Manager should record each conversation in a process log to be reviewed with the Medical Director in order to make program decisions.

The Literacy Program Manager should also reach out and further develop FHC's pre-existing relationship with the New York Public Library, establish a relationship with literacy tutoring programs in the Bronx, community centers with literacy programs and the NY Department of Education. He / She will look for ways to promote and enhance this program through these relationships and become involved in the campaign for improved literacy in the Bronx.

Expand assessment

Assessment is the main focus of this program, and for this reason it is important to ensure that the FHC has the best software available to conduct literacy assessments. For the first year, the FHC will continue with the existing Carmel Hill grant, using the STAR reading assessment software for grades 3 to 8. The Literacy Program Manager will need expand this assessment to include assessment of math and writing for current and younger children. The goal is to assess literacy in early childhood and address the issue of lower literacy levels at a younger age, and, therefore, engage parents at an earlier stage. The Literacy Program Manager will need to ensure that Renaissance Learning software is the best available software that meets the needs of the FHC. This will require an evaluation of the STAR series with other assessment programs available (as noted above a preliminary list of programs is provided in Appendix A). This evaluation should occur prior to the second year of the program, with the aim to implement either a new assessment system or expand the STAR series to commence at the beginning of the second year.

Annual program evaluation

The Literacy Program Manager will monitor the program's implementation and performance management on an ongoing basis. The evaluation process is time consuming but is crucial to program improvement and establishing the effectiveness of the program to potential donors. It is particularly important in the first years of the program to determine whether roll out to other Montefiore sites is justified.

On commencement of the program, the Medical Director and Literacy Program Manager should agree on metrics to measure the success of the program and set targets for the implementation of the program. They should also ensure there is a process for the collection of data, necessary to assess the program against the predetermined metrics, throughout the year. The Literacy Program Manager will conduct a full program evaluation annually to be used for internal reporting and fundraising purposes. Appendix F provides some examples of potential metrics which could be used. An external evaluation of the program has been budgeted and will be implemented funding permitting.

Develop relationship with family counseling services

In the event that the decision is made not to hire an internal counselor, the Literacy Program Manager should develop relationships with local family counseling service programs to potentially outsource the family counseling part of the intervention.

Expand program to other pediatric and family medicine health centers at Montefiore

In the medium to long term (years two to three), the Literacy Program Coordinator will need to develop a campaign and proposal for implementing the literacy program in other health centers within the Montefiore network. He/She will need to market this program to the Chairman of Department of Family and Social Medicine and to Medical Directors of other Montefiore family health centers. If a program is approved, he/she will assist with the implementation of this program in other sites.

Timeline of Implementation Activities

The timeline below outlines when the implementation activities should be undertaken:

Activities	May - June	Jul	Aug	Sep	Oct	Nov	Dec	2010	2011	2012
Program Staffing										
Hire program director										
Mobilize volunteers / patient navigators										
Conduct trainings for relevant staff members										
Hire counsellor										
Communication and Change Management										
Obtain executive approval from Board and directors of family medicine at Montefiore										
Engaging providers and staff at FHC										
Conduct outreach to parents										
Conduct outreach to the Community										
Create website										
Sourcing for Program Financing										
Renew Carmel Hill grant										
Source for funding										
Formalize book donations										
Commencing Program Activities										
Put together contact list for existing patients that could participate in program										
Schedule appointments for assessment										
Consult literacy specialist to develop questionnaire for literacy practices assessment										
Develop information packs and resource guides										
Categorize books										
Ongoing Program Operations										
Develop relationships with schools and education organizations in the Bronx that work on literacy										
Expand assessment										
Set-up performance management system										
Perform annual program evaluation										
Develop relationship with family counselling services										
Expand program to other pediatric and family medicine centers in Montefiore										

As shown above, the first few months of implementation are crucial to the success of this program. We strongly recommend engaging the necessary staff members up front and hiring the Literacy Program Manager as soon as is feasible.

Roles and Responsibilities

The following staff roles are affected by this program and will require additional responsibilities:

Staff Member	Additional Responsibilities
Medical Director	<p><i>Program Development and Implementation</i></p> <ul style="list-style-type: none"> • Seek organizational approval and support for program • Help secure funding for program • Identify and hire Literacy Program Manager • Conduct information sessions with staff, community groups and other key stakeholders to gain support for program • Collaborate with Literacy Program Manager (and outside evaluator) to develop evaluation metrics <p><i>Program operation</i></p> <ul style="list-style-type: none"> • Conduct performance evaluation of Literacy Program Manager • Sign off on implementation decisions made by Literacy Program Manager • Report back to funders on success of program
Doctors (Providers)	<p><i>Program Development and Implementation</i></p> <ul style="list-style-type: none"> • Undertake training on interpreting literacy assessment report and advising parents on child’s literacy levels and practice <p><i>Program operation</i></p> <ul style="list-style-type: none"> • Review, interpret and communicate contents of literacy assessment report during annual checkups
Nurses	<p><i>Program Development and Implementation</i></p> <ul style="list-style-type: none"> • Undertake training on operation of literacy assessment tool <p><i>Program operation</i></p> <ul style="list-style-type: none"> • Conduct child assessment when necessary • Collate results and provide results of child literacy assessment to doctor and/or parents when necessary
Receptionist	<p><i>Program Development and Implementation</i></p> <ul style="list-style-type: none"> • Undertake training on operation of literacy program <p><i>Program operation</i></p> <ul style="list-style-type: none"> • Contact parent to schedule annual check-up • Remind parents prior to appointment • Provide parent with information sheet and consent form for literacy assessment

A job description for the Literacy Program Manager is also included in Appendix G.

Budget

Based on the proposed Implementation Plan, the budget for launching and sustaining the program for three and a half years is \$640,000. This includes \$100,000 in start up costs in 2009, and program costs of between \$150,000 to \$200,000 per annum thereafter. A detailed budget appears in Appendix H.

Start Up	Year 1: 2010	Year 2: 2011	Year 3: 2012	Total

\$ 96,365	\$ 148,110	\$ 188,570	\$ 200,504	\$ 640,449
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To develop and launch the program will require \$100,000 in support to hire a full-time Literacy Program Manager, who will oversee planning, the development of program and marketing materials, initial outreach to families and the community at large as well as fundraising for program implementation. Included in the start-up budget is a percentage of the Medical Director’s time, the cost of training the internal staff and three paid volunteers (Patient Navigators). The Patient Navigators and support staff will also be responsible for marketing the program to FHC families and scheduling initial appointments. Additional costs during this phase include hardware and software, website development and the creating and printing of marketing materials as well as the cost of hiring an external consultant to develop the beginnings of a longitudinal evaluation.

In the first year of program implementation, the Literacy Program Manager will be assisted by three paid volunteers, Patient Navigators, who will work up to nine hours a week and be paid a rate of \$15 per hour. The Patient Navigators will be responsible for carrying out the assessments and, therefore, a majority of their work will take place during four months of the year (during the summer and just prior to the beginning of school). During the rest of the year, the Literacy Program Manager, with supporting assistance from the Patient Navigators, will be responsible for implementing assessments for families with pre-school age children and others. If at some point the volume of families increases during other times of the year, Patient Navigators may be asked to provide more hours. In addition to a dedicated program staff, the Medical Director has been budgeted at 10% time and 10% of the receptionists’ time is allocated to the program. Non-personnel costs in Year 1 include \$1,200 for the assessment tool (based on 1,000 users), the cost of books and supplies (in addition to what will be donated) and outreach activities including book readings and community events. In the second full year of the program, a Family Counselor be hired to compliment the direct pediatric literacy intervention. This individual will carry out formal family literacy counseling. By the beginning of the third year, the program will be fully implemented. Costs will include the same staffing resources as the previous year, with continuing costs for the assessment software, program evaluation, and outreach.

Conclusion

Evidence on Bronx socioeconomic conditions and the unique role of community health centers in promoting family health supports the need for Bronx health centers to be involved in improving

pediatric literacy. It is also clear that, given its substantial family medicine practice, FHC is ideally situated to assist in assessing literacy levels in early childhood as well as helping parents address their children's literacy needs. This program offers FHC and the broader Montefiore community an opportunity to lead the way in the Bronx to providing a more holistic approach to family health and development.

A structured literacy assessment program that incorporates identification of children's literacy levels, education of parents on the importance of literacy and home literacy practices, appropriate referrals, and individual case follow up will provide an essential and replicable mechanism for a community health center like FHC to positively affect pediatric literacy levels.

Fully implementation of the proposed program will require considerable resources, including the dedicated time of a Literacy Program Manager, and we do not envisage full implementation will occur until 2011 or 2012. If the program is successful, however, we consider roll out to other Montefiore Centers is possible.

Appendix A: Assessment Tools

Program	Description
Accelerated Math and Reader (Renaissance Learning)	The student selects and reads a library book or textbook. Teachers guide students to select titles within a zone of proximal development determined by the student’s reading grade equivalent score on any norm-reference standardized test. The student takes an AR quiz on a computer, which assesses the student’s comprehension of key elements of the book’s content. Teachers can use the reports to guide instruction, monitor student independent reading, and help the student select appropriate reading materials
AIMSweb (Pearson)	Benchmark – Assess all students three times per year for universal screening (early identification), general education progress monitoring, and AYP accountability. Strategic Monitor – Monitor at-risk students monthly and evaluate the effectiveness of instructional changes. Progress Monitor – Write individualized annual goals and monitor more frequently for those who need intensive instructional services.
Dynamic Indicators of Basic Early Literacy Skills (Dynamic Measurement Group)	A standardized, individually administered test of alphabetic principle including letter-sound correspondence and of the ability to blend letters into words in which letters represent their most common sounds for students in grades K-2. The student is presented with randomly ordered nonsense words and asked to verbally produce the individual letter sound of each letter or verbally produce, or read, the whole nonsense word. For example, if the stimulus word is “vaj” the student could say, /v/ /a/ /j/ or say the word “vaj” to obtain a total of three letter-sounds correct. The student is allowed one minute to produce as many letter-sounds as he/she can, and the final score is the number of letter-sounds produced correctly in one minute.
EdCheckup	Edcheckup provides stimulus materials, administration and scoring procedures for screening, and progress monitoring in reading. Children are assessed based on a reading passage. The approach used is General Outcome Measurement based on the principles and procedure developed, initially, as Curriculum-based Measurement through the Institute for Research on Learning Disabilities at the University of Minnesota (1977-83) which have been shown to provide valid and reliable indicators of student growth in the basic skills of reading, writing and arithmetic. A substantial number of students whose first language is Hispanic or Hmong are included in the benchmark sample.
STEEP (System to Enhance Educational Performance)	A research-based response to intervention program that guides users to match an appropriate intervention to the needs of struggling learners. Within the STEEP process, universal screening is conducted using curriculum-based measurement probes in reading and/or math. The screening data can be used immediately for instructional planning by teachers, administrators and school-based teams. STEEP then uses a standard protocol approach to quickly identify the type of intervention needed in reading or math for students not achieving benchmarks. Administered three times per year for those meeting benchmarks. The data system provides a color-coded list of students being progress monitored which allows for a review of student rate of progress.
Monitoring Basic Skills Progress (Pro Ed)	Based on Curriculum Based Measurement. The assessment task is a maze, where the seventh words of passages are deleted and replaced with three possible words, only one of which restores meaning. The primary score, which is graphed over time, is the number of correct replacements; representing the student’s overall level of reading competence at the grade level on which progress is being monitored.
PASeries (Pearson)	Provides for screening test for placement followed by three progress-monitoring tests for each grade for below-level, on-level, and above-level readers to measure progress toward grade level expectations and forecast performance on statewide tests. Reading assesses comprehension and vocabulary.

Program	Description
STAR (Renaissance Learning)	A computer-adaptive assessment of general reading achievement and comprehension that can be administered to individuals or groups of students. The tool provides information on student performance in reading. The difficulty of items is adjusted automatically to reflect the skill level of all students, including students with special needs. The STAR Early Literacy program measures early literacy skills (seven domains and 41 skills) and the STAR Reading provides information on reading for older children (also available for math).
Test of Silent Word Reading Efficiency (TOSWRE)	Designed to measure the ability to recognize printed words accurately and efficiently. It can be used in group or individualized assessment. It measures students' current reading skill levels by identifying the number of printed words that a student can recognize within 3 minutes from rows of words, ordered by reading difficulty.
Vital Indicators of Progress (Voyager Expanded Learning)	Series of easy and extremely dependable oral assessments that provide immediate feedback on the reading progress of each student, classroom and school. VIP provides standardized measures at four benchmarks to assess student progress throughout the school year and identify if a student is a struggling, an emerging, or an on-track reader. In order to ensure that students make progress toward the benchmark goals and remain on an upward trajectory, teachers administer progress monitoring measures to students who are identified as struggling or emerging either bi-weekly or monthly.
Yearly Progress Pro	Yearly ProgressPro™ is a computer administered progress monitoring tool based on Curriculum-Based Measurement (CBM) for students in grades 1-8.

Appendix B: Key design parameters of Assessment Tools

Program	Time required	Output	Technology requirements	Grade level	Staff training
Accelerated Math and Reader	An Accelerated Reader quiz takes approximately 2-10 minutes to administer. Scoring is automated and does not require any additional time	Raw scores, percent correct, and points earned are available.	Computer access is required	Pre-K to 12	Testers will require less than 1 hour of training. Paraprofessionals can administer the test
AIMSweb		Raw score, percentile score, and developmental benchmark scores are available	Internet access is required for full use of product services.	K to 8	Testers will require 1.5 - 2 hours of training. Paraprofessionals can administer the test.
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	DIBELS–NWF takes 2 minutes per probe to administer to individual students.	Raw, percentile, and developmental benchmark scores are available. Scores are calculated by hand unless computer system also purchased	Internet access is required for full use of product services.	K-6	
EdCheckup	The measure takes 3 minutes of administration time and 1-10 minutes of scoring time to administer to individual or group of students.	Student data may be entered online and is saved in a central database. Adequate growth is specified as “Low-Medium-High” based on samples used in research that is both direct and indirect.	Internet access is required for full use of product services. The reading probe materials are in PDF format and can be downloaded and printed.	K-8	Testers will require 1-4 hours of training. Paraprofessionals can administer the test.

Program	Time required	Output	Technology requirements	Grade level	Staff training
iSTEEP (System to Enhance Educational Performance)	Administration of the assessment takes 1 minute per form.	The data system actively monitors several indicators of student progress and provides clear and direct feedback about student rate of improvement using graphs and written descriptions	Internet access is required for full use of product services	K-12 (specialized module for Pre-K testing exists)	Assessors require 1 hour of training. Paraprofessionals can administer the assessment
Monitoring Basic Skills Progress (MBSP)	Administration of the test takes 2.5 minutes.	Scoring, generating individual reports with graphs, data analysis, and instruction recommendations for teachers are automatically done by the computer.	Access to computer is required.	Grade 1 through 7	Testers will require 1-4 hours of training. Paraprofessionals can administer the test
PASeries	It takes 40-50 minutes to administer the test. Scoring is automated and takes between 0-1 minutes.	Student and classroom level reports are available immediately. Building, district, and state level reports are batch processed in evenings.	Flexible administration allows for online or paper delivery in one class period.	G 3-8 in Reading and Mathematics and grades 6-12 in Algebra I and Writing.	Testers will require less than 1 hour of training. Paraprofessionals can administer the test.
STAR	STAR Reading takes approximately 10 minutes to administer the test. Scoring is automated.	Benchmarked report	Computer access is required, with headphones (preferred) or speakers for sound.	Early Literacy : Pre-K to 3 STAR literacy: 1 to 12	Testers will require less than 1 hour of training. Paraprofessionals can administer the test.

Program	Time required	Output	Technology requirements	Grade level	Staff training
Test of Silent Word Reading Efficiency (TOSWRE)	Administration of the test takes 10 minutes per protocol.	The primary score is the Silent Word Reading Fluency score, a standard score based on a mean of 100 with a standard deviation of 15 also available raw score, standard score, percentile score and grade equivalents.	None although data management system can be included in package	K-11	Testers will require less than 1 hour of training. Paraprofessionals can administer the test.
Vital Indicators of Progress	1 minute to administer and 1 minute to score	Raw and developmental benchmarks scores are available based on grade norms.	None	K-5	Testers will require less than 1 hour of training. Paraprofessionals can administer the test.
Yearly Progress Pro (McGraw Hill)	It takes 2.5 minutes to administer for individual students.	Raw scores are number correct replacement, number of errors, number attempted, percent	Computer access is required.	1-8	Testers will require 1-4 hours of training. Paraprofessionals can administer the test.

Appendix C: Process Manual

S/N	Task	Responsibility	Time Taken*	Resources
Pre Assessment				
1.	Contact parent to schedule annual check-up in July with built in extra time for literacy assessment	Receptionist / Volunteer	15 mins	- Telephone - Scheduling system - Patient contact list
2.	Send reminder one month in advance if applicable	Volunteer	10 mins	- Telephone - Computer - Internet
3.	Send reminder via email /text message/ phone 48 hours prior to appointment	Volunteer	15 mins	- Telephone - Computer - Internet
4.	Arrive at FHC for annual check-up	Parent	N/A	N/A
5.a.i.	<i>If this is the first annual check-up with literacy assessment at health center</i> Provide parent with information sheet and consent form for literacy assessment while in waiting room	Receptionist	2 min	- Consent Form - Information sheet
5.a.ii.	Parent to review information sheet and complete consent form	Parent	10 mins	
5.a.iii.	Literacy Program Manager explains information sheet to parent and answers questions about the program	Literacy Program Manager	10 mins	
5.b.	<i>If this is not the first annual with literacy assessment check-up at FHC:</i> Provide parent with consent form while in waiting room	Receptionist	1 min	- Consent Form
6.a.	<i>If parent does not consent:</i> Parent and child not to participate in assessment	Parent	N/A	
6.b.	<i>If parent consents:</i> Child is directed to assessment room	Volunteer / Patient Navigator	1 min	
Assessment				
7.	Child performs literacy assessment	Volunteer / Patient Navigator	15 mins	- Computer - Internet - Assessment software
8.	While child is being assessed, interview parent on literacy practices	Literacy Program Manager	15 mins	- Literacy practices questionnaire
9.	Collate results of child assessment and parent interview and highlight key points for practitioner	Volunteer / Patient Navigator	10 mins	- Printer

S/N	Task	Responsibility	Time Taken*	Resources
10.	<i>If this is not the first assessment</i> Include last assessment results with current report	Volunteer / Patient Navigator	10 mins	- Storage for past assessments (database or physical file)
11.	Place collated documents in patient's folder for doctor's attention	Volunteer / Patient Navigator	1 min	
12.	Provide parent with a copy of the results	Volunteer / Patient Navigator	1 min	
13.	Review results of child assessment and parent interview	Doctor	5 mins	
14.	Perform other annual check-up tasks	Nurse and Doctor	30 mins	
15.	Explain literacy assessment results to parent and child	Doctor	5 mins	
Intervention				
16.a.i	<i>If child performs at level:</i> Congratulate and encourage the parent on better literacy practices	Doctor	5 mins	
16.a.ii	Give child book at appropriate reading level	Literacy Program Manager	5 mins	- Book at reading level
16.a.iii	Provide information pack on literacy practices and how to engage with child on literacy	Literacy Program Manager	5 mins	- Information pack on literacy practices
16.b.i	<i>If child performs above level:</i> Congratulate and encourage the parent on literacy practices	Doctor	5 mins	
16.b.ii	Give child book at appropriate reading level	Literacy Program Manager	5 mins	- Book at reading level
16.b.iii	Provide resource guide gifted and talented (G&T) and accelerated learning in the Bronx	Literacy Program Manager	5 mins	- Resource guide for G&T programs
16.b.iv	Assist with applications to G&T programs as needed	Literacy Program Manager	TBD (<i>est. 10-60 mins</i>)	
16.c.i	<i>If child performs below level:</i> Check for other indicators of cognitive development from the examination	Doctor	1 min	
16.c.i.1	<i>If results indicate developmental problems:</i> Recommend child for further testing	Doctor	N/A	

S/N	Task	Responsibility	Time Taken*	Resources
16.c.i.2	<i>If results do not indicate developmental problems:</i> Discuss the importance of literacy for children and recommend talking with literacy counselor	Doctor	5 mins	
16.c.ii	Give child book at appropriate reading level	Literacy Program Manager	5 mins	- Book at reading level
16.c.iii	Provide resource guide for tutoring and literacy assistance programs in the Bronx	Literacy Program Manager	1 min	- Resource guide for tutoring programs
16.c.iv	Recommend follow-up testing in next 6 months	Literacy Program Manager	2 mins	
16.c.v	Schedule appointment with literacy counselor	Literacy Program Manager	5 mins	- Scheduling system
16.c.vi	Send literacy assessment results to school	Literacy Program Manager	10 mins	- Mailing system
16.c.vii	Assist with applications to tutoring programs as needed	Literacy Program Manager	10-60 mins	
<i>Follow-up (3 months)</i>				
17.a	<i>If child performed above level:</i> Contact parent to ensure program fit with child	Literacy Program Manager	15 mins	- Telephone - Computer - Internet
17.b	<i>If child performed below level:</i> Contact parent to ensure referrals were appropriate and followed	Literacy Program Manager	15 mins	- Telephone - Computer - Internet
<i>Follow-up (6 months)</i>				
18.a	<i>If child performed below level:</i> Contact parent to schedule follow-up test one month in advance	Literacy Program Manager	15 mins	- Telephone - Computer - Internet
18.b	Repeat steps 2 – 8		Approx 60 mins	
18.c	Discuss performance with parent and plan a path forward	Literacy Program Manager	20-30 mins	

**time taken per patient*

Appendix D: Potential Funding Sources

Foundation	Supports	Total Giving	High	Low	Relevance	Web Address
Achelis Foundation	Literacy/ Health Care	\$2,270,295	\$100,000	\$15,000	Literacy Assistance Center	http://foundationcenter.org/grantmaker/achelis-bodman/
Altman Foundation	Health care/ organizations	\$14,236,714	\$300,000	\$2,000	Reach Out and Read Funder	http://www.altmanfoundation.org/
Annenberg Foundation	Health care	\$266,898,723			By invitation only (need connection here)	http://www.annenbergfoundation.org/
Bank of America Charitable Foundation	Health care / Education	\$188,236,685	\$5,000,000	\$250		http://www.bankofamerica.com/foundation
Booth Ferris Foundation		\$11,331,000	\$300,000	\$50,000		http://foundationcenter.org/grantmaker/boothferris
Bristol-Myers Squibb	Health care/ Public health/ Education	\$22,987,066	\$4,600,000	\$1,000	Reach Out and Read Funder	http://www.bms.com/foundation/Pages/home.aspx
Cardinal Health Foundation	Health care / Education	\$5,874,386	\$500,000	\$165	Reach Out and Read Funder	http://www.cardinal.com/us/en/community/
Citi Foundation	Health care/ Education	\$96,422,843	\$2,000,000	\$20,000		www.citigroup.com/citi/foundation/index.htm
The Frances L. & Edwin L. Cummings Memorial Fund	Adult education-literacy / Health	\$1,778,000	\$100,000	\$2,000		

Foundation	Supports	Total Giving	High	Low	Relevance	Web Address
Deutsche Bank Americas Foundation	Education, services	\$16,275,229	\$3,000,000	\$500		www.community.db.com/html/db_americas_foundation.html
Dreyfus Foundation, Inc., Jean and Louis	Adult education-literacy / Health care	\$1,342,500	\$100,000	\$5,000		http://foundationcenter.org/grantmaker/dreyfus
Horace W. Goldsmith Foundation	Education	\$20,977,165	\$800,000	\$5,000		
Guttman, Stella and Charles	Education	\$2,079,390	\$135,000	\$10,000		http://www.guttmanfoundation.org
Hearst Foundation	Literacy, Hospitals, Health Care	\$17,000,000	\$1,000,000	\$25,000	Reach Out and Read Funder	http://www.hearstfdn.org
The JPMorgan Chase Foundation	Education	\$78,932,087	\$2,000,000	\$20,000		http://www.jporganchase.com/pages/jpmc/community
The Leonard and Evelyn Lauder Foundation	Health organizations / Education	\$13,655,800	\$13,000,000	\$2,000		
The New York Community Trust	Health care/ Families and youth	\$166,053,450				http://www.nycommunitytrust.org
New York Life Foundation	Education	\$9,005,146	\$600,000	\$300		http://www.newyorklife.com/foundation
Novartis US Foundation	Education / Health Care	\$787,283			Reach Out and Read Funder	http://www.us.novartis.com/novartis-us-foundation/index.shtml
The Procter & Gamble Fund	Education / Health Care	\$20,498,566	\$1,483,000	\$50	Reach Out and Read Funder	http://www.pg.com/company/our_commitment/community.shtml
The Riggio Foundation	Health organization	\$11,239,831	\$1,250,000	\$50		

Foundation	Supports	Total Giving	High	Low	Relevance	Web Address
Helena Rubinstein Foundation, Inc.	Health care / Education	\$2,513,365	\$200,000	\$285		http://www.helenarubinsteinfdn.org
May and Samuel Rudin Family Foundation, Inc.	Education/ Human services	\$4,039,269	\$650,000	\$1,000		http://www.rudin.com
Sovereign Bank Foundation	Education / Health Care	\$4,339,103	\$125,000	\$3,500	Reach Out and Read Funder	http://www.sovereignbank.com/companyinfo/company_information/community_development/foundation_guidelines.asp
State Street Foundation, Inc.	Health care	\$15,884,199	\$610,623	\$396	Reach Out and Read Funder	
The Bank of New York Mellon Foundation	Education	\$892,132	\$16,000	\$250	Reach Out and Read Funder	http://www.bnymellon.com
The Starr Foundation	Health care / Education	\$207,284,873	\$3,000,000	\$100	Reach Out and Read Funder	http://www.starrfoundation.org
Verizon Foundation	Health care / Education	\$51,027,185	\$4,500,000	\$12,000		http://foundation.verizon.com
Wolfensohn Family Foundation	Education	\$3,329,726	\$1,000,000	\$250		http://www.wolfensohn.org

Appendix E: Potential Literacy Resource Sources in the Bronx

Program Name	Service Provider	Location	Website	Contact	Number	Email
Reach Out and Read	Arthur Avenue Pediatrics	2385 Arthur Avenue, Bronx, NY 10458				
As the Twig is Bent Family Literacy Program	As the Twig is Bent Family Literacy Program	355 E 183rd Street, Bronx, NY, 10458		Debora Everett-Jones	718 220 4398	dreverettjones@aol.com
Reach Out and Read	Bronx Care @ Third Avenue	2737 Third Avenue, Bronx, NY 10457				
Bronx Heritage Society	Bronx Heritage Society	3006 Williamsbridge Road, Bronx, NY 10467		Roz Spriggs	718.295.2277	lscs2051@yahoo.com
Reach Out and Read	Bronx Lebanon Hospital Center					
Reach Out and Read	Bronx Lebanon Hospital Center @ Westchester Avenue					
Reach Out and Read	Bronx Lebanon Hospital Center, Center for Comprehensive Care	1650 Grand Concourse, 7C Bronx, NY 10457				
Reach Out and Read	Bronx-Lebanon Hospital Center, ACN Pediatric Clinic					
Reach Out and Read	Brownsville Community Development	592 Rockaway Avenue, Brooklyn, NY 11212				

Program Name	Service Provider	Location	Website	Contact	Number	Email
	Corporation					
Reach Out and Read	Child Health at Glebe					
Reach Out and Read	Child Health at Glebe	2527 Glebe Avenue, Bronx, NY 10461				
Citizen's Advice Bureau	Citizen's Advice Bureau	1130 Grand Concourse, Bronx, NY 10466	http://www.cabny.org/index.php?option=com_content&task=view&id=33&Itemid=62	Lisa Arbitman	718.293.0727	
Citizen's Advice Bureau	Citizen's Advice Bureau	1605 University Avenue, Bronx, NY 10453	http://www.cabny.org/index.php?option=com_content&task=view&id=33&Itemid=62	John Weed	718.293.0727	jweed@cabny.org
Citizen's Advice Bureau	Citizen's Advice Bureau	1477 Townsend Avenue, Bronx, NY 10452	http://www.cabny.org/index.php?option=com_content&task=view&id=33&Itemid=62	Judith Santos	718.588.3836	jsantos@cabny.org
Reach Out and Read	Dr. Martin Luther King JR. Health Center	1265 Franklin Avenue, Bronx, NY 10456				
Epworth United Methodist Church	Epworth United Methodist Church	834 Concourse Village East, Bronx, NY 10451		Barbara Mungins	718.292.0240	
Esperanza Family Literacy Program	Esperanza Family Literacy Program	1970 West Farms Road, Bronx, NY 10460	www.phippsny.org	Anita Puentaz	718.542.8333	apuentas@phippny.org
Family Literacy Program at PS 79	Good Shepard Services	125 East 181 st Street Bronx, NY 10453				
Early Childhood Development	Graham Windham	450 Saint Pauls Pl., Bronx, NY 10456	http://www.graham-windham.org/		(718) 681-7871	info@graham-windham.org

Program Name	Service Provider	Location	Website	Contact	Number	Email
Gun Hill Community Center	Gun Hill Community Center	745 Magenta Street, Bronx, NY 10467		Cassandra Brown	718.324.1807	
Reach Out and Read	Health Center at Gun Hill (Jacobi)	1012 E. Gun Hill Road, Bronx, NY 10569				
Reach Out and Read	Health Center at Tremont (Jacobi)	1826 Arthur Ave, 2nd fl., Bronx, NY 10569				
Steven Sales Day Care Center	Highbridge Advisory Council	80 E. 181st Street, Bronx, NY 10453		Cherise Bedford	718.365.6247	
Highbridge Community Life Center	Highbridge Community Life Center	979 Ogden Avenue, Bronx, NY 10452		Linda Avitabile	718.681.2222	avitabilel@hybridgelifelife.org
Reach Out and Read	HIP/St. Barnabas Southern Center	2016 Bronxdale Ave., Ste. 203, Bronx, NY 10462				
Reach Out and Read	JACOBI MEDICAL CENTER	1400 PELHAM PARWAY SOUTH, BRONX, NY 10461	http://www.volunteermatch.org/search/org35472.jsp	IMARA CASIANO	(718) 918-4136	
Reach Out and Read	Jewish Child Care Association	555 Bergen Ave., #4, Bronx, NY 10455				
La Penisula Head Start Community Organization	La Penisula Head Start Community Organization	711 Manida Street, Bronx, NY 10474			718.542.1161	
Latino Pastoral Action Center	Latino Pastoral Action Center	14 W. 170th St., Bronx, NY 10452		Carmen Colon	718.681.2361	
Head Start Program	Leake and Watts Dr. Richard R. Green Learning Center	450 Castlehill Avenue, Bronx, NY 10473		Dorcas Sola	718.829.9595	dsola1@yahoo.com

Program Name	Service Provider	Location	Website	Contact	Number	Email
Reach Out and Read	Lincoln Hospital Heads Up Program, Lincoln Medical and Mental Health Center					
Reach Out and Read	Lincoln Hospital Medical Center, Department of Dentistry					
Literacy Assistance Centre	Literacy Assistance Centre		http://www.lacnyc.org/profdev/familylit/			
Mary Mitchell Family Youth Center	Mary Mitchell Family Youth Center	2007 Maples Avenue, Bronx, NY 10456		Heidi Hynes	718.583.1765	
Reach Out and Read	Montefiore Medical Center, Pediatric Primary Care	111 E. 210th St., FCC PPB 1 st Primary Care Pediatrics, Bronx, NY 10467				
Reach Out and Read	Montefiore Medical Group Family Health Center	360 E. 193rd Street, Bronx, NY 10461				
Reach Out and Read	Montefiore Medical Group Medical Park, Comprehensive Family Care Center	1621 Eastchester Road, Bronx, NY 10461				
Reach Out and Read	Montefiore Medical Group, University Avenue Family Practice	105 W. 188th St., Bronx NY 10468				
Reach Out and Read	Morris Heights Health Center	85 W. Burnside Ave., Bronx, NY 10453				
Reach Out and Read	Morris Heights Health Center, Walton Avenue	25 E. 183rd Street., Bronx, NY 10453				

Program Name	Service Provider	Location	Website	Contact	Number	Email
Reach Out and Read	Morrisania Diagnostic & Treatment Center, Department of Pediatrics					
Reach Out and Read	Mount Vernon Neighborhood Health Center					
E.R. Moore Community Center	New York City Housing Authority: E.R. Moore Community Center	515 Jackson Avenue, Bronx, NY 10455		De Anna Thomas	718.292.1345	
Reach Out and Read	North Central Bronx Hospital	3424 Kossuth Avenue, Bronx, NY 10467				
Leaflet	NYPL		http://kids.nypl.org/images/family_literacy_fun.pdf			
Young Adult and Children Programs	NYPL		http://www.nypl.org/press/releases/?article_id=229			
Get A Clue @ Your Library 2007 (Grades 1-6)	NYPL		http://www.lacnyc.org/resources/adult/LD.htm			
"Preschool Romp."	NYPL - Bronx Library Center	310 East Kingsbridge Road [at Briggs Avenue], Bronx, NY 10458	http://www.nypl.org/branch/local/bx/fdc.cfm		(718) 579-4244	ronxlibrarycenter@nypl.org
Reading Aloud	NYPL - Edenwald Branch	1255 East 233rd Street				
"Preschool Story Time."	NYPL -Francis Martin	2150 University Avenue [at 181st St.], Bronx, NY 10453.	http://www.nypl.org/branch/local/bx/fxr.cfm		(718) 295-5287	francis_martin@nypl.org

Program Name	Service Provider	Location	Website	Contact	Number	Email
"Preschool Story Time."	NYPL - Grand Concourse Branch	155 East 173rd Street	http://www.nypl.org/branch/local/bx/gd.cfm		(718) 583-6611	
Reading Aloud	NYPL - Parkchester	1985 Westchester Avenue [at Pugsley Ave.], Bronx, NY 10462	http://www.nypl.org/branch/local/bx/pkr.cfm		(718) 829-7830	parkchester@nypl.org
Reading Aloud	NYPL - Pelham Bay	3060 Middletown Road [north of Crosby Ave.], Bronx, NY 10461	http://www.nypl.org/branch/local/bx/pm.cfm		(718) 792-6744	pelham_bay@nypl.org
"Preschool Story Time."	NYPL - Riverdale Branch	5540 Mosholu Avenue [at W. 256th St.], Bronx, NY 10471.				
"Preschool Story Time."	NYPL - Westchester Square	2521 Glebe Avenue, Bronx, NY 10461.	http://www.nypl.org/branch/local/bx/wt.cfm		(718) 863-0436	westchester_square@nypl.org
"Preschool Story Time."	NYPL - Woodlawn Heights	4355 Katonah Avenue [at E. 239th St.], Bronx, NY 10470.	http://www.nypl.org/branch/local/bx/wl.cfm		(718) 519-9627	woodlawn_heights@nypl.org
Reading Aloud	NYPL -Hunt's Point	877 Southern Boulevard [at Tiffany St.], Bronx, NY 10459.	http://www.nypl.org/branch/local/bx/hsr.cfm		(718) 617-0338	hunts_point@nypl.org
Reach Out and Read	Ola Pediatrics					
Reach Out and Read	Poe Medical Center	2432 Grand Concourse, Bronx, NY 10458				
Reach Out and Read	Ponce De Leon	1675 Westchester Avenue, Bronx, NY 10472				

Program Name	Service Provider	Location	Website	Contact	Number	Email
Research Foundation of CUNY	Research Foundation of CUNY	N-Tech Academy, Middle School / High School 368 , Tibbett Avenue & W 230th Street, NY Bronx			212.652.2800	
Minds Unlimited (DYCD)	S E Bronx Neighborhood Centers Inc	955 Tinton Avenue, Bronx, NY 10456	www.sebnc.org	Clyde Thompson	718.542.2727	elyde.sebnc@ju no.org
Reach Out and Read	Soundview Health Center					
Reach Out and Read	Soundview Health Center	731 White Plains Road, Bronx, NY 10473				
Reach Out and Read	South Bronx Health Center for Children and Families, Montefiore Medical Center	871 Prospect Avenue, Bronx, NY 10459				
Reach Out and Read	St. Barnabas Health Center	4422 3rd Avenue, Bronx, NY 10457				
Reach Out and Read	St. Barnabas Health Center, Bronx Park Pediatrics	2016 Bronxdale Avenue, #203, Bronx, NY 10462				
Reach Out and Read	St. Barnabas Health Center, Grand Concourse Department of Pediatrics	4422 3rd Ave., Mills Building 4 th floor Bronx, NY 10457				
Reach Out and Read	St. Barnabas Hospital Department of Pediatrics, Bronx Park Pediatrics					
St. Margeret's Episcopal Church	St. Margeret's Episcopal Church	940 E. 156th St., Bronx, NY 10455		Patricia Bryant	718.589.4430	pbryant@acninc .net

Program Name	Service Provider	Location	Website	Contact	Number	Email
St. Raymond's Community Outreach	St. Raymond's Community Outreach	1720 Metropolitan Ave., Bronx, NY 10462 Phone:		Vivian Becker	718.824.0353	
Supportive Children's Advocacy Network (SCAN)	Supportive Children's Advocacy Network (SCAN)	JHS 22 , 270 East 167th Street, NY Bronx,			212.-683.2522	
Reach Out and Read	The Floating Hospital, Help Morris clinic	285 E. 171st St., Bronx NY 10457				
Reach Out and Read	The Health Center at Gunhill, North Bronx HealthCare Network					
Reach Out and Read	The Roy Rogers and Dale Evans Children Center, Our Lady of Mercy Medical Center	600 E. 233rd St., Bronx, NY 10466				
Reach Out and Read	Tiffany Medical Practice					
Tremont Crotona Head Start	Tremont Crotona Head Start	1600 Crotona Park East, Bronx, NY 10460		Virgo Carlene	718.378.5600	
Reach Out and Read	Union Community Health Center, Pediatric Ambulatory Care	4422 3rd Ave., Mills Building 4 th floor Bronx, NY 10457				
Reach Out and Read	Urban Health Plan	1065 Southern Boulevard, Bronx, NY 1045				
Reach Out and Read	Webster Child Health Clinic					
Reach Out and Read	Williamsbridge Family Practice Clinic					
Women's Health of Bronx	Women's Health of Bronx Pavilion	West. Burnside Ave., Bronx, NY		Ivonne Pena	718.716.2229	ipena@mahc.org

Program Name	Service Provider	Location	Website	Contact	Number	Email
Pavilion		10453				

Appendix F: Examples of Evaluation Matrix

Type of Evaluation	Measure	Type
OUTPUTS	<i>Purpose: to measure the deliverables of the program</i>	
<i>Examples</i>	Number of children assessed	Quantitative
	Percentage of the total FHC pediatric patient population tested	Quantitative
	Number of books distributed and number of children who received a book	Quantitative
	Proportion of children tested who were above, at or below level	Quantitative
	Proportion of children who test above or below level and were provided with an appropriate external program recommendation	Quantitative
	Proportion of children who scored below grade level who went on to attend external literacy programs	Quantitative
	Proportion of children who scored above grade level who went on to attend an accelerated learning program	Quantitative
	Proportion of children recommended to an external program who attended the recommended program for more than 3 months	Quantitative
	Proportion of parents whose children were assessed that received the information pack on how to improve literacy practices in the home	Quantitative
	Proportion of families in the program who received family literacy counseling by a Literacy Counselor	Quantitative
	Proportion of children below or above level who were retested at 6 months	Quantitative
	Proportion of patients who have been tested in more than one annual checkup	Quantitative
	Socioeconomic spread of children assessed (demographic statistics on the children served including age, sex, ethnicity, primary language spoken at home and household income level)	Quantitative
OUTCOMES	<i>Purpose: to measure the impact of the program on parent and child knowledge of literacy practices, literacy-related behaviors, satisfaction with the program, and utilization of literacy resources</i>	
<i>Examples</i>	% change in parents' level of awareness of child literacy and of family literacy practices	Quantitative

Type of Evaluation	Measure	Type
	Parent satisfaction rating	Quantitative
	Child satisfaction rating	Quantitative
	Provider and staff satisfaction with training	Quantitative
	Provider and staff satisfaction with program	Quantitative
	School and community programs' satisfaction rating	Quantitative
	% change in literacy scores from baseline to post-test	Quantitative
PROCESS	<i>Purpose: To determine whether the program was implemented according to the implementation plan and to identify potential improvements</i>	
<i>Examples</i>	% completion of program implementation	Quantitative
	% completion of each step of program and explain deviations	Quantitative
	What were the barriers to implementation of the program?	Qualitative
	What were the barriers to assessment of children?	Qualitative
	What were the barriers to intervention?	Qualitative
	What were the barriers to follow up?	Qualitative
	What were the challenges to gaining staff support at FHC?	Qualitative
	What were the challenges in developing relationships with community literacy programs and schools?	Qualitative
COST EFFECTIVENESS	<i>Purpose: To determine whether the program is cost effective</i>	
<i>Examples</i>	Cost per child to deliver program	Quantitative
	Cost per % improvement in child's literacy level (cost-benefit analysis)	Quantitative
	% of budget spent	Quantitative

Appendix G: Job Description Literacy Program Manager

<i>LITERACY PROGRAM MANAGER</i>	
<u>Job Grade/Level</u> Educator – preferably with expertise in literacy and/or health	
<u>Job Objective</u> To develop, implement and oversee operational of Childhood Literacy Program at Montefiore Family Health Center	
<u>Supervises</u> Program volunteers	<u>Reports to</u> Medical Director
Roles and Responsibilities	
<p><i>Program Development</i></p> <p>Develop a marketing campaign to create awareness of the initiative and liaise with schools, funders and other key community stakeholders to ensure continued support for the project</p> <ul style="list-style-type: none"> • Oversee preparation of resource guides and other documentation regarding literacy practices to be provided to parents • Formalize in kind donations • Develop metrics to measure the success of the program and set the targets • Develop patient contact list • Consult with literacy specialist to enhance the program • Hire an internal counselor or develop relationship with family counseling services • Ensure the best available software (STAR or other) to expand the assessment • Recruit, train (doesn't the training happen during Program Development?), supervise and assign volunteer/patient navigators <p><i>Program Operation</i></p> <ul style="list-style-type: none"> • Train or organize training of doctors, nurses and volunteers (how is this different from what happens during Operation?) • Mobilize the receptionist, volunteer/patient navigators to schedule appointment • Categorize and organize book donations and Give child book at appropriate reading level • Liaise with parents, explaining the program structure and purpose, as well as engaging parents in the importance of literacy practices • Interview parent on family's literacy practices • Undertake intervention tasks including providing resource guide for tutoring and literacy assistance programs in the Bronx, schedule appointment with literacy counselor, send literacy assessment results to school and assist with applications to tutoring program, when applicable • Undertake follow-up steps including scheduling follow up <p><i>Program Administration</i></p> <ul style="list-style-type: none"> • Maintain patient records • Raise additional funding as required • Conduct annual evaluation for internal report and fundraising 	
<p>Key Performance Indicators</p> <ul style="list-style-type: none"> • Performance will be evaluated based on five competencies 1) Job knowledge; 2) teamwork; 3) customer service; 4) flexibility; 5) work ethic. 	
Skills and Competencies	
<p><u>Organizational Skills</u></p> <ul style="list-style-type: none"> • Communications and marketing • Leadership 	<p><u>Functional Knowledge (Health)</u></p> <ul style="list-style-type: none"> • Good working knowledge of cognitive development of children

<i>LITERACY PROGRAM MANAGER</i>	
<ul style="list-style-type: none"> • Project Management and Work Planning • Conflict Resolution • Budgeting and Fundraising • Relationship Building <p><u>Attributes</u></p> <ul style="list-style-type: none"> • Teamwork and Collaboration • Innovation & Creativity • Integrity • Decisiveness • Influence & Persuasion • Leadership • Results Orientation 	<ul style="list-style-type: none"> • Good working knowledge of health center and pediatric operations <p><u>Functional Knowledge (Education)</u></p> <ul style="list-style-type: none"> • Excellent knowledge of child literacy and adult literacy • Knowledge of ESL
<p><u>Years of Experience</u> Minimum 3 years work experience Experience in literacy program, preferably experience in health center</p>	
<p><u>Qualifications</u> Bachelor's degree with major coursework in education, reading, or other related field. Preferably masters in public health or education.</p>	

Appendix H: Budget

July 2009 – December 2012

Management, Doctors and Staff						
	Start Up - 6 Months	Year 1: 2010	Year 2: 2011	Year 3: 2012	Total	Assumptions
Medical Director	\$ 18,750	\$ 15,450	\$ 15,914	\$ 16,391	\$ 66,504	<i>25% of time in Start Up Year; 10% of time thereafter; 3% increase per annum</i>
Literacy Program Manager	\$ 27,500	\$ 56,650	\$ 58,350	\$ 60,100	\$202,599	<i>\$55,000 per annum; 1/2 time in Start Up Year; full time thereafter; 3% increase</i>
Family Counselor	\$ -	\$ -	\$ 22,500	\$ 23,175	\$ 45,675	<i>\$45,000 per annum; 1/2 time; 3% increase</i>
Doctors and Nurses	\$ -	\$ -	\$ -	\$ -	\$ -	<i>in kind</i>
Patient Navigator Pd. Volunteers	\$ -	\$ 16,200	\$ 16,686	\$ 17,187	\$ 50,073	<i>3 people; \$15 hour: 9 hours per week each; 40 weeks per annum; 3% increase</i>
Receptionist/Scheduler	\$ -	\$ 4,000	\$ 4,120	\$ 4,244	\$ 12,364	<i>10% of time; 3% increases</i>
<u>Fringe</u>	<u>\$13,875</u>	<u>\$ 27,690</u>	<u>\$ 35,271</u>	<u>\$ 36,329</u>	<u>\$113,165</u>	<i>30%</i>
Subtotal	\$ 60,125	\$ 19,990	\$ 152,840	\$ 157,425	\$490,380	

Program Development, Training, Marketing and Evaluation						
	Start Up - 6 Months	Year 1: 2010	Year 2: 2010	Year 3: 2011	Total	
Program Development and Planning	\$ 5,000	\$ -	\$ -	\$ -	\$ 5,000	<i>consultant</i>
Training						
Literacy Program Manager	\$ 1,500	\$ -	\$ -	\$ -	\$ 1,500	<i>\$1,500 for 3 hour session</i>
Receptionist ; Support Staff	\$ 1,000	\$ 500	\$ 500	\$ 500	\$ 2,500	<i>overtime hours</i>

Patient Navigator Paid Volunteers	\$ 540	\$ 270	\$ 270	\$ 270	\$ 1,350	<i>3 people; \$15 hour; 6 of training per; training avg. of 3 people per annum in Yr. 1 -3</i>
Evaluation	\$ 10,000	\$ 15,000	\$ 15,000	\$ 20,000	\$ 60,000	
Marketing Materials	\$ 3,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 8,000	
<u>Website</u>	<u>\$ 3,500</u>	<u>\$ 1,000</u>	<u>\$ 1,000</u>	<u>\$ 1,000</u>	<u>\$ 6,500</u>	
Subtotal	\$ 25,040	\$ 18,270	\$ 8,270	\$ 23,270	\$ 84,850	

Direct Program Costs						
	Start Up - 6 Months	Year 1: 2010	Year 2: 2010	Year 3: 2011	Total	
Assessment Program (STAR et al)	\$ -	\$ 1,200	\$ 1,200	\$ 1,200	\$ 3,600	<i>STAR, per 1,000 children</i>
Books and Supplies	\$ 3,000	\$ 6,900	\$ 7,935	\$ 9,125	\$ 26,960	<i>15% increase annually</i>
<u>Outreach, Events, Speakers</u>	<u>\$ 750</u>	<u>\$ 1,500</u>	<u>\$ 1,725</u>	<u>\$ 1,984</u>	<u>\$ 5,959</u>	<i>15% increase annually</i>
Subtotal	\$ 3,750	\$ 2,700	\$ 10,860	\$ 12,309	\$ 36,519	

Overhead and Other						
	Start Up - 6 Months	Year 1: 2010	Year 2: 2010	Year 3: 2011	Total	
Hardware and Software	\$ 5,000	\$ 2,500	\$ 1,000	\$ 1,000	\$ 9,500	
Printing	\$ 500	\$ 750	\$ 900	\$ 1,000	\$ 3,150	
Food & Events	\$ 750	\$ 1,500	\$ 2,000	\$ 2,500	\$ 6,750	
Postage and Delivery	\$ 600	\$ 1,200	\$ 1,500	\$ 1,800	\$ 5,100	
<u>Misc.</u>	<u>\$ 600</u>	<u>\$ 1,200</u>	<u>\$ 1,200</u>	<u>\$ 1,200</u>	<u>\$ 4,200</u>	
Subtotal	\$ 7,450	\$ 7,150	\$ 6,600	\$ 7,500	\$ 28,700	
TOTAL	<u>\$ 96,365</u>	<u>\$ 48,110</u>	<u>\$ 188,570</u>	<u>\$ 200,504</u>	<u>\$ 640,449</u>	

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