

# DESIGN THINKING FOR HEALTH CARE

## Start With Empathy

Jules Sherman, MFA Design

FEAR

"Is she alive?"

EXPECTATION

Loss of control

Rushed

Checklists

Keeping the baby @ the bedside for longer

PROCEDURE

Lack of baby dosages

Formulas

Apgar Score

INFORMATION

EMPs

Figuring things out between medical team on the

GUILT

ing of situation by son

Attempt to

Sensory overload

of medical team

Repetition of info

Difference in literacy process



# 25%

of mothers do not  
breastfeed immediately  
after birth in the US.

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of mothers do not  
breastfeed immediately  
after birth in the US.

- preterm birth
- tongue tie
- lack of sucking reflex
- birth trauma
- other health or attitude issues

# Current Practice:



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# Current Practice:



Expressing into a plastic spoon,



expressing into a tiny vial...







# USE:

A container or pump that allows a woman to collect her colostrum the first 1-3 days after birth.

# USABILITY:

Colostrum gets stuck in the valve of the pump, and current containers for hand expression are awkward and confusing. Transfer of colostrum to a syringe (for feeding) is inefficient and non-sterile.

# MEANING:

***Colostrum gets stuck in the valve of the pump.***

Meaning: Frustrating for mom and nurse since colostrum is “liquid gold” for newborn babies.

***Current containers for hand expression are awkward  
And confusing.***

Meaning: current containers are hard to hold, and don't set appropriate quantity expectations for new mothers who feel under pressure to feed their sick baby.

***Transfer of colostrum to a syringe (for feeding) is inefficient  
and non-sterile.***

Meaning: scraping colostrum off of valves and sides of containers creates anxiety in moms that there is “not enough” since much of the colostrum is lost during transfer to a syringe. This creates lower milk production due to anxiety. This translates to “I'm not enough.” “I'm not a good mother,” and “I could kill my baby.”

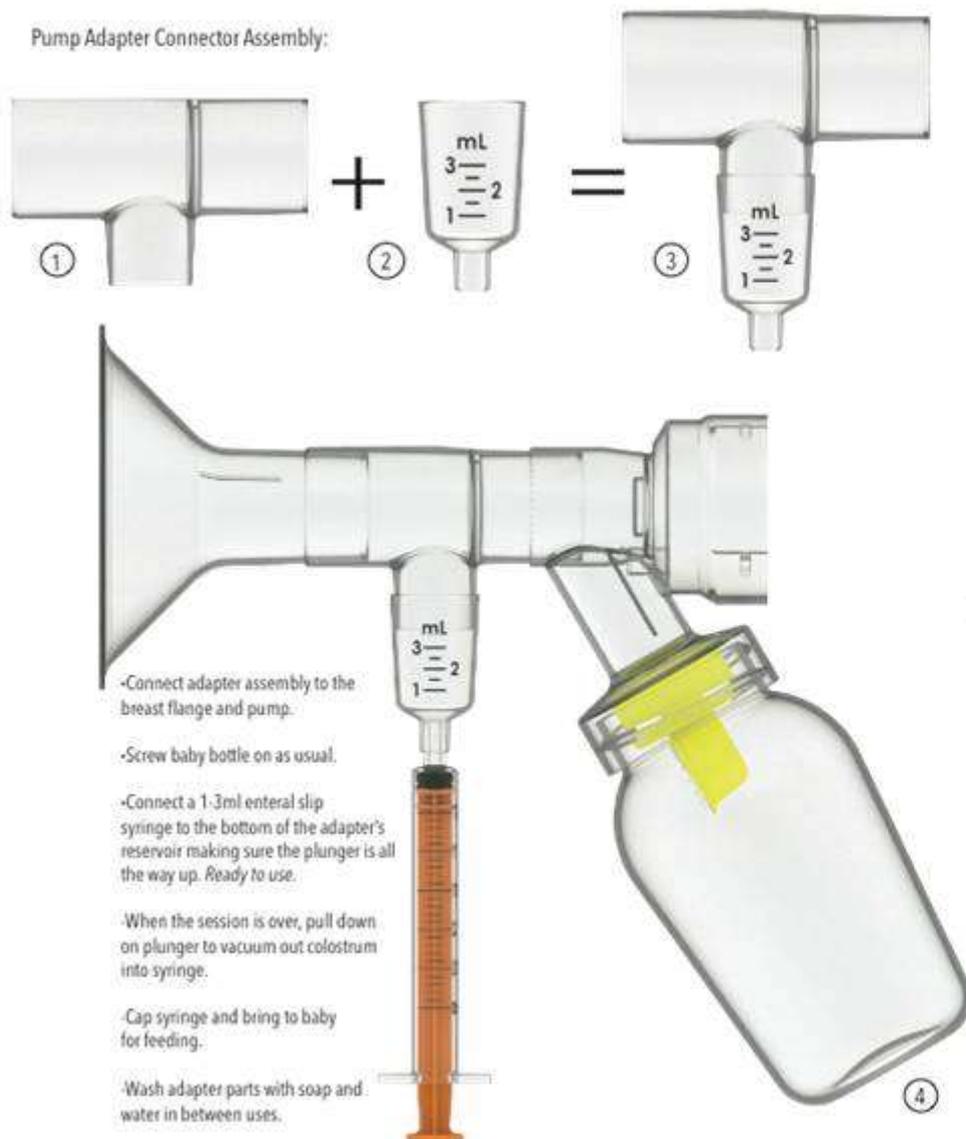
# Primo-Lacto®

Making it easier to supply the best nutrition for your baby.

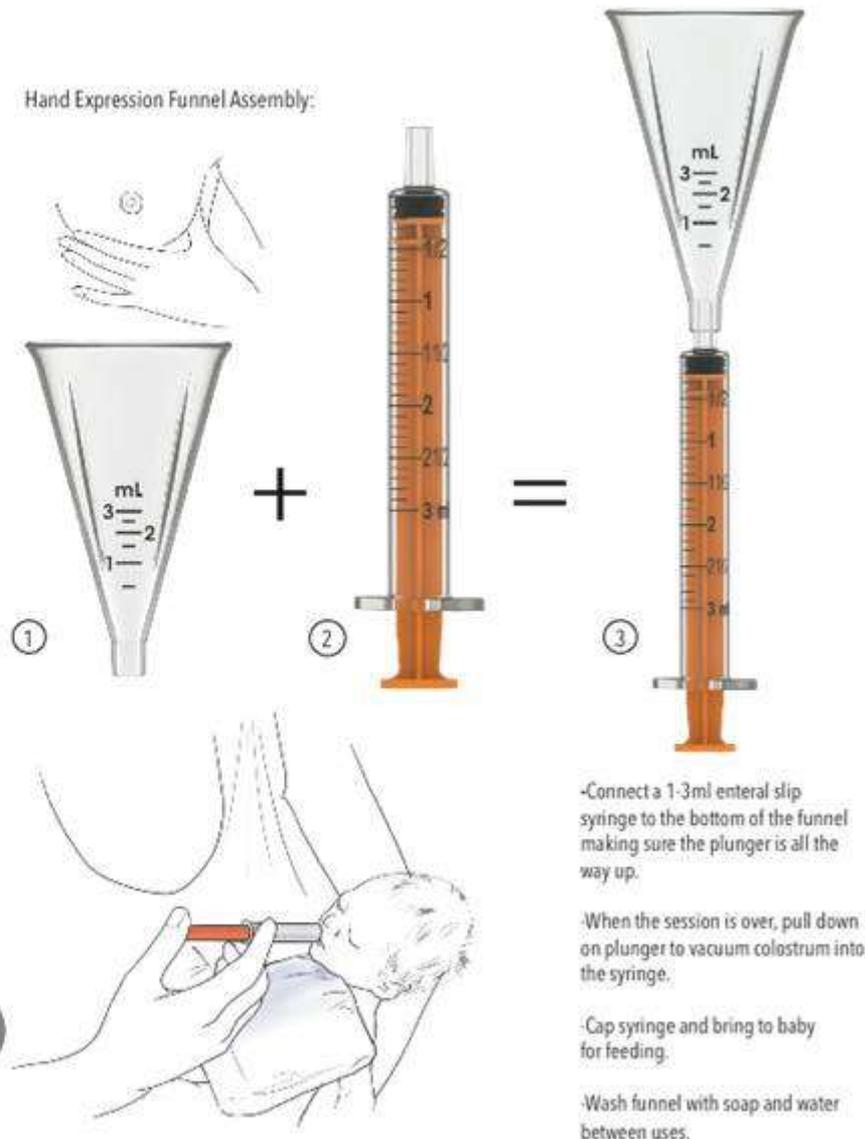
\*Primo Lacto is packed sterile and should be washed with soap and water in between uses during a mother's colostrum phase (1-3 days).

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## Pump Adapter Connector Assembly:



## Hand Expression Funnel Assembly:



-Connect adapter assembly to the breast flange and pump.

-Screw baby bottle as usual.

-Connect a 1-3ml enteral slip syringe to the bottom of the adapter's reservoir making sure the plunger is all the way up. Ready to use.

-When the session is over, pull down on plunger to vacuum out colostrum into syringe.

-Cap syringe and bring to baby for feeding.

-Wash adapter parts with soap and water in between uses.

-Connect a 1-3ml enteral slip syringe to the bottom of the funnel making sure the plunger is all the way up.

-When the session is over, pull down on plunger to vacuum colostrum into the syringe.

-Cap syringe and bring to baby for feeding.

-Wash funnel with soap and water between uses.

# Solution:



# Results:

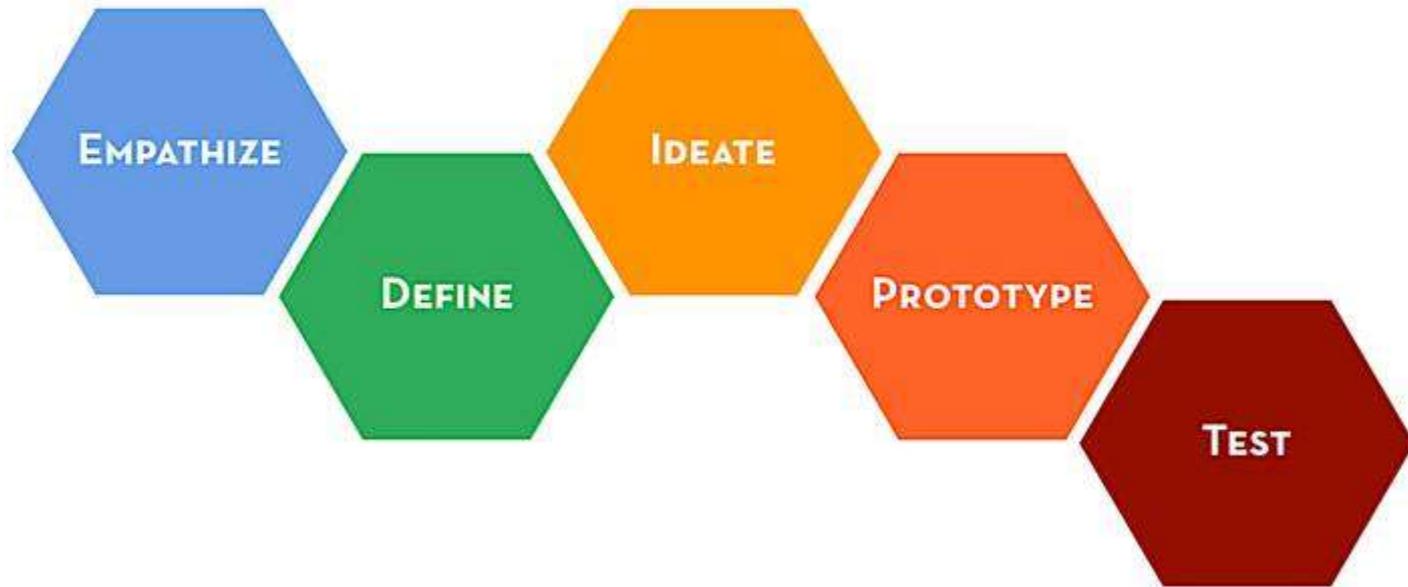
75 moms tested at 3 different hospitals.

80% mothers agreed that using Primo-Lacto is easier and more efficient than standard practice.

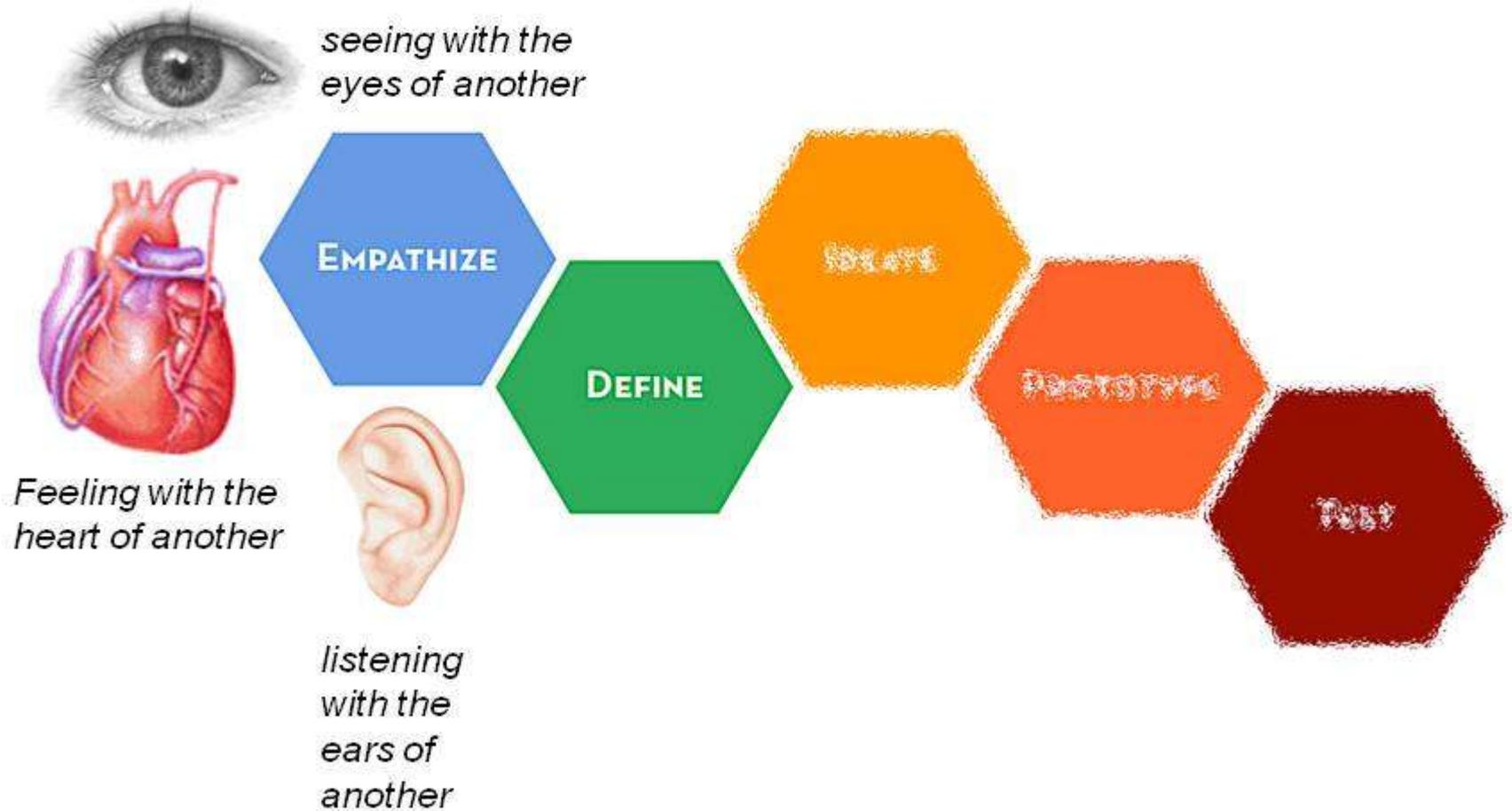
98% of nurses or lactation consultants agreed that using Primo-Lacto is faster and yields more colostrum than standard practice.

Of those 75 mothers who used Primo-Lacto, 95% were discharged either breastfeeding or pumping breast milk.

# Human Centered Design Paradigm



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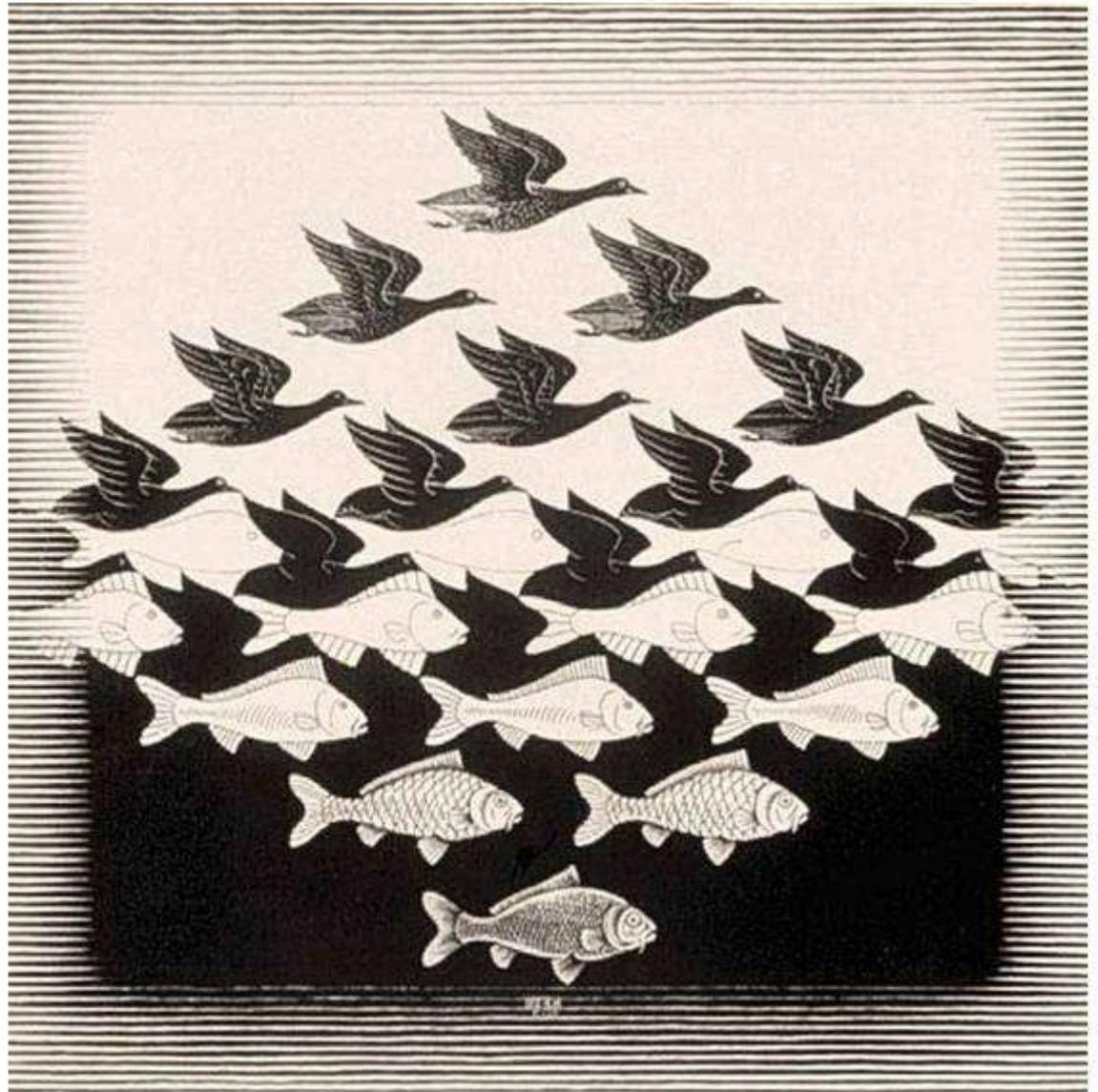


## **Observation:**

The action or process of observing something or someone carefully in order to gain information.

# Insight:

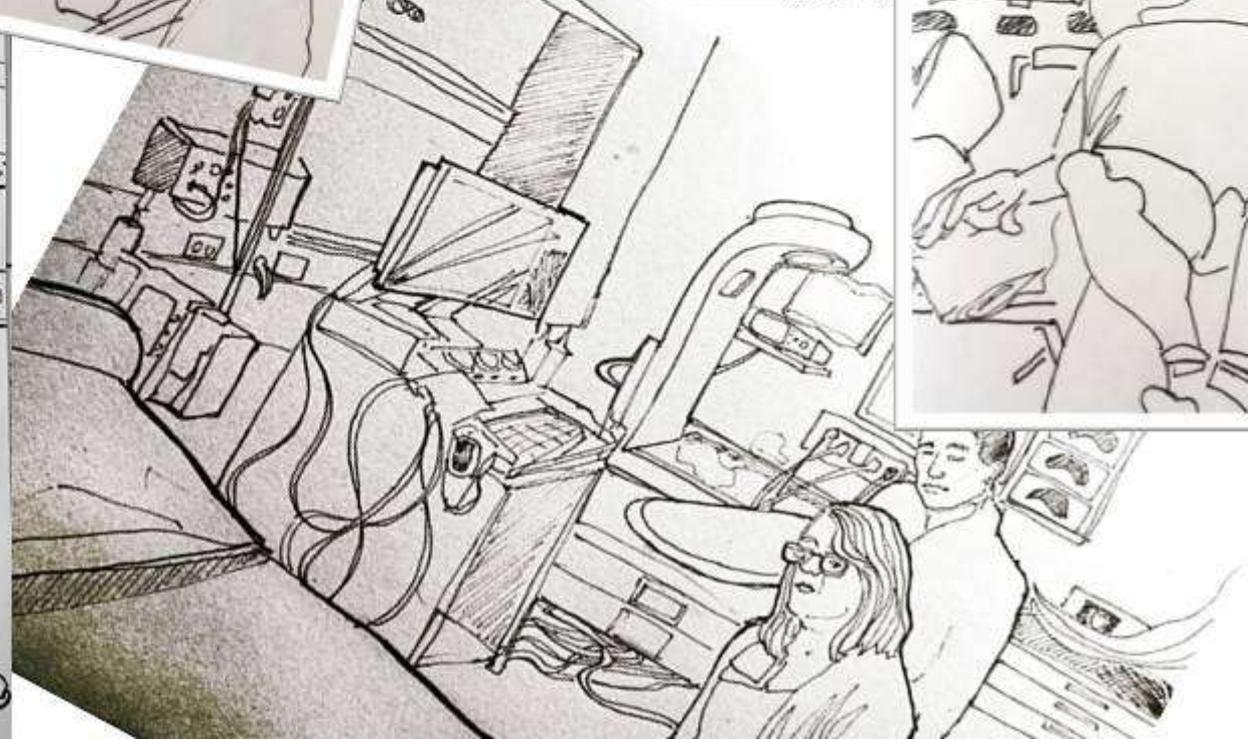
The capacity to gain an accurate and deep understanding of a person or thing.











## Need statement:

USER needs X because Y ← emotional components

In their own words: New mothers

### Words

"I wish I knew that I should have done something before hand to make breast-feeding easier. It really hurt when my nipple tip bled."

Johanna M.

"I almost threw up while in labor because I just ate a hamburger right before - which is probably not recommended. But hey, having a baby is like running a marathon. Gotta treat yourself a bit."

Olivia's mom

### Feelings

- Regret at being unprepared
- Frustration when she had trouble feeding her baby. → worried about malnourishment
- Inconvenience, annoyance of the temporary pain.

• justified for being indulgent, after all, 9 months of abstinence from junk food is a long time

• Grossed out from the hospital food that she felt compelled to have her husband drive out to buy a burger.

### Words

"There's a photo of me in my mother-in-law's foyer of showcasing my huge, braless boobs while I'm hanging onto my newborn for dear life... Yes, I know it's about the baby, but when there is a photo involved, it's about me too."

Mother on the in. catemom blog

"If your 'real' doctor doesn't deliver you, you sort of don't care anymore you just want the baby out \*whoever's going to make that happen, your partner, a nurse, or even a f\*cking janitor - seems perfectly fine."

### Feelings

- disappointed about her sudden intrusion of privacy
- Self-conscious about her image on camera + preferred that her family members acted with more sensibility.
- feels grossed out about how she looks right after birth.

• When she is in pain (b/c she's pushing a human being out of her body, she gets urgent and irrational. Anything goes as long as it ends the process.

• indifference toward OB credentials in the critical moment.

• annoyance with anyone/anything that could make her situation more difficult.





FOR  
RE

ral birth and I really wanted  
it felt like they kept pushing  
n, obviously, but I was trying  
n the hall just shrieking and  
ey kept saying, "Hey, the  
en you're in that much pain  
op, stop it." And then they  
so pushed too early and then  
o get him out, my older son,  
with this big thing on his head  
st thought no thank you. I  
d to squat. I just had the  
e on my back, which hurts

Laura Hedli 10/28/16 4:24 PM  
**Comment:** Expectations: desired b  
experience; expression of what her vi  
for her birth

Laura Hedli 10/28/16 5:13 PM  
**Comment:** Physical: Pain -- no epi

Laura Hedli 10/28/16 4:27 PM  
**Comment:** Physical: pushing then

Laura Hedli 10/28/16 5:00 PM



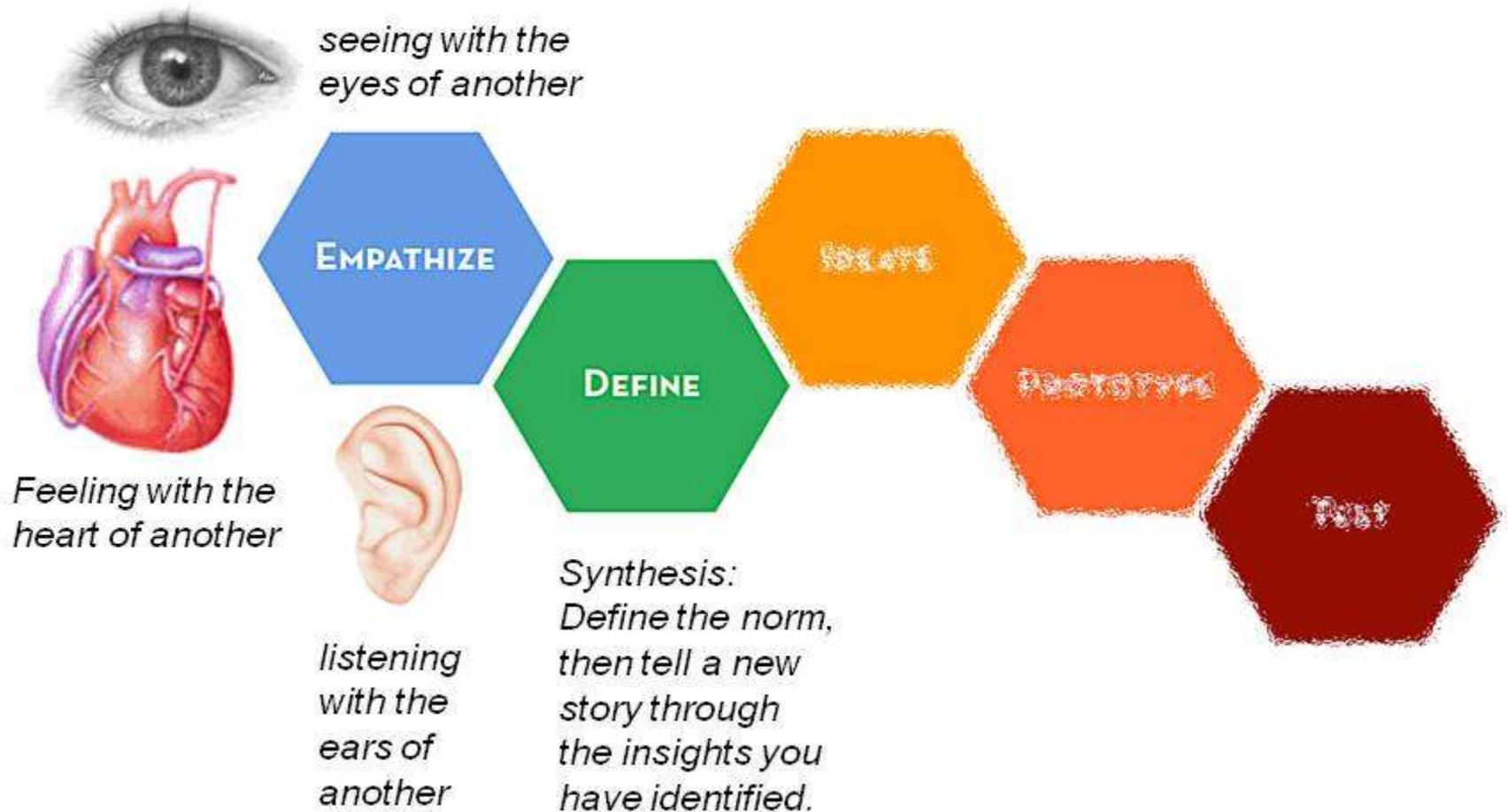
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28 FSPKR3: The opposite?  
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30 FSPKR1: I was surrounded by a lot of p  
31 pretty harrowing home birth s  
32 So I feel like if you can be in  
33 best of all worlds. So that's v  
34  
35 INT: So you mentioned on your fir  
36 hannening there. Did they giv

...ence that that was going to be better... so they had me on my back, which hurts

more, and then I discovered later that the midwife had never had children before  
And so she kept looking at the  
don't feel like pushing. And  
like you can't find something  
and they'd say, "No, no, no, d  
know. And so when I talked  
your body knows." And so I  
also think is wrong thinking.  
just me than all the people I h  
child again, I had pneumonia,  
and so that just sort of blew th  
my birth experience, which w  
birth.



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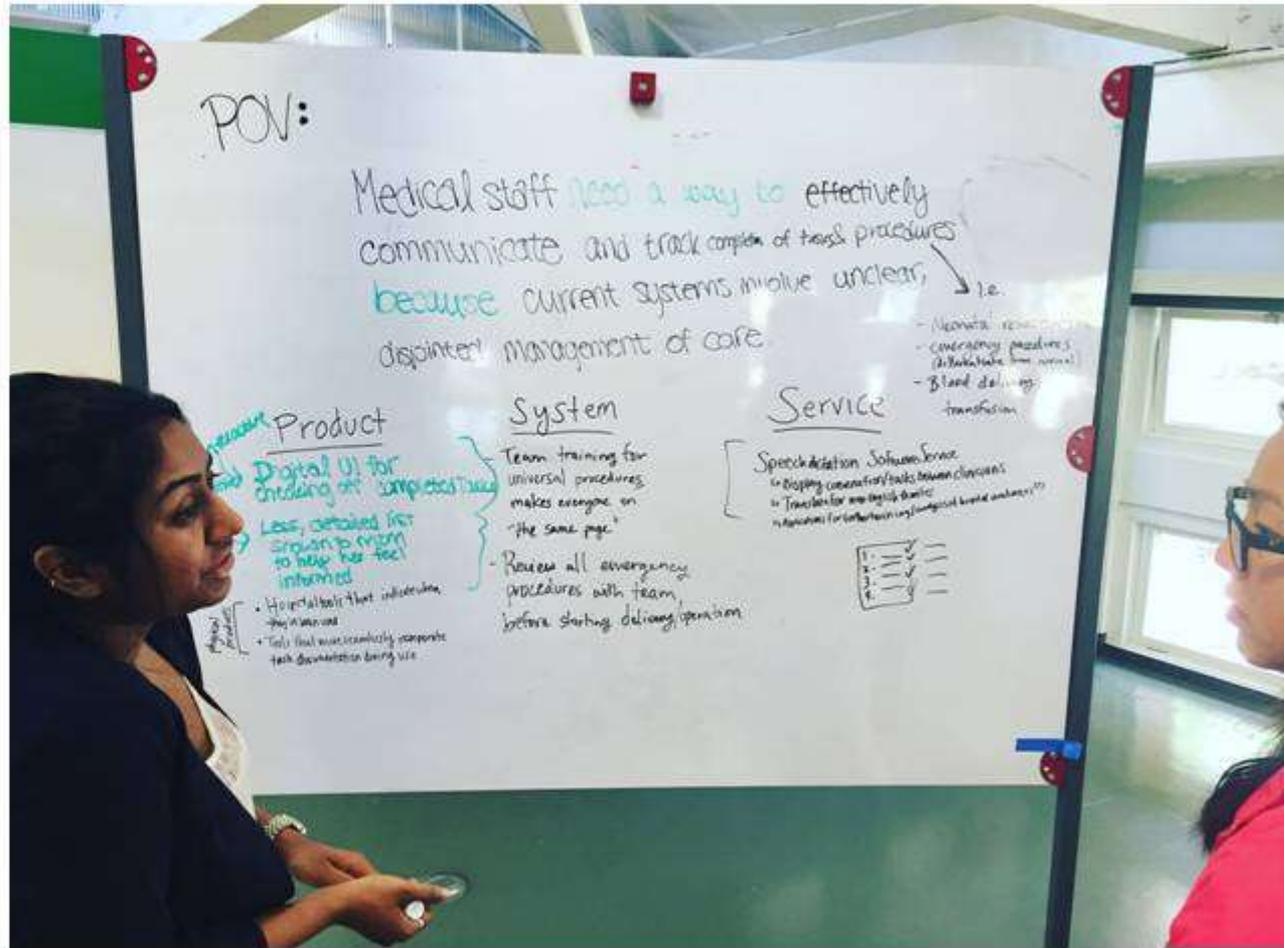


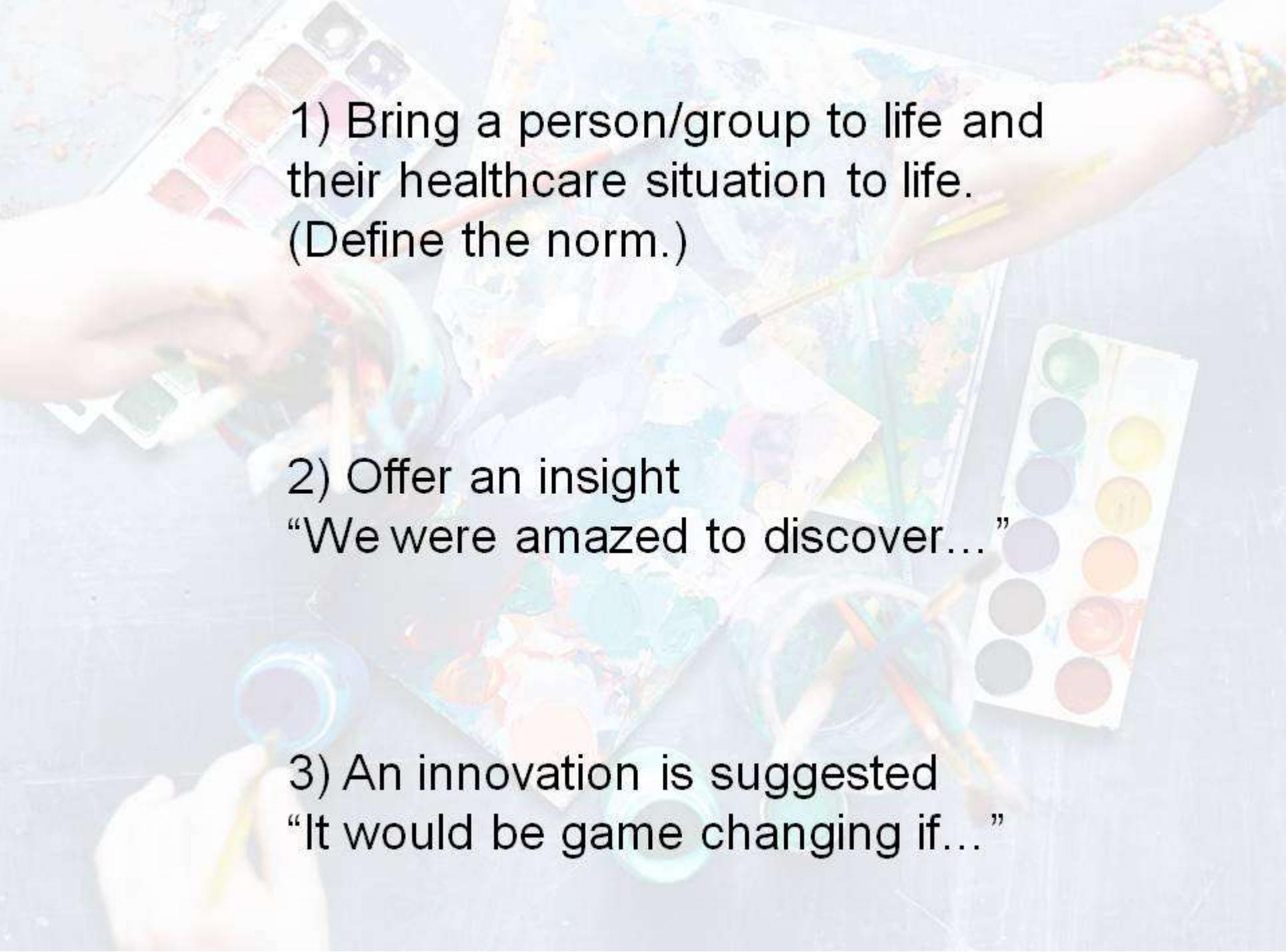
DEFINE

*Reframe*









1) Bring a person/group to life and  
their healthcare situation to life.  
(Define the norm.)

2) Offer an insight  
“We were amazed to discover...”

3) An innovation is suggested  
“It would be game changing if...”

