



Instructional Guide

By Dr. Betsy Diamant-Cohen and Dr. Brenda Hussey-Gardner

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Acknowledgements

Mother Goose on the Loose Goslings is the successful result of multiple collaborations and partnerships. The script for the program was written jointly by Betsy Diamant-Cohen, MLS, DCD, and Brenda-Hussey Gardner, PhD, MPH. Dr. Diamant-Cohen has over 25 years of experience as a children's librarian at public libraries and children's museums. She is the creator and Executive Director of Mother Goose on the Loose, an award-winning early literacy program. Dr. Diamant-Cohen conceived of the idea for Goslings and her advocacy led to the creation of the program. Dr. Brenda Hussey-Gardner is an Associate Professor of Pediatrics at the University of Maryland School of Medicine. She has over 30 years of clinical and research experience with infants born prematurely and their families. The participation of Port Discovery Children's Museum, the University of Maryland Neonatal Intensive Care Unit (NICU) and NICU Advisory Council, and the Applied Developmental Psychology Program at the University of Maryland, Baltimore County (UMBC) was instrumental in getting the Goslings program started.

Port Discovery Children's Museum. Located in Baltimore, Maryland, Port Discovery Children's Museum is a hands-on, interactive and educational Museum that educates and inspires children through purposeful play. Designed for children ages 0-10 and the adults in their lives, Port Discovery encourages children and the adults in their lives to play, learn and engage with one another while using their imaginations, building connections, and learning about the world

around them. In addition to offering unique and hands-on experiences through hands-on exhibits, unique family programs and events, and educational field trips, Port Discovery also offers programs and activities in their community. Port Discovery believes strongly in the importance and effectiveness of the Goslings program and is a proud partner and provider of the program in NICUs in the Maryland and DC region. Education Department staff Barb Henschel, CFLE; and Summer Rosswog, MLS were instrumental in organizing and presenting the first Goslings Programs; Segrid Pearson created the graphics; Derek Cooper; Dawn Sacks; Christine McLouglin, MA; Nora Thompson, MSED; Jan Fabiyi, MS; Bryn Parchman, MBA; and Pat Hoge, PhD have provided invaluable support for the program.

University of Maryland NICU & NICU Advisory Council. The Drs. Rouben and Violet Jiji NICU at the University of Maryland Children's Hospital, is a Level IV NICU with 52 single family rooms. The unit's team of doctors, nurses and support staff provide the highest intensity of care for the smallest and most critically ill babies. The NICU Advisory Council is composed of an interdisciplinary team of professionals and former NICU parents. Under the leadership of Christine Byerly, BSN, RNC-NICU and Jane Munoz, RN, IBCLC the council offers advice and guidance on policies, programs and research impacting families with babies in the NICU. The council provided indispensable clinical feedback during the development and pilot of Goslings. In addition to recognizing the efforts of the council, appreciation goes to NICU leadership (Dina El-Metwally, MD, PhD; Treza James, MS, NNP-BC) and the many doctors, nurses, social workers, and therapists who supported the development and implementation of Goslings in the NICU. Finally, deep gratitude goes to the families who attended Goslings and participated in our evaluation studies.

Applied Developmental Psychology Program at UMBC.

The Applied Developmental Psychology program, a doctoral program within the Psychology department at UMBC, focuses on developmental science and its applications. Faculty and students within the program do research on general developmental topics with a strong focus on important social issues. They also conduct evaluations of individuals as well as programs. Susan Sonnenschein, PhD, is a professor in this program and her scholarly interests focus

on factors that facilitate children's educational development. She has conducted research on children's early language, literacy, and mathematics development and evaluated programs designed to improve functioning in those areas for children at different points in development. Dr. Sonnenschein, and two of her graduate students, Rebecca Dowling, MA, and Lisa Shanty, MA, conducted the two evaluations of the Gosling program. The evaluations used a mixedmethods approach to show whether Goslings resulted in changes in participants attitudes or behaviors.

Funding from **PNC Grow Up Great**® brought these partners together and supported the creation, implementation and evaluation of Goslings during the initial two years. The **Bearman Foundation** helped support the development of the Goslings program and booklet, and funded the recording of Goslings songs, which were sung by Rahel Limor, CCM and recorded by Jim McClure at Betsy's Folly Studios in New Hampshire. The Child Health Foundation provided additional funding to support continued implementation of Goslings, by Port Discovery Children's Museum, at the University of Maryland NICU. Finally, funding from the National Network of Libraries of Medicine (NNLM) enabled Drs. Diamant-Cohen and Hussey-Gardner to utilize results from prior evaluation studies to revise the Goslings Family Guide, create this Goslings Instructional Guide, and develop a web-based Goslings registration and information page. NNLM funds supported the work of Segrid Pearson and Cameron Morgan, MA the graphic artists for the booklet, handouts, and guide; and Nuriel Pele, the web master for the Goslings website. In addition, NNLM funds were used to hold a focus group to obtain feedback on materials prior to final production. The focus group was comprised of individuals from Port Discovery (Barb Henschel, CFLE; Pat Hoge, PhD), the University of Maryland NICU Advisory Council (Hayley Anthony, BA; Christine Byerly, BSN, RNC-NIC; Jennifer Crouse, EdD, CCC-SLP, NLP; Alison Falck, MD; Jane Munoz, RN, IBCLC; Melanie Miller, MEd; Kristin Murphy, parent; Crystal Nwachu, parent; Stanley and Jessica Synkowski, parents; Ned Williams, parent), and the public library (Selma Levi, MLS; Carly Akkers, MLS).

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About MGOL Goslings

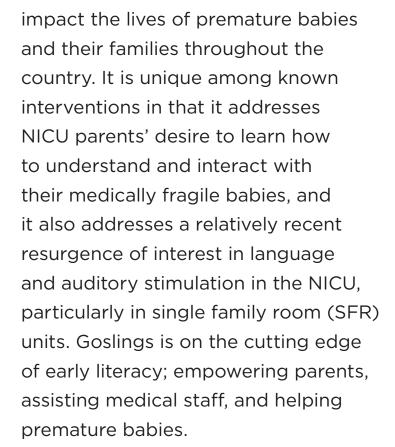
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Goal

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Objectives

Outcomes



Goslings has the potential to positively





Goal

The goal of Goslings is to facilitate the acquisition of optimal language and literacy habits from the beginning of life, even when that life starts too early. Goslings does this by partnering with NICUs to provide parents with the education and tools needed to (1) understand the medical readiness of their baby for interaction; (2) interpret their baby's behavioral signals; and (3) talk, sing, read (share books), and play with their baby—in the NICU and later at home.

Objectives

- To encourage parents to spend quality time interacting with their baby in medically and developmentally appropriate ways that promote early language and literacy while supporting parentinfant bonding.
- 2. To inform parents of the importance of early language and literacy for babies from the very beginning of life
- 3. To teach parents the value of learning through play.
- 4. To encourage parents to talk, sing, read, do fingerplays, and play with their baby according to their baby's individual readiness.
- 5. To educate parents about the behavioral signals that babies use to communicate readiness for interaction, self-coping and the need for a change.
- 6. To empower parents to give their babies the best beginning possible by showering them with high quality language, showing them expressions of love, soothing them with lullabies, and exposing them to soft and gentle music.

- 7. To relieve feelings of isolation, anxiety, and stress by offering a joyful program that creates community between families with babies in the NICU.
- 8. To encourage parents to continue early language and literacy activities once home.

Outcomes

Results of two Goslings evaluations demonstrates that the program:

- Provides parents with the guidance and materials needed to promote early language and literacy in the NICU.
- 2. Enhances parent confidence in interpreting their baby's signals of readiness for interaction.
- 3. Increases parent engagement in early language and literacy activities with their baby, especially talking and singing to their baby in ways that are responsive to their baby's signals and medical status.
- 4. Limits instances when parents overstimulate their medically fragile babies.

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Strategies for NICUs & Community Agencies to Partner Together

Some NICUs are rich in staff resources and will be able to deliver the program themselves. Other NICUs may need to. or want to, partner with community agencies to deliver Goslings for them. Potential partners include educators from a children's museums, children's librarians from a local library, librarians from a University Library of Medicine, early literacy professionals, and staff from an early intervention program (e.g., early childhood special educator). If a NICU is interested in partnering with a community agency, a designated staff member should call or send an email to the program director, explain who you are, state that you are interested in a potential collaboration to provide important early language and literacy education to parents in your NICU and request a time to meet to discuss in

more detail. Likewise, if you are a community agency interested in partnering with a NICU, a designated staff member should call or send an email to the NICU Medical Director and/or the NICU Nurse Manager. If you already have funding to support program implementation, be sure to mention this in your initial contact. If you don't have all the needed funding, be sure to put funding on the agenda so that you can brainstorm funding possibilities if there is interest in the collaboration. Some community agencies may be able to provide staff, in-kind, to facilitate sessions as long as the material costs are covered: other agencies may require funding to support the salary of their staff.

When there are unmet financial needs, the NICU and community agency can partner together to seek a philanthropic donation to cover some or all of the related costs associated with Goslings. Another option is to jointly write a grant to a local foundation for support. Most hospitals and many community agencies have staff dedicated to philanthropy and/ or grant writing; seeking their assistance is always advisable. If funding is tight, additional ideas to reduce costs include holding a rattle and book drive with a local childcare center or sorority and hosting a craft night for families to make monkey puppets; there are a variety of directions for making monkey puppets online.

Establish a Goslings Team & Champion

In order to successfully implement Goslings in any NICU, it is important to establish a Goslings Team and to appoint a Goslings Champion. The Goslings Team should be composed of at least three professionals who will work together to make Goslings part of the NICU culture. The team will educate staff about the program and its benefits, advertise the program to families, invite families to participate, facilitate program implementation, and document which families attend. In addition, this team may seek funding to support program implementation and/or engage in program evaluation activities. In the first year of program planning and implementation, this team should meet at least 2 hours monthly. One of the first tasks of the Goslings Team is to appoint a Goslings Champion. While the Goslings Team can be composed of NICU staff and any community professionals partnering with the NICU to deliver the Goslings program, the Goslings Champion should come from the NICU. This individual will assume overall responsibility and accountability for the program implementation in the NICU.

Create a Sibiling Policy

Each Goslings Team should develop a policy regarding sibling attendance at Goslings. Older siblings, especially those who are

at least 10 years old, may benefit from attending Goslings. Younger siblings, on the other hand, may not have the attention-span needed for an hour-long program created for adults. When developing your Goslings sibling policy, also consider your unit's general sibling visitation policy as well as your flu-season sibling policy.

Establish the Schedule

Depending on funding and trends in NICU patient status, you will need to determine the frequency that you will offer Goslings sessions. Each session lasts 60 minutes and parents only need to attend once. Some parents may, however, enjoy attending more than once. Offering Goslings one to two times monthly often works well.

In addition to determining the frequency of sessions, you will need to determine the best day of the week and time of the day. This will be unique to each NICU. However, because many parents return to work and save maternity/paternity leave until their baby is home from the hospital, late afternoon and early evening sessions often work best. Holding Goslings at consistent times facilitates communication with parents. For instance, knowing that Goslings is held the first and third Thursday of the month at 4pm is easier to remember than the next Goslings session is on Tuesday the 8th at 4pm and the one after that is on Sunday the 20th at 7pm.

If funding is tight, additional ideas to reduce costs include holding a rattle and book drive with a local childcare center or sorority and hosting a craft night for families to make monkey puppets; there are a variety of directions for making monkey puppets online.

Goslings Facilitators

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Qualifications

Goslings can be facilitated by a variety of neonatal, pediatric and early childhood professionals. Potential hospital staff facilitators include child life specialists, developmental specialists, doctors, nurses, psychologists, social workers, speechlanguage pathologists and other pediatric rehab specialists. Community professionals who may partner with NICU staff to implement the program include children's librarians, children's museum education specialists, early literacy professionals, early childhood teachers, early childhood special educators, and early interventionists. A bachelor's degree in a related field, and one year of experience working with parents and infants under the age of 1 year, is a prerequisite to becoming a Goslings facilitator. An exception can be made for professionals with an associate degree in a related field, and one year of experience working with parents and infants under the age of 1 year, if they have received in-person Goslings training.



Parents enjoy chanting to their "babies" during a Goslings session.

Regardless of a facilitator's professional background or the institution they represent, it is essential that the facilitator be a warm, naturally friendly individual who smiles with ease, has a sense of humor, and talks with parents as equal partners. In addition, facilitators need to be flexible and accommodating, and very comfortable reading and singing

in front of others. However, the facilitator does not need a good singing voice since being able to foster quality personal interactions is more important than voice quality.

Required Readings

Prior to administering the Goslings program, all facilitators are required to read two articles, in addition to this Instructional Guide. The first article. Mother Goose in the NICU: Support for the neediest infants and their families, is located in Appendix A. This article provides information regarding the rationale for the development of Goslings along with a description of the program's creation. The second article, Evaluation of an Early Language and Literacy Program for Parents of Infants in the NICU,2 provides a nice review of relevant literature. a description of instructional content, and an in-depth review of the methodology and results of a single group, pre- and post-test. mixed-methods evaluation of the Goslings program. This article is located in **Appendix B**. Additional reading material is available on the Goslings website at https://mgol. net/mgol-goslings-publications/.

Recommended Training

On-site training for Goslings facilitators is available and recommended, but not required. For information on this unique and interactive training workshop, visit the Goslings website at https://mgol. net/mgol-goslings-training-info/.

Practice

It is essential that facilitators practice implementing the program with one another to get feedback and gain confidence. If there is only one Goslings facilitator for your NICU, the

facilitator should practice in front of one or two colleagues, multiple times. When practicing, facilitators should follow the Goslings script and use the panels and manipulatives as will be done during an actual Goslings session. While the script does not have to be memorized, and it is better if you say things in your own way, the details are extremely important to share. The facilitator can use the outline provided by the panel visuals as prompts but should try to use as much of the script as possible. Since NICU babies are fragile, it is important to give parents correct information; repeating the information several times will help them to remember what is said.

Maryland and DC Restriction

Port Discovery Children's Museum, an original Goslings partner, is the sole provider of the Goslings program within Maryland and DC. Other institutions and/or entities within Maryland and DC are restricted from offering the program outside of an agreement with Port Discovery Children's Museum. Anyone wishing to deliver the Goslings program within Maryland and /or DC must contact Port Discovery Children's Museum for fee schedules and program delivery information: Port Discovery Outreach team at: Outreach@ portdiscovery.org.

Getting Ready

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Educate Staff

Early in the planning process, it is critical to inform the neonatologists and nursing management about Goslings and to gain their support. The Goslings Champion should set up a time to meet with the NICU Medical Director and the NICU Nurse Manager to talk about Goslings, answer any questions, and gain their approval for bringing Goslings to the NICU. At the end of the meeting, the Goslings Champion should ask for some time to present at a faculty clinical meeting. During the faculty clinical meeting, the Champion can provide an overview of Goslings, introduce the unit's Goslings Team, share the plan for bringing Goslings to the unit, and seek their input and backing. If desired, the Champion can also offer to email everyone a copy of the Evaluation of an Early Language and Literacy Program for Parents of Infants in the NICU article, located in Appendix B.

In addition to informing the neonatologists, all other NICU clinical staff need to learn about Goslings. This includes, but is not limited to, nurse practitioners, physician assistants, nurses, social workers and pediatric rehab therapists. An informational email is the simplest and quickest way to reach clinical staff. A sample email that you can use to inform NICU staff about Goslings is located in Appendix C. Feel free to adapt this email to align with your implementation plans. For most units, relying only on an email to educate staff about Goslings will not be sufficient. In addition to sending an email, consider creating a bulletin board for the staff lounge, posting flyers in the restrooms or locker rooms, sharing information during a team huddle, or providing a brief in-service over coffee and donuts.

Gather Supplies

A number of supplies are recommended for successful implementation of Goslings. These supplies are listed in **Appendix D.** They include:

- Items for the Goslings Kits
- Items needed to present the Goslings sessions, and
- Items for storage and transport.

While the materials listed were reviewed and received approval for use in a Level IV SFR NICU, most NICUs have their own approval process. The Goslings Champion should check with the NICU Medical Director or Nurse Manager to determine the approval process at your institution.

As the health and well-being of NICU babies is exceedingly important, it is essential that you follow your unit's policies and procedures for cleaning





From top: Figure 1, An example of a plastic bin being used as an isolette. Figure 2, The dolls can rest on tabletops throughout the workshop to help save funds.

the supplies. We recommend wiping everything down with Lysol or Cavicide wipes. In addition, we caution you to consider latex allergies and that you only purchase latex-free items.

Many of the Goslings items are optional, based on your setting, the supplies you already own, and your budget. For instance, the deluxe version of Goslings uses plastic storage containers as *isolettes* attached to stools by Velcro (see Figure 1). However, if the setting in which Goslings will take place has tables, you may want to put the isolettes on the tables rather than purchasing the stools. If you don't have the stools, then you won't need the Velcro. To be even more economical, you may choose not to purchase the *isolettes* and simply rest the dolls on tabletops (see Figure 2). This version may not be as realistic as the deluxe version. but it reduces expenditures, saves time when setting up, and minimizes the storage space required for supplies.

The list of items for storage and transport are entirely optional. Items listed are those that have been successfully used in Goslings programs when the supplies were kept in a different room (and sometimes at a different site) and needed to be transported back and forth. If there is storage space in the room where Goslings will be taking place, you will probably only need the storage boxes and not the carrying cases and moving carts. However, if you plan to present

Goslings in multiple locations, you may find it most economical to use the travel supplies rather than purchasing multiple copies of the program materials.

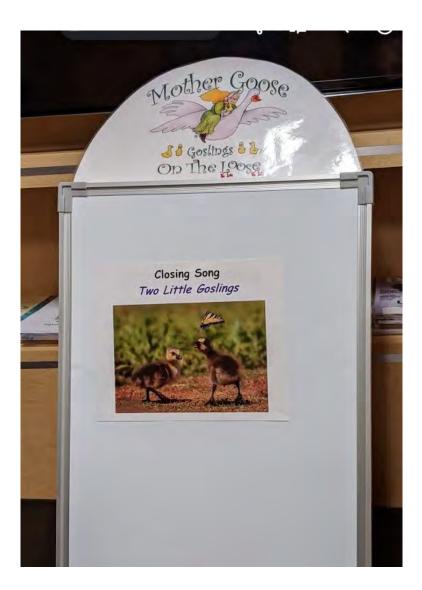
Since nursing mothers should be encouraged to drink water, you may want to have bottled water or a pitcher of water and cups available to program participants. If your budget allows, a basket of snacks is always appreciated. Healthy snacks include fruit, granola bars and pretzels.

Prepare Panels

In addition to the supplies that you will purchase, you need to print and laminate the 11" x 17" panels located on the Goslings website at https://mgol.net/mgol-goslingsmusic/mgol-goslings-handouts/. Mini versions of these panels are located in **Appendix E**. These panels are used as visuals placed on a magnet board during the Goslings session. The Goslings logo should be attached to the top of the magnet board with tape or Velcro, so it remains visible throughout the session (see Figure 3).

Panels are used during the Goslings session to provide parents with visuals during the program and to provide the facilitator with prompts to remember what to do next. Each visual consists of text and at least one illustration. The purple font signifies the title of the song or chant, the black font signifies text prompts to assist with the narrative.

Each panel should be photocopied in color (NOT double-



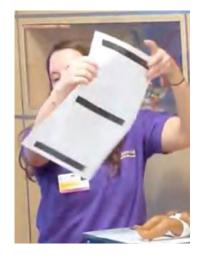


Figure 3, left, Goslings logo attached to the top of the magnetic board.

Figure 4, above, Magnets placed on the back of panels, for display on the magnetic board.

sided). To help keep the pages in order, write the page number that is on the front of each panel on the back of each printed page prior to laminating. Laminating the panels makes them more durable and easier to sanitize. Attaching magnetic strips to the back of each page facilitates putting the panels on and taking them off of the magnetic board, see Figure 4.

To prepare for the session, put all panels facing up, in numerical order, with the first one on the top of the

pile. Store this pile, in the order in which the panels will be used, behind the magnet board, within easy reach but out of view of the participants.

When you finish using a panel, put it in the plastic storage bin under the table. This will free up table space and facilitate clean-up after the session. Immediately put the next panel up. The magnet board should never be empty for more than a few seconds.

In addition to laminating the panels, you should laminate one copy of *Understanding My Signals*³ (available at https://www.vort.com/ product .ph?productid=19) and one copy of the Goslings Song Family Guide (see Appendix F and available for downloading at https://mgol.net/mgol-goslingsmusic/mgol-goslings-handouts/). Laminating these items adds stability and makes them easier to show to parents during the session. It also increases ease of sanitizing and durability; allowing them to last through numerous Goslings sessions.

Inform Parents Parent Flyer

In addition to notifying staff about Goslings, it is important to share information with parents. A Goslings flyer is a good way of doing this. The flyer can be used to briefly explain what the Goslings sessions entails and its benefits. It can also provide the date and time of the next session. The flyer can be posted in a family lounge, hallway, and/or delivered to the bedside of each baby. A sample flyer is located in Appendix G.

While the flyer informs and reminds parents of the date, time and place, a personal face-to-face invitation is the most effective way to engage parents and encourage them to attend a Goslings session. While all families can benefit from attending Goslings, some families may actually benefit more than others. Parents who over- or understimulate their babies and those who are afraid to interact with

their babies are good parents to actively encourage to participate in Goslings. Weekly interdisciplinary rounds or another weekly clinical team meeting is an excellent way for the Goslings Champion to remind team members of upcoming sessions and to find out if there are any parents for whom the Goslings Team should seek out to extend a personal invitation. In addition to these targeted personal invitations, a Goslings Team member should walk the unit the day before and again a few hours before the Goslings session to extend a personal invitation to any visiting family members. Bedside nurses and social workers are also excellent individuals to inform and invite parents to participate in Goslings.

Sign-Up Sheet

It is helpful to have a mechanism for registering families who plan to attend a Goslings session. A sample Program Sign-up Sheet is located in **Appendix H**. The sign-up sheet can be posted in a designated location (e.g., main nursing station, front desk) for parents to indicate their plan to attend a session. This sheet can also be used by the Goslings Team member to register families when walking the unit to verbally invite families to attend a session. Please note that it is important to be flexible with the sign-up sheet. The NICU is an unpredictable environment. As such, some families who sign up to attend may not be able to do so at the time of the session. Likewise, some families

who have not had the opportunity to sign up may simply show up.

Sign-In Sheet

As actual attendance may not match the sign-up sheet, it is also helpful to have a sign-in sheet. The sign-in sheet should include the name(s) of family members attending the Goslings session, their relationship to the baby (e.g., mother, father, grandmother), and the baby's name as they would like it to appear on the Certificate of Attendance. A sample sign-in sheet is located in **Appendix I**.

Involve Cuddlers

Some NICUs have volunteers who cuddle babies. These volunteers can be invited to attend a Goslings session so that they can learn how to foster the early language and literacy skills of the babies they cuddle. To clearly communicate that parents are of utmost importance in a baby's life, some of the words to the Goslings songs and rhymes have been modified for Cuddlers. For instance, instead of singing "Since I love you very much, I'll make a heart," Cuddlers sing "Since your Mommy loves you lots, she sends a heart." A Goslings Song and Rhyme Sheet for Cuddlers is located in Appendix J and a downloadable version is available at https://mgol.net/mgolgoslings-music/mgol-goslingshandouts/. Each NICU will need to decide whether or not Cuddlers receive a Goslings kit.

To clearly communicate that parents are of utmost importance in a baby's life, some of the words to the **Goslings songs** and rhymes have been modified for Cuddlers. For instance, instead of singing "Since I love vou verv much, I'll make a heart," Cuddlers sing "Since your **Mommy loves** you lots, she sends a heart."

Set-Up the Room

Prior to each Goslings session, the facilitator will need to do the following to set up the room.



Figure 5, Tailgate table.

- Set up tailgate table at the front of the room. Put a chair on one side of the table, facing forward (see Figure 5).
- Open up the Bookaeer and put it on the middle of the table (see Figure 6).



Figure 6, Bookaeer, front.



Figure 7, Magnetic board on bookaeer.

- Place the magnetic board on the Bookaeer and secure it (see Figure 7, back view.)
- Place the laminated Goslings session panels, *Understanding* My Signals, and the Goslings Family Guide on the table next to the magnetic board.
- Place a container on the floor, underneath the magnetic board, for collecting used panels.



Figure 8, Dolls.

Place the dolls (see Figure 8) on a table or counter so participants can see them and choose one when they enter the room.

- Arrange the chairs in a circle facing the magnetic board.
- 8 Place the sign-in sheet and pens on a table or counter near the front of the room. If you will be administering any program evaluation forms, place them near the sign-in sheet.



Figure 9, Healthy snacks.



Figure 10, Healthy drinks.

- If you plan on serving snacks (see Figure 9) and bottled water (see Figure 10), put them in a basket or on a tray in order to make it easy to offer them to participants a few different times during the program.
- 10 Arrange the tables so there is tabletop space in front of each seat where the parents can place their babies. Place a kit on or near each seat.



Figure 11, Preparing isolettes with Velcro.

Optional deluxe version, using stools and plastic isolettes:

Place a stool in front of each seat. Put two Velcro strips across the top of the stool. Put the opposite Velcro pieces on the bottom of the plastic isolette and stick the isolette to the stool (see Figure 11).



Figure 12, Setting up your workspace.

Depending on which version you chose, place an isolette and kit or just a kit in front of each chair — and don't forget to choose a doll and set up your station, too (see Figure 12).

Goslings Script

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Introduction to the Script Early Language and Literacy Key points

The Goslings script includes familiar movement and singing activities such as "Old MacDonald had a Farm" and "Twinkle, Twinkle, Little Star" in safe and developmentally appropriate ways for preterm and medically fragile babies. The script was purposively developed to highlight the following key early language and literacy points:

- Hearing words helps babies develop sound patterns and triggers their preprogrammed ability for language.4-6
- Exposure to words increases vocabulary, 7-8 which leads to reading readiness. 9-10
- Babies exposed to books and reading perform better in school.11
- According to Every Child Ready to Read® @ your library®, (ECRR), the five best ways to get children ready to read are to talk, sing, read (share books), write (exercise fine motor skills), and play, 12,13
- It is important to engage babies in early literacy activities by using rhymes, 14,15 songs, 16 chants, 17 books, 18 and movement. 19
- When parents talk and sing directly to their babies it is more effective at building vocabulary than simply exposing them to words by talking on a cellphone or listening to a television or video.²⁰⁻²¹
- There are multiple ways to share books with babies: reading aloud, talking about the pictures, singing songs about the pictures, pointing to the pictures, or simply allowing the baby to look at one page.²²⁻²⁵
- Nursery rhymes and songs form an important foundation for being ready to learn to read.26-28
- Reading aloud and singing to babies

Talking, reading, and singing to your baby helps to build your baby's brain.



To learn more about the ECRR curriculum, visit: http://everychildreadytoread.org/building-on-success-every-child-readyto-read-2nd-edition/

- helps a baby's brain develop and increases their overall health.²⁹⁻³²
- Early sensory exposure in the NICU helps with better language and motor outcomes.³³⁻³⁴
- Lullabies soothe and pacify babies.³⁵⁻³⁸
- Parents are their baby's first teacher and they play a key role in their baby's development.³⁹⁻⁴¹
- Positive parent-infant experiences, beginning at birth, enhance bonding and are essential for building literacy skills. 42-43

Delivering the Script

The following script is for one entire Goslings session which will last approximately 60 minutes. While the script does not have to be memorized it is very important to share the details accurately. For best results, practice the Welcoming Comments, making sure that all of these elements are incorporated into your initial greeting:

- A nice smile.
- · A confident manner.
- A cheerful voice.
- Voice projection loud enough for people on the other side of the room to hear you.

 Convincing words "I'm delighted to see you here today" giving the sense that you are really glad to be presenting the program.

Keep practicing until this part is perfect. It will set the tone for the entire program. Remember, your goals as a Goslings facilitator are to:

- Provide a safe, nonjudgmental space where families come together. A Goslings session can help minimize the isolation that some families feel while their baby is in the NICU by providing a place for parents to meet one another, ask questions, and share stories.
- Inform families of various resources available to help them foster their baby's brain development through early language and literacy activities (e.g., Goslings Family Guide, Understanding My Signals, Goslings activities, Goslings team members who can answer their questions after the session).
- Add joy to a family's day by modeling fun language and literacy building activities that parents can use in safe and developmentally appropriate ways while visiting their baby.

A quick guide to reading the script:

- The text in black is for the facilitator to read or say aloud.
- The text in *purple italics* gives explanations or instructions for the presenter.
- The text in *red italics* are extra notes for the facilitator to use at his or her discretion.
- The text in *green boxes* shows which display piece to use on the magnet board.
- All of the illustrations can be photocopied and used to make magnet board pieces.

WELCOMING COMMENTS

Welcome everyone and introduce vourself.

Hello, everyone. Welcome to Mother Goose on the Loose Goslings. Thank you for joining us. My name is _____ and I am delighted to see you here today.

Invite each person to choose a doll.

Since your babies can't yet leave the NICU, we have some dolls for you to use. If you haven't already chosen a baby, please choose a doll and place it in the isolette next to you or on the table in front of you.

Talk about the kits.

The kits near you are our practice kits. Following this program, each family is going to be given a new Goslings kit to use with your baby. This kit will be yours to keep; it's for you to use in the NICU and to take home at the end of your baby's hospital stay. In each kit are some items to help you sing and talk with your baby. Except for the books, children under three years of age should not play with the items in the kit without adult supervision. They are for you to use WITH your baby.

Give cell phone instructions.

Please put your cell phones on silent. If you are expecting an important call, then it's fine to leave your cell phone on, but we'd like you to step outside to answer it and talk. If you need to leave the program, that is also fine, but the kits will only be given to people who have attended the full program; this is to make sure that everyone knows how to safely use the items in the kit.

Go around the circle giving each person the opportunity to introduce him or herself.

Let's go around the circle, one by one. Tell us your name and then tell us whatever you are comfortable telling us about your baby. You can tell us whether you have a boy or girl, or how little your baby was when born, or how old your baby is now. Whatever you feel comfortable sharing is fine.

Goslings Script



A&Q

Ask the following questions:

- Who is able to hold their baby?
- Are your babies in a closed or open isolette?
- Are there any siblings? What ages are they?

Then invite parents to introduce themselves and answer any, or all, or none of the questions. After each person says their name, respond with "Welcome" or "Welcome, so-and-so." Make sure everyone gets a personal greeting from you. If you smile while you are talking, your voice will sound joyful.

Introduce any medical staff, library staff, early literacy professionals, visitors, or volunteers who are attending your program; or have them introduce themselves.

At today's Gosling program, we have a variety of people with a wide range of experiences with babies in the NICU. (See note)



On the Board: PANEL 1

Put panel 1, "Welcome" on the magnet board (see Figure 13).

OPENING RITUAL

Our program is called "Goslings." The point of this program is to improve your baby's stimulation while in the NICU by creating a language and literacy-rich environment that is appropriate for your individual baby's medical and developmental status.

Although it may feel a bit strange at first to be sitting here and singing with us, I guarantee it will get easier and easier. You'll be learning all sorts of great songs and rhymes to use with your baby. Sometimes it's hard to know what to do in your room and these activities can help fill the time in a fun way. It gives you safe ways to help with your baby's development.

Here is a rhyme with some gentle hand movements about two goslings for you to sing to your baby. In this Goslings program, I'm going to say everything twice. The first time you can listen, the second time repeat it with me. If you know the

song already, feel free to sing it with me both times. This song has hand movements; we can sing it with or without the hand movements.

Sing "Two Little Goslings" to the tune of "Hush Little Baby."



Figure 13, Picture from Panel 1.

Sing a second time and invite everyone to join in. Show the Family Guide and point out the QR code on the back.



Figure 14, Picture from Panel 2.

Song #1: Two Little Goslings

Two little goslings safe in their nest. Link fingers together to make a nest

One was awake and the other at rest. Slowly and gently lift one hand, lower the other with palm facing up.

One fell asleep and the other did too, Hands together

And they slept and they slept the whole night through. Head leans on hands.

Sleep is important for your baby. When babies sleep, their bodies work at healing themselves. That is why it is important to let your baby sleep, even if you have just arrived at the hospital for a visit and want to play. This song will remind you to let your baby sleep. Sing it with me now, and try adding the hand movements, too.

To help you remember the songs, we have this Family Guide in your kit. The words to the song we just sang are on page 5. You don't need to worry about forgetting the words or tunes to any of these songs because there is a QR code right here on the back page that you can scan into your phone and use to listen to all of the songs in the song book. We'll do that later on.



On the Board: PANEL 2

Take off panel 1 and place it in the container under the table. Put panel 2, "Opening Ritual" on the magnet board (Figure 14).

Singing to your baby is important. Gentle rhymes and rhythms can be comforting to your baby. Plus, hearing words through conversation and songs helps to build your baby's brain. No

matter what your voice sounds like, to your baby it is the most beautiful sound in the world.

Having a baby in the NICU can be scary. It probably wasn't what anyone expected when they had their baby. Goslings is an opportunity for all of us who care about these babies to meet each other.

It's truly impressive that all of you have gathered here today to learn ways to help your baby's brain develop. We'll have time at the end of the program for you to ask questions and for all of us to just get to know each other better.



MEDICAL NOTE

Think about how your baby is doing medically before doing these activities together. Being in the NICU is like taking a roller coaster ride; there are good days and bad days, ups and downs. On a good day, sharing these activities with your baby is a wonderful way to provide stimulation. During a hard day, it may be best to just sing songs softly or talk quietly to your baby. If you are in doubt as to whether or not it is a good day for sharing these activities with your baby, ask your nurse. The nurse will be able to tell you.

BUILDING PARENT KNOWLEDGE

Book #1: Understanding My Signals

Paying attention to your baby's signals will help you know which activities to use. Here is a terrific booklet called "Understanding My Signals" that shows how to interpret your baby's feelings by looking at your baby's face, positions and gestures. Recognizing these signals will help you decide when to proceed with an activity, when to make a change and when to give your baby a break.

There is a copy in your kits for you to review when you are back in your baby's room.

Hold up the booklet.

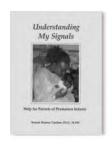


Figure 15, Cover of "Understanding My Signals."



Read the book

reproduce the motions or use

the descriptions

below to focus on particular signals.

If a copy of the booklet is not in each kit, explain where families can go to review a copy; for example, "There is a copy on the bulletin board in the family lounge for you to review."

SIGNALS

aloud and physically

Let's take a moment to review these signals. Babies have three types of signals: happy and ready, helping myself, and not happy.

Being alert and cooing is one signal that your baby is happy and ready. Relaxed face, arms and legs is another signal. Looking at objects or people signals "happy and ready." A baby with open eyes who is trying to smile is also showing a "happy and ready" signal.

Sometimes, your baby will signal, "I am helping myself." Babies signaling this may hold onto your finger or clasp their hands together, which prevents them from waving around. Sucking on fingers or a whole hand is another, "I am helping myself" signal. If your baby is trying to do this and has trouble getting his hand to his mouth, you may want to help him. Going into a light sleep is another way that babies help themselves.

After each signal, model the signal for those in attendance. Let's review signals for "I am not happy and need a change." Saluting (model this) means "I am not happy and need a change." Have you seen your baby do this? A finger splay, spreading fingers apart (model this), also means that your baby is not happy and needs a change. Frowning (model this), grimacing or grunting (model this), yawning, sneezing of hiccoughing (model this), arching back and neck and pushing away (model this), looking away (model this), and crying, all show that your baby is not happy and needs a change. Have you seen your baby show any of these signals?

When this happens, stop and think, "How many different things am I doing and what can I change?" If you are cuddling, singing, and using the rattle, try just cuddling and singing. If this is still too much, then just cuddle.

Goslings Script

There may be times when your baby will want no stimulation at all, and that's okay. During those times, your baby can rest quietly in the *isolette* or crib and you can take a little rest too. Then when your baby is happy and ready again, you can resume some of the fun activities.

Let's sing our opening song again, Two Little Goslings. Remember, all of the songs and rhymes we use should be sung in hushed tones while your baby is in the NICU.

Sing "Two Little Goslings" to the tune of "Hush Little Baby."

Let's sing our opening song again, Two Little Goslings.

Two little goslings safe in their nest. Link fingers together to make a nest

One was awake and the other at rest. Slowly and gently lift one hand, lower the other with palm facing up.

One fell asleep and the other did too, Hands together

And they slept and they slept the whole night through. Head leans on hands.



On the Board: PANEL 3

Place panel 2 under the table. Put panel 3, "Expectations" on the magnet board (see Figures 16-17).

SETTING REALISTIC EXPECTATIONS

Every baby is different, with different needs, different abilities and different levels of care. Right now, you are getting to know your baby and your baby is getting to know you.

When you sit near your baby's *isolette*, maybe your baby can open his eyes or hold onto your finger. No matter what, your baby can hear your voice and feel your words. Learning these songs and activities will help your baby's speech development. When you finally go home together, you can continue to use these activities to have fun playing together.

Babies love to hear their parents' voices. Babies don't care if you can sing on key or not. Just hearing your voice is soothing. So, let's sing together some more!

Song #2: Since I Love You Very Much

You may know the traditional song, "If You're Happy and You Know It." However, clapping can be too loud for NICU babies, so we're going to do it a little bit differently.

For the first verse, we're going to whisper, "I love you" (see Figure 16). You don't need to get right next to your baby's ear to whisper; your child will hear you even if you whisper softly.

Since I love you, I will whisper "I love you."

Since I love you, I will whisper "I love you."

Since I love you, love you, love you, and I'm always thinking of vou.

Since I love you, I will whisper "I love you."

The next verse is "Hold a hand" (see Figure 17). Gently hold your baby's hand in yours while you sing. Let's try it!

Since I love you very much, I'll, hold your hand.

Since I love you very much, I'll hold your hand.

Since I love you, love you, love you, and I'm always thinking of you.

Since I love you very much, I'll hold your hand.

Sing "Since I Love You Very Much" to the tune of "If You're

Happy and You Know It."

Love you

Figure 16, Picture for verse from Panel 3. "I love you."



Figure 17, Picture for verse from Panel 3, "I'll hold your hand."

On the Board: PANEL 4

Add panel 4 (see Figures 18-20), to the magnet board while leaving panel 3 on if there is space. If there isn't space, remove panel 3.

The next verse can be used to give a NICU hug. Place one hand on top of baby's head. Your other hand goes on your baby's bottom or feet. Keep your hands nice and still. It will be as if you are making a nest with your baby cuddled right inside.

Goslings Script

Pictures from Panel 3



Figure 18, Verse "I'll give a hug."

Look at the picture of the NICU hug (see Figure 18), there is also a picture of a NICU hug on page 6 in your songbook. Let's try singing "give a hug" with our dolls and give them a NICU hug at the same time.

Since I love you very much, I'll give a hug.

Since I love you very much, I'll give a hug.

Since I love you, love you, love you, and I'm always thinking of you.

Since I love you very much, I'll give a hug.

Next, we're going to sing "Since I love you very much, I'll make a heart" (see Figure 19). You can make a heart by putting your thumbs and index fingers together, like this. (Show example.)



Figure 19, Verse "I'll make a heart."

Since I love you very much, I'll make a heart.

Since I love you very much, I'll make a heart.

Since I love you, love you, love you, and I'm always thinking of you.

Since I love you very much, I'll make a heart.

For the next verse let's try blowing a kiss (see Figure 20). Remember to make it a gentle kiss and not to blow too hard. Flatten your hand, kiss the middle of your palm, and gently blow the kiss in your baby's direction, like this. (Show example.)



Figure 20, Verse "I'll blow a kiss."

Since I love you very much, I'll blow a kiss.

Since I love you very much, I'll blow a kiss.

Since I love you, love you, love you, and I'm always thinking of you.

Since I love you very much, I'll blow a kiss.



On the Board: PANEL 5

Take off panels 3 and 4 and put them under the table. Put panel 5, "Traffic Light" on the magnet board (see Figure 21).



Figure 21, Picture from Panel 5.

THE TRAFFIC LIGHT

Even on a good day, it is important to watch for the signals your baby is giving and use those to decide whether to sing fewer or more verses of this song. Of course, this song will have to be modified according to how medically stable your baby is, and this progresses in different stages, similar to a traffic light.

We all know what a traffic light usually means...red means stop, yellow means proceed with caution, and green means proceed but pay attention. In Goslings, we use a traffic light to indicate the medical status of babies.

In our interpretation of the traffic light:

Red light means VOICE ONLY.

A red traffic light means, "Stop." In Goslings, a red-light means voice only, no touching. Even on a red-light day, unless there is a crisis, hearing a parent's voice is good for babies. You can talk softly to your baby, sing to your baby, and be near your baby.

During a red-light day, the first verse "I will whisper 'I love you" would be all that you should sing with your baby.

Yellow light means VOICE & TOUCH ONLY.

A yellow traffic light means, "Wait, keep your eyes open, proceed cautiously or wait for the next green light." In Goslings, the yellow light means voice and gentle touch. Gentle touches may include skin to skin contact, a "NICU hug" like we just did to nest our baby, or gently putting your hand on your baby and leaving it there without stroking.

On a yellow light day, you might sing the first verse as well as the second and third, "hold your hand" and "give a hug."

Green light means VOICE, TOUCH, & SHOW.

The green traffic light means, "It is safe to proceed." Even though it may be safe for you to drive through an intersection, you still need to pay attention to what other cars are doing. In Goslings, the green light means you can try new things with your baby. However, you

Goslings Script

still need to pay attention to your baby's signals to know how much to try.

On a green light day, you can sing all of the verses, but be ready to stop. Monitor the signals your baby is giving you; stop or modify what you are doing if you get a "not happy" signal.

You can show your baby how you make a heart with your hands, or how you blow a kiss, but even these movements need to be done slowly and gently.

It's often difficult to assess the type of day a baby is experiencing. Sometimes babies have particularly good days or random hard days. So, it is always wise to ask your nurse "What kind of day is my baby having? A red light, a yellow light, or a green light day?" The nurse knows important information for determining your baby's status. For instance, if your baby has been doing very well and has had several green light days but had surgery yesterday, medically, your baby may be having a yellow or even a red light



If you are a member of the NICU clinical staff, this may be a good place to give a brief description of the different medical stages the babies may be experiencing and how it relates to the traffic light concept in this program. If you are not a clinical staff member, one is likely attending the session to offer you support. If this is the case, this person can provide the description. For instance, one of you may want to say something like:

- Babies on ventilators need very gentle stimulation because they are working hard to breathe. They frequently have red light days. You might only want to sing one or two verses with them.
- Babies who are stable on a ventilator or who have a nasal cannula may be ready for more stimulation. They often have yellow light days. You might want to sing verses three and four while doing a NICU hug or skin-to-skin care.
- Babies who are breathing on their own and are beginning to take feeds by mouth might be ready for you to show them an item from the kit. They often have green light days. On these days you can use the Goslings items with your baby.

day. Ask your nurse "What kind of day is my baby having; red, yellow or green?" She will respond with a color to let you know how much stimulation your baby can handle medically.



On the Board: PANEL 6

Take off panel 5 and place it under the table. Put panel 6, "Chanting" on the magnet board (Figure 22).

CHANTING

Chanting is another way of connecting music with your baby. Chanting can substitute for singing when you want to only use simple phrases. Many people chant when they meditate; chanting has been shown to stabilize heart rate, lower blood pressure, improve circulation, and lower levels of stress!44,45 Chanting is using a sing-song voice to repeat a phrase.

Chanting can take place on any day. During a red light day, you can chant to your baby without doing anything else. On a yellow light day, you can chant during skin-to-skin care or while giving a NICU hug with your hands. On a green light day, you may want to chant while holding your baby and showing her the monkey from the kit.



Figure 22, Picture from Panel 6.

Chant: "Mommy loves you."

When chanting, you can repeat a line over and over as many times as you want. In this chant, you can use the names of family members, or just say "Mommy loves you." Fill in the name of anyone you want. You can go on and on naming everyone you know. Or you can make up your own chant with any words you want. Here's one example of a chant:

Chant #1: Mommy Loves You

Mommy loves you. Grandma loves you.

Daddy loves you. Joey loves you. Auntie loves you. Sonia loves you.

Chanting is very relaxing. Now I feel more relaxed because I just chanted. Chanting calms you as well as your baby.

In addition to that chant, you can make up your own. When babies breast feed for the first time, some parents have liked chanting, "You can do it, you can do it, you can do it, you can do it!" Let's give our babies a nice NICU hug now, and chant with our babies. Feel free to repeat any of the chants we used or to make up your own.



On the Board: PANEL 7

Take off panel 6 and place it under the table. Put panel 7, "Kits" on the magnet board (Figure 23).



Figure 23. Picture from Panel 7.

KITS

Your kit has lots of great things in it: the Understanding My Signals booklet, two books, a shaker egg, a monkey puppet, and the Family Guide with all the songs we are doing here today. Although the kit contains different items, in the NICU we only use one thing at a time because more than one can be overwhelming to your baby.

Please take the monkey puppet out of your kit and place it on one of your fingers.

Although tiny babies can see, how they use their eyes develops over the first several months of their life.

- At first, babies develop the ability to look at objects. A tiny baby can see the puppet but will not be able to follow any hand movements.
- Next, babies do a little bit of tracking. This means they will follow the puppet with their eyes, side-toside, without moving their heads.
- When babies are one month old, most babies can follow horizontally. At this age, babies will follow the puppet with their eyes and head from side-to-side.
- At two months, most babies follow vertically. This means they will follow the puppet with their eyes and head as it moves up and down.
- At three months, most can follow a movement in a complete circle. This means they will follow the

Pull each item out of your kit one by one and name it. Show the monkey puppet last, and continue with the script. Use this time to inform families how to clean kit items following their unit's policies and procedures.

- puppet with their eyes and head as it moves in a big circle.
- Remember that babies see best when objects are about 10 inches away.
- If your baby was born early, remember to consider your baby's adjusted age when thinking about vision skills. An easy way to think of adjusted age is to think about how old your baby would be if your baby was born on your due date.



Figure 24, Picture from Panel 8.

On the Board: PANEL 8

Take off panel 7 and place it in the bin under the table. Put panel 8, "Meet the Monkeys" (Figure 24), on the magnet board.

USING FINGER PUPPETS

Song #3: One Little Monkey Jumping on the Bed

Remember: A red light means that medically, your baby is ready for voice only. If your baby is having a red-light day, it is best to recite the rhyme quietly without using the puppet at all. However, you may want to look at the puppet, without showing it to your baby, for inspiration.

One little monkey jumping on the bed. He fell off and bumped his head. Mama called the doctor and the doctor said, No more monkeys jumping on the bed!

A yellow light means that medically your baby is ready for voice and touch. On a yellow light day, you can recite the rhyme while doing a NICU hug or skin-to-skin care.

A green light means that medically your baby is ready for voice, touch, and show. On a green light day, most babies enjoy the rhyme while looking at the puppet. Start by reciting the words while you show your baby the puppet without moving it. Watch your baby's signals. If looking at the puppet is too much, put the puppet away and just recite the words. If your

Recite the rhyme softly and slowly, looking at the monkey without showing the monkey to the doll. Remember to use soft voice inflection; this is especially important since participants may be used to reciting this rhyme in a lively fashion.

After the song, Show some of the signals from "Understanding My Signals" and ask the participants to identify them. Translate that into how to use the puppet.





Show example of putting one monkey puppet on an index finger, positioning your hand about 10" inches from baby.

Recite: One Little Monkey using the monkey finger puppet.

Recite the rhyme one more time. The facilitator should do it with the puppet using very gentle movements.

baby gives you "happy and ready signals" then you can add gentle movement. Make sure to move your hand slowly, so your baby can follow along. Since babies see best when items are approximately 10" away from them, place your hand that distance away from your baby's face.

Let's recite the rhyme now as a fingerplay, using the finger puppet to act it out.

One little monkey jumping on the bed. Hold up finger with monkey puppet He fell off Lean finger slowly to one side and bumped his head. Lightly tap head Mama called the doctor and the doctor said. Lean finger to the other side No more monkey's jumping on the bed! Move finger forward.

Now that we've gone through three different ways to present that rhyme, take a moment to think about your baby and decide what would be the best way to share the rhyme. We'll recite the rhyme together again, but each person can choose which way to do it, according to the color of your baby's day.

On a red or yellow light day, the rhyme can be recited softly, with no other stimulation. If it is a green light day, try adding some conversation when you are done with the rhyme. For instance, the monkey might say to you, "That was so much fun! Did you like reciting that rhyme?" And you might answer, "I did!" Then the monkey might say, "It was so much fun performing for the baby. Do you think I could give the baby a kiss?"

On a green day, you can give a very gentle puppet kiss in a safe place! Slowly use the monkey puppet to plant a very soft kiss on your baby's leg or arm. Choose a place where the skin is

exposed so your baby can feel the softness of the puppet without interfering with any medical equipment. Avoid kissing the face as the puppet approaching the baby's face may seem scary.

Chant #2: Monkey See, Monkey Do

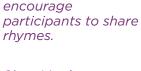
Here is another chant that you can recite with the monkey puppet:

> Monkey see, monkey do. Monkey says, "I love you!"

This chant has a steady beat which sounds a bit like a heartbeat. Can you think of a chant that the monkey can recite to your baby which also has a steady beat? Would anyone like to share an idea?

Let's put the monkey puppet back in the kits and try a different chant.

Babies' brains are wired for learning. They learn by hearing you talk and sing to them. Hearing sounds from a television or overhearing your cellphone conversations does not fire up their brains in the same way. So, every time you talk and sing to your baby, you are building your baby's brain!



Pause and

Sing: Monkeys away, monkeys away, put your monkeys away today.



Figure 25, Picture from Panel 9.



On the Board: PANEL 9

Take off panel 8 and put it in the bin under the table. Put panel 9, "Body Rhymes" (Figure 25), on the magnet board.

BODY RHYMES

Song #4: Open Them, Shut Them

The next song may be familiar to you. Many parents sing it to their children. The original version tells you not to let fingers go in your mouth. However, developmental specialists encourage babies to put their fingers in their mouths! Sucking on hands and fingers is one way that babies console themselves as they find comfort in sucking. Sucking on hands and fingers also

fosters the development of muscles needed for eating and talking. Because we WANT babies to put their fingers in their mouths, we will change this song a little.

Demonstrate singing and doing the movements: Open Them, Shut Them

Open them, shut them.

Put both hands in front. Open them and then make a fist.

Open them, shut them.

Open them and then make a fist.

Give a gentle tap, tap, tap.

Clap hands together softly.

Open them, shut them.

Open them and then make a fist.

Open them, shut them.

Open them and then make a fist.

Put them in your lap, lap, lap.

Fold hands in lap.

Creep them, crawl them,

Slowly walk fingers up your body.

Creep them, crawl them,

Right up to your chin, chin, chin.

Rest fingers on chin.

Open up your little mouth....

Open mouth.

And then invite them in!

Gently tap your fingers on your chin.

If your baby is having a red light day, it may be best to sing the song softly without any hand movements or touching. On a yellow light day, you can sing the song during skin-to-skin care or while gently cradling your baby with your hands.

On a green light day, you can sing while using all of the hand movements. When singing a song with hand movements, it is important to keep your baby safe. Hold your baby securely or sing while your baby is in the crib or an infant seat. Let's try it together now.

Sing with everyone using the movements.

Pause and give participants a chance to answer. Let's say we are about to sing this song, but you see the baby displaying one of the "not happy" signals. What were some of the signals?

Yes! Your baby may be saluting or spreading fingers apart; frowning grimacing or grunting; yawning, sneezing, or hiccoughing, arching the back and neck and pushing away; looking away or crying.

The first thing to do is PAUSE and give your baby a break. If your baby is in the *isolette*, what can you do?

Pause for answers.

You can use your hands to tuck your baby's arms and legs close to his body. If you are holding your baby, what can you do?

Pause for answers.

You can try holding your baby guietly and firmly to give her a secure feeling. You might lay your baby quietly on your lap and simply sit together.

While you are waiting quietly, look at your baby for signals that he is ready to interact again. What are some of the happy and ready signs?

Pause for answers.

That's right! If his eyes open; if he tries to smile; if he looks at you; or if his face, arms and legs are relaxed, this means your baby is happy and ready for interaction again.

When your baby is ready, start slowly with just one type of stimulation at a time. You may want to try humming softly. Let's try humming a verse of this song to our babies.

Hum the song together.



On the Board: PANEL 10

Take off panel 9 and put it under the table. Put panel 10, "More Chanting" on the magnet board (see Figures 26-29).

MORE CHANTING

Chant #3: Rum Pum Pum

Pictures from Panel 10:



Figure 26, Verse "This is my voice" verse.



Figure 27, Verse "Here is a hug" verse.



Figure 28, Verse "Here is my heart" verse.



Figure 29. Verse "Here is my thumb" verse.

On red light days, when it is best to have no touching, you may simply want to recite this phrase (see Figure 26).

Rum pum pum, this is my voice.

Rum pum pum, this is my voice.

My name is Mommy.

Your name is Baby.

I love you.

On yellow light days, you may want to give your baby a NICU hug (see Figure 27) while he rests in the isolette, reciting this rhyme:

Rum pum pum, here is a hug.

Rum pum pum, here is a hug.

My name is Mommy.

Your name is Baby.

I love you.

On yellow light days, during skin-to-skin care, you may want to hold baby on your chest so your heartbeat can be heard (see Figure 28). Without any extra movement, you can recite:

Rum pum pum, here is my heart.

Rum pum pum, here is my heart.

My name is Mommy.

Your name is Baby.

I love you.

On green light days, you may want to recite the rhyme this way (see Figure 29):

Rum pum pum, this is my thumb.

Gently stroke baby's head with your thumb.

Rum pum pum, this is my thumb.

Gently stroke baby's head with your thumb.

My name is Mommy.

Gently stroke baby's head with your thumb.

Your name is Baby.

Gently stroke baby's head with your thumb.

I love you.

Watch your baby's signals, if stroking causes a "not happy" signal, try simply placing your thumb on your baby's head without stroking.



On the Board: PANEL 11

Take off panel 10 and place it in under the table. Put panel 11, "Sharing Books" on the magnet board (Figure 30).

SHARING BOOKS

Book #2: Look Look!

This book, Look! Look! by Peter Linenthal has lots of highcontrast black and white art which is exactly what the youngest babies like to stare at. When read aloud softly, the rhyming words are soothing, and the story can be used to help put babies to sleep. On red, yellow, and green light days, you can read this book aloud to your baby very slowly in a rhythmic way. Remember to only show your baby the book on a green light day.

Let's all take our books out from the kits.

I'll read a few pages from my book aloud. If you'd like to read aloud with me, that's fine. If you'd rather just look at the illustrations and turn the pages as I read aloud, that's fine too.

On green light days, when your baby is awake in the crib, you may want to use the book for conversation. Look at the illustrations and talk about them. Point to the objects in the pictures and say what they are. For example, point to the sun and say: "Look, here is the sun."

Even if you don't read anything, you can still talk with your baby about the pictures. At this age, talking about the picture you see inside of the book and on the cover is just as meaningful as reading the story aloud. By talking about the colors, shapes, and whatever else you see, you are introducing your baby to books and giving the message that books are fun.

Read a few pages: Look Look! Hold up a copy of the cardboard book, Look Look!



Figure 30, Picture from Panel 11.

Read a few pages of the book aloud softly, but with expression.

Show one more example.

Put the books away now, and please take out your shaker egg.



On the Board: PANEL 12

Take off panel 11 and place it under the table. Put panel 12, "Playing Musical Instruments" on the magnet board (Figure 31).

PLAYING MUSICAL INSTRUMENTS

Show shaker egg. Pause while shaker eggs out from the kit and shakes them.

everyone takes their

Show an example of shaking the egg and let everyone have a few seconds to try it.

Demonstrate.

Pause for answers.

Figure 31, Picture from

Panel 12.

Practice singing the song together.

Shaker Eqq

All of the kits should have a shaker egg inside that looks like this. Find your shaker egg and take it out. When you shake it, you can hear how quiet it is.

The best way to use these shaker eggs in the NICU is to hold them between your thumb and your index finger, and twist it with your fingers only, not using your wrist.

You can also hold it between your thumb and other fingers while gently tapping it with your pointer finger.

Can you think of another safe way to use this shaker with your baby?

Shaken softly, these eggs enrich the songs sung on a green light day. They help you to keep the beat and they also remind you of songs that you can sing aloud to your baby.

Song #5: Are You Listening (to the tune of Are You Sleeping, Brother John)

Even though these eggs make a very soft sound, it is generally best not to awaken a sleeping baby as babies need their sleep to grow and get strong. Therefore, the shaker eggs should only be used on a green light day, when the baby is awake.

Are you listening? Are you listening? To the sounds? To the sounds? Sounds are all around us. Sounds are all around us. I love you. I love you.

Now let's personalize the song a bit. Instead of saying "to the sounds" we can substitute "Baby Boy" or "Baby Girl," or you can use your baby's name. Let's try it.

Are you listening? Are you listening? Baby boy? Baby boy? Sounds are all around us. Sounds are all around us. I love you. I love you.

Are you listening? Are you listening? Baby girl? Baby girl? Sounds are all around us. Sounds are all around us. I love you. I love you.

Let's give the shaker eggs a little break. Don't put them in your kit; we'll be using them again.



On the Board: PANEL 13

Take off panel 12 and place it under the table. Put panel 13, "More Body Rhymes" on the magnet board (Figure 32).

MORE BODY RHYMES

Here's a twist on a song you may already know:

Song #6: Twinkle, Twinkle

Twinkle, twinkle little star, what a wonderful baby you are. A little face, a tiny nose,

Tiny fingers, tiny toes.

Twinkle, twinkle little star, what a wonderful baby you are.

Talking and singing to your baby builds their vocabulary. Even at this early age, babies are able to learn and remember the words they hear. Knowing many vocabulary words is one of the factors that helps children learn how to read. Studies tell us that children who enter kindergarten with larger vocabularies usually do well in school.⁴⁶ So, by singing to your baby, you are actually helping to build your baby's brain!

Let's use the shaker egg again (see Figure 31). Instruments like the shaker egg should only be used on green light days. Even then, the instruments should only be used if your baby is in the crib or an infant seat, or if you are holding your baby in a very safe manner. Take your baby (doll) into your arms. Now, hold

Sing: Twinkle, Twinkle Little Star



Figure 32, Picture from Panel 13.

Sing the song while demonstrating how to hold the doll in one arm and the shaker egg in the other hand.

baby in the crook of one arm, like this, and use the shaker egg with the other hand as we sing the song once again.

Twinkle little star, what a wonderful baby you are.

A little face, a tiny nose

Tiny fingers, tiny toes.

Twinkle, twinkle little star, what a wonderful baby you are.

Hold up the book and turn to page 8. While this rhyme can be used on a green light day, you still need to watch the signals your baby is giving. Let's look at "Understanding My Signals" again.

Pause and give participants a chance to answer.

What signals do babies give to say that they are not happy and need a change?

Display the pictures from pages 9-11.

That's right. They may salute or spread their fingers apart.

Pause and give participants a chance to answer.

What other signals do they give to say, "I am not happy and need a change?"

That's right. They frown, grimace or grunt. They yawn, sneeze or hiccough. Or they may arch their back and neck and push away. Sometimes, they look away or cry.

Pause and give participants a chance to answer after each question. How would you modify this rhyme according to the type of day your baby is having? What could we do on a red-light day?

What could we do on a yellow light day?

During red and yellow light days, "Twinkle, Twinkle" can be sung softly as a lullaby. On green light days, you have a choice: you can sing the song while gently twisting the egg shaker or you can sing the song and touch the body parts as you name them in the song.



On the Board: PANEL 14

Take off panel 13 and place it under the table. Put panel 14, "Lullaby" on the magnet board (see Figure 33).

LULLABY

As you already know, shaker eggs make a soft and soothing sound when you slowly turn them from top to bottom. Be sure not to shake them close to your baby; at this point the sound is too loud, even on a green light day, for your baby's developing ears. But the softness of the sound as you turn this egg from top to bottom is a beautiful sound. These lovely sounds go well with a lullaby when your baby is ready for that kind of stimulation.

Demonstrate.



Figure 33, Picture from Panel 14.

Any song can be a lullaby, as long as you sing it slowly and softly. The "Alphabet Song" is sung to the same melody as "Twinkle, Twinkle Little Star." On red and yellow light days, you would only want to sing the lullaby. But on a green light day, you can gently use the shaker egg along with your voice.

Let's sing the "Alphabet Song," slowly and softly, using our shaker egg along with our voices.

Song #7: The Alphabet Song

Sing the "Alphabet Song" slowly and softly while using the shaker egg.

A, B, C, D, E, F, G H, I, J, K, L, M, N, O, P. Q, R, S, T, U, V. W, X, Y, and Z. Now we've sung our ABC's I love you, and you love me.

It looks like baby is tired now, so let's put our eggs away and simply sit quietly with our baby.

Sing "Shakers Away." Put shaker eggs back in kit.

Lullabies are great for babies at all stages. Because it is of utmost importance not to over stimulate our little babies, a slow, soft, gentle lullaby may be just the thing to soothe your baby. 16 Although all of the songs in this program have been sung in English, you can sing to your baby in any language. In fact, it's best for your baby if you sing in the language most comfortable to you. If your grandmother used to sing you a lullaby in Spanish and you remember it lovingly, then share the same song with your baby.



On the Board: PANEL 15

Take off panel 14 and place it under the table. Put panel 15, "Animals" on the magnet board (see Figures 34-35).

ANIMALS

Book #3: Wiggle! March

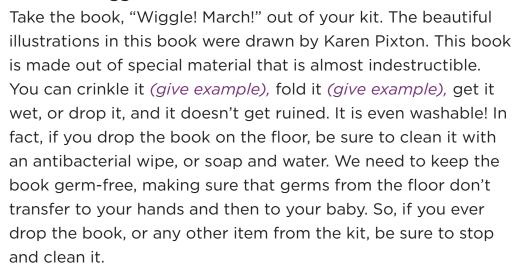




Figure 34, Picture of Wiggle! March! from Panel 15.

What do you notice about this book?

This book doesn't have any words, just colorful pictures of farm animals. Because there are no words, the book can be used in many different ways. One way is to fold the pages back so only one illustration shows at a time. Let's go through the book and make the animal sounds.

Pause and wait for parents to answer. They may say, "There are no birds." or "There are lots of animal pictures."

Go through the book, one animal at a time, making the animal sounds.

Let's go on a picture walk. In order to "read" this book to our babies, just look at the pictures and talk about them. You might point to the picture of the duck and say, "Here is a duck. What does the duck say? The duck says, 'Quack, Quack'."

It may seem strange to "read" a book to such a young baby in this way; but this is exactly the right way to start using books with babies. Just share them and talk about them. You might want to point at something on the cover and talk about it for a second or two, and that's it. What you are doing will still benefit your baby's brain development. Because Wiggle!

March! doesn't have words, you might never read it twice in exactly the same way. And that is fine!

You might want to look at a picture and make up your own story. For instance, "One day, a duck went down to the water. He wanted to go for a swim, but when he stuck his foot in the water, it was too cold. So, he went back home without swimming." Let's take a moment now for each person to share this book in some way with their baby.

Model reading the book to your doll, while the parents read to their dolls.

Once you've shared this book with your baby, it becomes comforting because it is familiar. It's also easy to learn from since you are building on what your baby already knows.

On a red light day, the pictures in this book can help to remind you of a song to sing or hum to your baby. Hearing your voice will be enough stimulation; there is no need to show your baby the pictures. On a red light day, the pictures are just for you.

Song #8: Old MacDonald

You can also use Wiggle! March! to remind you to sing to your baby. What song about animals do you know?

"Old MacDonald" is a song many people know. Instead of singing it in the typical, lively way, we are going to sing it slowly in a hushed

voice, almost like a lullaby. Since the picture on the front cover

Pause for answers.



Figure 35. Picture of Panel 15.

Old MacDonald from

Old MacDonald had a farm, Ee-ai-ee-ai-oh, And on that farm, he had a duck. Ee-ai-ee-ai-oh. With a "Quack, quack" here and a "quack, quack" there. Here a "quack," there a "quack," everywhere a "quack, quack."

Old MacDonald had a farm. Ee-ai-ee-ai-oh.

shows a duck, let's begin by singing about a duck.

Sing: Old MacDonald (slowly), modeling how to turn it into a gentle lullaby.

Watch your baby's signals. If your baby is showing "happy and ready" signals, sing another verse. If your baby is showing "helping myself" signals, hum a verse, or just sit quietly together. If your baby is showing "not happy" signals, give your baby a

break. During the break, you can look through the book and think about all of the animals that you will include in the song once your baby is ready.

On a yellow light day, during skin-to-skin care, there is no need to try to show your baby the book as she is snuggling comfortably with you. Just hum or sing the song softly. If you want a break from routine, make up a story about one of the animals in the illustrations; talk to your baby about the animal without showing him the book. Remember to always watch and respond to your baby's signals. Let's put our babies on our chests and try singing the verse about the cow, very softly.

Model holding the doll at your chest while singing softly; as the parents do the same.

Old MacDonald had a farm. Ee-ai-ee-ai-oh. And on that farm, he had a cow. Ee-ai-ee-ai-oh. With a "Moo, moo" here and a "moo, moo" there. Here a "moo," there a "moo," everywhere a "moo, moo." Old MacDonald had a farm. Ee-ai-ee-ai-oh.

Stop singing there if your baby shows "not happy" signals. But if she signals being happy, then sing some more. There's no need to sing about every animal in the book.

On a green light day, we can look at the animal pictures, while holding the book in a way that our babies can see the pictures too. That means the book has to be about 10 inches away from baby's face. Now you can show the book to your baby while singing the song. Remember to always sing softly, even on green light days. If your baby's isolette is closed, you can rest the open book on top, so it looks like this.

Demonstrate.



On the Board: PANEL 16

Take off panel 15 and put it under the table. Put panel 16, "Public Libraries" on the magnet board (see Figure 36).



Figure 36, Picture from Panel 16.

PUBLIC LIBRARY PROGRAMS

Did you know that many public libraries offer programs for babies? Similar to Goslings, library programs often involve songs, rhymes, puppets, and books. And they are free!

These free programs are a great way to follow up on Goslings, when your child is ready, and it is not flu season. In fact, many libraries run Mother Goose on the Loose programs, upon which the Goslings program was built!

If you are not sure if your baby is healthy enough to go to the library, ask your pediatrician.



Public Library Note: Libraries are no longer places where children are shushed and expected to sit still and be quiet. Children's spaces in public libraries often include play areas and the librarians love seeing children playing with their parents and other children.



Anyone can get a library card which allows you to borrow books and sometimes toys, games, and music!



The job of public librarians is to help people find what they are looking for, so you can always feel comfortable asking questions.



On the Board: PANEL 17

Take off panel 16 and put it under the table. Put panel 17, "Bedtime Routines" on the magnet board (see Figure 37).

BEDTIME ROUTINES

Book #3 (again): Wiggle! March!

Let's spend a few moments talking about bedtime routines. All babies, even babies in the NICU, can benefit from a bedtime routine. A bedtime routine involves doing the same sequence of events, each night, before putting your baby to bed. Bedtime

Hold up a copy of the book, Wiggle! March! Again (see Figure 37).

routines frequently include feeding the baby, reading a story, and singing a lullaby. Sometimes, they even include a bath. If you are here in the evening, talk with your baby's nurse about doing a bedtime routine using some of the items in the Gosling kit; just remember that bedtimes are quiet times so only choose items that are calm and quiet.



Figure 37, Picture from Panel 17.

Any of the activities, rhymes and songs we have done here today can be incorporated into your bedtime routine. They can soften and slow the bedtime ritual and help to calm your baby. Since Wiggle! March! has no words, I'm going to read it as if it's a bedtime story. There is no need to read all the pages. Follow along with me.

Read the book aloud softly, but with expression. Demonstrate showing the book to the doll, one page at a time, holding it 10" away from the doll.

Here is a bedtime book about farm animals

Duck says, "It's time to go to sleep." Quack quack.

Sheep says, "It's time to go to sleep." Baa baa.

Pig says, "It's time to go to sleep." Oink oink.

Horse says, "It's time to go to sleep." Neigh, neigh.

Cow says, "It's time to go to sleep." Moo, moo.

Rooster says, "It's time to go to sleep." Cock-a-doodledoo.

Mommy/Daddy says to baby, "It's time to go to sleep." Good night.



Figure 38, Picture from Panel 18.



On the Board: PANEL 18

Take off panel 17 and put it in the plastic bin under the table. Put panel 18 "Family Guide" on the magnet board (Figure 38).

GOSLINGS FAMILY GUIDE

Let's have a look at your song books. This Family Guide has all the songs and chants that we did today in Goslings. To help you remember all the tunes, there is a QR code on the back. Scanning it in onto your phone will lead to recordings of all the songs we sung today - and even a few more! Let's take a few minutes for everyone to scan in the barcode.



If you have parents who don't have a scanner on their phones, have a couple of recommendations handy for iPhones, Androids, and other devices. Give time for parents to scan the barcode.

They can also access the songs online at: https://mgol.net/home/mothergoose-on-the-loose-goslings/songs/



Figure 39, Picture from Panel 19.

Pause and wait for questions. Spend five minutes responding to questions.



On the Board: PANEL 19

Take off panel 18 and put it under the table. Put panel 19, "Questions" on the magnet board (Figure 39).

QUESTIONS

Does anyone have any questions about bedtime routines or anything that we've discussed today?

We are now at the end of our program. This Goslings program was created especially for parents with babies in the NICU. We hope that you found it helpful and we would like to know what you thought about the program.

Who would like to share something important that you learned today, or one thing that you look forward to trying with you baby?



It may take a while for someone to answer. It is fine to pause for a while and wait until people collect their thoughts. When someone answers, don't give a judgmental comment; rather, repeat back what they said, using fewer words (e.g., "Oh, you liked hearing about the traffic light.").



On the Board: PANEL 20

Take off panel 19 and put it under the table. Put panel 20, "Closing Ritual" on the magnet board (see Figure 40).

Sing "Two Little Goslings" to the tune of "Hush Little Baby."



Figure 40. Picture from Panel 20.

If you are not doing a program evaluation, skip to the next paragraph.

CLOSING RITUAL

facing up.

Let's close today with the same song we started with, Two Little Goslings:

Two little goslings safe in their nest. Link fingers together to make a nest

One was awake and the other at rest. Slowly and gently lift one hand, lower the other with palm

One fell asleep and the other did too, Hands together

And they slept and they slept the whole night through. Head leans on hands.

Before you leave, please take 5 minutes to evaluate our program. When you are done completing the brief questionnaire, hand it in, and we will give you a new kit to use with your baby. Your new kit is clean and ready to use. Please do not take the kits you have used; these are only for Goslings sessions.

We invite you to stay and spend some time with one another. When you are ready to go back to your baby, remember to take your Goslings kit and certificate with you. Try out all the items and see if you can remember what we did with them here today. Thank you for coming!

After the Goslings Session

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Provide a Certificate of Attendance

In order for clinical staff to encourage and support implementation of Goslings activities at bedside, it is important to have a mechanism for communicating family attendance. A Goslings Certificate of Attendance, highlighting the baby's name, is one strategy for communicating attendance. This certificate can be proudly displayed near the baby's bedside. The certificate also becomes a cherished document saved by most families. A sample Certificate of Attendance is located in **Appendix K.** When possible, it is ideal to have a second Goslings Team member at each Goslings session. This person can be preparing the certificates while the session is being facilitated.

Document Attendance in the Electronic Medical Record (EMR)

As just mentioned, it is important for clinical staff to have knowledge of family attendance so that they can encourage and support implementation of Goslings activities. Documenting family attendance in the infant's EMR is another strategy for communicating attendance. The template in **Appendix L** can be adapted and used to

facilitate communication of family attendance and to reinforce staff knowledge of program content. If the Goslings Facilitator is from a community agency, a Goslings Team member, from the NICU, will need to be responsible for doing this.

Share Attendance Information at **Weekly Rounds**

An additional way to inform clinical staff about family participation in Goslings is for the Goslings Champion to provide an update during weekly interdisciplinary or clinical rounds. As a baby is discussed, the Goslings Champion can inform the team if a family attended Goslings, noting who attended (e.g., Mother, father, grandmother) and sharing any pertinent information (e.g., Mom noted that she had been overstimulating her baby because she didn't know what the signals she was seeing meant).

Program Evaluation

Conducting a simple evaluation of Goslings in your unit can help the Goslings team in a number of ways. First, it can help the team identify areas for improvement. In addition, the team can use results to seek or maintain administrative support for the program. Finally, the team can use results in their requests for funding and in reports back to funders. Evaluation data, in addition to providing information regarding the number of families served, is much appreciated by funders and

may even be required. An example of a simple evaluation form is located in Appendix M. This form can be quickly and easily completed by families immediately after a Goslings session. If more detailed information is desired, the team may want to collect pre- and post-session data to evaluate Goslings. The pre- and postsurveys used by Shanty et al. in their 2019 article. Evaluation of an Early Language and Literacy Program for Parents of Infants in the NICU, are located in **Appendix N**. Goslings teams can use either of these evaluations or create their own. Teams need to remember to seek any needed institutional approval for using the evaluations with Goslings attendees. In some institutions, institutional review board (IRB) approval will be needed. Those needing to obtain IRB approval should be mindful of the fact that this process can be rather lengthy; it is wise to start this early.

Staying Up to Date

Goslings facilitators, and Goslings Teams can stay up to date on Goslings research, publications and news by going to https:// mgol.net/home/mother-gooseon-the-loose-goslings. To keep track of all the Goslings programs being presented, we ask that your Goslings Champion go to https:// mgol.net/home/mother-goose-onthe-loose-goslings/register-yourprogram/ and register your NICU as a Goslings provider. Entering your information will enable us to keep in touch and give you the potential to participate in future studies on Goslings.

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Children and Libraries Article

Mother Goose in the NICU

Support for the Neediest Infants and Their **Families**

BETSY DIAMANT-COHEN, SUSAN SONNENSCHEIN, DAWN SACKS, SUMMER ROSSWOG, AND BRENDA HUSSEY-GARDNER

f the 76,510 babies born during an average week in the United States, 7,361-or about 10 percent-are born prematurely.1 Preterm babies, born before the thirtyseventh week of gestation, can be born with underdeveloped organ systems and other health problems that impact their ability to survive on their own outside of the womb.

Preterm birth and low birth weight are leading causes of infant death, childhood disability, and developmental delays.2 Among the smallest survivors (those born at less than twenty-six weeks gestation), 57 percent have a mild or moderate disability, and 23 percent have a severe disability.3 To support preterm and other medically fragile infants, many hospitals have neonatal intensive care units (NICUs) specializing in the care of these at-risk infants.

Traditional NICUs were set up as nursery wards where preterm babies in isolettes were kept together in one big room,



Parents and their "babies" learn how to share books through the Mother Goose on the Loose program, now utilized in some NICUs.

allowing easy access to the babies by a wide array of medical staff. As the medical field and research on preterm infants have evolved, so have NICUs. One significant change has been the trend toward becoming more family friendly. Cuddling and skin-to-skin contact are now recognized as beneficial for all but the frailest infants. And most recently, NICUs are being reconfigured from the ward setting to individual family rooms. Families are encouraged to stay together, and it has become much easier for parents to spend as much time as possible with their babies.

While these single-family rooms yield many benefits, an unexpected negative outcome is demonstrated in the MRI scans showing decreased brain development in infants in individual rooms versus wards, as well as in lower language assessments











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at two years of age.4 It has been suggested that these negative effects are the result of infants receiving less stimulation in NICU private rooms than in NICU wards.5 Additionally, although research shows that early contact between parents and babies is crucial to development, many NICU parents do not know how to optimally interact with their infants. This is especially true when health issues and medical equipment require physical separation and/or limited physical contact, which can become psychological barriers to bonding.6

Clearly, there is a need to help parents of infants in NICUs learn to interact appropriately with their young children.

Never Too Soon for Early Literacy

Infants and toddlers immersed in a rich environment of playful early literacy activities show significant gains in brain development and language acquisition, both of which correlate highly with greater reading and mathematics achievement, increased behavioral self-regulation, and fewer externalizing and internalizing problem behaviors at kindergarten entry.7 These large and significant effects have been documented as early as twenty-four months, and it is increasingly apparent that there are great benefits to providing a language-rich environment as early as possible.8

In 2015, Dr. Betsy Diamant-Cohen attended a water aerobics class led by a young woman who performed exercises that ignored the beat of the background music. A fellow exerciser pointed out that older water aerobics teachers seemed to have no problem moving to the beat, whereas the younger ones tended to use music merely as a background and were either unwilling or unable to coordinate their movements with the tempo and beat of the music. The woman remarked, "I think it's because their mothers didn't recite nursery rhymes with them."

She continued, "I've been thinking about premature babies needing to hear their parents' voices and lamenting the fact that parents today don't know nursery rhymes. Wouldn't it be wonderful if we could teach these young parents some nursery rhymes so they would have something to sing and recite to their babies while visiting them in the NICU?" This woman had no idea that Cohen was a children's librarian or that she had developed the Mother Goose on the Loose early literacy program, but her comment sparked a lively discussion.

Knowing that early literacy begins at birth; that it is never too early to talk, sing, or read to a baby; and already believing in the power of nursery rhyme activities as a positive force for healthy child development, parent/child bonding, and good parenting skills, Cohen began researching the use of music and rhymes with premature babies. She found that studies indicated music in NICUs positively impacted infant health, feeding, and behavior. Health-related benefits included fewer episodes of oxygen desaturation,9 better cardiac and respiratory functioning,10 improved vital signs,11 and earlier discharge from the NICU.12 Feeding benefits included improved sucking patterns,

better feeding behaviors,13 and higher breastfeeding rates at the time of discharge and sixty days later.14 Behavioral benefits included improved sleep, decreased crying,15 and less stress.16

In addition to being beneficial for preterm infants, music also benefited their parents. In one study, sharing musical activities with their infants resulted in parents feeling more involved in their infant's well-being.17 In another study, mothers who engaged in music and movement programs with their infants reported an increased quality of attachment with their child over time. 18

After reading all of this, Cohen was convinced that a musicand rhyme-based early language program for parents of premature babies was needed. She shared this developing interest with colleagues at Port Discovery Children's Museum, who urged her to write a proposal to create a program. And so the Mother Goose on the Loose: Goslings program was hatched.

Serendipity Strikes

Soon after the program proposal was developed, a representative of a community funder had a conversation with a staff member of the University of Maryland Children's Hospital, which had recently reconfigured to a NICU with individual family rooms. Hearing about the recent research on developmental delays tied to individual rooms, the foundation representative remembered Port Discovery and their exceptional early childhood programs. In fact, his foundation was already supporting these programs. Could he bring these diverse organizations together? He could and did.

The program partners of the original Goslings program included Dr. Betsy Diamant-Cohen (Mother Goose on the Loose), Summer Rosswog (Port Discovery Children's Museum),Dr. Brenda Hussey-Gardner (University of Maryland School of Medicine and University of Maryland Children's Hospital), and Dr. Susan Sonnenschein (University of Maryland, Baltimore County, Department of Psychology). These partners represented practitioners in the pediatric, research, and early childhood development fields. Bringing their unique skills to bear, the partners worked together to create, deliver, and evaluate a unique pilot program to enhance infant stimulation in the NICU and, eventually, at home.

All partners were involved in the development of the Goslings program script or in its evaluation. Traditional songs and nursery rhymes were modified in two ways. First, they were revised to address medical needs and concerns of small babies. Second, the songs and rhymes were then adapted to enhance parent-child bonding by having them use the word love. For instance, instead of "If you're happy and you know it, clap your hands," parents were encouraged to sing, "Since I love you very much, I'll make a heart."

These songs gave parents positive words to help them create nurturing environments for their children and strengthened

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their skills for future relationships with their babies. Informal developmental tips to accompany the activities were designed to provide cognitive and emotional support to parents at a most difficult time.

The final script included nursery rhymes, songs, descriptions of the signals babies give, developmental tips, and suggested responses by parents with the intent of fostering early language and literacy skills, enhancing positive parent-infant interactions, and strengthening attachment.

Goslings Is Born

Through the process of sharing, obtaining feedback, and modifying the program, the final Goslings program was brought to the NICU in 2016. We developed a kit with carefully selected items to best meet the needs of both premature and medically fragile full-term infants. It included finger puppets, colored scarves, musical instruments for little hands, an indestructible wordless book, Dr. Brenda Hussey-Gardner's Understanding My Signals book,19 a booklet of all the songs and rhymes used in the session, and a pass for a family visit to Port Discovery Children's Museum.

Since NICU infants are too medically fragile to leave their rooms and participate in Goslings, dolls of different races and cultures were purchased for use during the program. Isolettes were simulated by attaching plastic bins to metal stools. A magnetic board was purchased for the facilitator; on it, each song was given a visual representation to show what was coming next.

It was-and is-amazing to see how enthusiastically parents participate during a Goslings program. At first, they seem to feel a bit silly when asked to have a conversation with a finger puppet or to read a book to their "infant." However, mothers and fathers quickly join in, and by the end of the program, almost everyone is singing and participating. Family members forget they are interacting with a doll and sometimes act as if the doll is their infant; the love that they transfer to this "infant" is clearly visible. At the end of each program, parents are given an unopened kit to take back to their room to use with their baby.

What Goslings Parents Say

Incidental feedback from parents is positive. One father enthusiastically described what he had learned the previous week and how he was using that information with his twinschanting, singing, and reading to one who was medically stable while quietly holding the other one who was not as stable. One couple recounted that before the Goslings program they would wake their infant up to play with her whenever they visited. But after Goslings, they knew that sleep was the best thing for her, and they waited for her to wake up naturally before playing with her. Parents seemed to greatly appreciate



Training the Port Discovery staff for the first Goslings program

getting information about their infants' signals with the suggestions on how to respond appropriately. They enjoyed having activities to use with their children.

The father and mother of twins who had been released from the hospital after a lengthy stay said,

These two guys were born at twenty-seven weeks. . . . We had a pretty lengthy stay [in the NICU]. We were there every day, but we weren't really sure how to interact with them in that environment. We attended one of the very first Mother Goose on the Loose: Goslings classes, and it was extremely helpful for us. It taught us to read their signs to see what kind of activities would be good for them that day. It gave us a book of songs that we could sing to them and showed us how to read books that rhyme and to kind of turn them into songs. We still sing the same songs to them today. We use the toys, like the scarves and the rattles. And it also taught us how to incorporate new things as they progressed from the isolette to the crib and eventually to home. We would highly recommend this program for all the other NICU parents, and especially those first-time parents like us.

Formal Evaluation

During waves one and two of Goslings, researchers in the Department of Psychology at the University of Maryland, Baltimore County, administered pre- and post-surveys to parents attending Goslings sessions. The primary questions of interest focused on whether the parents thought the program increased their knowledge of how to interact with their infants. It asked how often they talked, sang, shared books, and recited nursery rhymes with their children and how often they now expected to do so after the one-hour Goslings program.

In the second wave, researchers also conducted interviews with parents regarding actual implementation of the material used during Goslings. Within a week or two of attending the program, parents were asked how often they actually used these early literacy behaviors with their children. This was then compared to their intake survey.

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Based on the responses of parents during both waves of the program, Goslings was highly successful. All parents who completed the program said they would recommend it to other parents of infants in an NICU and would recommend that the program be implemented again. Almost all the parents thought they would significantly increase their linguistic interactions with their infants after completing the program, which they also thought had increased their knowledge of how and when to interact with their infants to stimulate their language development; for example, one parent said, "I have new ideas on ways to help my child grow and learn other than just holding them."

All the parents reported modifying their behavior based on attending Goslings. A noteworthy finding was that parents reported learning how to read or interpret their infants' signals, thus promoting more appropriate interactions. For example, they learned when the infant was telling them that he or she was overstimulated and not ready for further interaction.

Being sensitive and appropriately responsive to one's infant's signals sets the stage for fostering emotional bonding between the parent and the infant. Parents reported interacting in a developmentally appropriate manner with their infants; parents of more developmentally immature or fragile infants interacted less than parents of more mature infants.

Some parents already knew some or much of what the program taught; however, these parents reported liking that experts affirmed their knowledge. They also often reported learning to use their prior knowledge in a more developmentally appropriate manner for their infants. For example, they learned to speak more softly to their infants. Other parents learned that it was appropriate to speak and interact even with very young and medically fragile infants, and some parents of course increased their knowledge of the range of appropriate linguistic interactions. And another benefit of the program, according to some parents, was being able to interact with other parents like them. One parent commented, "You get to meet other families that may be going through something with their baby, and you have a chance to talk about it."

Goslings: Today and Tomorrow

From the unique needs of babies and their families in the NICU, Mother Goose on the Loose: Goslings was born. The program, now in its second year, takes place inside the hospital NICU with the cooperation of medical personnel, families, and early childhood program facilitators. Mother Goose on the Loose: Goslings is designed to teach parents in specific, effective strategies that support infants' early development, promote parent-child bonding, help parents provide a nurturing environment in the NICU and at home, and optimize infant language, social, and emotional development.

The long-term goal is to improve the odds for NICU infants, who are at significant risk for adverse developmental outcomes, by teaching and encouraging parents to provide the earliest possible developmentally appropriate stimulation through talking, reading, singing and using rhymes. A related goal is to provide comfort and support to parents in the NICU by teaching them to use purposeful play in appropriate ways with their fragile infants. This promotes familial bonding and provides a sense of empowerment and engagement with their fragile infants. A longer-term goal is to build a foundation for parents to continue reading and singing to their children at home, and to encourage attendance at early literacy programs once the children are healthy enough to visit their public libraries or local children's museums.

According to Hussey-Gardner, approximately 70 to 75 percent of NICU babies at her hospital receive medical assistance. Studies have shown that children from lower income homes hear fewer words and are slower at language processing, language comprehension, and language production.20 They have lower levels of grammatical development21 and are behind norms for spontaneous speech.22 The plasticity of the brain and its ability to form connections is based on what occurs in the child's first years of life. We know that parents are children's first and best teachers, young children develop in the environment of relationships, and the brain synapses upon which all future learning connects are formed in the earliest years of life. Therefore, another valuable future research question arising from Goslings might be, Does teaching NICU parents how to share books, rhymes, and songs with their infants in the earliest years of life help to instill habits for fostering healthy social, emotional, and intellectual development?23 If so, Goslings could be especially beneficial for low-income participants.

As previously noted, Goslings shows great promise. In the coming year, evaluation and research is being planned to assess the impact not only on parent intentions but also on parent behaviors and, potentially, infant developmental outcomes. If the data demonstrate the hoped-for outcomes, Goslings has the potential to influence parent and child support programs in hospitals across the country. There is also potential to modify the program to support very young children with special needs and their parents in nonmedical settings, such as in clinics and in Early Head Start programs.

As we continue to conduct research on the effectiveness of the program, the partners are exploring opportunities to share the knowledge gained by developing tools and training to extend the impact of Goslings. This is being done slowly and cautiously because because environmental stimuli and interactions that are inappropriate or not carefully monitored can cause damage.24

Through literacy programs, libraries and children's museums want to help children be the best they can be. As these informal learning centers strive to help underserved families, the Goslings program can help them reach the youngest children, giving them an early literacy foundation and much more. It teaches parents how to talk, sing, read, and play with their

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youngest children, even their premature or medically fragile full-term babies.

While NICU staff are appropriately focused on caring for the medical needs of their tiny patients, there is growing recognition of and appreciation for the role parents play in supporting infant development and in providing an environment rich in beneficial stimulation. Libraries and children's museums may have a significant opportunity to provide such programs.

We'd love to see Goslings expand beyond the University of Maryland Children's Hospital-and beyond Baltimore-to reach as many parents and infants as possible. Offering Goslings programs would be outreach at its finest, improving the lives of parents and our youngest children from all racial, cultural, and economic backgrounds. &

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Neonatal Network Article

Evaluation of an Early Language and Literacy Program for Parents of Infants in the NICU

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Disclosure

This work was supported by a grant from PNC Grow Up Great. Dr. Hussey-Gardner is the author of Understanding My Signals, a booklet used in Goslings. Dr. Hussey-Gardner receives royalties on the sales of this booklet, which is published by VORT. Lisa M. Shanty, Rebecca Dowling, and Susan Sonnenschein have no conflicts of interest to declare.

Purpose: To evaluate the effect of a NICU parent education program on parents' early language and literacy practices, and on their confidence interpreting and responding to infant signals.

Design: Single group, pre- and post-test, mixed-methods evaluation design.

Sample: One hundred and four parents and other caregivers completed questionnaires before and after the one-hour program. Ten parents participated in follow-up interviews.

Main Outcome Variables: Before and after sessions, participants reported on frequency of their current and intended early language and literacy practices, and their confidence interpreting and responding to infant signals. Participants also reported program satisfaction. Interview participants reported their behavior change one to two weeks later.

Results: The program significantly increased intention to engage in more early language and literacy practices, and increased parent-reported knowledge of how and when to interact with their infants. The majority of interviewed parents reported engaging in these practices one to two weeks later.

Keywords: NICU parent education; neonatal intensive care; early language and literacy; parent-infant interaction

ACH YEAR, APPROXIMATELY 15 MILLION Infants worldwide are born preterm, defined as <37 weeks' gestational age. Advances in the medical field, particularly in the NICU, have contributed greatly to increased survival rates for medically complex infants.2,8 While the NICU offers critical medical intervention, it can be challenging to achieve the appropriate level of sensory stimulation for infant neurodevelopment. Traditional multibed NICUs are often overstimulating, and private single-family rooms (SFRs), while more intimate, can be understimulating.4.5 Furthermore, infants in the

NICU do not always receive optimal levels of caregiver interaction because of physical barriers and holding restrictions, lack of parental preparedness to care for a medically complex infant, and parental stress.6 Environmental stressors combined with medical vulnerability place these infants at significant subsequent risk for developmental delays and behavioral challenges.73 Of particular interest to the present study is delayed and/or atypical development of language, which is common among children born preterm and low birth weight (LBW).9 Outcomes are variable based on

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medical and social risk, but many studies suggest that these language delays can persist through middle childhood and adolescence. 10,11

The Mother Goose on the Loose-Goslings program (Goslings) was developed to address the need for early language and literacy intervention for medically complex infants and the need for additional parental support in the NICU. Goslings is an adaptation of the Mother Goose on the Loose (MGOL) program, originally designed for parents/caregivers and their infants and toddlers. The MGOL program aims to promote early literacy through nursery rhymes, songs, puppets, and instruments, many of the same tools and strategies used in the Goslings program, as will be later described in further detail.12 Inspired by the unique needs of a developmentally vulnerable population and the research evidence in favor of language and literacy practices in the earliest weeks of life, the founder of MGOL partnered with a local children's museum, a level IV NICU, and a university to develop and deliver the Goslings curriculum. A more complete history of the evolution of the Goslings program can be found in the Children and Libraries article.12

The present study evaluates Goslings' effectiveness in promoting parents' early language and literacy practices and confidence interpreting and responding to their infants' signals in a Level IV SFR NICU.

LITERATURE REVIEW

The development of Goslings comes during a widespread transition from traditional multibed rooms to private SFR NICUs. While this change is associated with neurodevelopmental and behavioral benefits for infants through increased frequency and quality of parental involvement, 13 SFRs may also produce an unintended negative consequence for infants' language development. 14,15 One study found that infants in SFRs with low parent visitation (and presumably lower levels of sensory stimulation) had lower language scores at two years than infants who were in traditional multibed rooms.16 This finding is supported by extensive literature on the importance of early language exposure for later language and literacy development. 17-19 One recent study showed a significant positive correlation between conversational turn taking between parents and their 18-24 months of age toddlers and IQ, verbal comprehension, and vocabulary a decade later.20 Motivated by this research and by the possibilities that this new private NICU setting could offer in terms of parentinfant engagement, Goslings set out to accomplish two primary goals.

Goal one was to provide parents with the knowledge, skills, and tools to promote early language and literacy development through talking, reading, singing, and reciting nursery rhymes to their infants. Despite well-documented evidence on the value of language-rich activities like shared book reading early in life, some studies have found that factors like higher stress and lower socioeconomic status may decrease parental engagement in these activities.21,22 One study suggests that

parents of very low birth weight (VLBW) children may be less likely than parents of full-term children to engage in home literacy experiences, which could be attributable to the stress and competing priorities that come with having a child with special medical and/or developmental needs.25 Nevertheless, there are clear benefits of early literacy activities, particularly for the NICU population. For example, Caskey and colleagues found that exposure to more adult speech in the NICU room predicted higher cognitive and language scores on the Bayley-III at 7 and 18 months.²⁴ Braid and Bernstein found that parental engagement in shared book reading with toddlers born preterm was associated with higher cognitive scores on the Bayley-III at age two.25 Singing to infants is another method of incorporating language into the daily routine and has been found to regulate infants' physiologic function (e.g., heart rate, sleep patterns, caloric intake, sucking) as well as act as a coping mechanism for parents.26,27 To our knowledge, only a few interventions exist to promote early language development in the NICU, and they focus mainly on shared book reading, specifically providing books to parents and informing them of the benefits of reading to their infants. These interventions have been found to increase parent-rated value of early literacy practices; frequency of early literacy activities both in the NICU and postdischarge; and parental feelings of intimacy, control, and normalcy.28-3

Goal two of Goslings was to emphasize the bidirectionality of parent-infant communication by informing parents how to interpret and sensitively respond to infant signals, or behaviors that indicate to a caregiver the infant's internal states, needs, and readiness for interaction (e.g., crying, facial grimacing, gesturing). Infants in the NICU experience frequent fluctuations in their behavioral states concurrent with their medical status throughout the day; they may become more easily aroused and distressed when overstimulated by visual, auditory, or tactile stimuli.31 Furthermore, preterm infants are often less alert and responsive, and may exhibit less clear behavioral signals than full-term infants.32 A caregiver's sensitive response to signals not only helps regulate the infant's physiologic and behavioral states but also provides the foundation for secure attachment, self-regulation, and subsequent long-term academic and social success. 33,34 To promote parental knowledge of and responsiveness to infant signals, several NICU interventions exist, including Creating Opportunities for Parent Empowerment (COPE),35 Neonatal Individualized Developmental Care and Assessment Program (NIDCAP),36 and the Mother-Infant Transaction Program (MITP).37 These programs have been shown to reduce parental stress and depression as well as improve maternal confidence in caring for their infants. 38,39

The Goslings program is unique in that it introduces several different early literacy activities (i.e., talking, reading, singing, and reciting nursery rhymes) and teaches parents how to adjust those activities based on their infants' signals of readiness for interaction. This goes a step beyond existing early literacy interventions, which typically focus on just

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one activity. It also educates parents on how to appropriately use common early childhood toys (e.g., rattles, finger puppets) to introduce other forms of auditory, visual, and tactile stimulation. The present study addressed five questions: (a) Are parents satisfied with the Goslings program? (b) Do parents think Goslings provided them with skills to promote early language and literacy? (c) Do parents think Goslings increased their confidence to interpret their infants' signals of readiness for interaction? (d) Do parents intend to implement what they learned from Goslings? And (e) Do parents utilize the information and strategies presented in Goslings one to two weeks after the session?

METHOD

Design

This study, part of a larger program evaluation,12 used a single group, pre- and post-test, mixed-methods design with parents and other family members as the primary participants. This study was approved by the institutional review boards of the hospital and the university. Informed consent was obtained from the interview participants.

Procedures

The Goslings program was implemented over the course of two years in a Level IV SFR NICU located in a large, urban city in the mid-Atlantic region of the United States. All parents and relatives of infants cared for in this NICU were eligible to attend a Goslings session. Families were informed of the program via a personal verbal invitation from a nurse, the NICU developmental specialist, or posted flyers.

At each session, families were informed of the evaluation component and were invited to complete anonymous preand post-program questionnaires, provided that they met inclusion criteria. Adolescent parents, non-English speaking participants, and participants who arrived to the session late or left early were excluded from participating in the evaluation but were still welcome to participate in the session. Participants were told that the evaluation was voluntary and would not impact their participation in the program or the care they received in the NICU. Only a small number of parents did not agree to complete the questionnaires; the exact number of parents is unknown as refusal rates were not formally recorded.

In the second year of the evaluation, parents who completed the questionnaires were also invited to participate in an interview one to two weeks after the session to share their experiences with implementing Goslings strategies. Interviews were coded concurrently with recruitment. Recruitment for interviews continued until saturation of themes was attained, or when no new themes emerged.40

Intervention

The Goslings program was facilitated in the NICU family lounge by a Port Discovery Children's Museum staff member who had expertise in delivering early childhood programs and specialized training to deliver the Goslings program. The facilitator used visual aids as s/he led the group in songs, nursery rhymes, and chants. The instructional content presented by facilitators (e.g., positive literacy practices and signals for interactions) is described in more depth below. Participants used clear bins as makeshift "isolettes," a Goslings kit (including a songbook, picture books, rattles, finger puppets), and a doll to practice the strategies presented during the session. A member of the NICU staff, either the developmental specialist or a NICU nurse, was also present at each session to answer medical or developmental questions from parents and caregivers. At the end of the session, each family received a new Goslings kit to take back to their SFR, and then home, to use with their infants.

Instructional Content

Language and Literacy. In each Goslings session, the facilitator expressed the importance of early language and literacy activities, specifically talking, reading, singing, and reciting nursery rhymes. The facilitator also explained and demonstrated how these activities could be paired with other forms of stimulation such as visual stimulation (e.g., holding up a colored scarf or finger puppet), auditory stimulation (e.g., gentle shaking of a rattle), and gentle touching (e.g., gently cupping the infant's head and feet for a "NICU hug"). The facilitator modeled these activities, and participants practiced with dolls. For example, the facilitator demonstrated the use of a wordless picture book and led the group in practicing this same activity with their doll. Each activity was practiced more than once during the session and the facilitator provided developmental tips (e.g., information about infants' visual acuity) and advice for implementation (e.g., using books for bedtime routines) throughout the session.

Signals of Readiness for Interaction. The facilitator described, showed images of, and demonstrated infant behavioral signals that indicate they are ready for interaction (e.g., facial expressions like smiling) or not ready for interaction (e.g., gestures like covering their face). Images of these signals were provided in booklet form for parents to take home following the session. 41 Throughout the session, the facilitator advised how to adapt the language and literacy activities described above based on the infant's readiness signals. The facilitator also used a "traffic light" as a visual reminder of when to proceed with visual, auditory, and tactile stimulation as modeled in the session ("green light day") and when to limit stimulation ("yellow" or "red light day") based on the infant's medical status. For example, the facilitator demonstrated singing while gently touching the infant and making soft sounds with a rattle as an example of an activity to be used when the infant is displaying positive readiness signals and is medically stable (e.g., having a green-light day). On a yellow-light day (e.g., the infant is recovering from a procedure), an appropriate activity would be singing quietly but not

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touching or using a rattle. Participants were advised to observe their infants' signals while they are interacting with them and adapt their behaviors accordingly to prevent overstimulation.

Participants

A total of 104 family members (e.g., parents, aunts, uncles, or grandparents) of 91 infants completed the evaluation questionnaires (see Table I for demographics). Ten parents (nine mothers, one father) participated in semi-structured follow-up interviews (see Table 2 for demographics).

Measures

The research team developed measures in alignment with the goals of the Goslings program. The NICU Advisory Council, a multidisciplinary committee inclusive of former NICU parents and NICU medical professionals, reviewed

TABLE 1 ■ Participant Demographics

		N (%)
Caregivers (N = 104)	
Relation to Infant	Mother	65 (63%)
	Father	21 (20%)
	Other	17 (17%)
Highest Education	Less than HS	7 (7%)
	HS Diploma	28 (27%)
	Some college/trade school	19 (26%)
	AA/BA/BS	26 (25%)
	Postgraduate degree	16 (15%)
Race/Ethnicity	Black	49 (47%)
	White	44 (42%)
	Other	11 (11%)
Marital Status	Married	45 (44%)
	Single	44 (43%)
	Other	14 (14%)
Infants (N = 91)		
Gender	Female	40 (44%)
	Male	51 (56%)
Chronological Age	≤7 days	25 (28%)
	1-4 weeks	36 (40%)
	1-2 months	16 (18%)
	≥2 months	13 (14%)
First-Born	Yes	69 (66%)
	No	34 (35%)
Birth Weight	≤1,000 g	15 (17%)
	1,001-1,500 g	28 (31%)
	1,501-2,000 g	19 (21%)
	2,001-2,500 g	10 (11%)
	≥2,500 q	19 (21%)

Note. Sums may be less than overall N because of missing data and percentages may exceed 100% because of rounding.

TABLE 2 ■ Interview Participant Demographics (N = 10)

		N (%)
Relation to Infant	Mother	9 (90%)
	Father	1 (10%)
Highest Education	Less than HS	1 (10%)
	HS Diploma	3 (30%)
	Some college/trade school	2 (20%)
	AA/BA/BS	4 (40%)
Race/Ethnicity	Black	5 (50%)
	White	3 (30%)
	Other/no response	2 (20%)
Marital Status	Married	4 (40%)
	Single	6 (60%)

the questionnaires and supported their face validity. The measures were then piloted with participants over the first five sessions of the program and further revised as necessary. Official data collection began during the sixth Goslings session.

Pre-Program Questionnaire. Immediately before the program, participants completed a Pre-Program questionnaire, in which they reported demographic information about themselves and their infant(s). They also rated the frequency with which they engaged in several early language and literacy activities with their infant in the past week. Additionally, they rated their confidence on four items relating to caring for and understanding their infants' needs. Cronbach's alpha for this scale was acceptable (α = .719). See Table 3 for a complete list of questionnaire items.

Post-Program Questionnaire. Immediately following the program, participants completed a post-program questionnaire in which they rated their satisfaction with the program and how well it met its intended learning objectives. They also reported the frequency with which they intended to engage in several early language and literacy activities. Finally, participants responded to two open-ended questions regarding what they liked most about the program and what they would change. Cronbach's alpha for this scale was excellent ($\alpha = .915$). See Table 3 for a complete list of questionnaire items.

Semi-Structured Interview. One to two weeks after participating in Goslings, parents who consented to be interviewed reported on the frequency with which they had engaged in early language and literacy activities since attending the program. In addition, they were asked how Goslings impacted their knowledge and engagement in early language and literacy activities. Participants also described these interactions, including if and how they used infants' signals to adapt their interactions and what, if any, barriers existed. Finally, participants shared whether Goslings helped increase their comfort and confidence engaging in literacy activities

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TABLE 3 ■ Pre- and Post-Program Questionnaire Items

Pre-Program Items

In the past week, how often did you [talk, read, sing, and recite nursery rhymes] to the baby in the NICU? (1 = Not at all, 3 = 4-6 times aweek, 5 = Several times a day)

Please rate the following items on a scale of 1 (strongly disagree) to 5 (strongly garee).

I feel comfortable caring for the baby's needs.

I understand the baby's cues of overstimulation.

I feel confident predicting how the baby will react when

I know what the baby looks and acts like when s/he is ready for interaction.

Post-Program Items

Quantitative Questions

During the coming week, how often do you intend to [talk, read, sing, and recite nursery rhymes] to the baby in the NICU? ($1 = Not \ at \ all$, $3 = 4-6 \ times \ a \ week$, $5 = Several \ times \ a \ day$)

Please rate the following items on a scale of 1 (strongly disagree) to 5 (strongly agree).

I am satisfied with the Mother Goose program.

The Mother Goose program provided me with skills and materials to help the baby's early literacy and development.

The program informed me of the importance of [talking, reading] to

The program taught me about the baby's signals of readiness for interaction.

The program made me feel more confident that I can read the baby's

How likely would you be to recommend this program to other parents/ families of babies in the NICU? (1 = Extremely unlikely, 3 = Neutral, 5 = Extremely likely)

Would you recommend that the NICU offer this program again? Yes/No

Open-Ended Ouestions

What did you like most about the program?

If you could, what would you change about the program?

and understanding and responding to their infants' signals. See Table 4 for interview questions and sample probes.

Statistical Analysis

Questionnaires. Quantitative data from pre- and post-program questionnaires were entered by a trained research assistant in SPSS-24. The data were re-entered in a separate file by a second research assistant and the two data files were compared for accuracy. Discrepancies between the two files were reviewed and resolved by checking the original data. Pre- and post-program comparisons were analyzed through paired samples t-tests. Responses to open-ended questions were transcribed. A member of the research team read and categorized responses according to theme.

Interviews. Parent interviews were transcribed by trained research assistants. Each interview was checked twice for accuracy, first by the initial transcriber and then by a second transcriber. Discrepancies were resolved via consultation with

TABLE 4 Interview Questions and Sample Probes

- In the last week [or since attending Goslings], how frequently have you come to the hospital and spent time with your baby?
- When spending time with your baby, how often do you [talk, read, sing, and recite nursery rhymes] to/with your baby
- Were there times you wanted to [talk, read, sing, or recite nursery rhymes] to/with your baby but were unable to do so? If yes, can you tell me about this?
- Please tell me what you do when you [talk, read, sing, recite nursery rhymes] to your baby. What specific toys/instruments/ techniques from the program?
- Do you think attending Goslings changed how much you [talk, read, sing, and recite nursery rhymes to/with your baby? Why or why not?
- Do you [talk, read, sing, and recite nursery rhymes] more or less often now than before the Goslings program? Why?
- Did Goslings change how you [talk, read, sing, and recite nursery rhymes] to your baby? If yes, in what ways? If no, why do you think things stayed the same?
- Did Goslings help you to feel more comfortable [talking, reading, singing, and reciting nursery rhymes] to your baby? If yes, what helped you feel comfortable? If no, is there anything the program could have done differently to make you feel more comfortable?
- Do you think the program changed your knowledge of your baby's signals or cues for interaction? If yes, please give a specific example of when you were able to use this knowledge.
- 10. Have you had any difficulty using the information or skills you learned from Goslings with your baby?

the supervising researcher, who reviewed the original audio tape. Three members of the research team independently coded transcripts for themes using inductive thematic analysis, a bottom-up approach in which themes are derived from interview responses rather than a predetermined coding scheme.42 Discrepancies were resolved through repeated discussions, and emerging categories were used to refine interview questions and delineate themes. Enrollment continued until saturation of themes was attained (i.e., no new themes emerged).40 The final thematic coding scheme was developed via feedback from all three raters. See Table 5 for the qualitative coding scheme and illustrative quotes.

RESULTS

Overall, quantitative and qualitative data revealed that Goslings was highly successful in meeting its goals. Results for each research question are presented below.

Are Parents Satisfied with the Goslings Program?

Ninety-seven percent of participants reported they were satisfied or strongly satisfied with the program. Additionally, all would recommend the program to other parents of infants in the NICU, and all supported continuation of the program.

In two open-ended questions in the post-program survey, parents were asked what they liked most about the program. The top three themes were learning songs and rhymes (36 percent, n = 37), learning about signals of overstimulation (24 percent, n = 25), and the interactive nature of the session (17 percent, n = 18). Parents were also asked to share what

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TABLE 5. ■ Qualitative Coding Scheme for Parent Interviews

Theme	Category	Illustrative Quote
Behavioral Changes	Increased target behaviors (e.g., talking, reading, singing, nursery rhymes)	"At first I used to just look at him I just sit right here and stare like this. Now I just hold full conversations with him At first I wasn't reading to him at all. I just was showing him pictures. But now it's like more active with each other."
	Future intentions	"Going forward, I think we'll use it like once he's a little bit more awake and stuff like that."
	Increased comfort with interaction	"I was nervous when she was first born I don't really know what to do you know, learning different stuff, it helped me adapt feel more comfortable and adapt to my daughter."
	Responsivity to signals	"That [signals] has been invaluable. I think it'd be great even if we weren't in the NICU, but here especially because he is overstimulated and he's not supposed to be touched he's not supposed to do any of this stuff it's nice to not cause him any more pain or discomfort."
	Responsivity to medical status	"When [the baby] is awake and stuff like that I'll sing to him and do the songs and stuff that we learn[ed] but the toys are a little too much like I tried the monkeys and he just squinted his eyes and turned away the whole time."
Barriers to Interaction	Infant alertness	" it's like anything you really do like when you talk to him or sing to him, it puts him to sleep."
	Medical equipment (e.g., isolettes, wires, tubing)	"When he's in the isolette, it's too hard to get him to focus on things cause there's so much going on it's too hard to try to hold him and hold a book or things like that, so it's more of just me talking Cause he still has so many cords so it's just hard to handle everything."
Building from Strengths	Affirmation	"[Goslings] reinforced what other people in the family were already saying 'you should read to him!' And I got more books we were doing the right thing,"
	New information	" cause even before the Goslings I sung to all my babies but, [Goslings] gave me more songs. I didn't know a lot of nursery songs "

Note. For ease of readability filler words (e.g., like, um) were removed.

they would change about the program. The great majority of parents (93 percent, n = 97) did not suggest any changes to the program. The most common suggestion (n = 3) was displaying on the board the words to the songs and nursery rhymes as they were being practiced during the session. Other suggestions, endorsed by one person each, included having a greater variety of books, considering cultural and religious diversity, giving more time for the session, offering one-on-one time with the facilitator, asking parents to share with the group songs and nursery rhymes they already know, and having less repetition in practicing songs during the session.

Do Parents Think the Goslings Program Provided Them with Skills to Promote Early Language and Literacy?

The majority of participants believed that Goslings informed them of the importance of talking to their infant (94 percent, n = 98) and reading to their infant (95 percent, n = 99). Participants reported that they had acquired a new appreciation of the importance of early literacy activities, and they believed that the program provided them with the skills and materials to help promote their infants' early literacy and development (97 percent, n = 101). In open-ended comments on the post-program questionnaires, parents mentioned that they appreciated being given books and toys to use with their infants. One parent wrote, "I have new ideas on ways to help my child grow and learn other than just holding them."

Do Parents Think the Goslings Program Increased Their Confidence Interpreting Their Infants' Signals of Readiness for Interaction?

The majority of participants believed that Goslings taught them about infant signals of readiness for interaction (96 percent, n = 100) and that the program increased their confidence in reading their infants' signals (95 percent, n =99). After attending Goslings, parents reported that they were significantly more knowledgeable about their infants' signals of overstimulation [t(99) = 6.90, p < .001] and reported significantly greater confidence interpreting these signals [t(99)] = 7.03, p < .001] (see Table 6 for complete results). As noted earlier, learning about signals was one of participants' favorite aspects of the program. One parent wrote that the program not only taught her new ways of interacting with her baby but also "different ways to use these toys/songs depending on the kind of day the baby is having."

Do Parents Intend to Implement What They Learned From Goslings?

The frequency with which participants intended to engage in early literacy activities with their infants after the program increased significantly from the reported frequency of those behaviors prior to the program. Participants reported increased intention to sing (t[96] = 9.77, p < .001), talk (t[96] = 2.26,p < .05), read (t[96] = 12.39, p < .001), and recite nursery rhymes (t[96] = 14.00, p < .001) to their infants after participating in the program. See Table 6 for complete results.

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TABLE 6. Behaviors, Knowledge, and Confidence Before and

Titter i rogium		
Current (Pre) and Intended (Post) Behaviors ^a	Pre-Program M(SD)	Post-Program M(SD)
Talking	4.54 (0.78)	4.68* (0.67)
Reading	2.13 (1.48)	4.02 (1.10)
Reciting Nursery Rhymes	2.19 (1.47)	4.21" (0.96)
Singing	2.84 (1.58)	4.26" (0.98)
Knowledge/Confidence ^b		
Confidence Understanding Cues	3.97 (0.88)	4.73" (0.69)
Knowledge of Signals	3.92 (1.02)	4.76" (0.67)

Scale [1: not at all; 2: 1-3 times per week; 3: 4-6 times per week; 4: every day; 5: several times a day].

Do Parents Utilize the Information and Strategies Presented in Goslings One to Two Weeks After the Session?

As interview data were coded, three themes emerged: behavioral changes, barriers to interaction, and building from strengths. Within each large theme were categories of responses, as described below. Themes, categories, and illustrative quotes are provided in Table 5.

Behavioral Changes. Five categories emerged within the theme of behavioral changes: Increased frequency of early language and literacy practices, future intention to engage in these practices, increased comfort with interaction, responsivity to infant signals, and responsivity to infant medical status. Eight of the ten parents interviewed discussed that they engaged in more early language and literacy behaviors now than before the program, and seven parents specifically mentioned that the program taught them the importance of engaging in these behaviors while their infants are young. Compared to behavior before the program, parents reported more singing (n = 8), talking (n = 5), reading (n = 8)5), and reciting nursery rhymes (n = 3). Parents who were not engaging in language and literacy practices at the time of the interview expressed interest and motivation to do so when their infants were more alert and medically ready for interaction. Seven of ten parents reported that the program helped them feel more comfortable interacting with their infants. A few first-time parents shared that fear and lack of knowledge prevented them from interacting with their infants beyond basic caretaking activities such as feeding and dressing, but the program gave them concrete strategies for how to engage in appropriate stimulation and enhance language development.

All interviewed parents reported that the program taught them how to read their infants' signals and how to adapt their behaviors accordingly. For example, some parents reported a new understanding of their infants' stress signals and how they could be a response to environmental stressors such as lights that are too bright, sounds that are too loud, or other forms of overstimulation. The majority of parents also reported adapting their behaviors in accordance with their infants' medical status, including limiting interaction when the infant is recovering from a procedure or refraining from interaction when the infant is sleeping.

Barriers to Interaction. Over half of the parents interviewed experienced barriers to being interactive with their infants. The reported barriers fell into two primary categories: infant alertness and NICU medical equipment. Six of ten parents reported that their infants were sleeping most of the day, which limited opportunities to try Goslings strategies in the NICU room. Instead of waking their infants for interaction, parents appropriately allowed their infants to sleep. A few parents even used the terminology from the program in their responses, saying that they try to limit interaction on "red light days" when infants are displaying signals inconsistent with readiness for interaction. Seven of ten parents also commented that interacting with their infants is challenging when isolettes and other medical equipment create physical barriers. Three of those parents noted that it can be challenging to hold their infants and simultaneously hold a book or toy, all while keeping tubes and wires intact. All parents who reported barriers to interaction expressed excitement to try the activities when their infants were more alert and less inhibited by medical equipment.

Building from Strengths. Two categories emerged within the theme of building from strengths: affirmation and new information. Nine parents shared that Goslings reaffirmed the activities they were already doing with their infants. For instance, most parents were already doing at least one of the early language and literacy activities with their infants, but many noted that these interactions were limited in frequency and variety prior to participating in the program. Seven parents specifically shared that Goslings gave them new songs, books, and nursery rhymes to incorporate into their existing routines. With a new repertoire of activities to choose from and knowledge of when it is appropriate to interact, parents reported newfound confidence.

DISCUSSION

This study demonstrated the success of Goslings in meeting the unique needs of infants and their families in a Level IV SFR NICU. In general, participants spoke highly of the program. Three major themes emerged from the quantitative and qualitative data. First, the program provided parents with the guidance and materials to promote early language and literacy. Second, the program increased parents'

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^bScale [1: strongly disagree; 2: disagree; 3: neutral; 4: agree; 5: strongly agree].

confidence interpreting their infants' signals of readiness for interaction. Third, parents' intentions to implement what they learned from Goslings increased significantly from their reported behaviors prior to the program. Among those parents interviewed one to two weeks following the program, there was a reported increase in engagement in early language and literacy activities, especially talking and singing to their infants in ways that were responsive to their infants' signals and medical status. Some parents of more medically fragile infants chose not to engage in certain Goslings activities, particularly those that involved more stimulation than talking, until the infants were more medically ready. This choice communicated an understanding of the important message that all parent-infant interaction should be responsive to the infants' signals and Goslings strategies should be adapted for the medical status and needs of each individual infant.

Goslings is unique among known interventions in that it not only addresses NICU parents' desire to learn how to understand and interact with their medically fragile infants, but it also addresses a relatively recent resurgence of interest in language and auditory stimulation in the NICU, particularly in SFRs. Although some studies suggest that only a small percentage of total NICU noise consists of identifiable adult language because of competing noise from medical equipment,15,43 language exposure increases greatly for infants whose caregivers are present and engaged in holding. 13,43 The developmental trajectories for infants in SFRs are still being studied, but existing research supports the need for targeted interventions, like Goslings, that aim to increase the quantity and quality of language-rich interactions during a critical period of infant brain development. Engaging in literacy practices in the earliest months of life may set the foundation for continued parent engagement in these practices later as well as foster subsequent benefits in children's language acquisition.^{18,19} Knowing when it is appropriate to engage in these early literacy practices is particularly important for infants in the NICU, who experience frequent fluctuations in their readiness for interaction. Promoting responsive and sensitive interactions in infancy and early childhood promotes healthy attachment, which has been found to predict positive academic and social outcomes in later childhood.34,44

The Goslings program also added a level of normalcy to a stressful and unpredictable time for families. Beginning life in a Level IV SFR NICU, which cares for the most critically ill infants, can disrupt the typical parental role as many caretaker responsibilities are often performed by medical staff, leading to feelings of guilt, shame, stress, and anxiety among parents. ^{6,45,46} Providing parents with tools and strategies to be active participants in their infants' care may allow them to reclaim their identity as parents and increase feelings of mastery, self-efficacy, and purpose. ^{30,38} Although we did not formally assess changes in stress or self-efficacy, parents did report increased confidence in caring for their infants after Goslings and expressed optimism about the journey and excitement to use Goslings strategies with their infants.

The success of Goslings also may be attributed to several process conditions, which have been linked to successful capacitybuilding interventions in the education setting.⁴⁷ First, the Goslings sessions were designed to target a developmental need of parents in the NICU, and the learning objectives were clearly communicated at the beginning of each session. Second, parents had the opportunity to learn from the facilitators in a safe space, where they were encouraged to share their experiences and form relationships with other caregivers experiencing similar circumstances. Research suggests that psychosocial support can help meet the emotional needs of families in the NICU. 48,49 Finally, the Goslings sessions were interactive and collaborative; the opportunity to practice strategies with baby dolls and manipulatives during the session likely increased parental feelings of confidence and empowerment to interact with their infants after the session was over. Consistent with adult learning principles, practice enhances the transfer of skills from the session in the NICU family lounge to the SFR to home. 50 Parents also receive a kit of materials to use with their infants, which maximizes the likelihood that the activities and strategies from the session will be transferred into practice.

The creation, implementation, and evaluation of the Goslings program resulted from a collaborative partnership among practitioners and researchers from three institutions, each of whom had expertise in various relevant areas, including pediatrics, child development, and early childhood programming. We believe that three strategies in particular contributed to the successful implementation of Goslings. First, we consulted with the NICU Advisory Council throughout program development, implementation, and evaluation to obtain feedback on materials and procedures. Second, a developmental specialist or nurse walked the unit to personally invite parents to attend Goslings and then attended Goslings to support the facilitator and address questions posed by families. Third, the Goslings team engaged in multiple efforts to inform all NICU staff of the Goslings program. We did so by providing in-service trainings, placing reading materials on Goslings in the staff lounge, posting announcements in staff areas, sending e-mails, and discussing Goslings attendance at weekly multidisciplinary rounds. By doing so, Goslings became familiar to all staff, which aided in recruitment, created a common language between staff and families, and allowed staff to reinforce Goslings strategies throughout the family's time in the NICU. Other NICUs seeking to implement a parent education program like Goslings may benefit from incorporating some of the strategies that our team found to be effective, while still acknowledging the unit's available resources and unique needs.

NICUs that do not have the capacity to offer programming like Goslings could consider offering individual or group consultation to families to promote their understanding of infant signals and support early literacy practices, ideally in a way that encourages hands-on practice. If resources allow, NICUs could provide families with children's books and/or distribute educational materials that guide parents on

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how to engage in language-rich activities with their infants throughout the day while being sensitive and responsive to signals of overstimulation. While the NICU can be a source of stress for families, the support of nurses and other staff can also make the NICU a safe space to learn and practice appropriate methods of interaction prior to discharge.

Limitations and Future Directions

These results, while positive, must be interpreted in light of limitations. First, an inherent limitation of this evaluation is the exclusion of a comparison group of families who did not attend the Goslings program. This decision was made for ethical and logistical reasons, as we did not wish to exclude any families from attending. While our sample was demographically representative of the population served by this NICU, it is possible that the Goslings sessions attracted parents who were already committed to enhancing interactions with their infants, which may have biased the sample and influenced outcomes. Future inclusion of a comparison group would help determine the added benefit of the Goslings program compared to standard practice. A similar limitation related to generalizability is that this program was implemented in a SFR NICU, where parents had more privacy to use these tools and strategies with their infants. An important direction for future research is to determine how this program might function in an open-bay NICU, where auditory stimulation might be greater but high-quality interaction might be more limited. Future research should also aim to recruit a larger sample to enhance generalizability.

Another limitation is that most parents reported on intended behavior change; we were only able to follow up with a small sample of parents who reported their actual behavior change a few weeks later. Further, we relied exclusively on parent self-report, which poses the threat of social desirability bias. Future research should obtain direct observational measures of the quantity and quality of parent-infant interaction before and after Goslings. For instance, collecting data on nurse observations of parental behavior before and after attending Goslings would add an objective measure of behavior change to supplement parent self-report. We also did not conduct any long-term follow-up with families to learn whether they implemented strategies when their infants became medically ready or whether the program had any long-term effects on child development. With the growing shift toward SFRs in NICUs and the associated concerns regarding long-term language development, it remains an important objective of future research to determine the effect of NICU parent education programs like Goslings on the later development of preterm infants.

CONCLUSION

In general, the success of Goslings provides support for its continuation in this NICU and shows promise for possible extension to other NICUs. This program served the unique needs of families in the NICU by providing guidance

and materials to promote early language and literacy in ways that are responsive to infants' signals and medical status. Empowering parents with knowledge and skills can be a powerful tool for promoting sensitive and responsive parentinfant interaction in the NICU and in the months and years following discharge.

ACKNOWLEDGMENT

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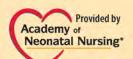


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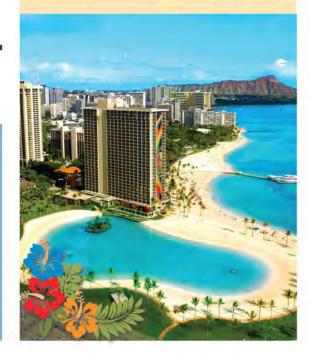
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Informational Email for NICU Staff

Mother Goose on the Loose (MGOL) Goslings is coming to our NICU!

MGOL is an award-winning nationally replicated early literacy program for babies from birth to age three and their parents or caregivers. Research has established that parents are important first teachers, and that children learn best through routine and repetition in a nurturing environment. MGOL incorporates these research findings and theories of learning into a program that uses nursery rhymes, songs, books, puppets, and instruments to foster speech development, early literacy skills, motor coordination, selfconfidence, self-regulation, and empathy.

MGOL Goslings is an adaptation of MGOL tailored specifically for families of babies being cared for in a NICU. The Goslings adaptation features information regarding premature babies, developmentally appropriate activities for babies being treated in a NICU, early language and literacy tips for families, and materials for families to use when engaging in purposeful play with their babies.

Many NICU parents may not be aware of the importance of parent-infant interactions and may not know how to nurture their baby's early language

and literacy skills, which are critical to later school readiness and success. This program gives parents useful tools to aid in their babies' development, ranging from explanations of premature baby signals to activities incorporating the talk, sing, read, and play early literacy practices recommended by the "Every Child Ready to Read" curriculum for parents and caregivers. Best practices for interacting with NICU babies are highlighted using the analogy of traffic light colors (i.e., red-voice only, yellow-voice and touch, green-voice, touch, and show books or toys) to indicate babies' medical stability. Participation in Goslings helps to develop a sense of community between families, increasing comfort and supporting parentbaby bonding. When medically stable, even the most vulnerable babies will benefit from gentle playful interactions in a nurturing environment with family members who have attended a Goslings session.

At the conclusion of the session, each family is given a new Goslings kit containing materials used during the program. Each kit contains two books, a monkey finger puppet, a gentle music shaker egg, a baby signals guide, and a copy of the Goslings Family Guide. This kit provides parents with all they need after completing a program session to implement what they have learned: to talk, sing, read, and play in developmentally appropriate ways with their babies in the NICU and later at home.

Starting on [insert date] we will offer Goslings in the [insert location]. The program will take place on [insert day of the week or month, for example, the first Thursday of the month] and will be 1 hour long, running from [insert time]. We plan to offer [insert number of sessions] sessions of the program between [insert month] and [insert month]. Families are invited to sign up in advance at the [insert location] for an upcoming program session. Multiple family members and older siblings are welcome to attend.

The dates for the first five sessions are as follows: [List first five session dates.]

A certificate of attendance will be given to all families who attend Goslings. Please display this certificate so that all clinical staff are able to easily identify participating families. In addition, a note documenting family attendance will be placed in each infant's medical record. If you are interested in observing a session or for further information, please contact [insert name of Goslings Champion at [insert phone number and/or email address].

Supply List

Items Recommended for the Goslings Kit



Wiggle! March! by Karen Pixton Available at https:// bit.ly/2QkYKZy.



Look, Look! by Peter Linethal Available at https:// bit.ly/2STJm8a.



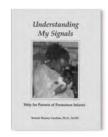
Monkey finger puppet Available at https:// bit.ly/2SMmtnb.

Folkmanis usually gives discounts to non-profits that buy in bulk. If the puppet exceeds your budget, consider hosting a craft-hour with parents to make a sock monkey puppet.



Nino percussion egg shakers assortment Available at https:// amzn.to/2ufXYVv.

Shaker eggs come in packs of four, only one is needed per kit.



Understanding Mv Signals Available at https://www.vort. com/product. php?productid=19.

One copy per kit is recommended; however, if this is cost prohibitive, you can purchase one booklet to post on a family bulletin board or to place in a family library for parents to reference.



Goslings Family Guide

Available (free) in PDF at https://mgol.net/ wp-content/ uploads/2020/03/ *3Updated-Song-and-*Rhyme-Booklet Edited.prn_.prn_.pdf.



Canvas or nylon bag to hold the materials

Available at https:// bit.ly/2MMmtQk.

You can put your logo on it. If you already have your own hospital bag, it is absolutely fine to use it.

Optional Items Recommended for the **Goslings Kit**

Feel free to provide take home materials from your local library (e.g., hours, phone number, address; early literacy brochure; list of recommended books for babies; website resource list).

Additional board books for distribution

- Read to Me by Judi Morreillon (Spanish/ English, Vietnamese, and Vietnamese/English): available at http://www. starbrightbooks.org/ details.php?id=237.
- Global Babies (2007), Global Baby Girls (2013), Global Baby Boys (2014) by Maya Aimera: available at https://amzn.to/36xpSKH.
- The Little Dump Truck (2014) by Bob Kolar: available at https://amzn. to/2ZYKGYV.
- Honk, Honk! Baa, Baa! (2014) By Petr Horaek: available at https://amzn. to/2Qvb1Lc.
- Black and White (2007) by Tana Hoban: available at https://amzn.to/2uppslc.
- Brown Bear, Brown Bear, What Do You See? (1996) by Bill Martin, Jr.: available at https://amzn. to/37FGO1H.

Items Needed to Present the **Goslings Session**



12.5" newborn multicultural dolls

One per parent participant and one for the facilitator. Available from childtherapytoys. com at https://bit. Iv/2tTm0pa.



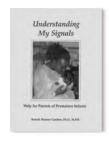
Magnetic board. 24" x 36"

to display Goslings visual panels. Available from Lakeshore at https://bit. Iv/37vGYsQ.



Readaeer Bamboo Reading Rest

Bookrest to support the magnetic board. Available at https://amzn. to/36AMXLN.



Understanding My Signals booklet

One laminated copy to review with participants during the session. Available at https:// www.vort.com/product. php?productid=19.



Cavicide wipes

Wipes are used to disinfect used kit materials and surfaces: available at https://bit. /v/37vVC2D. If your NICU requires disinfecting with a different product, follow your NICU protocol.

Goslings panels

to use with the magnet board. Available (free) at https://mgol.net/home/mother-goose-onthe-loose-goslings/mgol-goslings-handouts/ panels-for-goslings-2/.

Optional Items Recommended for the Goslings Session



 Sterilite, 15 Qt./14 L Latch Boxes

Comes in case of 10. to serve as the isolettes, one per participant and one for the facilitator: available at https:// bit.ly/37yZb80.

- Assorted plastic stack stools from School Outfitters (comes in stacks of 4) to serve as "isolette" stands: available at https://bit. lv/3aPQGlu.
- If you opt for the stools, **VELCRO Brand Industrial** Strength Tape, 4' x 2" to keep the isolettes attached to the stools: available at https://bit. ly/2RAatEx.

Optional Items for Storage and Transport

Sterilite Latch and Carry Storage Bin (18 gallon) to store supplies: available at https:// thd.co/3btBmRm. Depending on the number of program participants, you may need 2 boxes for storing dolls and other items. Smooth surfaces allow for easy cleaning and wiping down, latches are great in case the bin tumbles or gets knocked over, and handles make attaching bins together using bungee cords easier.



- Lifetime 48 in. White Plastic **Adjustable Height** Folding High Top **Table** for Goslings' facilitator use if there is not a table
- in the program room: available at https://thd.co/2XCtSbp
- **Body Choice Deluxe Carrying Case** to carry the table, magnetic board and stand: available at https://bit. ly/2U9grh0 (without wheels) or https://bit.ly/311QamA (with wheels).

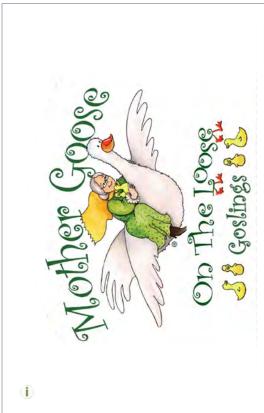


- Magna Cart MC2 Steel Folding **Hand Truck** for transporting storage bins and stools: available at https://thd. co/2JiBaaY.
- **48" Super Duty Bungee Cords** (4-pack) for securing bins (and possibly stools) onto Magna Cart; bungee cords increase durability when traveling and versatility when securing the bins: available at https://thd. co/2WStkgW.
- **Blue Plastic Button & String** Closure Envelopes (12" x 18") to store panels, instead of using an additional bulky bin: available at https://bit.ly/3dzMm1y.

Panels for Goslings Session

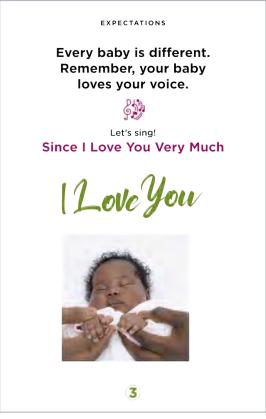


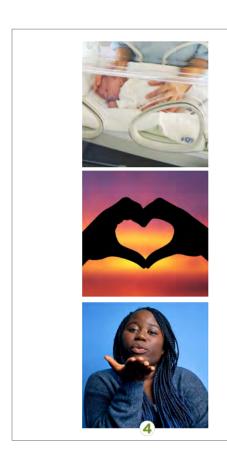




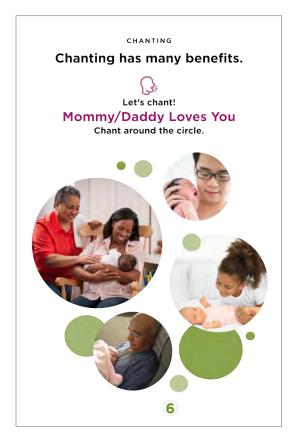


OPENING RITUAL Music can comfort & heal! To your baby, your voice is the most beautiful sound in the world. The NICU can be like a roller coaster ride... **Understanding My Signals** Happy and ready Helping myself Not happy **Two Little Goslings** Always use soft voices in NICU.











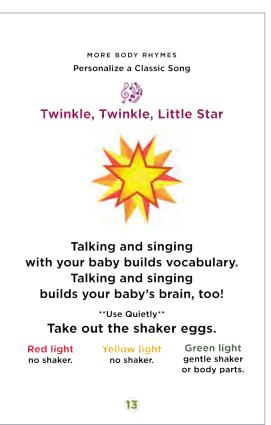












LULLABY

Any song can become a lullaby. **Shaker Eggs and Lullabies**

Soft Sounds Only



Let's sing!

The Alphabet Song



Lullabies are great for soothing babies. Sing in any language.

Shakers Away

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ANIMALS



Wiggle! March!

Let's talk about the pictures... Can we make up a story?



Wiggle! March! & Old MacDonald Use the pictures as reminders.

Let's sing about the animals.

Remember to sing softly and slowly, and to watch for signals.

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PUBLIC LIBRARIES

Visit Your Library!

Most public libraries offer free programs for babies!

Babies need to be healthy before attending a group program and may not be allowed to attend during flu season. Check with your baby's doctor before attending a group program.



BEDTIME ROUTINES

Bedtime routines are calming and help your baby get ready for sleep.

They can involve:

- reading a book aloud,
- · singing a lullaby,
- · giving baby a bath,
- · feeding,
- or anything we've done in Goslings!

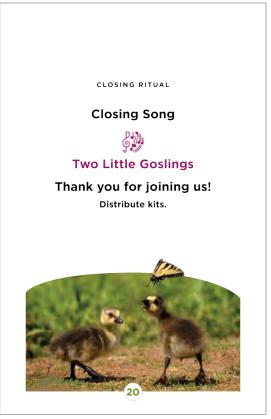


Let's turn Wiggle! March!, into a bedtime story.

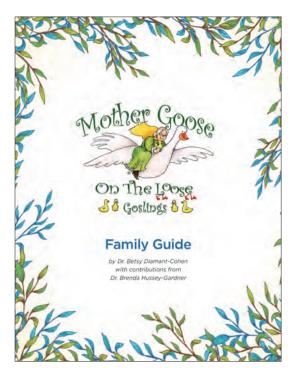
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Goslings Family Guide



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has a strong foundation that will enable them to be successful in school and in life.

- GOL fervently values:

 The right of every child to become literate.

 Parents and family as a child's first and most important teachers.

 Nursery rhymes and music as tools for learning.

 Joyful experiences with books and illustrations.

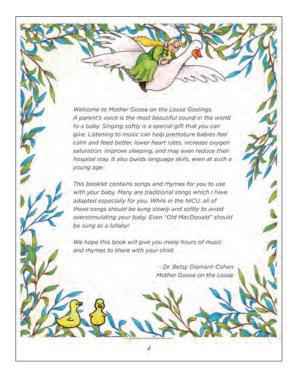
 Community as the support system for families.

 Healthy development of the WHOLE CHILD, with focus on social, emotional, intellectual and physical skills.

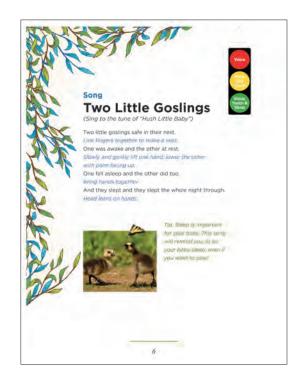
Find out more at mgol.net!

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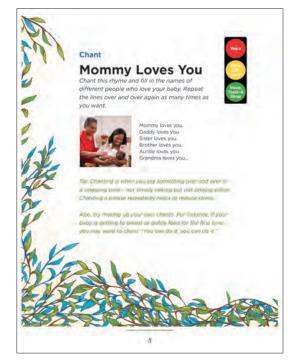




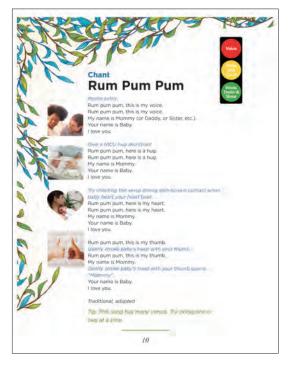






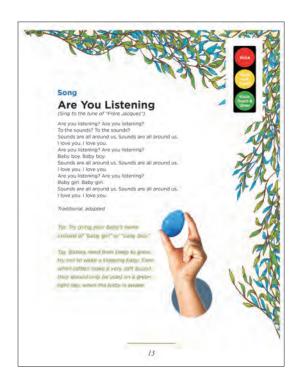


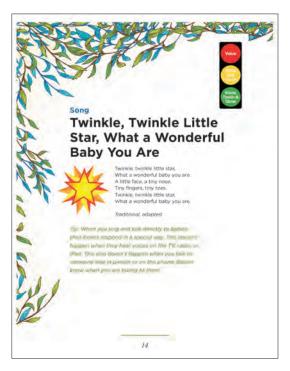


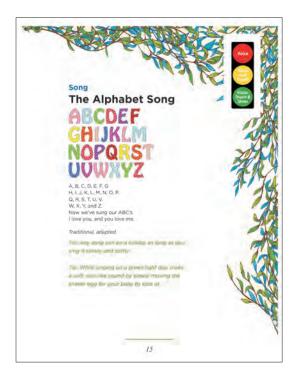


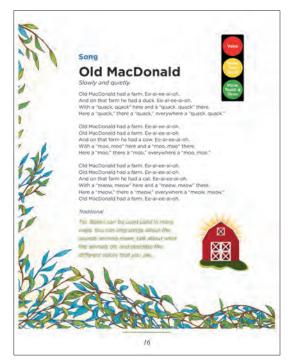


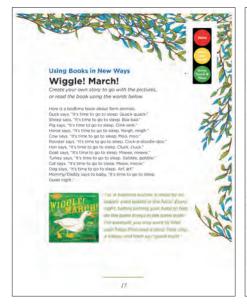




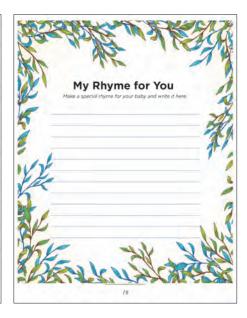
















Sample Informational Flyer for Parents

An interactive workshop to support your growing baby!

Mother Goose
On The Loose
Goslings & &

Month April 28, 2020 4-5 p.m.

Where: NICU Family Lounge

Please sign up at the front desk.

Benefits:

- Reading and singing helps your baby's brain development.
- Reciting nursery rhymes and singing songs helps your baby get ready to learn to read.
- Babies exposed to books and reading perform better in school.

FREE Family Kit includes toys, books, a developmental guide and an activity booklet!

Multiple family members are welcome, including older siblings and adult family members. Families will recieve one Family Kit per child in the NICU.

If you would like to attend more than one session, you may do so if there are vacancies. Families will not recieve additional kits for attending more than once.



Sign-Up Sheet



Parent's Name	Number of Family Members Attending	Baby's Room #
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

We hope to see you soon!

Sign-In Sheet



First & Last Name	Your Relationship to the Baby (e.g. Dad)	Your Baby's Name for the Certificate	Room #
1,			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			

Goslings Song & Rhyme Sheet for Cuddlers













Certificate of Participation



Sample EMR Verbiage

The [insert family member(s), for example, mother and father] of [insert baby's name] attended Goslings on [insert date]. Goslings is an early language and literacy program offered in our [insert location, for example, NICU Family Lounge]. All families receive a new kit of toys and books to use with their baby; along with a copy of the Goslings Family Guide, a copy of "Understanding My Signals." Participating families are taught the "stop light" concept as a way of communicating how much stimulation their baby can handle at a given time, based on the baby's medical condition: red light means use voice only; yellow light means use voice and touch (e.g., NICU hug, skin-to-skin care) and green light means use voice, touch and show (e.g., book, rattle, toy). Families are encouraged to ask their baby's nurse what kind of day their baby is having to guide them during their interactions. Families are also taught that they should always read and respond to their baby's signals when talking, reading, singing, holding or playing. All families receive a certificate for participating.

Simple Evaluation Form

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I am satisfied with the Goslings program.					
Goslings provided me with skills and materials to help my baby's early language and literacy development.					
Goslings increased my comfort in interacting with my baby.					
Goslings taught me different ways to interact with my baby depending on the type of medical day my baby is having.					
Goslings increased my understanding of my baby's cues of readiness.					
Goslings increased my understanding of my baby's cues of overstimulation.					
Goslings helped me learn what to do when my baby is overstimulated.					
I recommend this program to other parents of babies in the NICU.					
I recommend that the NICU continue to offer this program for other parents.					
What did you like most about Goslings?					
If you could, what would you change about 0	Goslings?				

Shanty et al. Evaluation Forms

Parent/Family Pre Questionnaire

	per;	Parent/Family Pre Questionnaire
	er Goose on the Loose Goslings Family Information	
	ns: Please circle an answer to each of the items	s below.
	lation to the Baby in the NICU:	, below.
Mother		Other
Are you	the primary caregiver? If no, who is?	
Yes	No	
Your hig	thest level of education:	
	Trade/technical/vocational training Associate's degree Bachelor's degree Master's degree Professional degree Doctoral degree	
	ce/ethnicity:	
		Choose not to respond
3.0026.000.0	rital status:	
Married	Single Separated/divorced	Other
Is this yo	our first time attending Mother Goose on the I	Loose Goslings?
Yes	No	

	27.00				
			n the Loose Gos Questionnaire	lings	
Today's Date:	1 1				
What month was th	ne baby in the	e NICU born?			
Gender of baby in t	the NICU:	Boy Gir	ſ		
To the best of you	r ability, plo	ase circle an ans	wer to each of the	items below:	
1. Birthweight of baby in the NICU	≤1000 g (≤2.2 lbs)	1001-1500 g (2.3 - 3.31 lbs)	1501-2000 g (3.32 – 4.41 lbs)	2001-2500 g (4.42 – 5.51 lbs)	>2500g (>5.52 lb
2. Gestational age at birth of baby in the NICU	≤ 25 weeks	26-30 weeks	31-33 weeks	34-36 weeks	37+ week
3. Baby's length of stay in the NICU (to date)	<7 days	1-2 weeks	3-4 weeks	1-2 months	2+ month
4. Is the baby in the NICU a first- born child?	Yes	No			
5. Is the baby in the NICU a twin or triplet?	Yes, twin,	Yes, triplet.	No		

ID Number:

Parent/Family Pre Questionnaire

Frequency of Activities with Baby in the NICU

In the past week, how often did you:

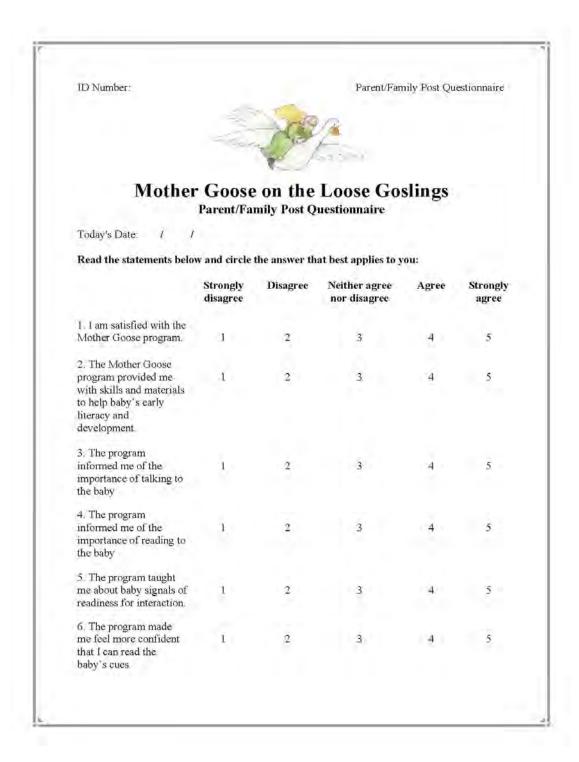
	Not at all	1-3 times a week	4-6 times a week	Every day	Several times a day
6. Talk to the baby in the NICU	1	2	3	4.	5
7. Read books to the baby in the NICU	1	2	3	4	5
8. Recite nursery rhymes to the baby in the NICU	1	2	3	4	5
9. Sing to the baby in the NICU	1	2	3	4	5

Please circle the answer that best applies to you:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
10. I feel comfortable caring for the baby's needs.	1	2	3	4	5
11. I understand the baby's cues of overstimulation.	à	2	3	4	5
12. I feel confident predicting how the baby will react when overstimulated.	I	2	3	4.	5
13. I know what the baby looks and acts like when s/he is ready for interaction.	4	2	3	4	5

Shanty et al. Evaluation Forms

Parent/Family Post Questionnaire



ID Number: Parent/Family Post Questionnaire 7. How likely would you be to recommend this program to other parents/families of babies in the NICU? 1 2 3 4 5 Extremely Unlikely Likely Extremely Neutral unlikely likely 8. What did you like most about the program? 9. If you could, what would you change about the program? 10. Would you recommend that the NICU offer this program again? Yes No During the coming week, how often do you intend to: Not at 1-3 times a 46 times a Every Several times all week week day a day 11. Talk to the baby in 2 5 the NICU 12. Read books to the 2 3 5 baby in the NICU 3 13. Recite nursery rhymes to the baby in

3

4

the NICU

the NICU

14. Sing to the baby in