



MAJOR PROJECT

Babycare kit

IDPS-2

Acknowledgement

The success of this project required a lot of help and guidance from many people. All that we have done for this project is only due to their supervision and guidance and we would not forget to thank them.

We respect and thank Prof., Rahul Baumik, for providing us with an opportunity to work on this project and for giving us the support guidance which made this project a success.

We thank the faculty of architecture and design, PES University, Bangalore.

We would also like to thank our fellow classmate, for their constant criticism and feedback, during research, brainstorming and ideation.

Priya Srivastava

Shreya Venkatesh

Prof., Rahul Baumik



Research

SECONDARY & PRIMARY

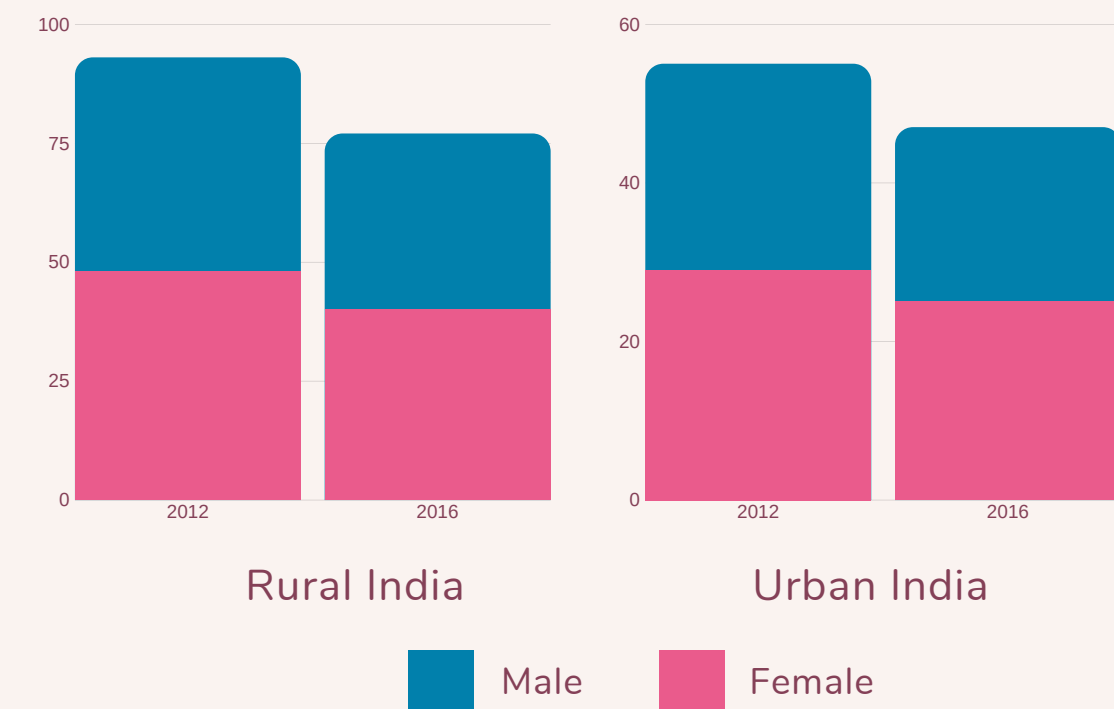
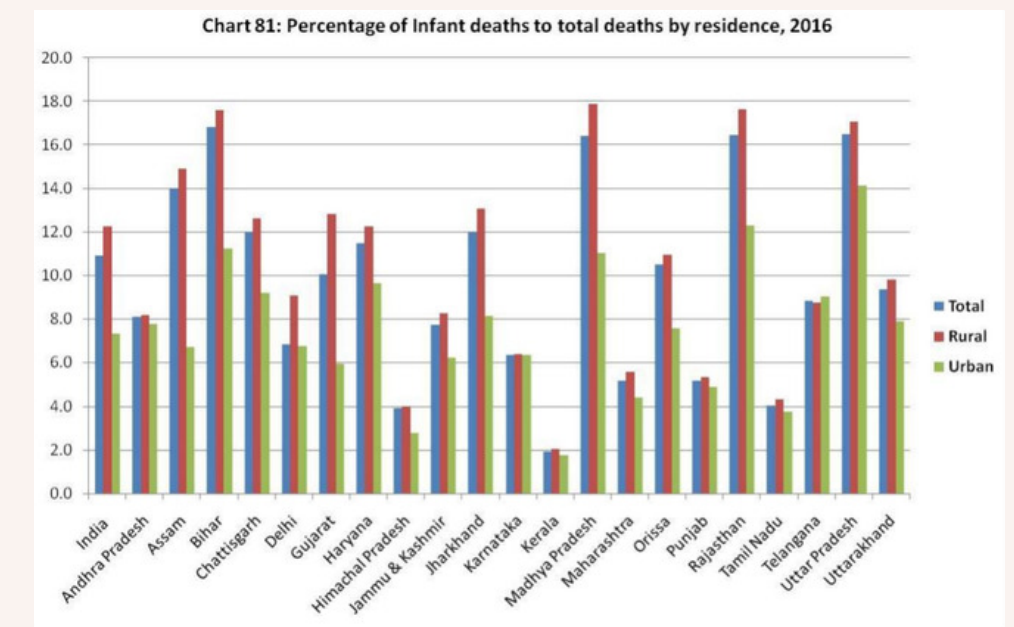
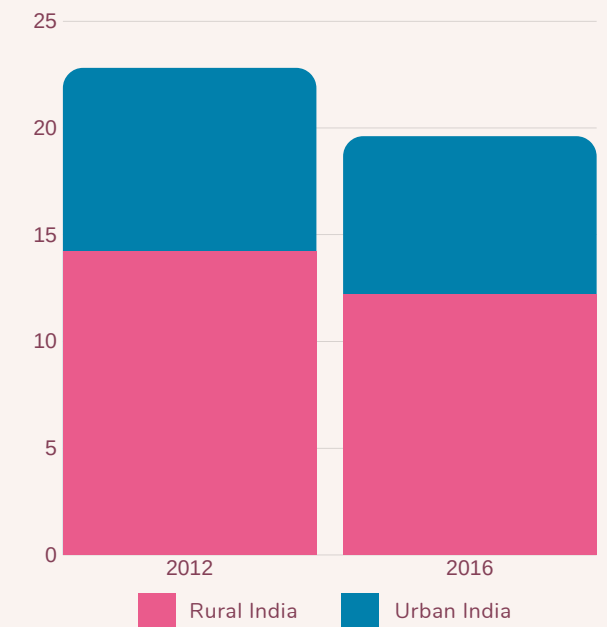
Infant Mortality

From the survey results we can see a significant drop in the number of infant deaths in a span of 5 years.

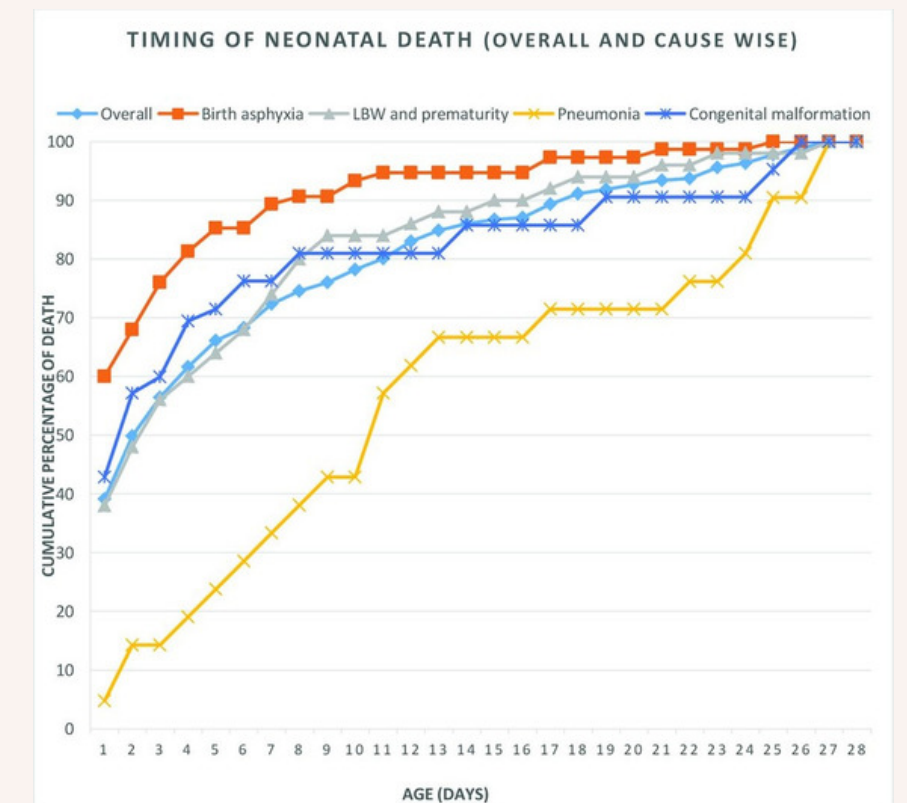
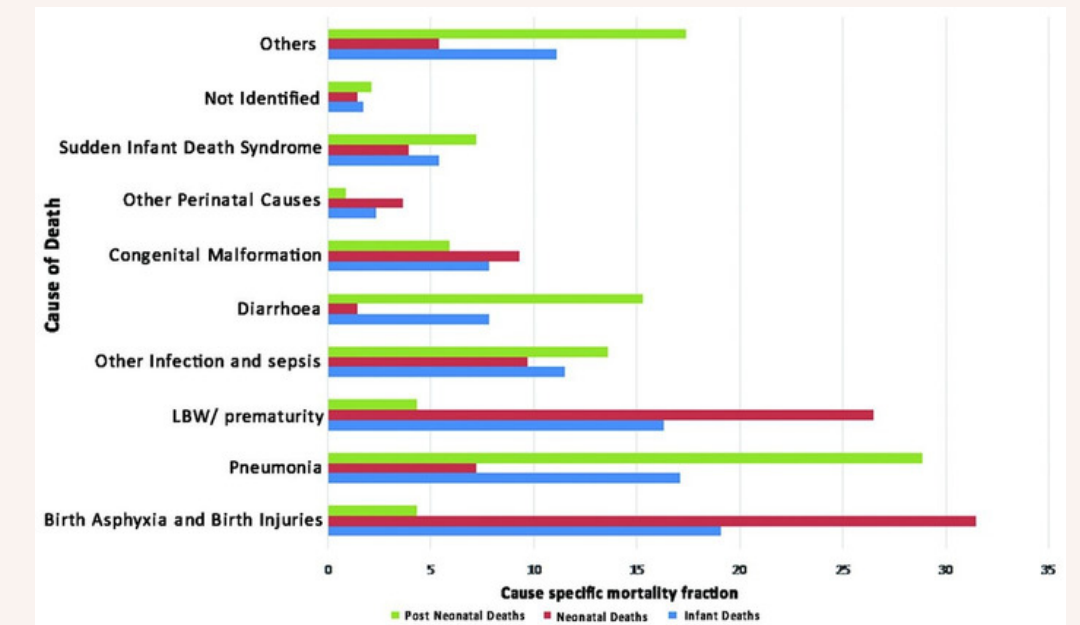
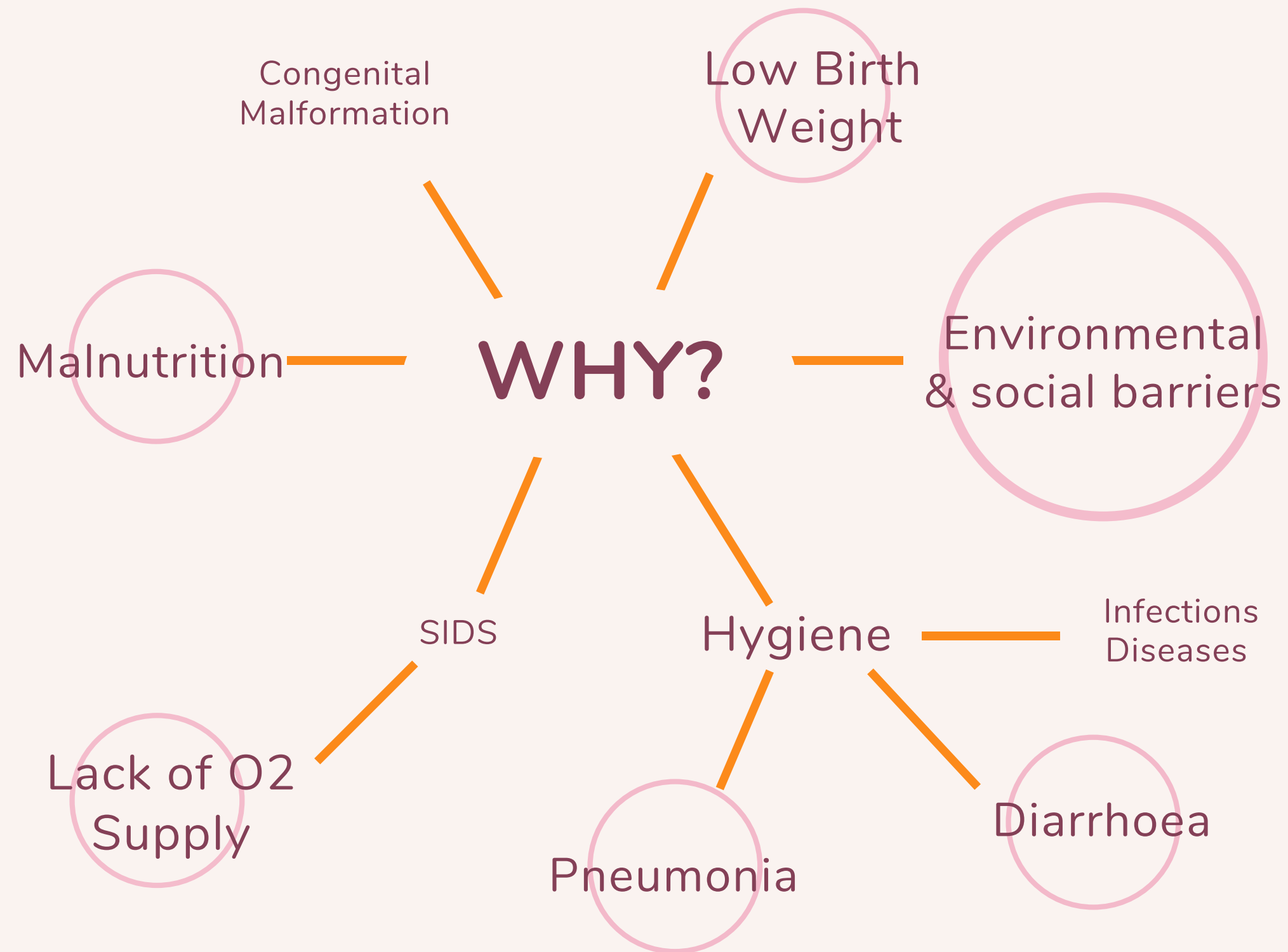
The mortality rate has reduced by **0.3%**

The highest mortality rate is seen in **Madhya Pradesh (16.4)** and lowest being **Kerala (1.9)**

On further research we found out that amongst those deaths the number female deaths is larger than that of the male by **7.1%** avg



Infant Mortality



Similar product



Cradle Hospital

- Complete package from gynac visits to delivery
- Basic necessity box provided
- Teaching sessions included like how to breathe during labor, feed, change diaper, first aid

Flinto Box Toy box

- Based on the age
- Helps in development
- Games & activities
- Monthly subscription



Taluk hospital Magadi

INSIGHTS

- There is no pediatrician
- There is an intensive care unit for new born
- If there is any complication during birth, both mother & child are sent to Vani villas, Bengaluru.
- The mother & child are not separated, kangaroo style.
- The mothers are given Rs.5,000 - 6,000 every month.



Dr. Amulya Pediatrician

INSIGHTS WHAT WE CHECK DURING EVERY CHECK-UP

On every monthly check-up the following values are recorded:

- Heartbeat / breathing
- Weight
- Height
- Temperature

Other than the basic check-ups the babies are give immunization shots



Mrs. Amruth Parent

INCIDENT

" In the middle of the night my daughter woke up from sleep, crying. We tried everything possible but nothing worked, after a while when we checked, her temperature was way too high & we thought of going to the doctor, but at that hour the local hospital was closed and we had to travel all the way to Mysuru with a crying baby. Later she was admitted for 2 days to keep check on her temperature."

INSIGHTS

- How to calm her daughter
- How to bathe her, alone
- What to do if she refuse to be fed
- What are the solid fruits that I can feed her



Time line

AGE

0 - 1 month

2 - 3 month

4 - 7 month

REFLEXES/SKILLS

Mouthing reflexes
Startle (Moro) reflex
Grasp reflex
Stepping reflex

Motor Skills
Language Skills
Social/Emotional Skills

Motor Skills

Language Skills

Social/Emotional Skills

DEVELOPMENT

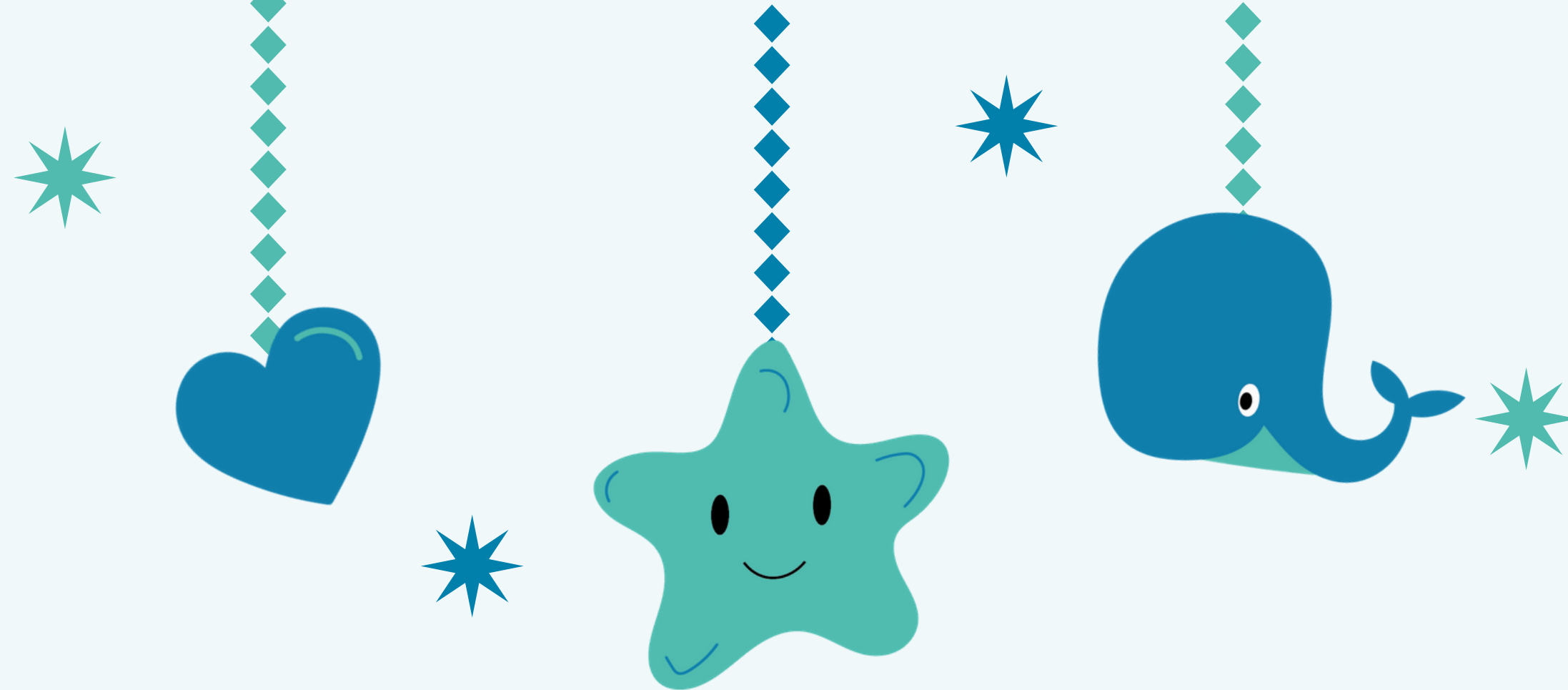
Raises head when on stomach
Keeps hands in tight fists
Focuses 8-12 inches away,
Hearing a noise

Opens and shut hands
Follows moving objects with eyes
Cooing sounds
Smiles at familiar faces
Enjoys playing

Rolls over both ways
Transfers objects from hand to hand
Explores objects by banging, shaking, with
hands & mouth


Laughs
Babbles consonants

Distinguishes emotions by tone of voice
Responds to pee-ka-boo



Final concept

BRIEF, COMPONENTS, USES



Brief

“ Starter kit for new mothers to
help take care of their new born
in rural India ”

Idea

WHO

- Infants
- New mothers

WHAT

- An awareness kit
- A system connecting mothers with the necessary

WHY

- To try & reduce infant mortality rate in rural India
- Help new mothers embrace their new life with ease

WHERE

- Rural India
- (Urban rural)



Stakeholders

Primary



Baby

New Mother

Secondary



NGO

Hospitals

Tertiary

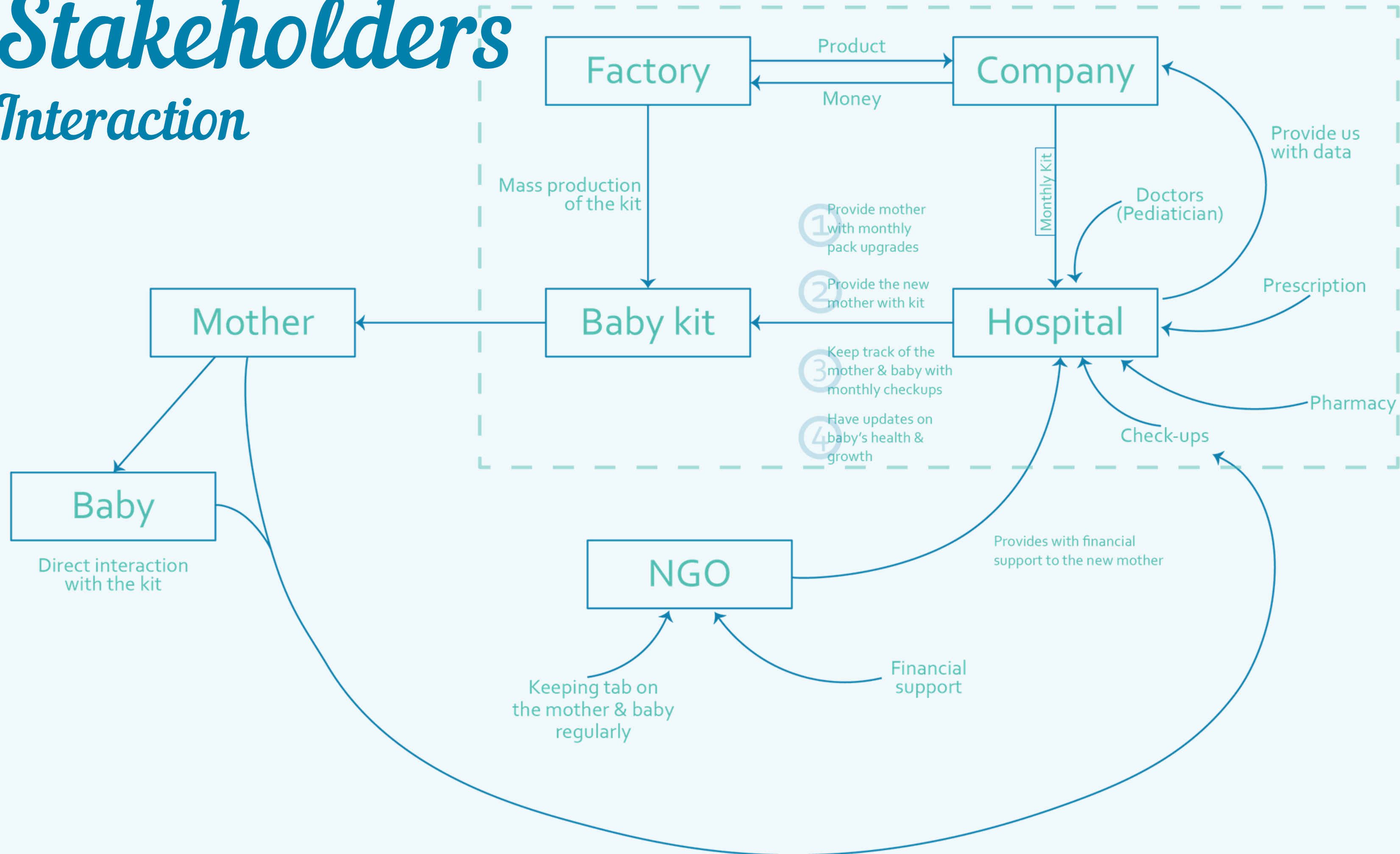


Pharmacies

Factories

Families

Stakeholders Interaction



Journey Map

- ① Successfully delivers baby @ Hospital
- ② First check-up by the doctors (for the kid)
- ③ Hospital provides her with the subscription option.
- ④ Once she selects for the subscription, she is educated by the doctors/nurse ~~on how~~ ^{about} the kit.
- ⑤ Goes back home and starts using the kit.
- ⑥ Comes back to the hospital for regular check-ups.
Where the subscription is upgraded.

○ Kit's elements are ~~re~~produced in factory and assembled

○ A batch (consisting of 20 units) is delivered to the Hospital monthly.

On alternate months, the upgradable elements are delivered ~~to~~ to the Hospital.

These kits and upgrades are then under the pharmacy's care, and are handed out based on prescriptions.

What? Why? How?

PROBLEM

Pneumonia

Malnutrition

Diarrhea

CAUSES

Germ
Born prematurely
Not properly dried after bath
Odd bath timing

Lack of Nutrition
Lack of breastfeeding
Low intake of water
Digestive disorder

change in the mother's diet
A bacterial infection
Use of antibiotics by
baby or mother
Odd bath timing

SOLUTION

- Checked by the pediatrician
- No codeine or dextromethorphan
- Antibiotics

- Monitoring progress
- Calculate body mass index regularly
- Promote breastfeeding

- Change your baby's diaper frequently.
- a little bit of liquid at a time
- Call Your Pediatrician Right Away
- Keep breastfeeding
- Pedialyte or Infalyte

IDEAS

- Awareness on the problem: what to look out for?, what to do?
- Provide handouts & process
- Device to incorporate into the bed to track the development
- Make Pedialyte or Infalyte in doses packed & ready to use

What? Why? How?

PROBLEM

CAUSES

SOLUTION

IDEAS

SID

Smoke during pregnancy
Lying on the stomach
Premature Birth
Breastfeeding

- Crib as bare as possible.
- Use a pacifier.
- Back to sleep.
- Don't use baby monitors

- Well ventilated Bedding
- Jhulla

RWI infections

Rashes
Ear infection
Respiratory infection

- Pediatric appointment
- Don't use too much diaper

- Rash cream
- Ear drops
- How to use them

Crying

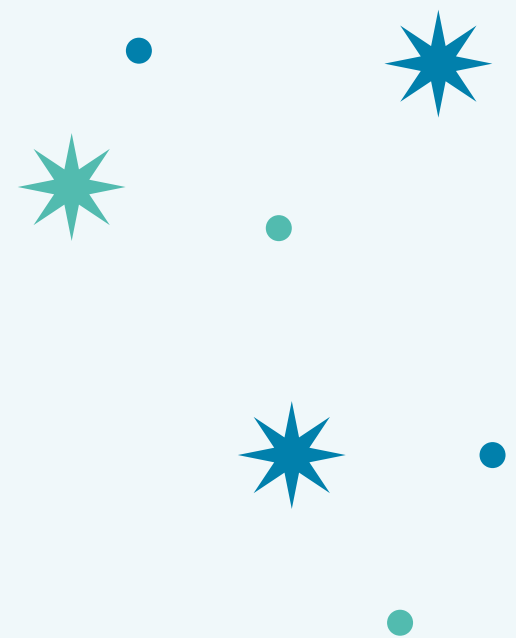
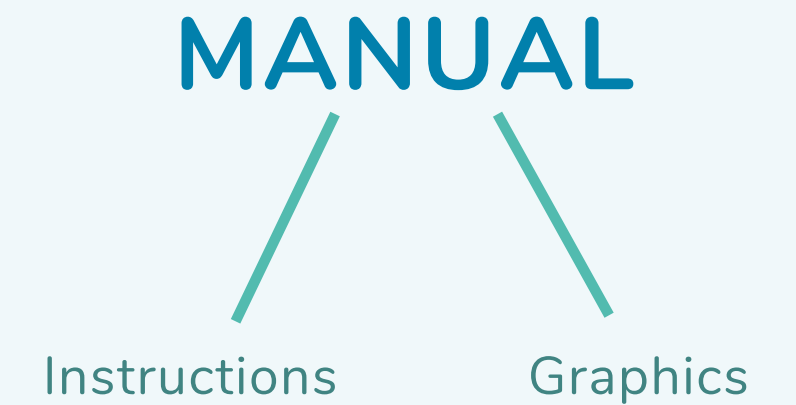
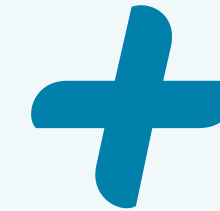
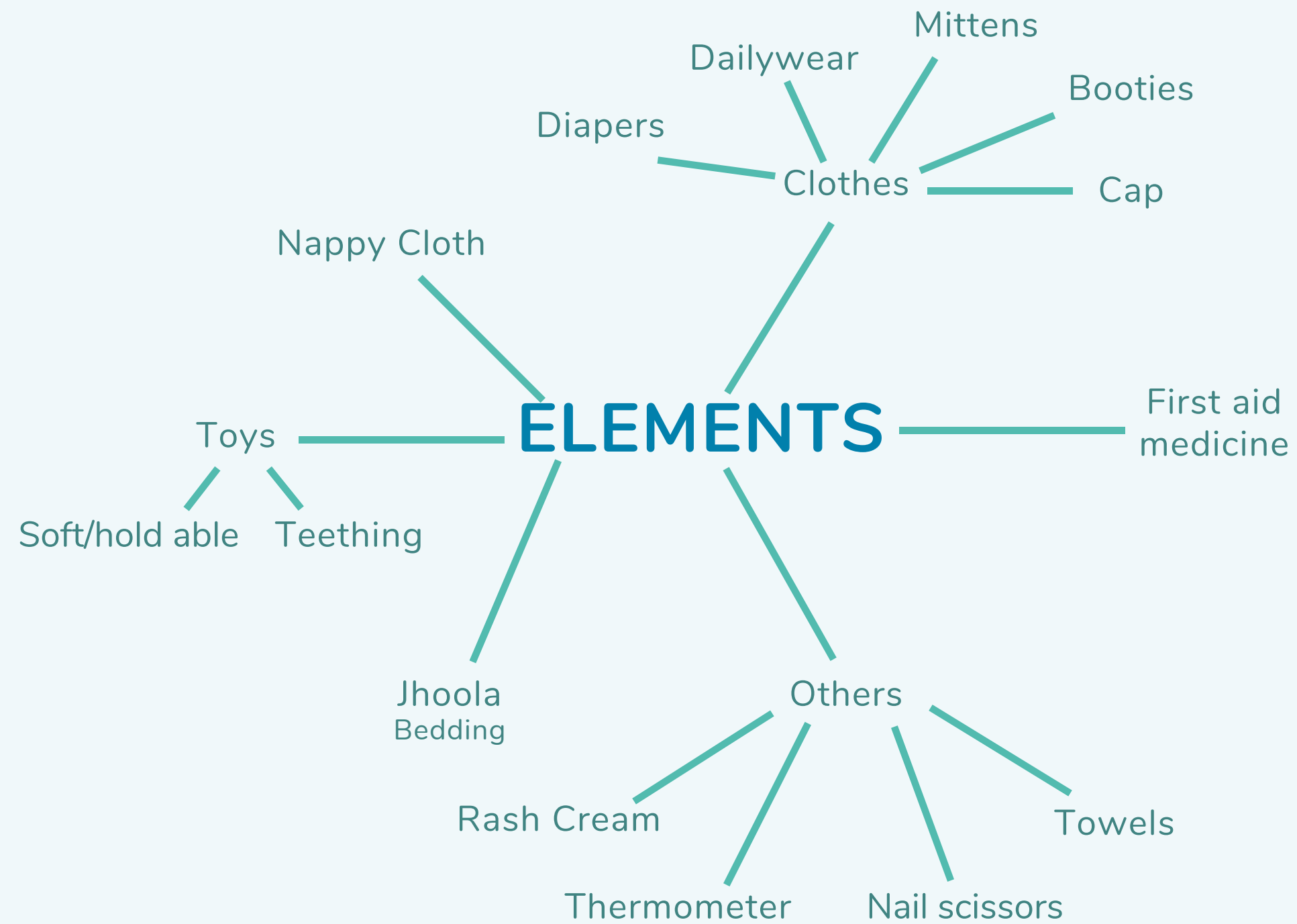
Sleepy
Hungry
Dirty diaper
Breastfeeding

- Use a pacifier.
- Swing the baby
- Bounce slightly
- Check diaper

- Awareness on how to calm the baby
- Feeding chart

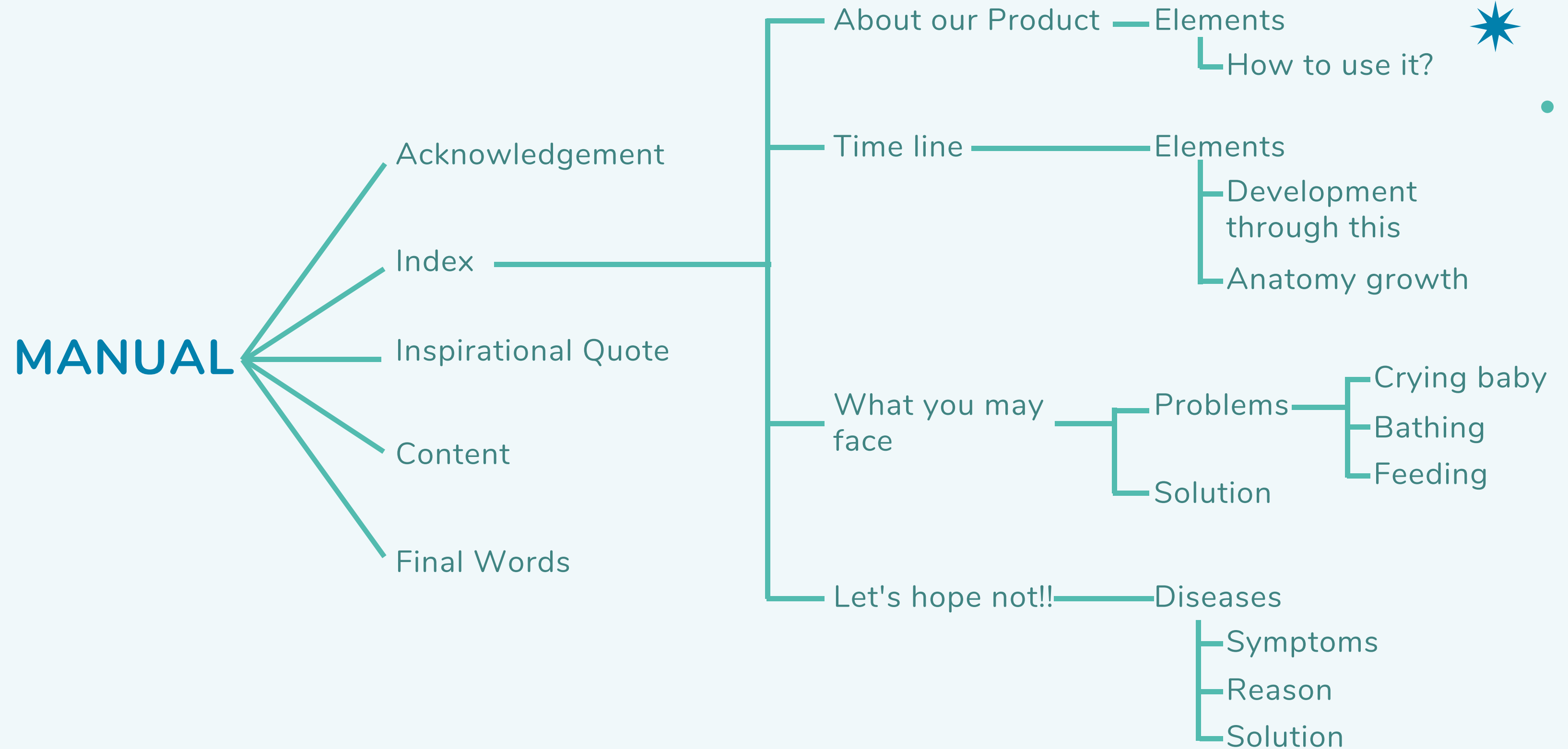
Elements

Component overview



Elements

Manual Parts





Jooli swing cradle

- baby feel secure and safe
- The Jooli is a simple saree cloth with both ends of the hammock tied to the same hook.
- Baby feels difficult to turn around
- Baby might suffocate

Elements

Existing products



Nail scissors

- Do not use regular nail cutter for babies
- Infant nails are soft & flexible

Cost ₹179/-



Thermometer

- Reusable but has a expiration date
- Simple to use
- lack of contact for infection
- Paper thin strips

Cost ₹150/-



Mosquito Sticker

- Don't need to apply repellent on skin
- Baby skin is very sensitive

Cost ₹49/-



User feedback

PRIMARY FEEDBACK
BASED ON IDEA & MANUAL CONTENTS

Abhilasha Narayan Onco-gynec & mother

Abhilasha(37) is a working mother of a 5 year old boy.

INSIGHTS

- Good Idea
- Currently not available in India
- Selection of the elements are good.
- The Diseases mentioned is unnecessary, this can trigger a person and cause worry

SUGGESTIONS

- Include charts- feeding, health chart
- Remove a few elements- pacifier, plastic toys



Sinchana Swaroop *Stay at home mom*

Sinchana(45) is a stay at home mom. She has 3 daughters (10, 5, 2). She loves to socialize.

INSIGHTS

- It would have been useful if it was given to me from the hospital
- wasn't aware that the angle of the Jhoola could cause so much harm.
- The text is difficult to read

SUGGESTIONS

- Gender based segregation - boy / girl
- Incorporate the tracking charts in an app



Rekha Shivanna Helper

Rekha(27) is a house helper and an expecting mother.
Uses a old Nokia keypad phone.

INSIGHTS

- Physical product is a good option.
- The content of how to put the baby to sleep might be really helpful.

SUGGESTIONS

- Explanation in regional language - Kannada
- Include basic home remedies.



Feedback / insights

- Remove elements - pacifier, diapers,
- Include - charts, instructions on how to use the jhooli properly.
- Incorporate Regional languages
- Costing-affordable



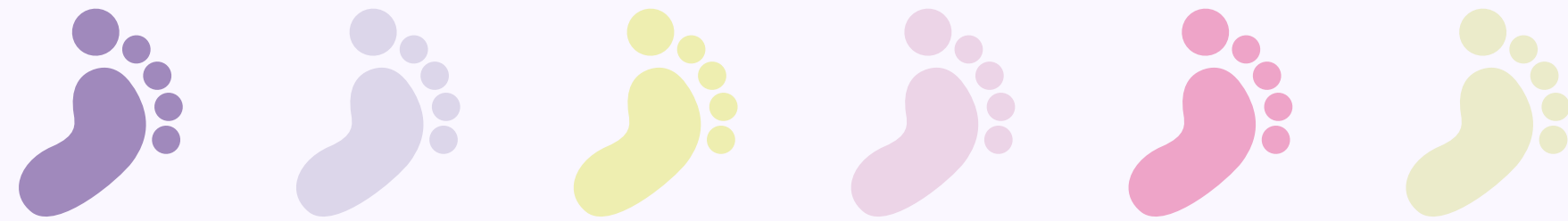
Future Scope

- App Subscription version for urban users
More products, wider range
- Kit for kits for specific problems/disabilities.

The background of the slide is a photograph. It shows a hand holding a thin, light-colored string. A single red chili pepper is attached to the string and hangs on the left side of the frame. On the right side, a yellow rubber glove is visible, also holding a string. The overall lighting is warm and slightly dim.

ting toes

Color Pallet



Brand Name & Logo

tiny toes

Typography

Baby Care
Sans pro light



Cough & Cold



Salt nasal drops

Mix with water to use



Turmeric

The heat from the turmeric will help in diluting the mucus and oozing it out.



Steam

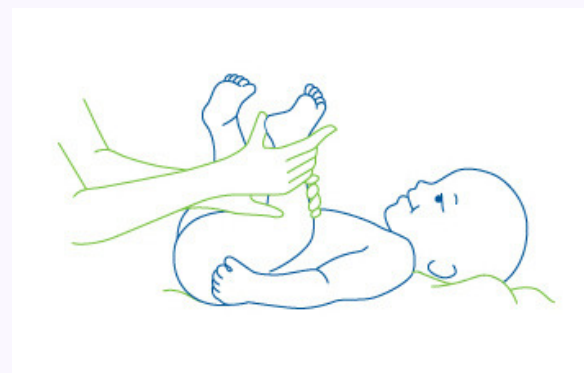
The heat from the steam helps dilute the mucus.

Colic



Oil Massage

Massage baby's entire body



Knee Pushing Exercise



Asafoetida

Mix in water & rub it around the navel



Baby Herb

Burn it & rub the herb on stone & apply around the navel

Fever



Lemon Bath

Has a cooling effect



Sponge bath

Helps reduce the body temperature



Fennel Seeds

Helps prevent gas & colic



Methi

Contains Omega 3 which is good for baby's brain development



Ginger

Enhances milk supply

Breast feeding



Garlic

increasing the secretion of breast milk



Anise

helpful in unclogging the blocked milk ducts

Charts



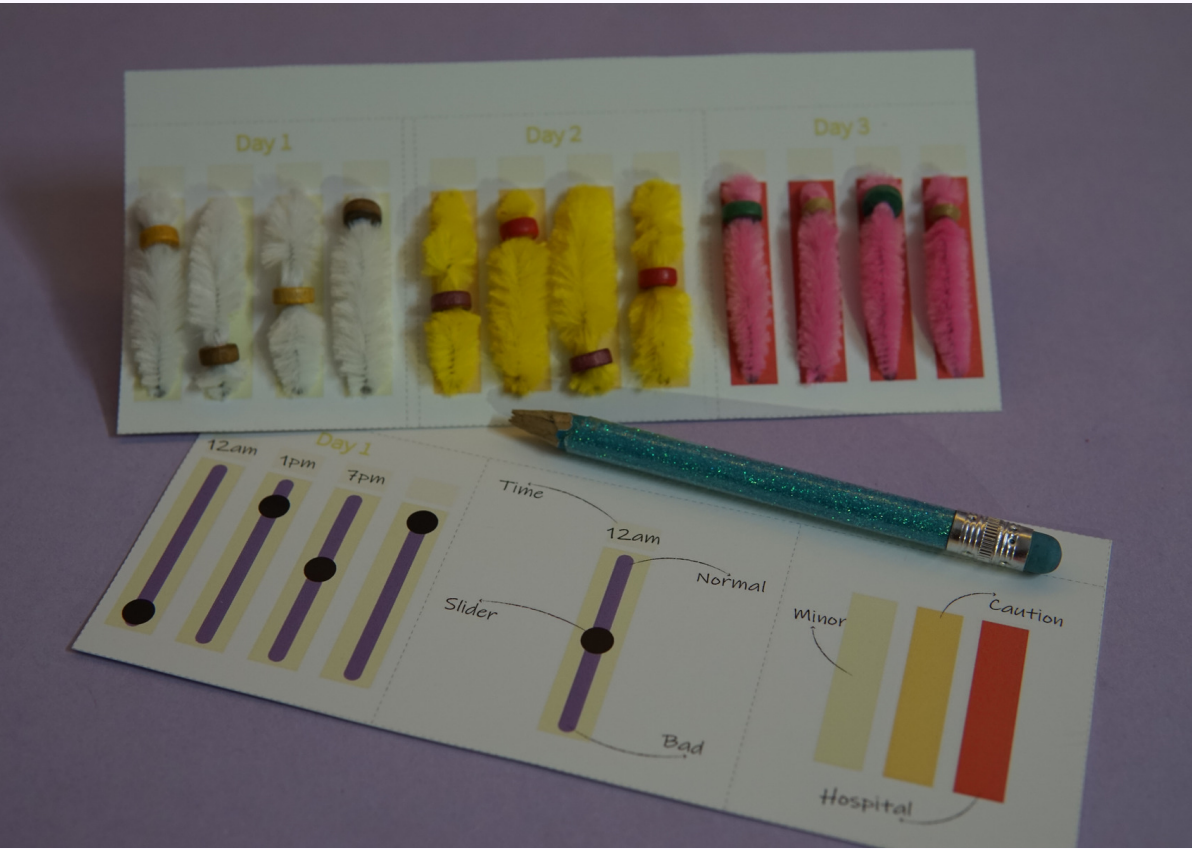
Temperature charts

To keep track of the temperature when suspected a fever



Feeding chart

To help new mothers keep track of the feeding time



Vomit chart

To keep track of the severity of the problem to go to a doctor

Prototype -1st cut



Final-Prototype



References

Based on the survey conducted by www.censusindia.gov.in

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