

*IP2022 Conversation Circle*

# The Importance of Health Literacy & Parent Education in the NICU

June 7, 2022

12pm – 1pm PST

CPQCC

## Meeting Logistics

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- Participants are automatically muted upon entry
- **Feel free to unmute and ask questions or utilize the chat function to submit questions you have for the presenters**
- The **slides and recording** will be posted to the CPQCC website following today's session
- Please send a private chat message to **Janine Bohnert** if you are having technical difficulties

# CPQCC Webinar Agenda

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TIME	TOPIC	SPEAKER
12:00 – 12:05pm	Welcome & Introductions Jamboard Question	Ashwini Lakshmanan, MD, MS, MPH
12:05 – 12:20pm	Health literacy through a health equity lens	Lee Sanders, MD, MPH
12:20 – 12:32pm	Parent education through the lens of Adult Learning Theory	Tanya Hatfield, MSN, RNC-NIC, C-ELBW
12:32 – 12:57pm	Q&A Panel Discussion Moderated by Ashwini Lakshmanan, MD, MS, MPH	<b>Panelists</b> Carmin Powell, MD Lee Sanders, MD, MPH Tanya Hatfield, MSN, RNC-NIC, C-ELBW
12:57 – 1:00pm	Large Group Sharing & Closing Jamboard Question	Ashwini Lakshmanan, MD, MS, MPH

# Introductions

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## Planning Committee

Ashwini Lakshmanan, MD, MS, MPH – Children’s Hospital Los Angeles

Courtney Breault, MSN, RN, CPHQ – CPQCC

Janine Bohnert, BS – CPQCC

Tanya Hatfield, MSN, RNC-NIC, C-ELBW – University of California San Francisco


## Additional Facilitators

Carmin Powell, MD – Watsonville Community Hospital

Lee Sanders, MD, MPH – Stanford Pediatrics

This Session is  
Dedicated to  
Micah

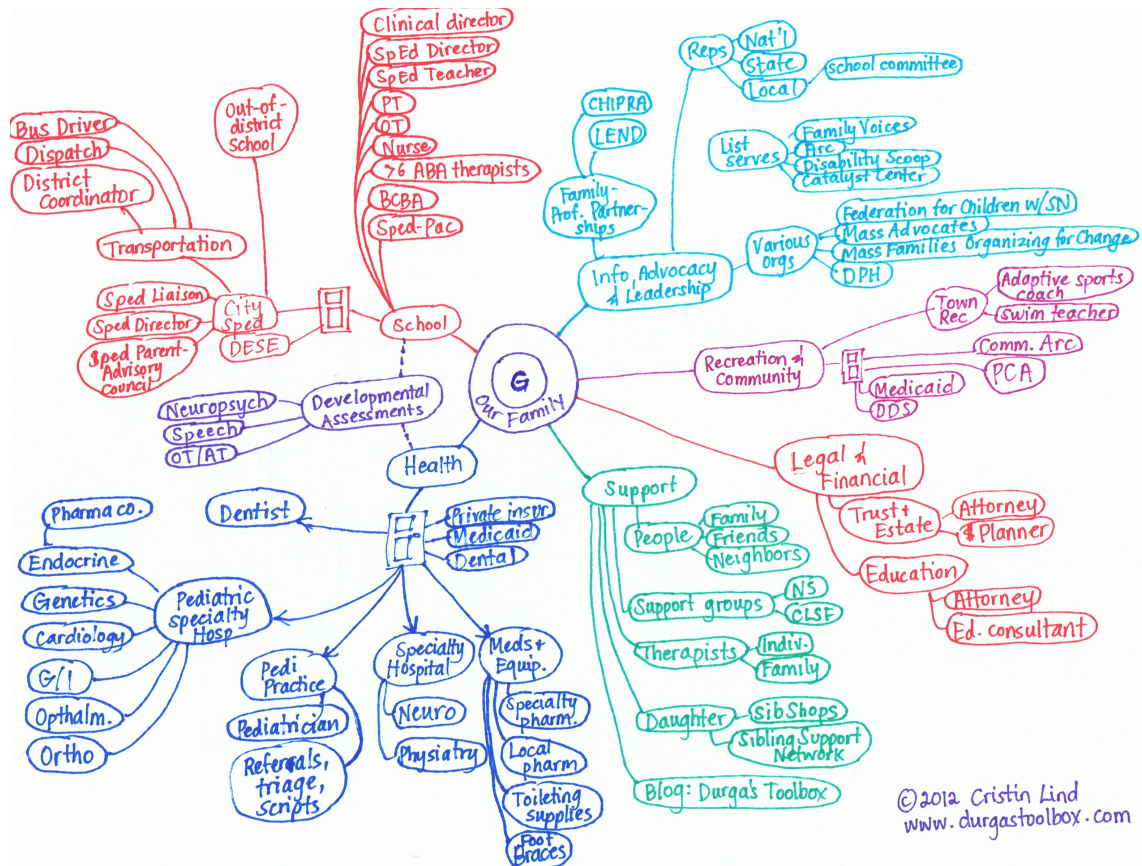




Health Equity  
through a  
Health Literacy  
Lens

Lee Sanders, MD, MPH

# One Family



©2012 Cristin Lind  
www.durgastoolbox.com


**Essential Question: What care system do we need, in order to meet everyone's health needs?**





# One Task


Your child has an ear infection, and your doctor gives you this prescription.


How much medicine you would administer for one dose?


 **MEDICAL CENTER EAST PHARMACY**  
**Rx# 5392877**  
**GIVE 2.5ML BY MOUTH**  
3 TIMES DAILY FOR 10 DAYS  
///DISCARD INUSED PORTION  
///AFTER 14 DAYS  
**150 AMOXIL 250/5ML SUS SKBM**  
no refills allowed

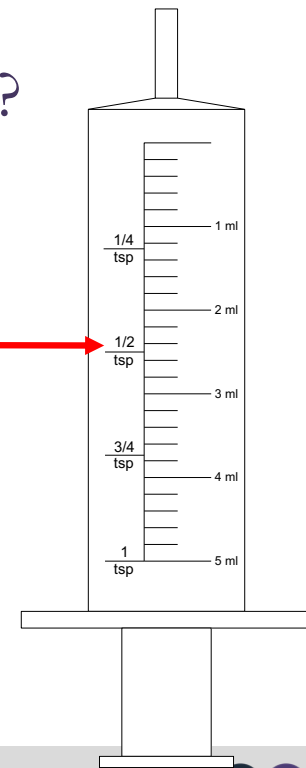
**IMPORTANT** - UNLESS DIRECTED BY PHYSICIAN, **ALL MEDICATION MUST BE FINISHED.**

 **KEEP IN REFRIGERATOR**  
 **ALWAYS SHAKE WELL BEFORE USE.**

 **DISCARD UNUSED PORTION**  
AFTER THE EXPIRATION DATE OF \_\_\_\_\_

 THE EFFECTIVENESS OF BIRTH CONTROL PILLS MAY BE ALTERED BY CERTAIN MEDICATION (ANTIBIOTICS, ANTI-INFECTIVES) ASK YOUR DOCTOR OR PHARMACIST.

  
539287700





Among parents of young children, about what percent answer this question incorrectly?

A. 10%

B. 20%

C. 33%

D. 50%



N = 358

Lokker, Sanders, et al Acad Ped 2009

# Literacy

“The ability to use printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential.”

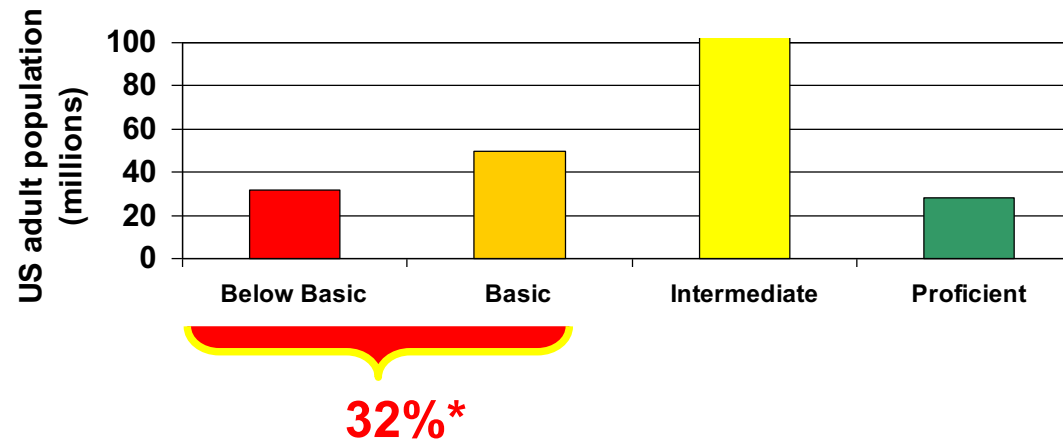
U.S. Department of Education 2003

# Health Literacy

“The capacity to obtain, process, and understand basic health information, and services needed to make informed health decisions.”

Institute of Medicine 2004

# Health Literacy Skills of Adults



## “Below Basic”

- Understand an appointment slip.
- Dose over-the-counter medicine.
- Enter names / DOB on health insurance form

## “Basic”

- Interpret a growth chart
- “Take medicine on an empty stomach”
- Determine when next vaccine is due

**\*8-10% have limited English proficiency (LEP)**

Yin HS, Johnson M, Mendelsohn AL, Abrams MA, Sanders L, Dreyer BP. *Pediatrics* 2009.

# The Shame of Low Literacy

2/3 of adults with low literacy have **never asked** for help with learning to read

Most have also **never told**:

Their Spouse 68%

Their Children 53%

Anyone 19%

Parikh et al 1996

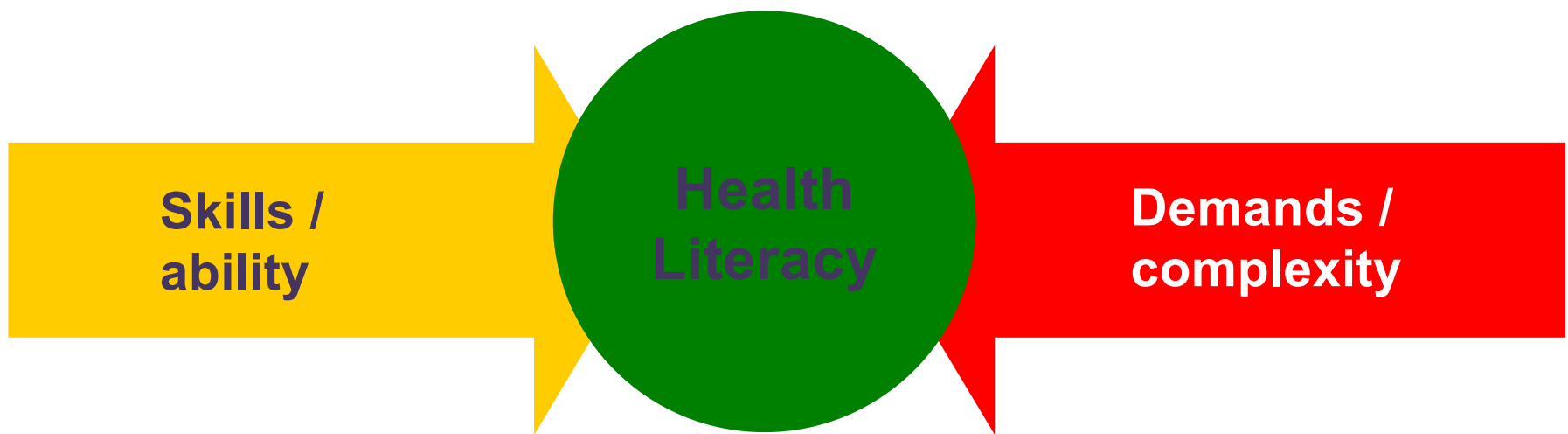
# Health Information Complexity

Health Websites	10 <sup>th</sup> -12 <sup>th</sup> grade level <sup>i</sup>
Insurance Enrollment	7 <sup>th</sup> – 12 <sup>th</sup> grade <sup>v</sup>
AAP parent handouts	6 <sup>th</sup> - 16 <sup>th</sup> grade <sup>ii,iii,iv,vi,vii</sup>
Medication Labels	8 <sup>th</sup> -10 <sup>th</sup> grade <sup>x</sup>
<b>Median Parent Literacy Skills</b>	<b>8<sup>th</sup>-grade</b>
CDC Vaccine information	5 <sup>th</sup> - 10 <sup>th</sup> <sup>viii,ix</sup>

D'Allesandro DM, et al 2001. Davis TC, et al. 2006. Arnold CL, et al. 2001. Farrell M, et al. 2008. Sanders L, et al 2007. Davis TC, et al. 1994. <sup>[vii]</sup> Davis TC, et al. 1990;31:533-538. <sup>[viii]</sup>; <sup>[x]</sup> Lokker, et al 2008.



**“Public Health Malpractice?”** Roter D 2008



Parker, Ruth. WHCA Health Literacy Action Guide 2009.

# Low Health Literacy and Poor Health Outcomes

## Child / Family Health Behaviors

- Decreased breastfeeding\*
- Poor child feeding/diet\*\*
- Increased TV/screen use\*\*
- Injury-risk behaviors\*\*
- Tobacco use\*

## Healthcare Access and Use

- Under-insurance\*\*
- Increased ED use\*
- Decreased “usual source of care”\*\*
- Decreased Access to WIC, TANF\*\*

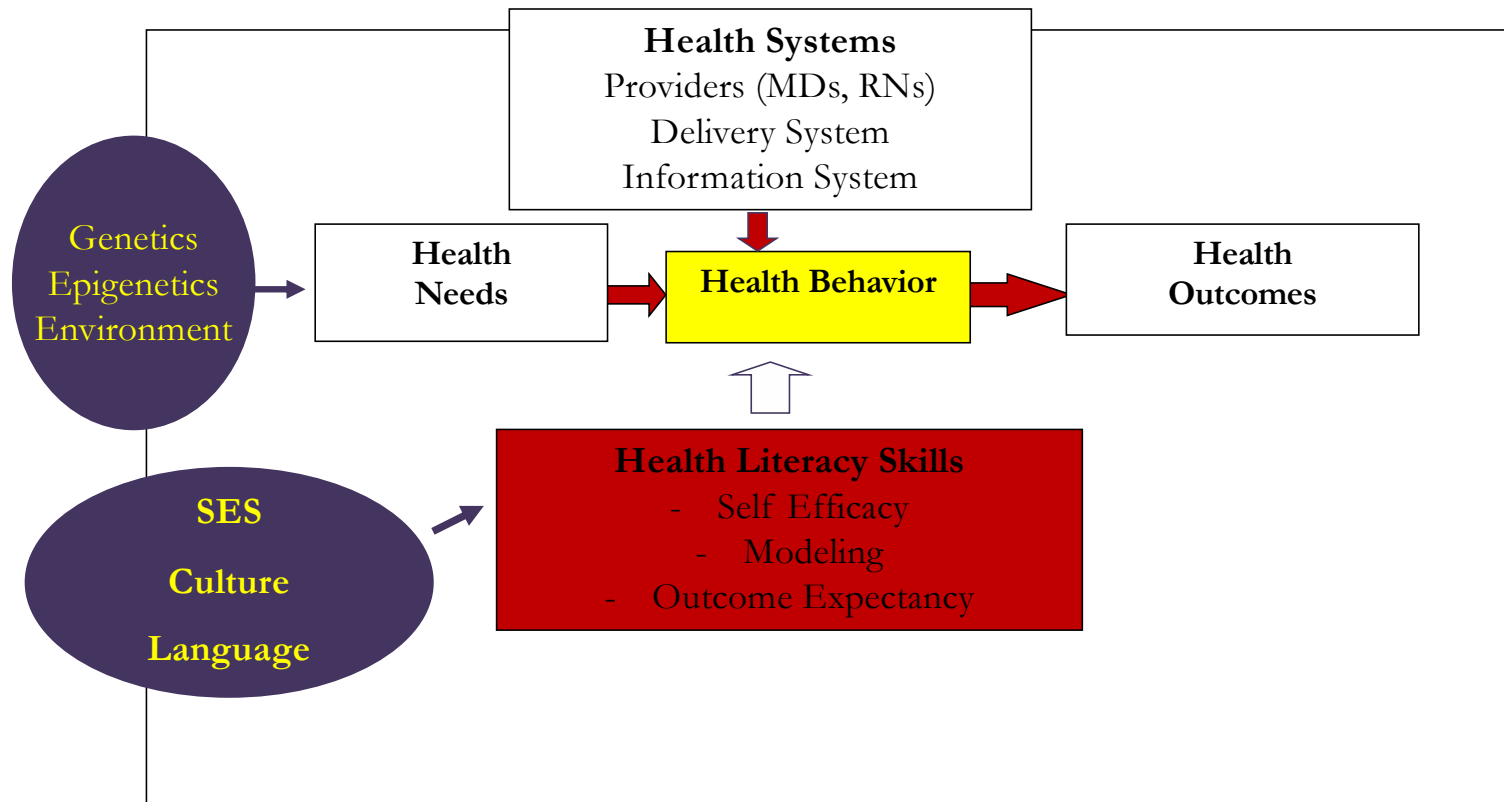
## Maternal / Child Health Outcomes

- Maternal depression\*\*
- Child developmental / behavioral problems\*
- Worse control of child chronic illness\*
  - Asthma (ED visits)
  - Diabetes (HA1c)
- Adolescent STDs

\*Adj. for SES; \*\*Strong association

Sanders LM 2009; Dewalt et al, 2011

# Health Literacy Action Framework: Adapted from Cognitive Behavioral Theory





# Health-Literacy Strategies for the Health System

Training  
Inter-Disciplinary Teams  
Appropriate Materials

Structural Change

- Daily Rounds
- Discharge Policies

## Patient Education Materials Assessment Tool for Printable Materials (PEMAT-P)

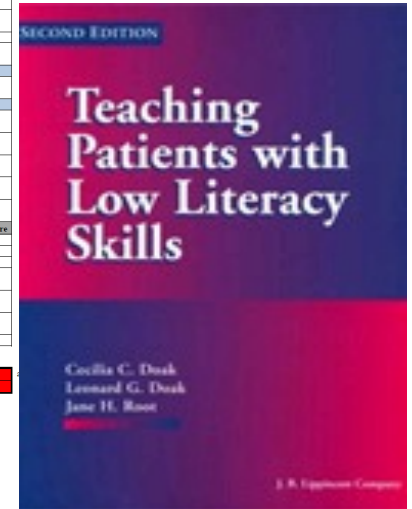
Title of Material: \_\_\_\_\_  
Name of Reviewer: \_\_\_\_\_  
Date of Review: \_\_\_\_\_

Each question has specific response options. Select your response option from the dropdown in the "Rating" column. Read the PEMAT User's Guide (available at: [http://www.ahrq.gov/professionals/prevention-chronic-care/prepare/self\\_mgmt/pemat/](http://www.ahrq.gov/professionals/prevention-chronic-care/prepare/self_mgmt/pemat/)) before rating materials.

Item	Response Options	Rating
<b>UNDERSTANDABILITY</b> <span style="float: right;">Select your responses here</span>		
<b>TOPIC-CONTENT</b>		
1. The material makes its purpose completely evident.	Disagree = 0    Agree = 1	
2. The material does not include information or content that distracts from its purpose.	Disagree = 0    Agree = 1	
<b>TOPIC-WORD CHOICE &amp; STYLE</b>		
3. The material uses common, everyday language.	Disagree = 0    Agree = 1	
4. Medical terms are used only to familiarize audience with the terms. When used, medical terms are defined.	Disagree = 0    Agree = 1	
5. The material uses the active voice.	Disagree = 0    Agree = 1	
<b>TOPIC-USE OF NUMBERS</b>		
6. Numbers appearing in the material are clear and easy to understand.	Disagree = 0    Agree = 1 No numbers = NA	
7. The material does not expect the user to perform calculations.	Disagree = 0    Agree = 1	
<b>TOPIC-ORGANIZATION</b>		
8. The material breaks or "chunks" information into short sections.	Disagree = 0    Agree = 1 Very short material* = NA	
9. The material's sections have informative headers.	Disagree = 0    Agree = 1 Very short material* = NA	
10. The material presents information in a logical sequence.	Disagree = 0    Agree = 1	
11. The material provides a summary.	Disagree = 0    Agree = 1 Very short material* = NA	
<b>TOPIC-LAYOUT &amp; DESIGN</b>		
12. The material uses visual cues (e.g., arrows, boxes, bullets, bold, larger font, highlighting) to draw attention to key points.	Disagree = 0    Agree = 1	
<b>TOPIC-USE OF VISUAL AIDS</b>		
13. The material uses visual aids whenever they could make content more easily understood (e.g., illustration of healthy portion size).	Disagree = 0    Agree = 1	
16. The material's visual aids reinforce rather than distract from the content.	Disagree = 0    Agree = 1 No visual aids = NA	
17. The material's visual aids have clear titles or captions.	Disagree = 0    Agree = 1 No visual aids = NA	
18. The material uses illustrations and photographs that are clear and uncluttered.	Disagree = 0    Agree = 1 No visual aids = NA	
19. The material uses simple tables with short and clear row and column headings.	Disagree = 0    Agree = 1 No tables = NA	
<b>ACTIONABILITY</b> <span style="float: right;">Select your responses here</span>		
20. The material clearly identifies at least one action the user can take.	Disagree = 0    Agree = 1	
21. The material addresses the user directly when describing actions.	Disagree = 0    Agree = 1	
22. The material breaks down any action into manageable, explicit steps.	Disagree = 0    Agree = 1	
23. The material provides a tangible tool (e.g., menu planners, checklists) whenever it could help the user take action.	Disagree = 0    Agree = 1	
24. The material provides simple instructions or examples of how to perform calculations.	Disagree = 0    Agree = 1 No calculations = NA	
25. The material explains how to use the charts, graphs, tables or diagrams to take actions.	Disagree = 0    Agree = 1 No charts, graphs, tables, diagrams = NA	
26. The material uses visual aids whenever they could make it easier to act on the instructions.	Disagree = 0    Agree = 1	

\*A very short print material is defined as a material with two or fewer paragraphs, and no more than 1 page in length.

UNDERSTANDABILITY SCORE	0-10
ACTIONABILITY SCORE	0-10



Doak, Doak and Root 1991

**What the colors mean**

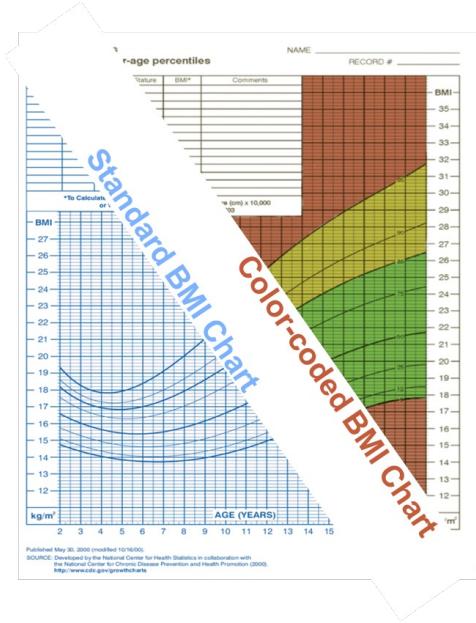
Red: Unhealthy  
Yellow: Caution - At Risk  
Green: Normal

<b>Total Cholesterol</b> (mg/dL)	150	>Normal: At Risk: Unhealthy:	<b>Below 170</b> 170 - 199 Above 199
<b>LDL (Bad) Cholesterol</b> (mg/dL)	115	Normal: >At Risk: Unhealthy:	<b>Below 110</b> 110 - 129 Above 129
<b>HDL (Good) Cholesterol</b> (mg/dL)	33	>Unhealthy: Normal:	<b>Below 35</b> 35-134
<b>Triglycerides</b> (mg/dL)	122	>Normal: Unhealthy:	<b>Below 135</b> Above 134
<b>Blood Sugar (Glucose)</b> (mg/dL)	105	Normal: >Pre-Diabetes: Diabetes:	<b>40 - 100</b> 101 - 125 Above 125
<b>Insulin</b> (µU/mL)	105	>Normal: At Risk: Unhealthy:	<b>Below 21</b> 21 - 29 Above 29

Please remember that:

- These test results may not be accurate if Susie had anything to eat or drink in the 8 hours before the blood test.
- Test results can also be affected by some medications.
- Normal levels for children are different than for adults.

More information about what the tests mean and what you can do are found on the back of this page.



**CVM Medication Schedule**

Nombre del medicamento	9 AM	10 PM	
Levetiracetam 100mg/mL (Keppra)	4.5 mL (450 mg)	4.5 mL (450 mg)	
Ranitidine 15mg/mL (Zantac)	1.5 mL (22.5 mg)	1.5 mL (22.5 mg)	
Sulfamethoxazole-trimethoprim 40 mg-8 mg/mL (SEPTRA)	3.4 mL (27.04 mg) **Tomar sólo el viernes, sábado, domingo	3.4 mL (27.04 mg) **Tomar sólo el viernes, sábado, domingo	
Topiramate 25 mg cápsula (TOPAMAX)	3 Cápsulas (75mg)	3 Cápsulas (75mg)	

**Know my blood sugar levels**

Blood-Sugar Level	What To Do
<b>Stop</b> My blood sugar is high: <b>240 or higher</b>	Call doctor. No sweets, fats.
<b>Be Careful</b> My blood sugar is getting high: <b>150 to 239</b>	Less sweets, fats.
<b>Go</b> My blood sugar is under control: <b>70 to 149</b>	Good job.

When my blood sugar is less than 70 drink half a glass of fruit juice or eat 7-8 hard candies.

What I will do if my blood sugar level is too high:

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# Primary Care and Goal Setting

## Keep Your 4 Month Old Growing Healthy!



Learn how your baby shows you he's hungry or full.

So you give the right amount - not too much and not too little!

pages 2-3

Wait to start solid foods.

Most babies are not ready until they are close to 6 months old.

pages 9-11

### What drinks should I give my baby?

Give your baby



breast milk



formulas



water in small amounts

Try not to give



100% fruit juice

Do not give your baby



juices that are not 100% fruit juice



soda



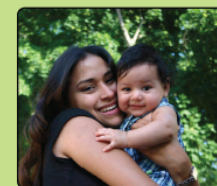
sweet tea



sports drinks

8

## I Can Keep My Baby Growing Healthy!



✓ Pick one of these ideas or write down 1 or 2 things you would like to do in the next few weeks.

I will look for one new way my baby tries to tell me when he is full.

I will not give my baby juice.

Before I give my baby solid food, I will look to see if he shows signs that he is ready to start.

✓ Monday and Tuesday of next week, I will give juice at lunchtime only instead of at lunch and dinner



Sanders et al, Pediatrics 2021

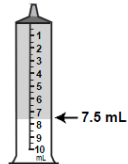
# Design Studio for Health Equity: Translating Research to Action

## MEDICAID POLICY



## HEALTH LITERACY

Tome 7.5 mL:



← 7.5 mL

**CARLOS HERNANDEZ**  
444 Main St., Chicago, IL 60611  
1/1/15

**Amoxicillin 250 mg / 5 mL**  
Tome 7.5 mL por la boca  
en la mañana y en la noche  
durante 10 días.  
Tomar para infecciones de oído.

**Rx: 0664978-5527** No usar después del: 4/15/15  
Cantidad: 150 mL No volver a llenar  
Proveedor: Shonna Yin, MD

**IMPORTANTE:** Termine de tomar  
toda esta medicina  
(a menos que el  
doctor le diga que  
deje de tomarla).

Líquido rosa

**CITY PHARMACY**  
10 E. Wabash  
Chicago, IL 60601  
(312) 555-5555

## CARE MANAGEMENT Medical Home

Goalkeeper



Jane Doe

### Goals

To join a family trip to Hawaii in January. To improve her communication skills.

### Track


PAIN ASTHMA SCHOOL MOVEMENTS

### Optional Updates

WHAT'S NEW PHOTO UPDATE

VIEW TRACKING HISTORY

**Plan The Dinner Plate –  
for your 15-18 month old**  
It's easy to do – just split the plate into 3 parts,  
the largest part for vegetables.




This dinner plate has:  
• 2 servings  
vegetables  
• 1/2 serving  
rice & beans  
• 1 serving fish

Start with 1 tablespoon  
of each food and let  
your toddler ask for  
more!

**Breakfast**

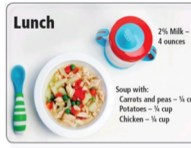
2% Milk –  
4 ounces



Cereal – 1/2 cup  
Pear – 1/2 of a pear, small bite-sized pieces

**Lunch**

2% Milk –  
4 ounces



Soup with:  
Carrots and peas – 1/2 cup  
Potatoes – 1/2 cup  
Chicken – 1/2 cup



**Parent Education  
through the Lens of  
Adult Learning  
Theory**

**Tanya Hatfield, MSN,  
RNC-NIC, C-ELBW**

## Poll – What made your last learning experience successful?

- I selected the topic, or had a choice in selecting what I learned
- Learning built upon existing knowledge
- I understood why the learning would benefit me
- I was motivated to learn
- I knew I could apply the new knowledge or skill right away
- Other factors
- None of the above



# What We Know About Adult Learners

Independent & self-directed learners

Learnings build on prior experience

Drawn to learning with clear objectives and rationale

Motivation to learn is internal

Desire to learn skills they can immediately apply

(Knowles et al., 2015)



# Applying Adult Learning Principles to Parent Education

Actively involve families in their learning needs

Recognize that experience is the basis for new knowledge

Help families understand the “why”, Make things relevant and impactful.

Assist families in solving problems & development of skills

Maintain positive learning environment & recognize growth

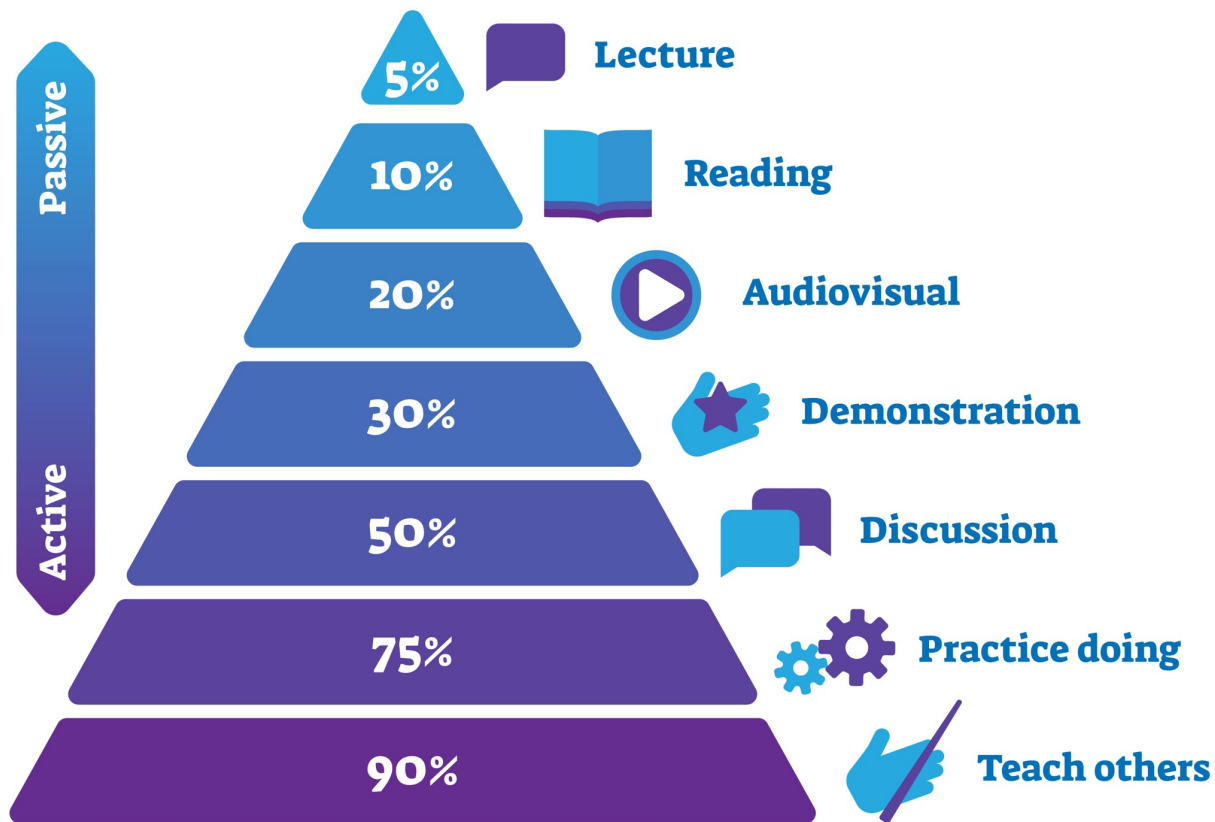


# How Do You Learn Best?

## Learning Assessment & Styles



- Listening
- Reading
- Watching
- Discussion
- Practice
- Teaching



"Tell me and I forget, teach me and I may remember, involve me and I learn."

- Benjamin Franklin




**How we teach &  
communicate  
matters as much as  
What we teach &  
communicate**

# What We Say & How We Say It

Using clear, concise communication



 r/explainlikeimfive ·

2 months ago 



4.9k



ELI5: why do hypodermic needle ends not fill with a tube of skin like pushing a straw through cheese does?

Other



580 Comments



Share



Save



Hide



Report

95% Upvoted



2 mo. ago  2

Oh i know this one. Im an engineer at a medical products plant and this was one of my projects about a year ago. The phenomena you are describing we define as coring. It also is related to particle shedding where the needle pulls small particles from the rubber stopper, vial cap or the skin. The two are related and the elastic properties of skin are such that if we mitigate coring in rubber we will prevent coring in skin. As far as particles, you will always drag skin particles from the outside of the body to the inside. That is why it is very important to clean the skin and surrounding areas.

The needles are designed to stop coring by utilizing a beveled edge that slices a tear in the object being penetrated and wedge itself into the opening. They are highly polished and chemically sharpened. Newer needles even use 3 or 5 beveled edges in a complex patern to allow for the needle to pass with less resistance and thus less chance of coring/ particle shedding.

Finally the sharpened concave area of the inside of the needle is dulled using micro sand blasting so that it cannot shave a core of material upon entering. It will continue to gradually wedge the material out of the way while the outside edges cleanly cut.

We do testing to ensure that all needles produce a fewer number of particles than the customer, pfizer and moderna, will allow. Usually we meet this criteria with far greater margins of saftey than what was required of us and any foreign bodies will be chemically inert and microscopic ~50nm. We have produced needles with foreign body presence low enough to be used for ophthalmic (eye needles) situations. Which is really important cause eye skin is different and your eye has no filtration system.

 333   Reply [Share](#) [Report](#) [Save](#) [Follow](#)



2 mo. ago 🏆 ⭐ 📄 2



It's more like pushing a straw into a juice box. The pointy end of the straw punctures the opening, and the film is pushed out of the way.

↑ 2.1k ↓ 🗨 Reply Share Report Save Follow



2 mo. ago

This was an awesome answer!

↑ 150 ↓ 🗨 Reply Share Report Save Follow

# Important Concepts for Effective Teaching & Communication

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1

## Simple, Clear Communication

Utilize plain language  
Avoid medical jargon  
Early, adequate and comprehensive education (Gadepalli et al., 2017; Labrie et al., 2021)

2

## Family Focused

Personalized education & care plans, *that parents help create*  
Reliable resources available when families need it (websites, written materials, podcasts)

3

## Culturally and literacy sensitive

Education materials available in multiple languages  
Accessibility to interpreter services  
Materials that represent diverse backgrounds

4

## Evaluate Effectiveness

Confirm understanding before offering new topics  
Utilize Teach-Back methodology

- Reflection of our effectiveness

# Resources for Parent Education

**imps** improving maternal and perinatal outcomes  
www.thetimp.com

## NICU Discharge Path

Preparing for Your Baby to Come Home

This sheet has been designed as a guide to educate families on the necessary steps that occur going home. You may use this tool to track your baby's progress by crossing out the square completed that activity. All activities may not apply to every baby. Cross out only the activities that apply to your baby. If you have any questions regarding the above steps, please contact your primary nurse.

PARENT NAME(S): \_\_\_\_\_  
FOR BABY: \_\_\_\_\_ DATE OF BIRTH: \_\_\_\_\_

	At Admission Your Baby Weighs: _____	When Your Baby Weighs: 1500-1600 g (3 - 3 ½ lbs)	When Your Baby Weighs: 1600-1800 grams (3 ½ - 4 lbs)	Two Weeks Before Discharge: Your Baby Weighs: > 4 lbs	One W Before Your Ba
<b>Nutrition</b>	<ul style="list-style-type: none"> <li>Intro to feeding: breast, nipple, tube, or IV nutrition (gesteased by a dietitian)</li> <li>Meet with lactation consultant</li> <li>Learn how to build your milk supply</li> </ul>	<ul style="list-style-type: none"> <li>Begin feeding your baby (breast, nipple, tube, or IV nutrition)</li> </ul>	<ul style="list-style-type: none"> <li>Your baby is gaining weight</li> <li>Review breast feeding or pumping with lactation consultant</li> </ul>	<ul style="list-style-type: none"> <li>Learn how to mix formula (if applied)</li> </ul>	<ul style="list-style-type: none"> <li>Your baby</li> <li>Learning</li> <li>Purchas</li> <li>Order &amp; (if neede</li> </ul>
<b>Baby Care</b>	<ul style="list-style-type: none"> <li>Learn about skin-to-skin contact: How can it benefit my baby?</li> </ul>	<ul style="list-style-type: none"> <li>Learn baby care: taking temperature, changing diapers, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Learn how to bathe your baby</li> </ul>	<ul style="list-style-type: none"> <li>Decide on circumcision</li> <li>Get shots (for babies 2 months old)</li> <li>Demonstrate baby care competence with nurse</li> </ul>	<ul style="list-style-type: none"> <li>Ask your question baby at f</li> </ul>
<b>Medications &amp; Equipment</b>	<ul style="list-style-type: none"> <li>Learn what your baby's monitors can tell you</li> </ul>	<ul style="list-style-type: none"> <li>Watch and learn about your baby's medications</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate giving medications to your baby</li> </ul>	<ul style="list-style-type: none"> <li>Learn about changes to your baby's medications</li> </ul>	<ul style="list-style-type: none"> <li>Fill presc</li> <li>Bring me</li> <li>Have any questio</li> </ul>
<b>Your Health Care Team</b>	<ul style="list-style-type: none"> <li>Meet your: Doctor, Nurse, Case Manager, Social Services</li> </ul>	<ul style="list-style-type: none"> <li>Attend learni</li> <li>missio</li> <li>Be ab</li> <li>Clari</li> <li>Healt</li> </ul>			
<b>Tests</b>	<ul style="list-style-type: none"> <li>Your baby will have multiple tests while in the hospital. If you have any questions, please ask your nurse or doctor.</li> </ul>	<ul style="list-style-type: none"> <li>Eye sk</li> <li>for b</li> <li>Clari</li> <li>the ab</li> <li>PT, C</li> </ul>			
<b>Education</b>	<ul style="list-style-type: none"> <li>Begin journaling about your baby's NICU journey</li> <li>Learn about your baby's diagnoses</li> </ul>	<ul style="list-style-type: none"> <li>Learn ab</li> <li>Baby</li> </ul>			
<b>Discharge Planning</b>	<ul style="list-style-type: none"> <li>Begin planning: Add your baby to your insurance plan; Update person</li> </ul>	<ul style="list-style-type: none"> <li>Choose your pediatrician; your case manager can help.</li> </ul>	<ul style="list-style-type: none"> <li>Get your baby's space ready at home (bink, bottles, clothes)</li> <li>Get helpful hints from your nurse</li> <li>Establish support system at home</li> </ul>	<ul style="list-style-type: none"> <li>Learn about equipment needed for home (if applied) (apnea monitor, oxygen use, tube feedings)</li> <li>Arrange an extended visit or overnight</li> </ul>	<ul style="list-style-type: none"> <li>Return to Th</li> <li>Learn sleep positions: "Back to Sleep"</li> </ul>

plain language thesaurus for Health Communications



**Descarga la aplicación Hand to Hold**

Únase a la Comunidad Hand to Hold para tener conexión compasiva con otros padres de la NICU y los Especialistas en apoyo familiar de Hand to Hold durante cualquier etapa de su experiencia de la NICU. Descargar en la App Store de Apple o Google Play.

## 瞭解 壞死性腸炎 (NEC)

### NEC

**什麼是壞死性腸炎？**  
壞死性腸炎 (necrotizing enterocolitis, 發音為 [neck-ro-lee-zing en-tear-oh-ko-lee-tis]) 這個字，又稱 NEC，描述一種腸道的疾病。  
在罹患 NEC 的情況下，腸道內襯有一部分破損，會影響嬰兒消化系統處理食物的能力。

**什麼會導致 NEC？**  
NEC 成因未知。NEC 最常見於早產嬰兒和/或已經生病的嬰兒。其他可能風險因子可能包括：  

- 低出生體重
- 絨毛膜炎 (胎盤和圍繞嬰兒周圍的液體感染，最常發生於從母親羊水破了到嬰兒出生的時間較長時。)

就  
5:  
感興趣  
(低或太高)

極治療有助於改善存活機會。



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Moderated  
Q&A Panel  
Discussion

Ashwini Lakshmanan,  
MD, MS, MPH

# Q&A Panel Discussion

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## Moderator

Ashwini Lakshmanan, MD, MS, MPH – Children’s Hospital Los Angeles

## Panel

Carmin Powell, MD – Watsonville Community Hospital

Lee Sanders, MD, MPH – Stanford Pediatrics

Tanya Hatfield, MSN, RNC-NIC, C-ELBW – University of California San Francisco



**Key Takeaway  
& Closing**

**Ashwini Lakshmanan,  
MD, MS, MPH**

## Key Takeaways

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- Consider systems level changes
- Definitions of Literacy v. health literacy and health literacy complexity
- Consider the association of health literacy and health outcomes
- Consider adult learning theory with parent education
- Consider simple concepts for teaching and communication

## What's Ahead?

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### *IP2022 Conversation Circle*

**How to build Family Advisory Council in your local NICU**

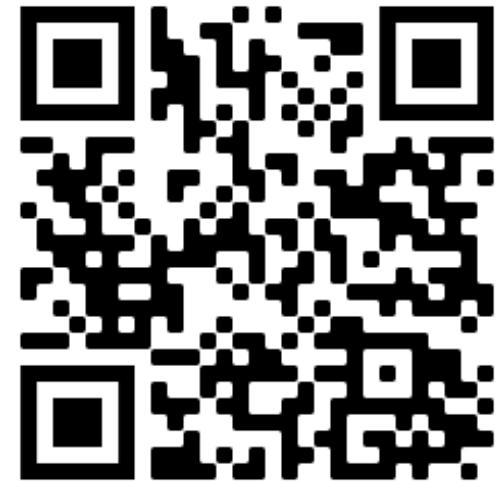
September 15, 2022

11am - 12:30pm PST

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