

A child's hand is shown holding a blue, robot-like glucose monitor buddy named AZU. The child is wearing a grey hoodie and a yellow wristband. The background is a blurred outdoor setting with dry leaves on the ground. The text 'AZU' is prominently displayed in the upper left, and the tagline 'The new glucose monitor buddy for children.' is below it. In the bottom left, there is a vertical line followed by the text 'DSID 144 | Bethany Valderrama | Process Book'.

# AZU

The new glucose monitor buddy for children.

# Project **Brief**

Design a patient-centered healthcare product.

# Table of Contents

## **PROJECT FRAMING**

## **TEAM EXPLORATION**

Brainstorming: Areas of Healthcare

Personas: Target Users 1

Presentation: Empathy Report, Personas, & Interviews

## **INDEPENDENT PROJECT**

Concept Exploration

Concept Selection

Diabetes: Research & Interviews

Target User: Refined Character Board & Consumer Journey 2

Refined Design Concepts 1

Target User: Refined Character Board & Consumer Journey 3

Refined Design Concepts 2

Target User: Final Character Board & Consumer Journey

CMF & CAD: Details & Material Finishes

Final Design Concept

Final Design & Presentation



# PROJECT FRAMING

---

to spark healthcare thinking, find a problem in health to solve by completing the project framing exercise

Resources



## Frame Your Design Challenge

---

**What is the problem you're trying to solve?**

Immediate medical attention is not always easily given or accessible.  
.....  
.....  
.....

**1) Take a stab at framing it as a design question.**

How might we make professional medical aid more easily accessible?  
.....

**2) Now state the ultimate impact you're trying to have.**

Provide either professional medical advice or physical aid quickly and efficiently.  
.....

**3) What are some possible solutions to your problem?**

Think broadly. It's fine to start a project with a hunch or two, but make sure you allow for surprising outcomes.

in-home friendly medical aid device to communicate/interact with, easily transportable medical equipment  
for professionals (nurses, EMTs, etc.) to use, weekly/monthly "check-in" systems connected to one's  
hospital, robots, wearable tech, accountability help device linking patient to professional  
.....

**4) Finally, write down some of the context and constraints that you're facing.**


They could be geographic, technological, time-based, or have to do with the population you're trying to reach.

context: main city or suburbs, home, on the road, travel, busy or restricted lifestyle  
.....

constraints: portability, ease of use, need for high power for equipment, security of data, cost/ affordability  
.....

**5) Does your original question need a tweak? Try it again.**

How might we provide portable, reliable, and efficient equipment for "traveling/on call" professionals in  
the medical field?  
.....



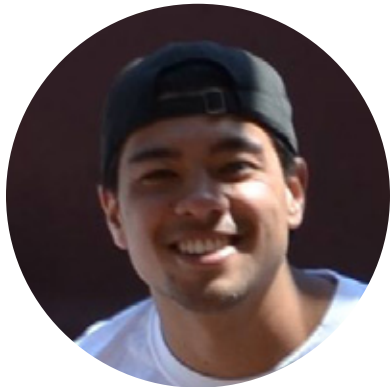
# TEAM EXPLORATION

---

focusing on the human dimension,  
brainstorm and research various healthcare areas and  
develop 2 personas with distinct disabilities that one could  
possibly design for



「The **Team**」



Josh  
Polido



Michael  
Tran



Grayson  
Mendivil



Bethany  
Valderrama



# **BRAINSTORMING**

## **AREAS OF HEALTHCARE**







general brainstorming

analogies brainstorming





# **PERSONAS**

## **TARGET USERS 1**



# Parker



Parker's parents lived a very alternative lifestyle through the sixties and seventies, and moved to Arizona from San Francisco to experience the freedoms of the desert and a slower city. As a result of this lifestyle, the family didn't have insurance and were skeptical of medicine, and often resorted to holistic and homeopathic remedies. Parker has a more sensible relationship to medicine and healthcare, but still does not like to visit the doctor, and often neglects check-ups and other preventative visits.

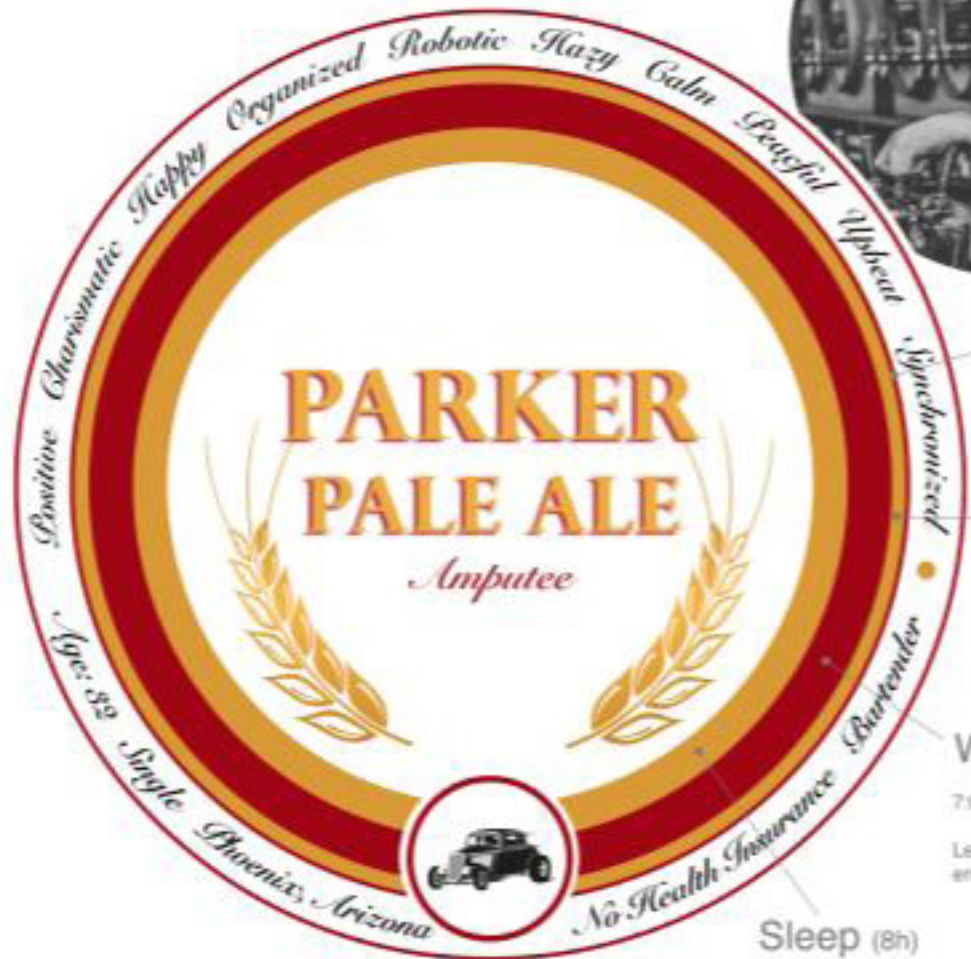
At a young age, Parker suffered an accident that resulted in the loss of his left leg below the knee, which further complicates his relationship with his care providers. Parker has had time to adapt to the condition, but it can still complicate tasks. He has a positive attitude that is well known in his social circles, and his social charm makes him a successful bartender.

- Age: 32
- Relationship Status: Single
- Occupation: Bartender
- Location: Phoenix Arizona
- Health Insurance: None
- Salary: \$19k/Year
- Knows everyone's drink
- Plays in a blues band

DSID 144  
Human Dimension  
Michael Tran  
Bethany Valederrama  
Joshua Polido  
Grayson Mendivil







**Morning (3h)**

11:00 am - 2:00 pm  
 Leg will be attached once awake

**Leisure Time (4.5h)**

2:00 pm - 5:30 pm  
 Leg may be taken off to shower,  
 then attached while getting  
 dressed

**Work (8.5h)**

7:00 pm - 3:15 am  
 Leg often causes fatigue towards  
 end of shift

**Sleep (8h)**

3:30 am - 11:00 am  
 May need to walk with crutches to  
 urinate



# Delaine

Delaine has been successful as a magazine editor after a busy career as a restauranter. Her goal of a quiet life got more complicated when her husband's life got even quieter, literally. She's having difficulty adapting to the changes and it wears on her personal life as well as her professional as she begins to have difficulty communicating not just with her readers, but also her closest friend and partner. Delaine now not only needs to adapt her lifestyle to the changes in her husband's, but she also suddenly finds new responsibilities that she must grow into. Suddenly her once energetic younger husband of 47 is left with guilt and feelings of being a burden in addition to the burden of his own changing world, so she must rise up to be his rock.

- Name: Delaine
- Relationship Status: Married
- Age: 53
- Profession: Editor at Thyme Cooking Journal
- Salary: \$60,000
- Location: Minneapolis, Minnesota
- Insurance: Yes







# Delaine

THE INGREDIENTS OF AN EDITOR'S LIFE

**SERVES: 1 PERSON / PREP TIME: 24 HOURS**

## INGREDIENTS

- Sleep
- Personal Time
- Work
- Dale

## INSTRUCTIONS

1. Let rest for 7 Hours
2. Medium heat for 2 Hours
3. Marinate for 8 Hours
4. Medium Heat for 6 Hours
  - 2 scoops of Therapy
  - ¼ teaspoon of Breakfast
  - 1 Dinner
  - 3 wholesome hours at Home





**PRESENTATION**  
**EMPATHY REPORT,**  
**PERSONAS, AND**  
**INTERVIEWS**



# Human Dimension

## Group 2

Support: Veronica, Josh Pallas, Michael Tran, Brittany Costantino

1

### Definition

Imagine an object of healthcare and introduce one or more innovations that address the human dimension of the product in a patient centered way.

2

### Problem Space

People with (differently)abled bodies face physical challenges in their daily life.

3

### Research

Findings from articles, online sources, news, etc.

4

### Prosthetic Context

**Technological**

- More advanced prosthetic arms for more complex movements and more complex activities
- More than one arm for more complex capabilities
- More

**Behavioral**

- Some prosthetic users find prosthetic limbs uncomfortable for activities, comfort, look, and fit
- Not considered as a more natural or acceptable
- Use of prosthetic of less than 100% of the population

**Culture**

- Prosthetic may not be seen as a prosthetic that is not considered as a prosthetic because of its ability
- Some prosthetic users see it as a prosthetic that is not considered as a prosthetic because of its ability

5

### Hearing Aid Context

**Technological**

- More hearing aids can be used in a more discreet or invisible manner
- More hearing aids can be used in a more discreet or invisible manner

**Behavioral**

- More hearing aids can be used in a more discreet or invisible manner
- More hearing aids can be used in a more discreet or invisible manner

**Culture**

- More hearing aids can be used in a more discreet or invisible manner
- More hearing aids can be used in a more discreet or invisible manner

6

### Who's Involved?

- Family and Spouses
- Doctors/ Nurses/ Caregivers/ Therapists
- Neighbors
- Coworkers/ Teammates
- Teacher
- User Drivers
- Client
- Service Animals

7

### Interviews

Gaining insight on observations & challenges faced by ones directly and indirectly affected by those disabled.

8

### Interview 1

**Interviewee:** Assistant manager @ Amazon Medical Market, San Jose

What are the biggest physical/psychological challenges customers encounter?

- Getting from the car into the store
- Transporting their equipment into the store
- Getting into the store and finding what they need

**Key Takeaways:**

- More - understanding of physical issues
- Understanding the needs of the customer
- What are the most difficult customers and what are their "pain points"?
- More - understanding of physical issues
- Understanding the needs of the customer

**Other Observations:**

- Understanding the needs of the customer
- Understanding the needs of the customer

9

### Interview 2

**Interviewee:** Endocrinologist and assistant @ Goodwill Senior Living, San Jose

What are the biggest physical/psychological challenges customers encounter?

- Getting from the car into the store
- Transporting their equipment into the store
- Getting into the store and finding what they need

**Key Takeaways:**

- More - understanding of physical issues
- Understanding the needs of the customer
- What are the most difficult customers and what are their "pain points"?
- More - understanding of physical issues
- Understanding the needs of the customer

10

### (cont.)

**What's the user's experience?**

- Equipment is bulky and can be difficult to use
- Equipment is bulky and can be difficult to use

11

### Personas

Two distinct personas whose daily routines are affected by physical, emotional, struggles and physical limitations in or surrounding their lives.

12

### Delaine

Delaine is a brand of organic, natural, and healthy food.

13

### Parker Pale Ale


Parker Pale Ale is a brand of organic, natural, and healthy food.

14

### Analogies

Analogy: Prosthetic is like a prosthetic limb.

15



# INDEPENDENT PROJECT

---

continued research & exploration leading to a final direction and design



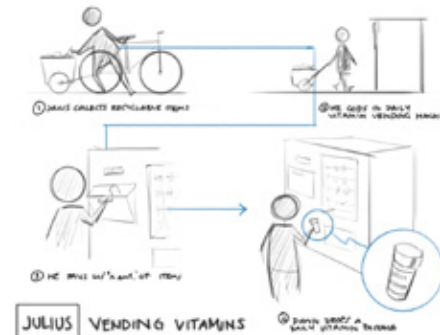
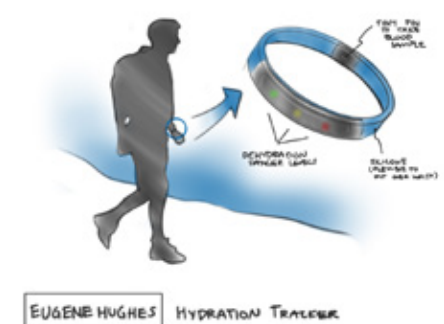
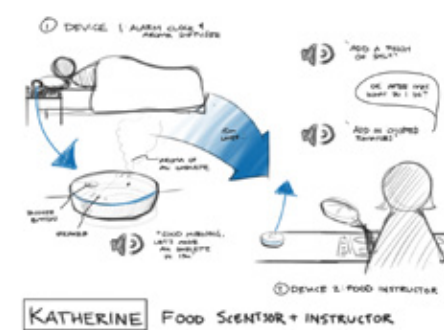
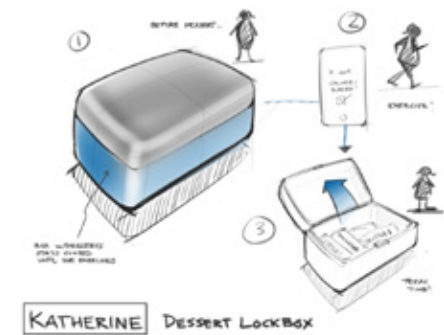
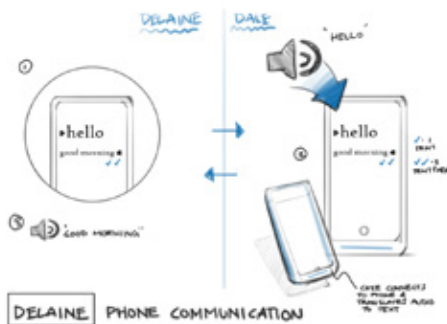
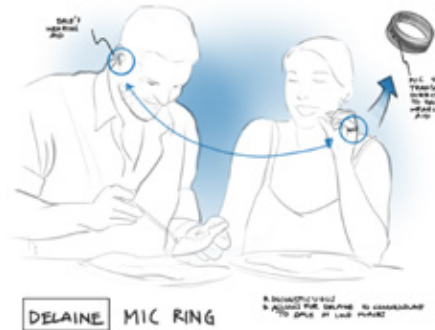
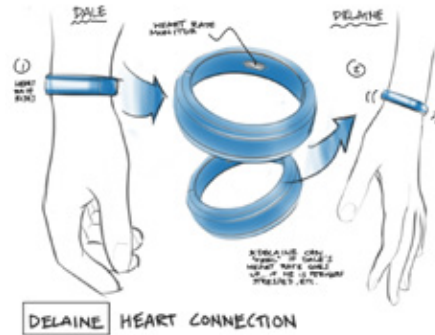
**CONCEPT**  
**EXPLORATION**





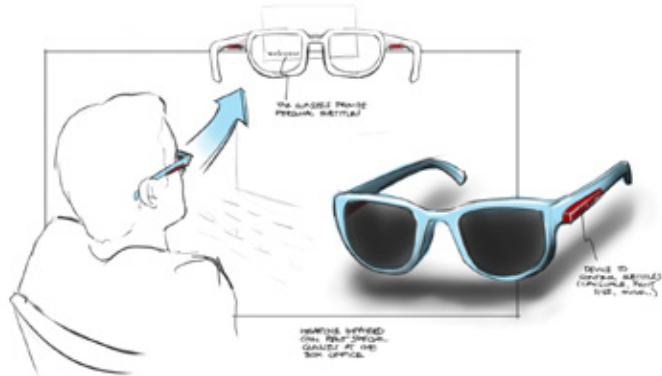
# 10 Sketches

choosing specific personas to design for, 10 completely different concepts to meet their needs in new ways

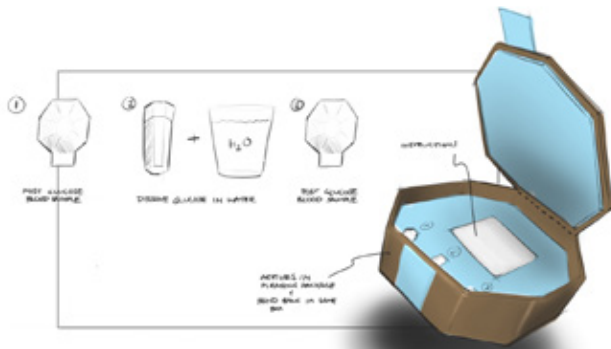


# 5 Sketches

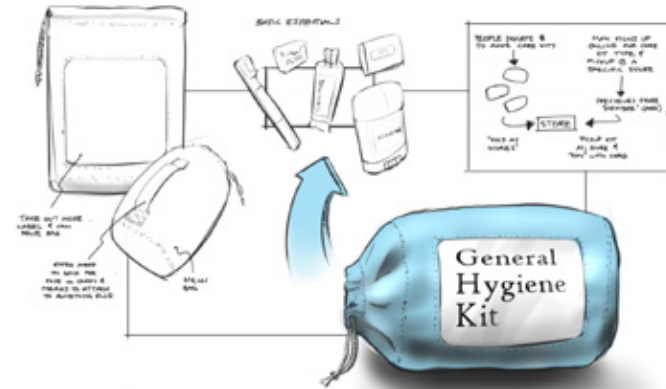
refine exploration & ideation further with each concept targeting a specific dimension: mobile, domestic, or human



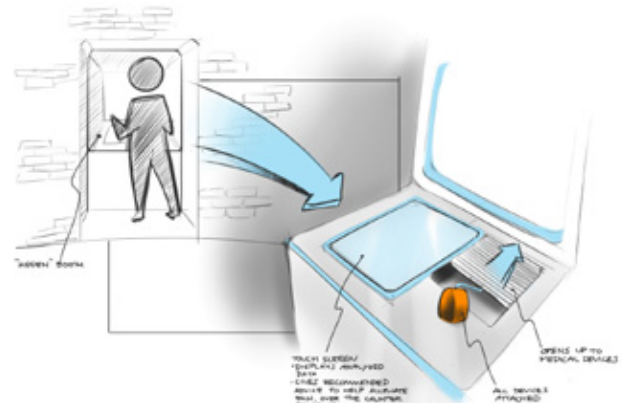
SUBTITLES FOR THE THEATER



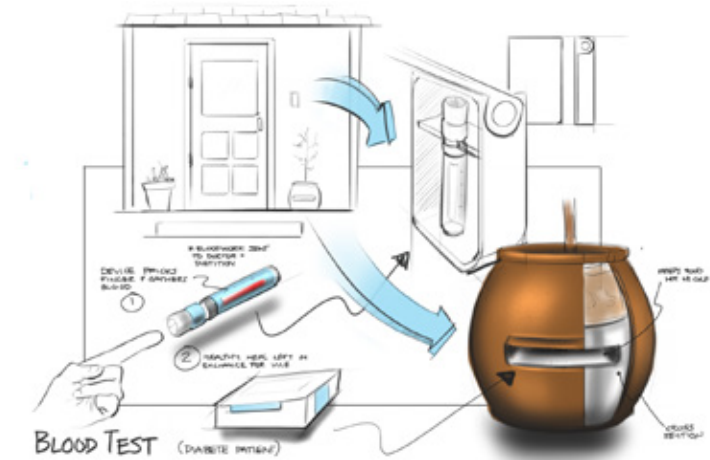
HOME ORAL GLUCOSE TEST (TYPE 2 DIABETES)



CARE KIT



SELF CHECKUP



BLOOD TEST (DIABETIC PATIENT)







# **CONCEPT SELECTION**

---

design a product for diabetic patients





## Nurse Rosie

Working long 12 hour shifts as an ER nurse, she is constantly on her feet tending to multiple patients. She can become quite tired at times and forget to properly clean supplies which can increase the risk of disease spreading amongst patients.

Many of her patients suffer diabetes and need constant glucose monitoring. A system which avoids the need for finger pricking can make her job easier with the elimination and need to constantly sanitize equipment coming in direct contact with multiple patients's blood. She can focus on reading and analyzing their data, giving proper insulin injections, and giving her patients personal attention and care.

human dimension

Nurse Rosie uses applicator to insert patch onto the patient



The patient wears the patch during hospital stay (3-5 days). Glucose data is collected and analyzed.



The patch wirelessly transfers real time data to Nurse Rosie's phone. She can monitor glucose changes and calculate insulin dosages.



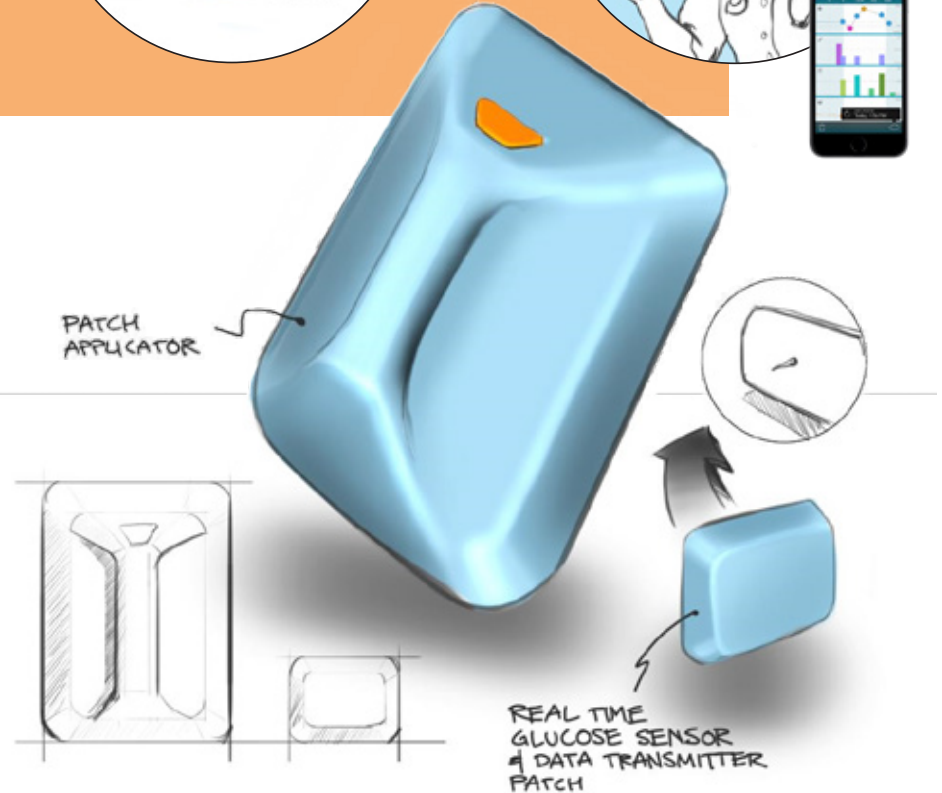
no finger pricking

lower risk of blood spreading infection and disease



less painful

ease fear of finger pricking and complications of constant glucose monitoring



Resources



## Frame Your Design Challenge

---

**What is the problem you're trying to solve?**

Nurse Rosie's long shifts makes her tired and can impact her efficiency in cleaning medical devices which can easily spread disease.

**1) Take a stab at framing it as a design question.**

How might we make a nurse's job easier by making sanitation easier.

**2) Now state the ultimate impact you're trying to have.**

While working with diabetes patients, make glucose monitoring safer and easier.

**3) What are some possible solutions to your problem?**

Think broadly. It's fine to start a project with a hunch or two, but make sure you allow for surprising outcomes.

make blood glucose monitoring (BCM) safer for multi patient use with an intuitive cleaning system, use sensors instead of blood sample and strips, create blood detector for more efficient cleaning, have self monitors in patients rooms so can do less frequent visits to multiple patients

**4) Finally, write down some of the context and constraints that you're facing.**

They could be geographic, technological, time-based, or have to do with the population you're trying to reach.

context: continual glucose monitoring needed for patients (frequent visits), daily use, hospital, multi-patient

constraints: portability, ease of use, sanitation

**5) Does your original question need a tweak? Try it again.**

How might we provide a convenient and sanitary glucose monitoring device that Nurse Rosie can use to help her numerous patients with diabetes?



# **DIABETES**

## **RESEARCH & INTERVIEW NOTES**



# Research Findings

- particularly researching:
- glucose monitoring methods and alternative ways besides finger-sticking (newer technology etc.)
  - psychological effects of having diabetes
- interviewees:
- Safiye Chen: school nurse
  - Grant Gordon: hospital nurse

**DIABETES**  
TYPE 1 + TYPE 2

insulin dependent      insulin deficiency

→ INSERT STRIP UNIT TECH  
- TRAIN IN HOSPITAL → CONTINUOUS MONITOR  
- CONTINUE AT HOME

glucose monitoring → fear of fluctuations  
! infection risk      SMART SIMILAR SYSTEM  
! inconvenience

A1C - 3 month track?

**home robot**  
- remind  
- monitor  
- administer  
- recycles/dipses

hospital robot → glucose monitoring  
→ insulin administration

website  
"Beyond the finger"  
Alternate Blood Sugar testing sites

where to prick?  
- finger, thumb  
- palm  
    ↑ need location?  
- thigh  
- calf  
- upper arm  
- forearm

website (PDF):  
2007 guideline for isolation precautions  
Preventing Transmission of Infectious Agents in Healthcare settings

source of transmission  
- direct vs indirect contact

person  
nurse Rosie  
↓  
tired, long hours @ home use  
- machine to make her job easier & safer for patients @ hospital

arm → reader → phone → doctor app  
- phone can  
- bracelet w/ wireless to phone  
- USB plug to computer

**FREESTYLE LIBRE**  
+ INJECT TECH!

sanitary & sterilization  
- efficient  
- disposable parts  
- accurate  
? - warms area  
? - adjustable lancing depth

sterilization station  
Soiled device  
shipped  
disposed  
(circular)  
↓  
put in waste  
infected material  
(not sharp)

alternating site can be difficult to obtain blood sample +  
\* sample may not be current/accurate (thing wrong)  
↓  
go back to finger

→ privacy concerns  
hospital device to keep track of  
→ why applicator  
→ think of system  
→ patient & nurse connection (relationship) innovative

inpatient clinical detection

5 parts  
applicator  
nurse receiver  
patient receiver → inpatient monitor  
nurse connector

POC (point of care)  
CGM (continuous glucose monitoring)  
FGM (FLASH glucose monitoring)

inpatient clinical detection

ARM BAND MONITOR + TRANSMITTER  
WRISTBAND RECEIVER & READER  
↳ can replace

single use patient hospital unit  
infection  
to prevent outbreaks w/ person glucose monitors & insulin administration

esp. hepatitis B

COMPLIANCE  
EDUCATE  
COMPLIANCE  
SAFE  
SANITARY  
ACCURATE

→ reduce errors if fear & risk of infection  
→ increase compliance, education, & sanitation & sanitation  
→ new tech: accuracy of data reading, tracking & storing

↑ trends → ↑ correct insulin



**SANTA CLARA KASER  
DIABETES DEPARTMENT**

Alert for recommended caloric intake before meal

- more efficient
- less painful
- less invasive
- time efficient
- self sufficient
- reduce blood spread & infection
- more time for education
- increase patient compliance
- less "trash" & waste hazardous

w/ recommended foods → app?

**Safiye Chen**

- 27 yrs
- High school math
- East side DMIA

?

% of children getting diagnosed w/ type 2 diabetes

Why - obesity? food choice/lifestyle...

nurse

- less time to train
- can spend time on health education patients
- time to forward to education

**Keefe Biomedical "artificial liver"**

data/trend tracking  
education  
carb count

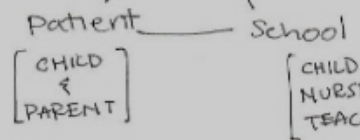
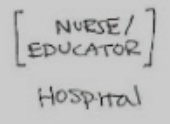
versus How is it DIFFERENT THAN...

CGM  
INSULIN PUMP  
FGM  
FINGER PRICK

DEXCOM CLARITY  
DEXCOM CGM

- 3 parts
- sensor
  - reader
  - connector to system?

why introduce new way of glucose monitoring in hospital settings?



\* Youtube: Blood glucose monitoring tutorial for teachers/ caregivers

LOW BLOOD SUGAR [HYPOGLYCEMIA]	IDEAL	HIGH BLOOD SUGAR [HYPERGLYCEMIA]
- too much insulin	AGE RAN FOR DM	- not enough insulin
- too much activity		- not enough activity
- not enough food		- too much food

BRACELET

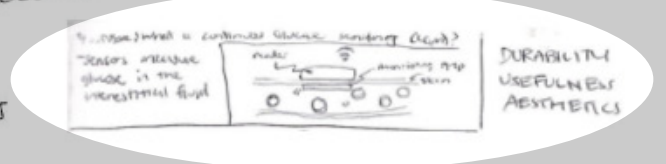
- no blood calibration
- no finger sticking

→ Personal iPhone

→ CAM READER (needed?) or login to account

→ glows red when hitting hypo or hyper glycemic levels

BALANCE: ACTIVITY + FOOD + INSULIN



**Young kids**

↓ counting calories not meeting glucose goals

↓ dinky diet

↓ glucose intake

[ make sense ] learn

- CHECK 4-5 TIMES A DAY
- BEFORE BREAKFAST
  - BEFORE LUNCH
  - BEFORE DINNER
  - AT BEDTIME
  - ANYTIME AS NEEDED

DESIGN IDEAS

- CARD → WALL
- "BUD" FOR BUDDY

DESIGN DETAILS: BUDDY + BUCK

- LOCK/CHARACTER
- INTERFERE PLACEMENT
- CLASP HOLE
- PART LINES
- SCREW HOLES
- BUTTONS? ON/OFF, SILENT
- VIBRATE/LIGHT HOME
- A

- KEYCHAIN BUDDY
- ↳ NON PAINFUL
- MINIMAL BAND W/ LONG LASTING BATTERY
- ↳ CAN WEAR IN ALL ACTIVITY
- BUDDY CHARGING DOCK

DESIGN DETAILS: BAND

- BAND
- CLASP
- BATTERY: CHANGE or CHARGER?
- BATTERY INDICATION
- READER
- SIGNAL TO CHECK
- LIGHT?
- VIBRATE?





**TARGET USER**  
**REFINED CHARACTER BOARD &**  
**CONSUMER JOURNEY 2**



# Nurse Rosie

## Character Board





## Nurse Rosie

32 years old  
single  
lives alone but in same town as immediate family

5:00am	wake up
5:00am - 6:00am	breakfast & get ready
6:00am - 6:30am	commute to work
6:30am - 7:00 am	handover from night shift
7:30am	shift starts
7:30am - 12:00pm	work and make rounds to patients
12:00pm - 1:00pm	lunch
1:00pm - 5:00pm	work and make rounds to patients
5:00pm - 5:20pm	quick break, light dinner
5:20pm - 7:30pm	work and make rounds to patients
7:30pm	shift ends
7:30pm - 8:15pm	commute home w/extra traffic
8:15pm - 8:45pm	get ready for bed, watches a little tv
9:00pm	sleep

\*works mainly with diabetic patients,  
especially those newly diagnosed

human dimension





**REFINED**  
**DESIGN CONCEPTS 1**

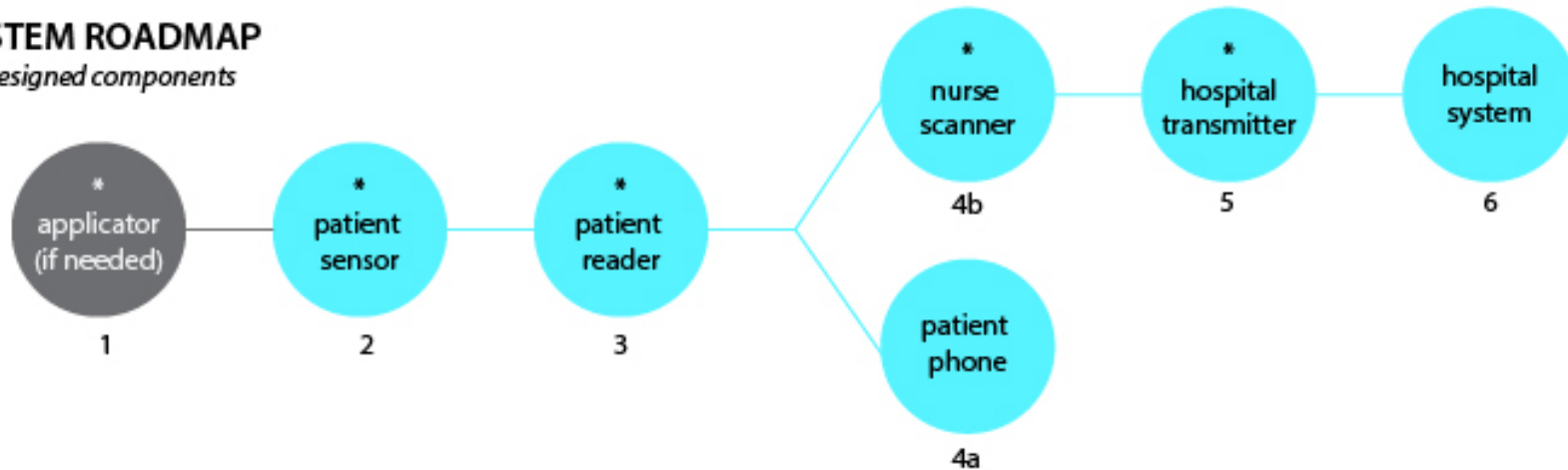


# 5 Sketches & Mockups

┆ explanation roadmap of concepts

## SYSTEM ROADMAP

\* = *designed components*



### 1. applicator (if the sensor is an under-the-skin strip)

nurse applies glucose monitor sensor strip under patient's skin

### 2. patient sensor

monitors real time glucose levels

### 3. patient reader

scans the patient sensor and stores the reading to send

~

### 4a. patient phone

the patient reader sends data to an app on their personal phone via bluetooth

### 4b. nurse scanner

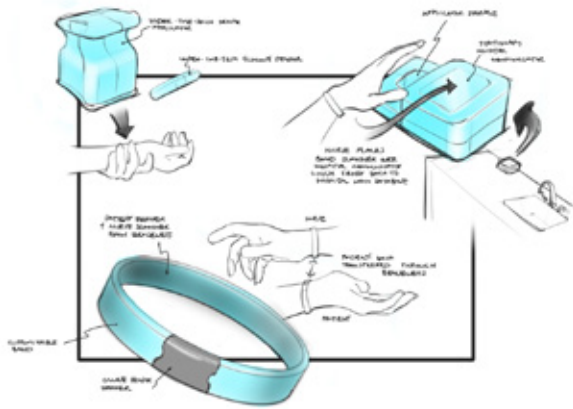
scans the patient reader to collect data

### 5. hospital transmitter

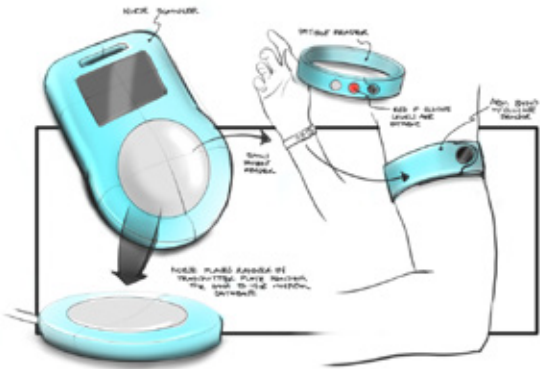
reads data from the nurse scanner and sends it to the main hospital system

### 6. hospital system

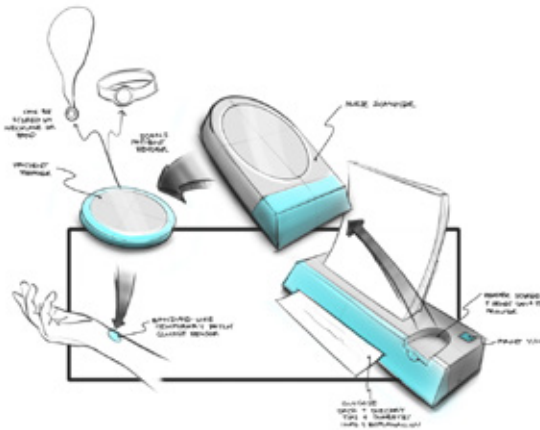
collects, stores, and analyzes data from transmitter for the specific patient record



System 1



System 2



System 3









**TARGET USER**  
**REFINED CHARACTER BOARD &**  
**CONSUMER JOURNEY 3**



## daily routine

6:45am	wake up
6:45am-7:00am	get ready
7:00am-7:30am	eat breakfast and gets lunch together with Mom
7:30am-7:45am	Mom drives her to school
7:45am-8:00am	hangs out with friends before school
8:00am-9:50am	class
9:50am-10:00am	bathroom break
10:00am-11:30am	class
11:30am-12:30pm	recess & lunch
12:30pm-3:00pm	class
3:00pm-3:30pm	Mom picks her up and drives her home
3:30pm-4:40pm	gets snack, starts homework, and gets ready for soccer practice
4:40pm-4:50pm	Mom drives her to the park for soccer practice
4:50pm-5:00pm	arrives to soccer practice to warm up
5:00pm-6:30pm	soccer practice
6:30pm-6:40pm	Mom picks her up and drives her home
6:40pm-6:50pm	shower
6:50pm-7:20pm	set the table and eat dinner with family
7:20pm-8:30pm	do homework
8:30pm-9:30pm	hangout (read, etc.), get ready for bed
9:30pm	bedtime



## Kent, Claire

status  
student

age  
10

hometown  
Chapel Hill, NC

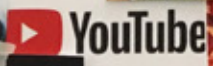
hobbies  
school (especially math), soccer,  
riding her bike, hanging out with friends

health condition  
recently diagnosed with Type 2 Diabetes

challenge  
adjust to new lifestyle (continuously check g  
lucose levels for diet and  
insulin injection dosages, etc.)

product opportunity  
create a non-finger sticking  
continuous glucose monitor that...  
- is intuitive to use  
- is unobtrusive to wear  
- is easy to learn to develop new  
habits of checking glucose levels  
- allows her to continue usual activities

CLAIRE KENT



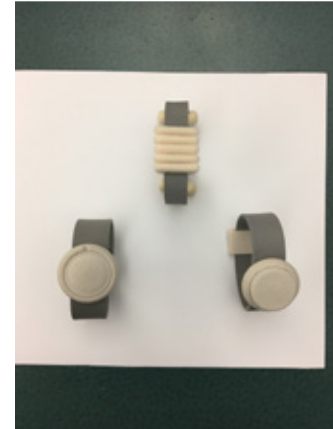
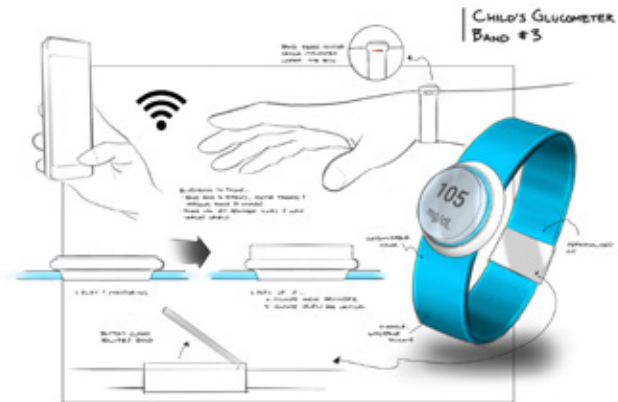
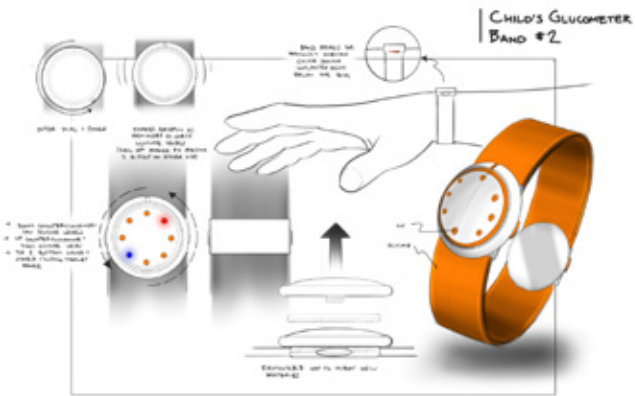
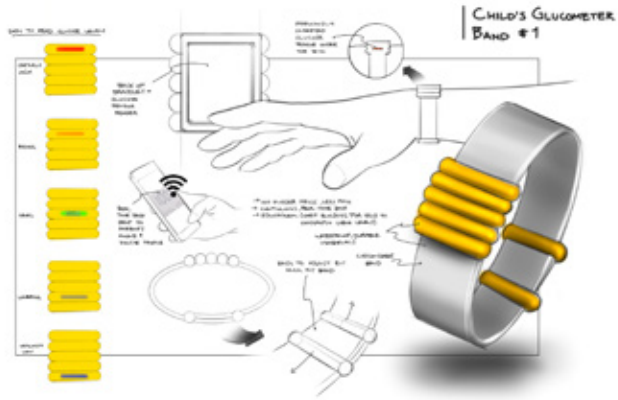


**REFINED**  
**DESIGN CONCEPTS 2**





# 3 Sketches & Mockups





**TARGET USER**  
**FINAL CHARACTER BOARD &**  
**CONSUMER JOURNEY**



# { CLAIRE CHO }



status student  
age 8  
hometown Chapel Hill, NC  
hobbies school (especially math), dance, singing, crafts, riding her bike, hanging out with friends  
health recent diagnosis and early stages of Type 2 Diabetes  
challenge adjust to new lifestyle (continuously check glucose levels for diet, exercise, and insulin injection dosages)

home ..... morning routine  
featuring: getting ready, breakfast, & time with Mom

road ..... Mom drives to school

school ..... morning & afternoon routine  
featuring: classes, recess, lunchtime, friends

road ..... Mom drives home

home ..... late afternoon routine  
featuring: snacktime, starting hw, getting ready for dance

road ..... Mom drives to dance practice

dance ..... early evening  
featuring: exercise, fun, and friends

road ..... Mom drives home

home ..... evening routine  
featuring: dinnertime, finishing hw, free time, & bedtime

{ CLAIRRE CHO }





**CMF & CAD**  
**DETAILS & MATERIAL FINISHES**





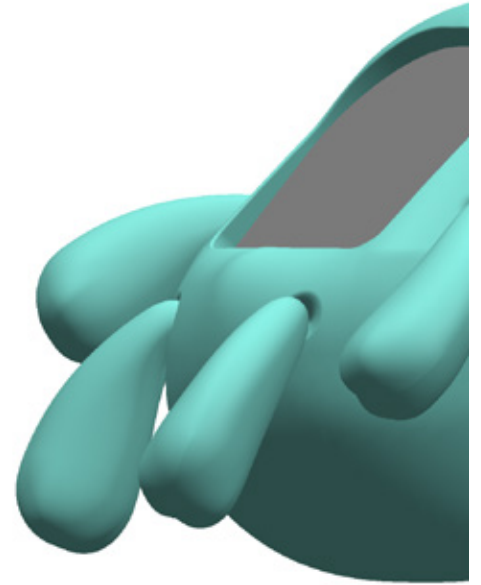
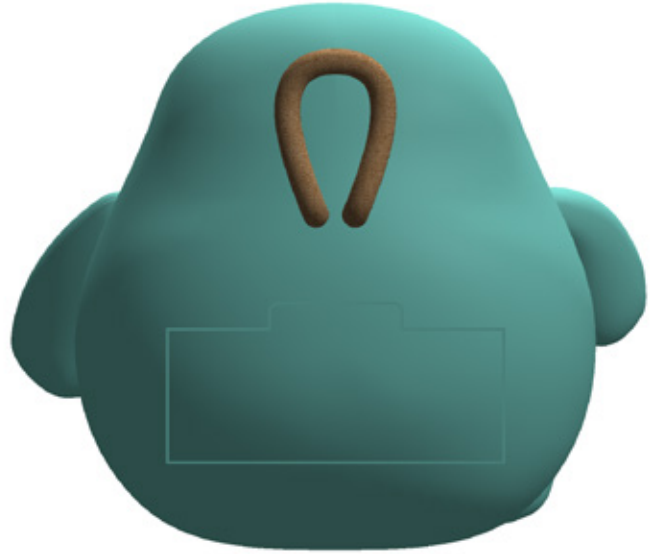
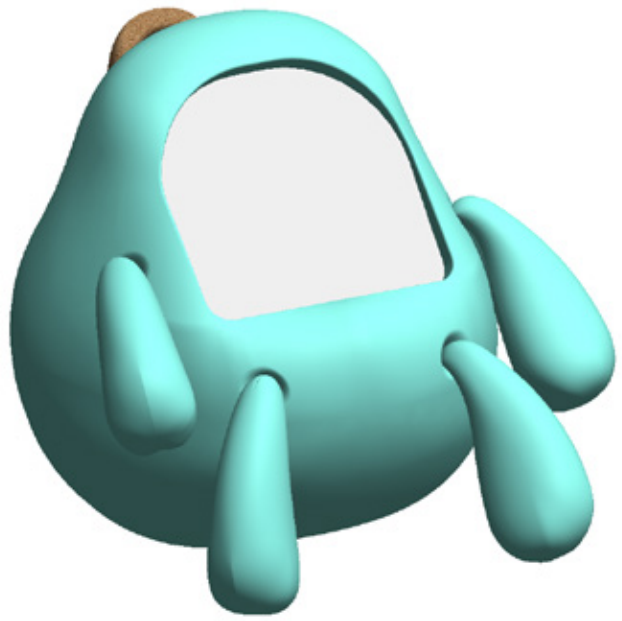
{ CME }

soft touch plastic, fabric strap, organic form, minimalistic design



home • natural • comfort



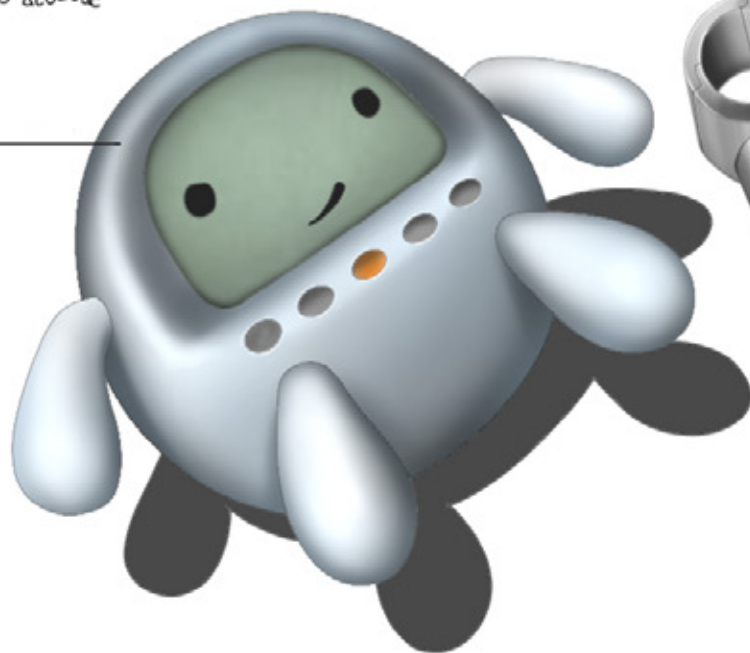




**FINAL**  
**DESIGN CONCEPT**



BUDDY W/FACIAL  
RESPONSES TO GLUCOSE  
LEVELS :

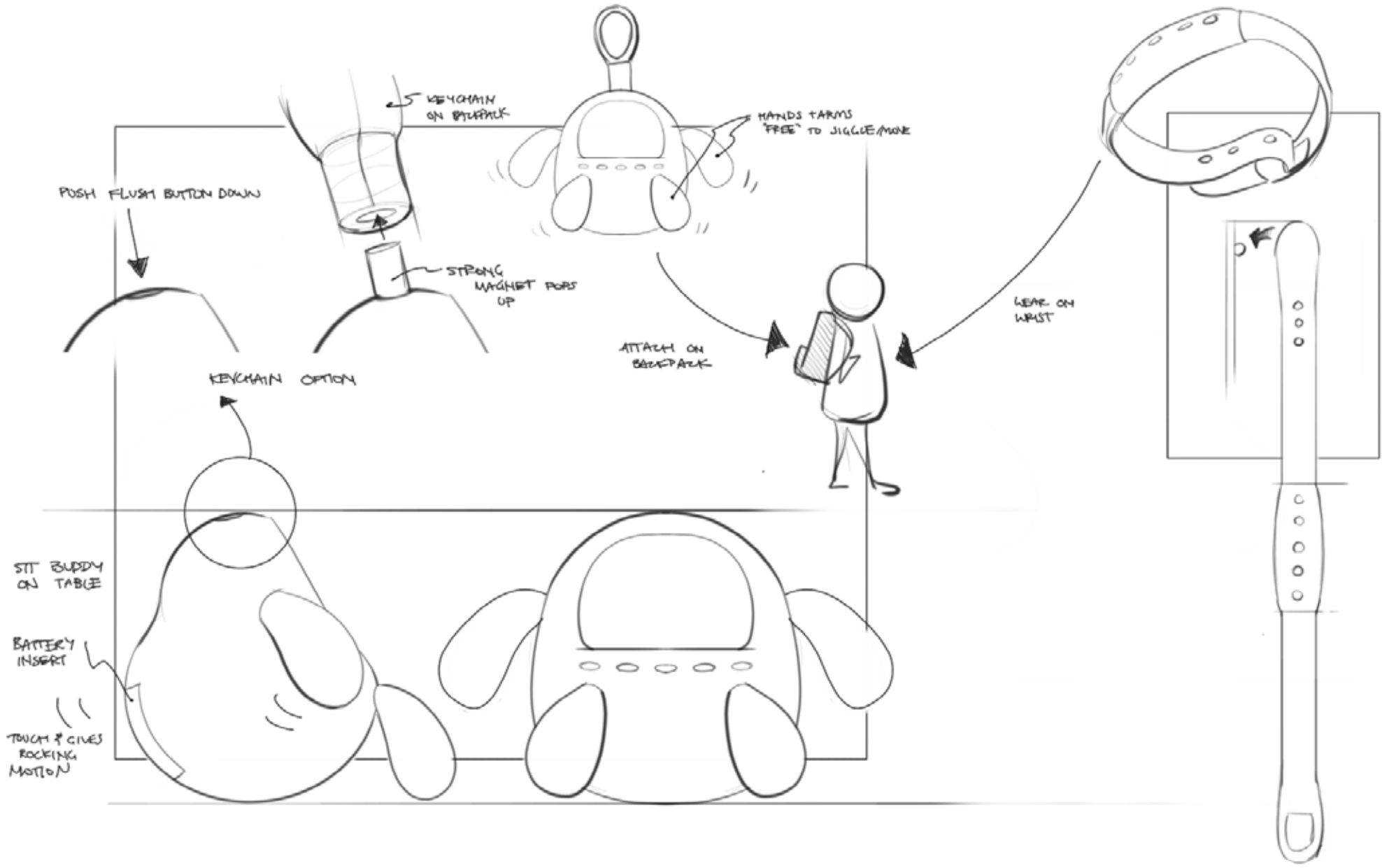


KEYCHAIN

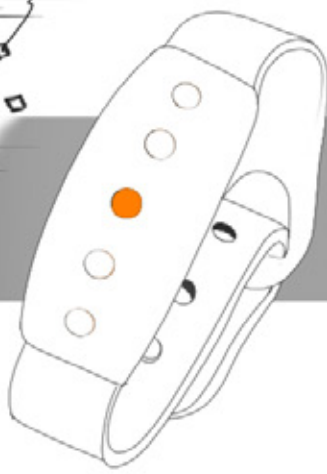
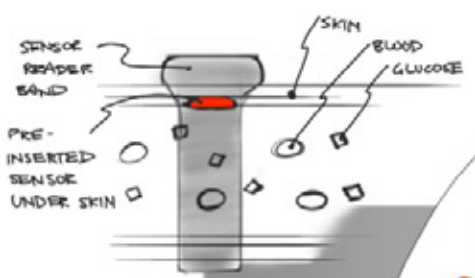


SENSOR READER









BAND + BUDDY "TALK"

LEVELS :

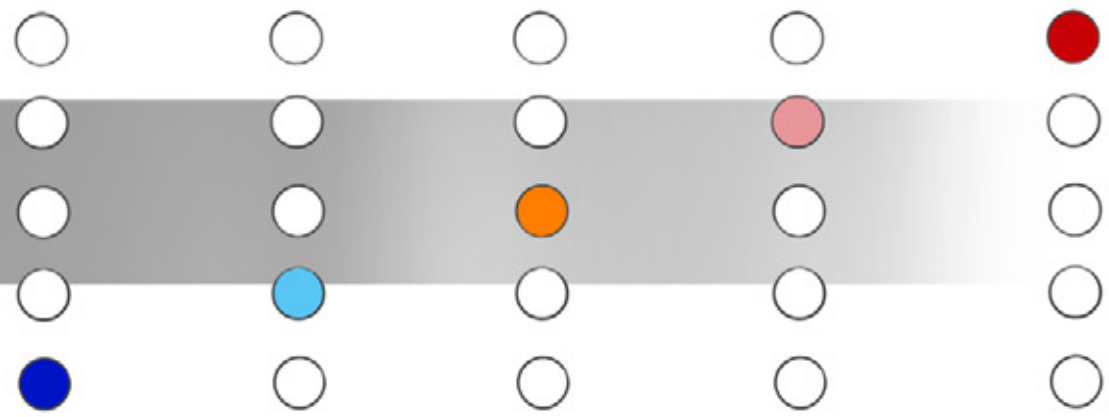
CRUCIALLY LOW

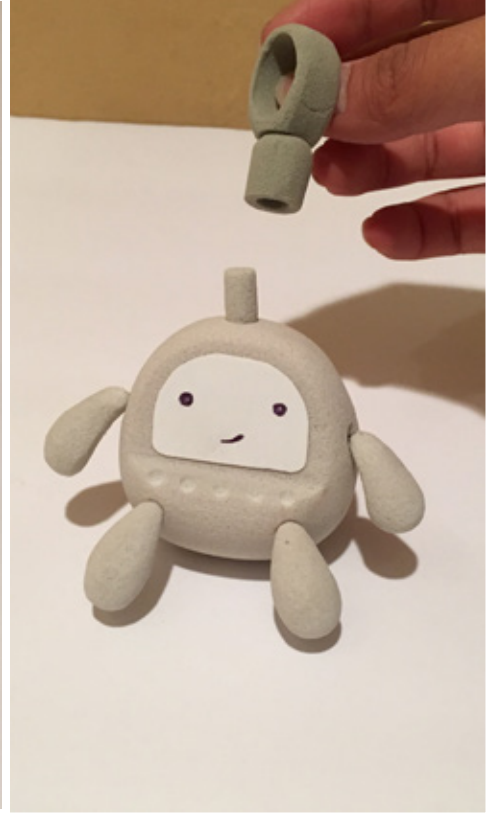
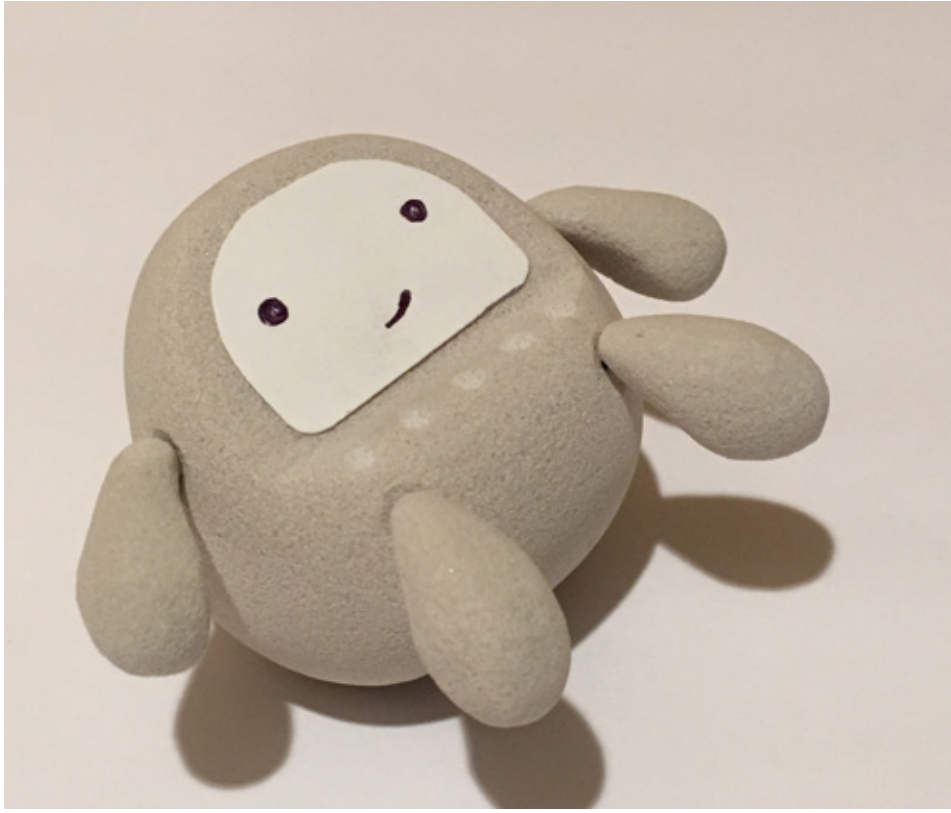
LOW

GOOD

HIGH

CRUCIALLY HIGH





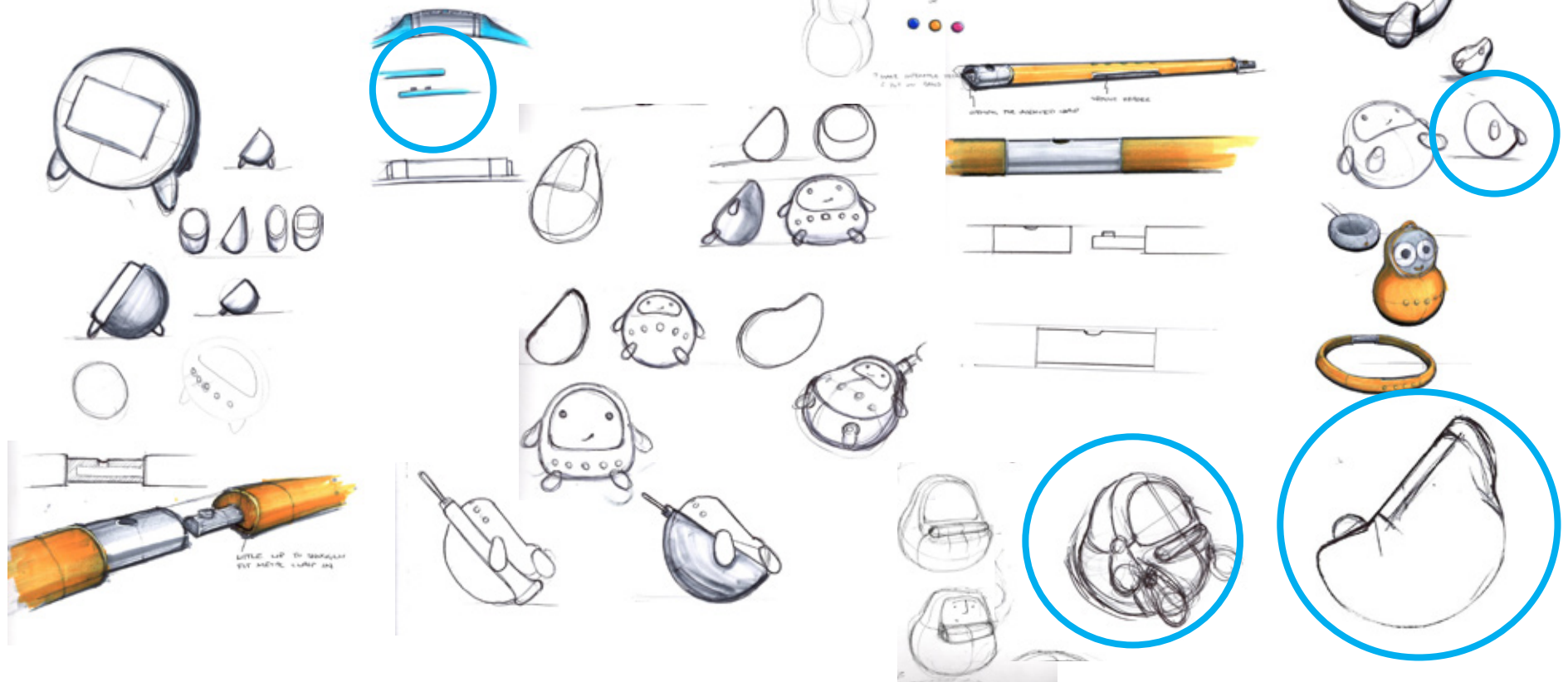


# Finalizing Details

final 2 parts:

**WRISTBAND** - receives the child's glucose levels by an implanted sensor under the child's skin that reads the glucose levels in the fluid and sends info to the wristband

**GLUCOSE BUDDY** - faces correspond to the glucose readings from the wristband and change accordingly...acts as the little buddy the child takes care of as they take care of themselves





**FINAL**  
**DESIGN & PRESENTATION**

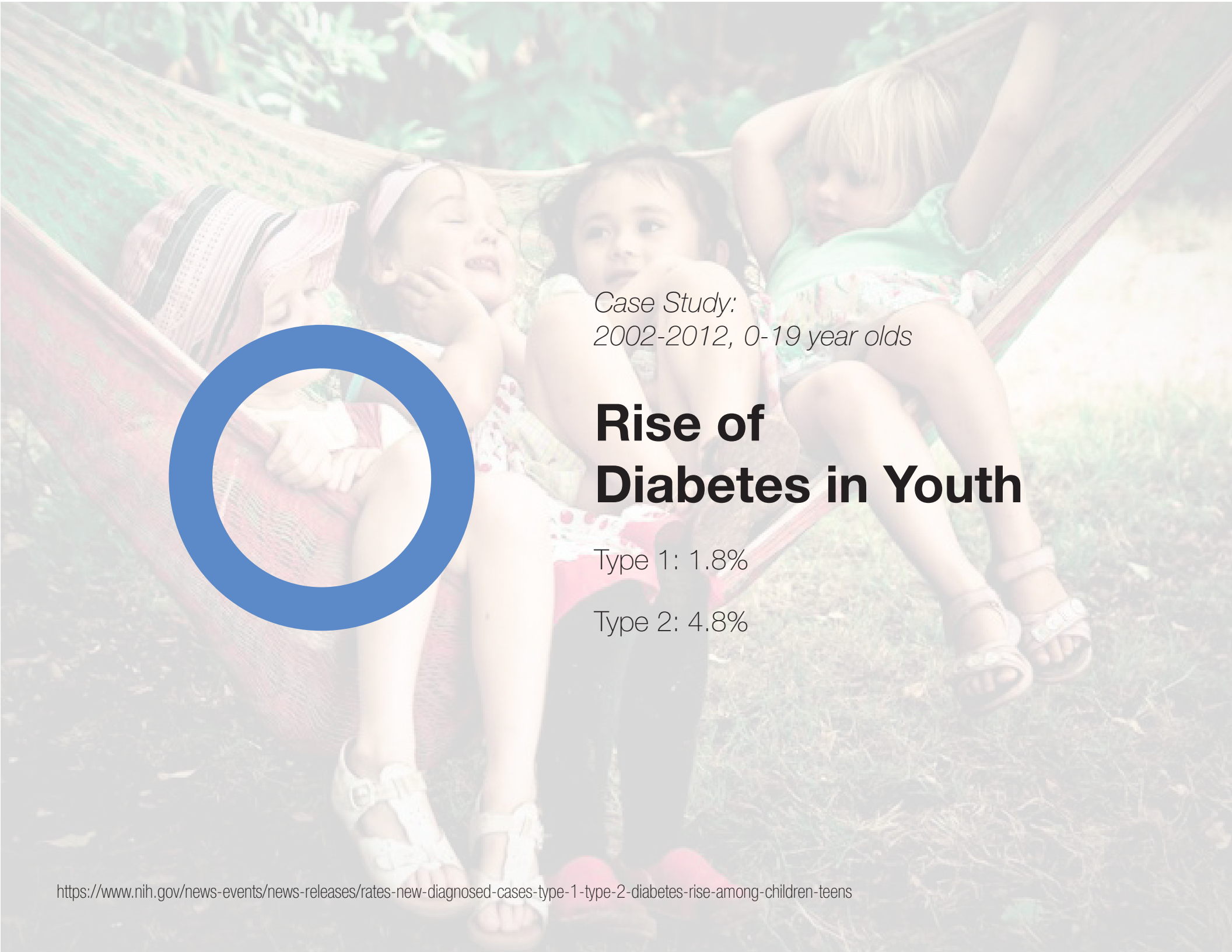




hello,  
AZU



The new glucose monitor buddy for children (~5-9 year olds)

A photograph of three young children sitting in a hammock outdoors. The child on the left is a girl with a pink headband, the middle is a girl with dark hair, and the right is a boy with blonde hair. They are all wearing summer clothing and sandals. The background is a soft-focus green landscape.

*Case Study:  
2002-2012, 0-19 year olds*

# **Rise of Diabetes in Youth**

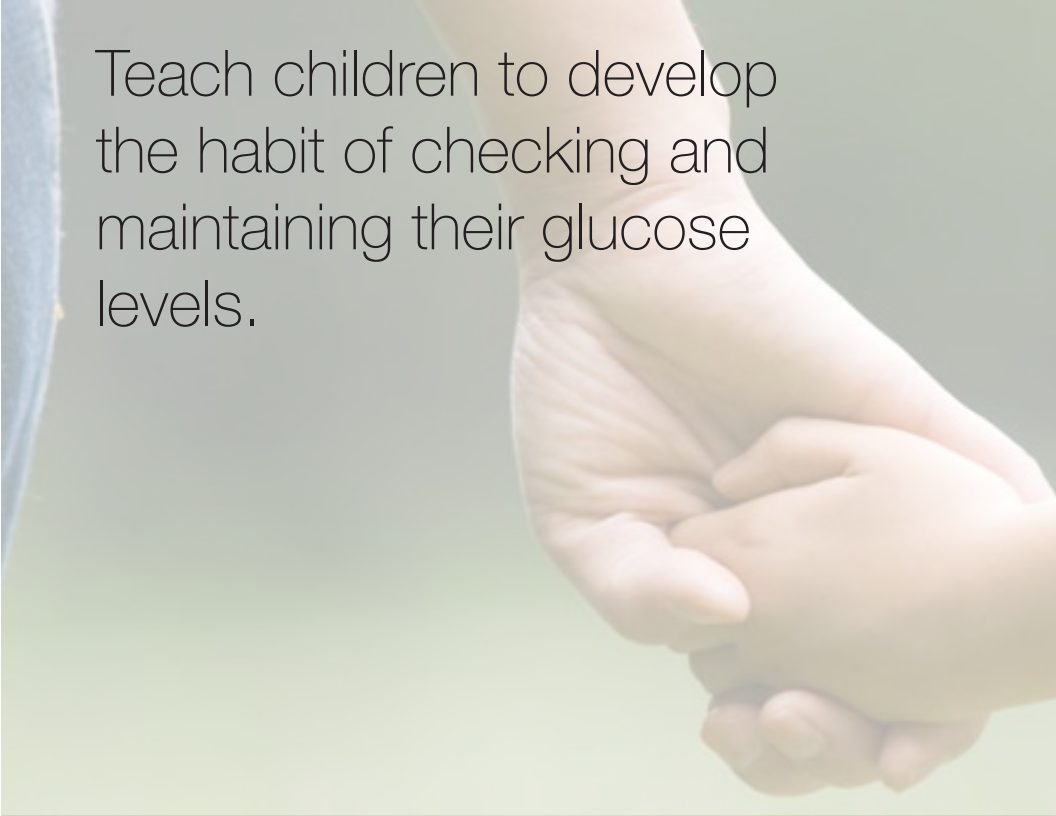
Type 1: 1.8%

Type 2: 4.8%



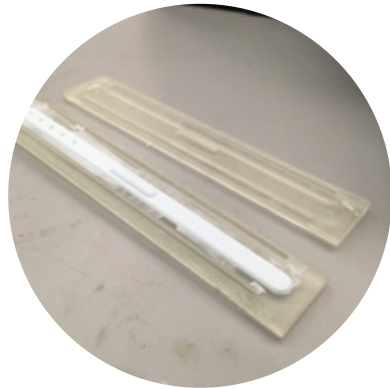
## Opportunity

Reduce fear, anxiety, and hassle of checking levels by eliminating finger-pricking.



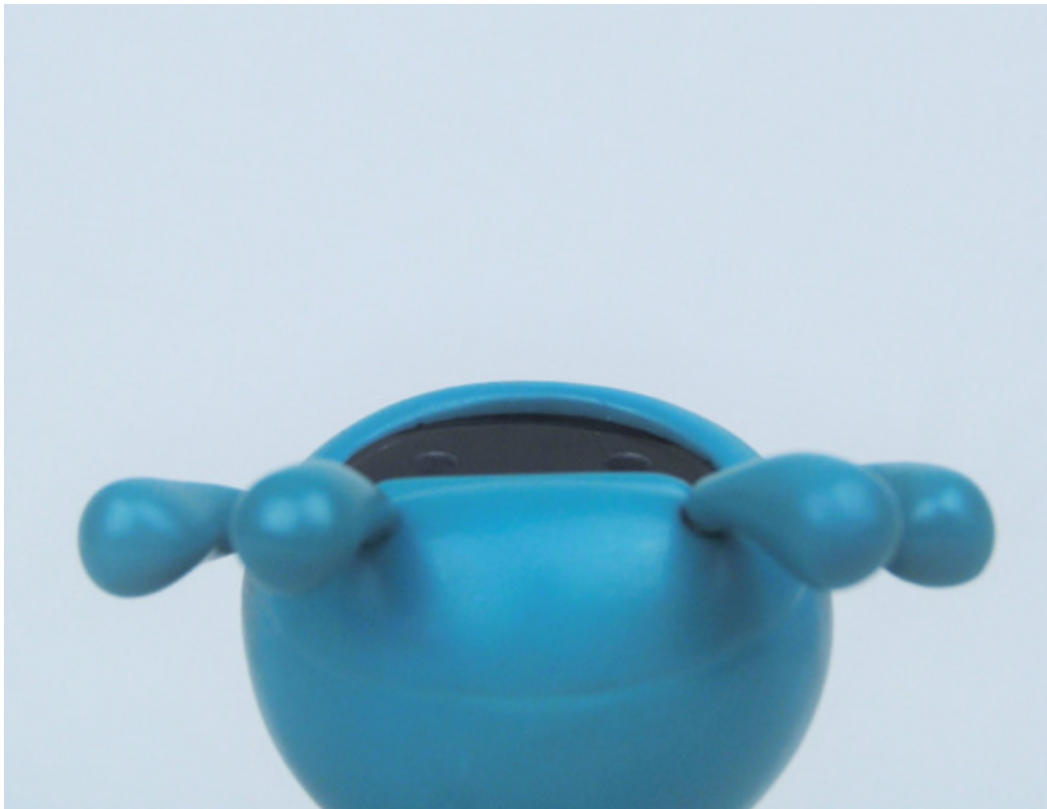
Teach children to develop the habit of checking and maintaining their glucose levels.





「The **Process**」









**AZU:** a child's constant companion to help keep them accountable to their glucose levels

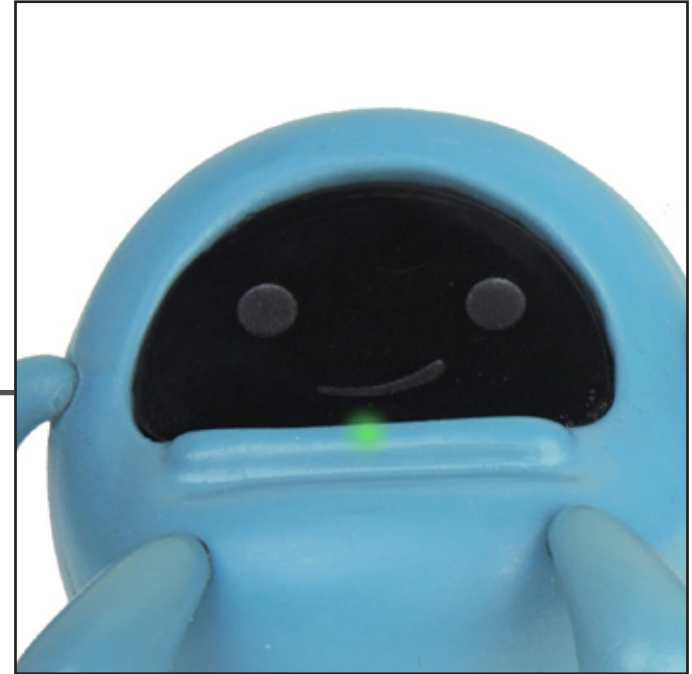
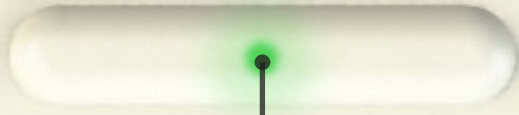


**wristband:** unobtrusive glucose monitor band always worn that reads blood levels by the pre-planted chip inserted under the skin (no finger-sticking required)



*How it works* Simple. Intuitive. Fun.

**keep AZU happy :)**



**green light** steady glucose levels  
**= happy face**



...if levels change, his arms and legs  
will briefly **shake**

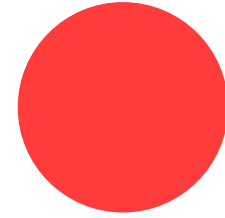
# AZU's face

# sugar levels

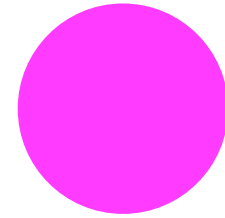
# band color



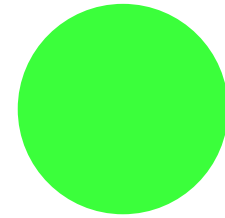
critically high



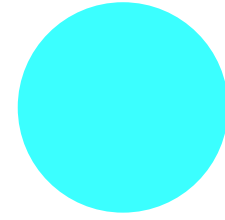
high



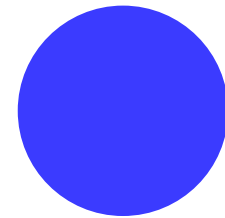
stable



low



critically low















「thank you」