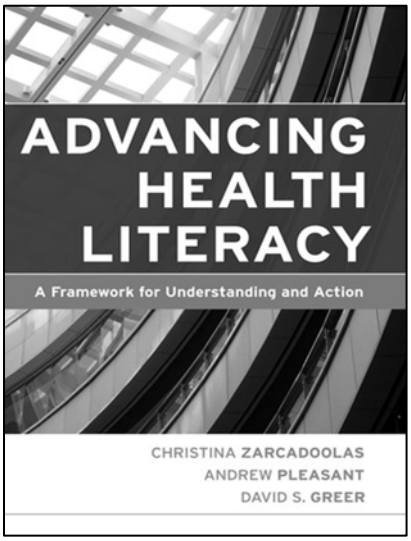
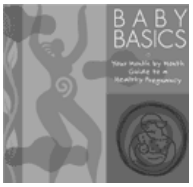


Chapter 7: BABY BASICS

A Prenatal Program Focusing on Developing Health Literacy



This Chapter is excerpted from
Advancing Health Literacy:
A Framework for Understanding and Action
Publication June, 2006

Advancing Health Literacy addresses the crisis in health literacy in the United States and around the world. This book thoroughly examines the critical role of literacy in public health and outlines a practical, effective model that bridges the gap between health education, health promotion, and health communication. Step by step, the authors outline the theory and practice of health literacy from a public health perspective. This comprehensive resource includes the history of health literacy, theoretical foundations of health and language literacy, the role of the media, and a series of case studies on important topics including prenatal care, anthrax, HIV/AIDS, genomics, and diabetes. The book concludes with a series of practical guidelines for the development and assessment of health communications materials. Also included are essential techniques needed to help people make informed decisions, advocate for themselves and their community, mitigate risk, and live healthier lives.

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Chapter 7

Baby Basics:
Developing a prenatal program through ongoing audience participation

The US Surgeon General VADM Richard Carmona at the launch of a city-wide Baby Basics Initiative in Houston, TX (11/04) said "Often there was a wall between us and the people we were trying to serve. It was a wall of confusion and misunderstanding brought on by low functional literacy skills. And, unfortunately, it was sometimes shored up by our inability to recognize that our patients didn't understand the health information that we were trying to communicate. We must close the gap between what health care professionals know and what the rest of America understands about how to have a healthy pregnancy and a healthy baby. Not every American is a scientist or a health care professional, and we can't expect everyone to understand what it takes doctors, nurses, pharmacists, and other health care professionals years of training to learn. That's why the Baby Basics Program is so important."

This case highlights the importance of not only developing health education material that is linguistically and culturally appropriate, but also using that material to its fullest potential. It also demonstrates that collaborating and continuously working with target audiences and communities to gather input is vital in producing effective health promotion strategies and communications for patients as well as providers. This case was written in collaboration with Shusmita Dhar, Lisa Bernstein, and Amy Dombro[1]

[1] Dhar–Research Assistant on this book; Bernstein - Executive Director of The What to Expect Foundation.

Healthy beginnings: infant and maternal health

Prenatal care is, for many underserved communities, the entry point into our healthcare system. For some first-time expectant women, the initial prenatal appointment is the first time she will visit an ob-gyn. Helping pregnant women access and understand the need for early and consistent care (in 2001 in the US 1 out of 9 births were to women receiving late or no prenatal care); helping them make pregnancy lifestyle changes and fully engage in their prenatal care, and finally stressing the need for sustained, preventative care is crucial not just for birth outcomes, but also because, in a short time, she will be expected to manage not only her own, but also her newborn's, healthcare. The preventable death of an infant is one of the great tragedies of life. The overall U.S. infant mortality rate did decrease to 6.8 percent in 2001, due to factors including improved fetal screening, mothers adopting protective behaviors such as not smoking, placing children on their back to sleep, and increases in early enrollment for prenatal care. While the infant mortality rate declined more than 23% between 1991 and 2001, the US infant mortality rate is still higher than that of 27 other nations, and many underserved communities are not equally represented in these improving numbers. Black infants, for example, are still more than twice as likely to die as white infants (Division of Reproductive Health 1999). Likewise, in 2002, about 1 in 9 infants (11.3% of live births) was born to a woman receiving inadequate prenatal care in the United States In a system that is characterized by advancing technology and resources, these numbers imply a breakdown of prenatal service delivery and problematic health literacy on the part of pregnant mothers.

Source: National Center for Health Statistics. Available at http://www.cdc.gov/nchs/hus.htm.

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Problem Identification: Needs Assessment Research With Providers and Clinicians

Research clearly demonstrates that education level and literacy level correlate with prenatal health. As female literacy rates increase, infant mortality rates decrease, with lower education levels correlating to later prenatal care (PRAMS 1997). [2] [3] [4] Among non-Hispanic mothers, infant mortality rates increase with decreasing levels of education as well (Matthews 2000; Chang et al., 2003). [5] Lack of awareness of the importance of good prenatal care, poor diet and health practices during pregnancy; and pregnant women engaging in risky behaviors such as use of alcohol, tobacco and street drugs are central areas of focus in prenatal education.

Prenatal education has been available and promoted for more than a century in this country. While prenatal care benefits eligibility varies greatly nationwide, federal

[2] The Pregnancy Risk Assessment Monitoring System is a surveillance monitoring system that uses self-report, by new mothers of live-born infants.

[4] In a report of Infant Mortality Statistics from 2000, the National Vital Statistics Report similarly found an inverse relationship between increasing education level and decreasing mortality. (Mathews, 2000)

[5] In the Report of the Secretary's Task Force on Black and Minority Health on Infant Mortality and Low Birth Weight published in 1982, Samuels wrote that "the most striking risk factors for post-neonatal mortality [include] maternal age, parity, education, and socioeconomic status…"

programs, such as Healthy Start program encourages prenatal health education with some form of home health care visits in communities with high infant mortality rates. Most prenatal education efforts however, do not adequately address the health literacy or the fundamental literacy levels of many pregnant women, especially low-income and ethnic minority women.

Pregnant women want to do what's best for their baby. They are eager for information and support, but sadly, may leave their prenatal appointment stressed and confused – understanding little more about there pregnancy than when they arrived. Ob-Gyn providers and insurers (including Cigna and Aetna) have long seen that providing patients with comprehensive prenatal information empowers patients and provides a health and financial advantage. They regularly invest in What To Expect When You're Expecting for their insured patients, finding it reduces unnecessary emergency room visits, lessens frequent (and frantic) phone calls to providers, and results in better prepared patients who are fully engaged during their prenatal visits.

By far, *What to Expect When You're Expecting* (Murkoff, Eisenberg & Hathaway, 2002)is the most popular mainstream book for pregnant women. That book has sold over 26 million copies, is read by over 1 million women each year, is available in over 30 countries, and is a bestseller not only in the United States but also in India, Australia and England.

Written at between 11th to 13th grade level that book is written for a woman with a high level ability to read (fundamental literacy) as well as competence in other domains of health literacy (See Chapter 2 for discussion of domains).

> For example the following passage: **The Father's Age**
>
> *"I'm only thirty-one, but my husband is over fifty. Does advanced paternal age pose risks to a baby?"*
>
> Throughout most of history, it was believed that a father's responsibility in the reproductive process was limited to fertilization. Only during the 20th century

> (too late to help those queens who lost their heads for failing to produce a male heir) was it discovered that a father's sperm held the deciding genetic vote in determining his child's gender. And only in the last few years have researchers postulated that an older father's sperm might contribute to birth defects such as Down syndrome. Like the older mother's ova. The older father's primary oocytes (undeveloped sperm) have had longer exposure to environmental hazards and might conceivably contain altered or damaged genes or chromosomes. And from the studies that have been done, there is some evidence that in about 25 or 30 percent of Down syndrome cases, the faulty chromosome can be traced to the father. (p. 33)

Their reader at a minimum must :

- understand difficult vocabulary
- read complex language and sentence structure
- identify topics of interest
- Navigate a complicated text to find answers
- easily adapt to switches between a formal and colloquial tone.
- appreciate the sophisticated style that has references to history and metaphorical descriptions, and
- has a fairly facile understanding of basic body anatomy

What To Expect When You're Expecting's authors Heidi Murkoff and Arlene Eisenberg received continuous requests for book donations from clinics across the country that provided prenatal care and education to the Medicaid population. Lisa Bernstein, an executive at Workman with a background in commercial book marketing and materials development, as well as a volunteer literacy tutor for recovering drug addicts, identified

the need for a different health promotion vehicle – one that specifically addressed not only the literacy skills but also the economic, cultural and social concerns of underserved families. Murkoff, Eisenberg and Bernstein formed The What To Expect Foundation hoping to identify or create a book similar in scope and tone to *What To Expect When You're Expecting*, but that was appropriate for

women living in poverty. They could find no such guide and so created BABY BASICS: Your Month By Month Guide To A Healthy Pregnancy. Teaching providers, educators and patients how to best use this book led to the creation of the Baby Basics prenatal health literacy Program.

The fundamental goals of the *Baby Basics* Program are:

- To promote healthier pregnancies and safer deliveries.
- To foster effective communication and partnership between providers and their patients within the prenatal health care community.
- To empower pregnant women to engage and act upon health information, thus learning to care for themselves and their babies.

Phases of Development of the Baby Basics book and program

1. Identify the need and working with your target audience to design appropriate materials
2. Field test with providers and pregnant mothers
3. Identify best practices from patients, providers, and educators, for using these

materials and from these practices develop additional tools and training.

4. Develop a model intervention that can be tested, evaluated and replicated

Phase 1: Identifying the need and working with target audiences

Low-income and immigrant populations cannot afford to purchase books, and many lack the literacy and language skills necessary to read and understand them. While there are many excellent provider curricula available, most low-income women do not receive comprehensive health information that encourages them to become active participants in their prenatal care. At best, patients receive simple, two-page pamphlets that are often lost or thrown away. Most of their health education is taught by word-of-mouth – which is difficult to retain.

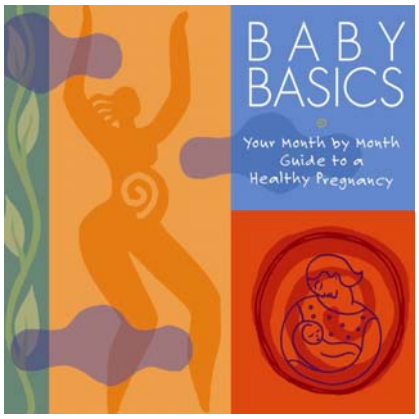
In 1998, The Foundation conducted a broad survey audit of prenatal materials created for low-income women. They discovered that while high-risk women and teens may be enrolled in many programs (e.g., WIC, Home Visitation programs, childbirth classes, etc) she is unlikely to receive comprehensive, coordinated health information. Instead, she may receive many pamphlets and un-coordinated spoken advice from a variety of sources that vary in jargon and even direction. But overwhelmed and confused by many well-intentioned, disparate messages, she will need to call the health center or show up at the emergency room even with simple complaints, if she seeks medical advice at all. Unfortunately, however, informal focus groups and experience show that she's even more likely to call a friend or relative for advice.

Existing programs mostly relied on ad hoc information sheets and hand-outs. The materials were often poorly designed, simply copied and rarely took into account the audiences' literacy level, or their specific life circumstances and interests. There was tremendous duplication of resources and energy by individual programs from around the country and across the street seeking grants for materials that ultimately were written and designed on a limited budget and were quickly outdated. To a low-literate reader these materials sent out all the wrong signals. "I never read these things they give us - I end up losing them or tossing them." "This looks like something they would give me at school.

Just cause I'm having a baby doesn't mean I've gotta do homework." "Boring. Boring. Boring. That's what that is," were just some of the responses to free pamphlets given out to pregnant women in the Bronx, NY.

The Foundation spent over a year creating the Baby Basics book. The format was developed after extensive focus groups with prenatal community health outreach workers – who were asked to help imagine the written materials they most wish they could give to their moms. Next, the pregnant mothers who were to be the book's audience, took part in group discussion that helped identify their special needs – such as an explanation of Medicaid benefits, the affects of homelessness on pregnancy, and even the legal rights of a mother who tests positive for drug use at delivery. Lastly, experts in literacy, multicultural health, Medicaid benefits and prenatal reviewed and fine-tuned the manuscript for Baby Basics.

Description of the Baby Basics *Book*



Baby Basics, is a month-by-month pregnancy guide. It is a brightly colored, spiral-bound, 288 page book, filled with information, stories, checklists, and pictures. There are tabs along the side, allowing the reader to flip to relevant chapters. There is a brief chapter for each of the 9 months of pregnancy, as well as a chapter on post-partum care. The remaining chapters focus on nutrition, referrals and special issues including homelessness, miscarriage and drug addiction**.** Each chapter has a section called "The Basics", written at a 3rd grade level. These pages are pale blue and reinforce the most basic health messages. They always include the same four sections. The repetition is reassuring for mothers and makes the book easier to navigate.

The sections are:

A Look At Your Baby: A drawing and description of the baby, month by month *in utero.*

Your Changing Body: Answers the question - Are the things I'm feeling this month normal?

Make a Healthy Baby: The basic medical advice parents need to have each month.

Your Monthly Visit to Your Doctor or Midwife: What to expect at a check-up, questions to ask, and space to write notes.

The white pages, called "Take Care of Yourself", are written to a 6th grade level and contain more in-depth information on pregnancy issues. Women can turn to these pages to build upon the "Basics". For example, in the "Basics" it says that headaches are a perfectly normal symptom of pregnancy. In "Take Care of Yourself" there are tips for reducing headache pain and frequency.

In addition, each chapter includes features that help bring health information alive:

"YOU MAY HAVE HEARD" - is a collection of sometimes amusing pregnancy myths, wives' tales and cultural stories. Harmful ones are respectfully debunked.

In **"OUR STORIES"** - six people share monthly pregnancy stories complete with friendly, personal tips. The wide range of their feelings and experiences ensure that some of the stories will reflect and touch the lives of many different cultures and lifestyles.

Valerie: A single mom who is unsure about pregnancy.

Maria: A teen with a supportive boyfriend.

Amanda: An older married mom, who after a miscarriage is joyous and nervous about this pregnancy.

Warren: An ambivalent father-to-be.

Aida: A grandmother whose young granddaughter is pregnant.

Beth: A supportive friend who worries about her friend's unhealthy lifestyle.

These stories capture real-world scenarios reflective of the life situations of many low-income, at risk women. As we have discussed earlier in this textbook, relevancy is a key factor in readability. This makes the reading more inviting and more relevant, thus breaking down some of the barriers that poor readers have with conventional text material.

"ON MY MIND" - offers questions that help women become even more aware of the miracle growing within and to begin thinking of themselves as mothers. These questions are great conversation starters and an opportunity to promote literacy by keeping a personal record of pregnancy.

"TIPS FOR DADS" - are spread throughout the book with action points for Dads. The Dad-tips can also work as tips for a birth friend.

For each month, there is space provided for the mothers to write in their own concerns and questions to take to their doctors. "Think about any questions you want to ask at this visit. You can write them down here, if you want to."

The prose is trustworthy and reflective of real world spoken language and cadence familiar to the reader. For example in month 7 friendly phrasing is ubiquitous: Under "Your Changing Body" – "Your mind – Worries about what labor will be like;

Forgetful; Bored with the whole thing?; So excited you can't stand it." (p. 146). Or, "Your 7th Month Visit to Your Doctor or Midwife - They'll check…By now you know the drill. They will check." (p. 148). The text is peppered with quotations to capitalize on the power of spoken language. For example, "Juan says my breasts are too small to breastfeed."

Your Changing Body

"I have now stopped at every bathroom between here and the grocery store. My kids are starting to joke that I should wear a diaper!"

Your body

- Tired, sleepy
- Need to urinate more
- Nauseous
- Constipated
- Heartburn or indigestion or gas or bloating
- Food cravings or aversions—certain foods look good, others look bad
- Breast changes—bigger, more tender, tingly. Darkening around the nipple. And bumps. You can see the veins under the skin.
- Headaches or faintness or dizziness
- Hungry all the time, or not hungry at all

Your mind

Getting used to the mood swings? Moving between joy and sadness, worry and fear and excitement. It's all normal.

Pregnant women often have trouble with their memory. So write down questions when you think of them. And bring a pen to write the answers down, or a friend to help you remember the answers!

Should I call the doctor? If you feel sick, or have any bleeding, turn to page 286 to check your symptoms. But if you are worried—it's always best to call.

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Make a Healthy Baby

Weight might be on your mind. Maybe you're having trouble gaining any (or you're even losing weight) because you are too sick to your stomach to eat. Or you're gaining too quickly (you feel as if you could eat a horse at every meal and you don't want to start looking like one). Use your common sense.

Do's

- ✓ Eat healthy foods.
- ✓ Drink plenty of water.
- ✓ Exercise (if the doctor or midwife says okay).
- ✓ Eat small amounts if you feel sick to your stomach.
- ✓ Eat foods that appeal to you.
- ✓ Cut down on junk foods and sweets (like chips and candy).

Don'ts

- ✓ Don't eat foods that are hard to digest.
- ✓ Don't force yourself to eat foods that make you feel sick.

Your doctor, midwife, or nurse will advise you about how much weight you should gain. Everyone is different. Usually they recommend gaining 3 to 4 pounds during the first 3 months. Then, 1 pound a week until the last month. For a total of 25 to 35 pounds.

For great cooking tips, check out the What to Eat chapter.

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Phase 2: Field testing with providers and pregnant mothers

In 2002, 100,000 copies of *Baby Basics* were printed and distributed for free to programs all across the United States. In New York, Los Angeles County, Minneapolis and Washington D.C., the Foundation partnered with the city Health Departments and invited every healthcare provider in each of those cities, that served low-income, Medicaid eligible pregnant women to apply for enough books for their mothers for one year. Also, certain prenatal health education programs, Early Head Start Programs, Pueblo prenatal clinics serving the Native American population, Healthy Start and Even Start and Family

Literacy Programs were invited to apply for books. The only commitment necessary was that the programs agree to return a completed evaluation form that asked questions about the content, format and readability of the book.

Early Findings

In a survey of 200 clinicians (nurses, nurse practitioners and health educators), 90% said that they believe women in the target categories would read the book; they thought the format was appealing; almost half surveyed believed that male partners would also read the book. A total of 20 focus groups were held with pregnant women to explore their reactions to *Baby Basics.* The following are key findings from this research:

1. **Mothers developed a relationship with *Baby Basics***

   Because it was "beautiful" and "real" mothers felt it was more than a handout from their nurse or doctor. It felt like a "gift." It made mothers feel special. In fact, when asked who this book was written for, 100% of the mothers responded that it was written "for me". When asked who they would give the book to, many mothers offered to tell their friends about it, but since some had written in the book, and others felt very possessive of this "gift" most of the mothers said they "might lend it to someone, but I want it back, because its mine."

2. **Mothers wanted to read *Baby Basics* because it had the information they wanted.**

   One Brazilian mother proudly announced, "This is the first book I read in English from front to back. Not only was it simple, but it was exactly the information I most wanted to know. I told every one of my girlfriends to go to the clinic that had the book."

3. **Art matters.**

   A 16-year-old bubbled, "it looked like a kids book to me. Not at all scary. Something I wanted to pick up because there were bright colors and lots of pictures."

4. **Women finding themselves in the pages felt reassured and important.**

   The stories in the book resonated with mothers of all ages. 100% of the women surveyed who had read the book had read all of the stories. Some of them had read the stories from start to finish when first receiving the book. A homeless mother suggested that we add a story about homelessness and pregnancy, "just knowing that other moms are in the same place as me would make me feel less alone." A mother who had recently miscarried asked us to include a first person narrative in that section too. (Both suggestions were incorporated into the 2nd edition of the book, published in 2003).

5. **Some mothers needed to be coaxed or reminded to open the book, but when they did they were happy to find the answers they wanted – and surprised that a book could give them answers.** A young mother said she had so many questions,

"and I would ask my mom and my girlfriends and everyone told me to stop asking so many questions. Or they would all tell me something different. And the book was sitting right there near my bed and I picked it up one night and the answers to every single one of those questions was right there. So I read the whole thing through. Twice."

Findings from focus groups with providers

From Focus Groups with practitioners, the Foundation learned:

1. Most healthcare providers did not incorporate *Baby Basics* or any written materials at all into their health education practice. Many programs handed mothers a book at the end of her first appointment and never referred to it again. When asked if mothers read the book, they did not know.

2. There needed to be more of a process developed for the books distribution and use. One clinic put the books out in the lobby, where they were quickly taken. "Our mothers love the books, they're all gone. Can we have more?"

3. Many healthcare providers and educators had never considered their patients literacy skills when providing care, and had never learned how to educate patients who couldn't read. With no training in how to ensure patients' understanding their was no way to ensure patient compliance. Thus when handed the Baby Basics books, providers and educators could only worry that their patients would not or could not read the book.

5. Midwives, and Ob-Gyn's had developed useful, insightful and simply replicable ways to use the *Baby Basics* book.

6. Just putting appropriate materials into a woman's hands is not enough.

Providing the materials, and the support needed to read and act upon these materials has been proven to improve care and save health care dollars. A UCLA/Johnson & Johnson Healthcare Institute study found that when Head Start parents were provided with a comprehensive early childhood health education book and "health literacy" classes to help them use the book to assess appropriate care for a sick child, emergency room visits went down and annual healthcare costs were reduced by at least $198 per family.

Phase 3: Identifying Best Practices

A book alone can't solve all of the challenges faced by a low-income pregnant mother. But watching healthcare professionals use Baby Basics, The What To Expect Foundation saw that it was a catalyst, not just for mothers who but also for the providers and educators who used it. Across the country, midwives, doctors, nurses and educators had independently created health literacy strategies for using BABY BASICS/HOLA BEBE that effected powerful change both in their practice and their patient's understanding and compliance. A series of program building steps at health centers (such as Newark's University of Medicine and Dentistry of NJ), and cities across the country (as in Houston, TX) encouraged The What To Expect Foundation to develop the Baby Basics Program – not as a new system, but as a tool, a practice and a philosophy of health literate, patient centered care that could be integrated into all of the existing systems, strengthening and supporting communication and education for patients, providers and educators.

In 2001, the WTEF designed their first formal field test site of the *Baby Basics* book while developing the *Baby Basics* Program at The University of Medicine and Dentristry of New Jersey in Newark, NJ - a city in which 79% of annual births, 3,400 out of 4,334 deliveries in Newark are to women living at or below poverty level (Dr. Lakota Cruse, the NJ Maternal and Child Health Bureau statistician High illiteracy coupled with a high

infant mortality rate (13.2%), encouraged the Foundation to work with Dr. Theodore Barrett, the Director of the Women's Ob-Gyn University Associates at UMDNJ.

The University of Medicine and Dentistry of New Jersey (UMDNJ) houses the largest pre-natal clinic in Newark. The program is lead by Dr. Theodore Barrett, MD, FACOG. The *Baby Basics* Programs' health literacy intervention was created to respond to University Hospital's needs and with the advice and evaluation provided by Dr. Barrett and Jennifer A. Winter, MS, RN, APN, C, the clinic's nurse manager. At University Hospital, every pregnant new patient is told to attend her first pre-natal appointment on a Wednesday. That check-up is a group class that uses *Baby Basics* as an introductory tool. Every mother receives a copy in English or Spanish and, as a group meets, with the health educator, WIC counselor, in-take worker and Social Services provider. Mothers are told that the doctors and nurses will refer to *Baby Basics* throughout their prenatal care and that they should refer to the book for answers to their questions. Working with Dr. Barrett, the WTEF developed a *Prescription Pad*, which has a space for the appointment time, day and date and is written in English and Spanish. It has a space for the healthcare provider to write instructions and to note where in the book mothers can look for further discussion. It also has spaces for the WIC and other educators to make notes. Mothers are given a *Prescription Pad* page at each visit.

In each patient's chart, there is a chart checklist that lists the education topics for each visit and refers to the page numbers where each topic is found in the book. In addition, a *Baby Basics* index and the curriculum for each month of pregnancy is laminated and hanging on a peg in every clinic exam room.

When various health educators who teach topics such as nutrition, or breastfeeding or labor and delivery teach at University Hospital, they do so with a copy of *Baby Basics* open on their lap or desk. Even mothers who can't read can look at the pictures and focus on the topics with the educator. As importantly, the staff now tries to use the language in *Baby Basics* in discussion. They find that "it's easier for us to all say it the same way. We know the mom hears it from all of us, and she'll start to understand we're all talking about the same thing. A c-section, a caesarian section, same thing to us, but not to a mom who has never had one and never heard the word before." The Nurse Manager at the clinic, Jen Winters, is enthusiastic about the program and has found that it makes her job easier. "I have it all written right in front of me. Pointing at pictures, working our way down lists, this makes sense."

The next major Baby Basics Program step was built as a collaboration between healthcare providers and adult literacy providers in Houston, Texas and reached 15,000 expecting women.. US Surgeon VADM General Carmona, launched the city program, commenting that "Not every American is a scientist or a health care professional, and we can't expect everyone to understand what it takes doctors, nurses, pharmacists, and other health care professionals years of Training to learn. This is especially relevant in the area of pre-pregnancy and pregnancy. *That's why the Baby Basics Program is so important.*"

PHASE FOUR

Lastly, The What To Expect Foundation created a model pilot in Jamaica Queens that would codify the program and could be used to evaluate outcomes. The model identified three audiences in the prenatal realm that need to be engaged: patients, healthcare systems, and community-based prenatal support programs. For that audience they developed a four-pronged "Baby Basics Toolbox for Change" that includes: Materials, Training, Technical Assistance and Evaluation. Simply put, the initiative:

1. Provides at-risk expecting young women with innovative prenatal health education materials and the health literacy support to better understand and access health care for themselves and their children.
2. Supplies healthcare institutions of varied sizes and structures with the prenatal health literacy training, tools and implementation support to better ***welcome*** their patients, ***communicate and care*** for their patients, and ***engage*** their patients -- from doctors, midwives and nurses, to educators, administrators and clerical staff.
3. Coordinates community-wide interventions across artificial boundaries (health, education, social services) to provide patient centered prenatal care. By simply using the same materials, language and messaging, the prenatal community - doctors, WIC counselors, home visitors, Doulas, childbirth educators have a consistent health literacy strategy that supports a community-wide message.

A narrative description of the Baby Basics model intervention follows:

Kia is 20 and pregnant. She has heard that Jamaica MIC Women's Health Services, in addition to providing prenatal care, has a free program for pregnant moms, and that the staff is friendly. She calls for an appointment and is told Wednesday's best for first appointments since there's a BB Mom's Club -- a supportive pregnancy/health literacy group held at MIC with snacks and a chance to meet other pregnant women from the neighborhood.

When Kia comes the following Wednesday, the clerk, Angela welcomes her warmly, and brings her to a desk, where they fill out Medicaid and MIC intake forms together. Angela has had a BB training, and understands not only the health literacy challenges Kia may face, but has worked with the rest of the staff to figure out how to best bring BB and health literacy into her work. Angela gives Kia a gift, *Baby Basics*, and explains that this book has answers to many of her pregnancy questions. Angela says she knows it's a big book, but reassures Kia that she doesn't have to read the whole thing at once. If she needs help reading it, the BB Mom's Club will help. Angela also gives Kia a copy of the *Baby Basics Planner* and shows where to keep track of prenatal appointments, information and questions for her doctor. Then, she invites Kia to

take the Medicaid registration form they've just filled out together, and copy some of that information into her *BB Planner*, so she has a generic form she'll be able to copy anytime.

Kia hears laughter coming from the health education room and joins the group. The health educator, Theodora is laughing with a room full of pregnant women. Theodora has been trained to use the BB Mom's Club Activity Cards, how to run groups, and as importantly Adult Literacy/English as A Second Language strategies for teaching adult learners. Rather than leading the group, she is using this innovative health literacy curriculum to help expecting women find information they want to know, both by looking it up in *Baby Basics* (teaching skills like using an index or reading a list of tips) and learning from each other. She is encouraging moms to write down their specific questions for the provider in the BB Planner and is using role playing to help moms feel comfortable asking questions. Each activity is 20 minutes long, and to join it doesn't matter what language you speak, or how far along you are in your pregnancy.

Called out of the BB Mom's club, Kia meets with Dr. Kramer. Dr. Kramer has had BB health literacy training, flips quickly through BB and talks about the information Kia needs to know. He uses the same language used in BB. He uses the BB prompt cards (a "cheat sheet curriculum with illustrations) to find the pages he wants to be sure to highlight for Kia this month. When he opens Kia's planner he sees that in the BB Mom's club, Kia has checked off some questions and written two of her own questions. He tells her these are good questions, and they discuss answers. He looks on his *Provider Prompt* Cards to see where it is noted in BB and writes down pages and key words for Kia to review when she gets home.

When the nurse Julia comes in to see Kia, she can see on the chart and in the planner what has already been discussed with Dr. Kramer, and can quickly review some of the key points – using the same language as the doctor and pointing to some of the same pages in the BB guide. As she makes notes in Kia's chart about the PCAP mandated educational topics discussed, she also makes a notes in Kia's planner about the topics and BB pages. Kia is not a high risk patient, or a teen, so she is not going to meet with the social worker at MIC. But, as she flips through the BB Planner, she sees that there is a program across the street from MIC that has free cribs for moms on Medicaid, a program she would not know about otherwise. Julia tells Kia about WIC – the address and phone number is in her BB planner. Julia circles the phone number and draws a quick map on the page. Kia makes an appointment for her next visit – and asks for a Wednesday so she can attend another BB Mom's Club. She is given an appointment card – and is encouraged to note the time and date in her BB planner. If it's all in one place she won't lose it, and be less likely to miss her appointment. When Kia goes to WIC….the nutrition educator pulls out her

Baby Basics and discusses healthy eating. Kia sees that she too is using Baby Basics to explain nutrition and feels comforted that whatever she can't remember, she can always look up again.

Evaluation

The continued evaluation will help us determine how useful and used providers find these tools and strategies, the success of the community integration steps, and evaluate the outcome measures highlighted below:

	Intervention sites		**Nonintervention (control) site**	
Some proposed Measures	**Baseline**	**After Implementation**	**Baseline**	**After Implementation**
Process				
Number of linkages with literacy organizations		✓		
Number of Baby Basics/Hola Bebe books distributed		✓		
Patient satisfaction (as measured by existing patient surveys)	✓	✓	✓	✓
Outcome				
Birth outcomes Birth Weight Number of nonscheduled visits per patient	✓	✓	✓	✓
Number of unnecessary calls to providers with questions	✓	✓	✓	✓
Number of missed visits per patient	✓	✓	✓	✓
% of pregnant women who smoke during pregnancy	✓	✓	✓	✓
% of pregnant women who drink alcohol during pregnancy	✓	✓	✓	✓
% of pregnant women who screen positive for depression	✓	✓	✓	✓
% of pregnant women who screen positive for anxiety	✓	✓	✓	✓
Number of providers trained		✓		
Number of women referred to BB Mom's Club Number of women who go to classes Number of women who stay for full classes		✓		
Proportion of women returning for postpartum care at MIC center	✓	✓	✓	✓
Proportion of women selecting a pediatrician before delivery	✓	✓	✓	✓
Mediating				
Presence of other programs and interventions in community	✓	✓	✓	✓
Other program enrollment (WIC, e.g.) for patients studied	✓	✓	✓	✓
Readability statistics of existing patient education materials	✓		✓	

Summing Up

Update with any new insights.

We have seen in this case study that conceptualizing, designing and field testing materials for target audiences is a collaborate and iterative process – one that remains open to new information and transforming ideas. By involving members of the healthcare and the adult education communities, as well as pregnant women in their target audiences, *Baby*

Basics phased its ongoing development. This collaborative model allows The What to Expect Foundation to address their goal of integrating women's fundamental literacy, health literacy and health. Key strengths and uniqueness of the *Baby Basics* Program are:

- Readable material with appropriate tone for audience
- Culturally relevant and mindful of reader contexts
- Emphasizes empowerment as a service
- Strategic layout and design
- Excellent distribution plan linked to an education program
- Ongoing field testing and ongoing revision of the *Baby Basics* Program.

Exercises

#1
Select an existing health education program you are using or know of. Reconstruct as best you can, how the program was developed. Identify the amount and kind of target audience input that was used. Does this input seem adequate to you? If yes, please explain. If no, please describe the types of input you would have recommended.

#2
You've been asked to produce a set of consumer health materials and a dissemination plan for a hospital. You are told that once the materials are ready to be printed, you should "try them out" to get reactions from the target audience. Prepare an argument for using a more collaborative approach. Write up a brief outline of how you would get the job done.

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