



Care Reimagined

USC Iovine and Young Academy + EY Collaboration
Challenge-Based Learning

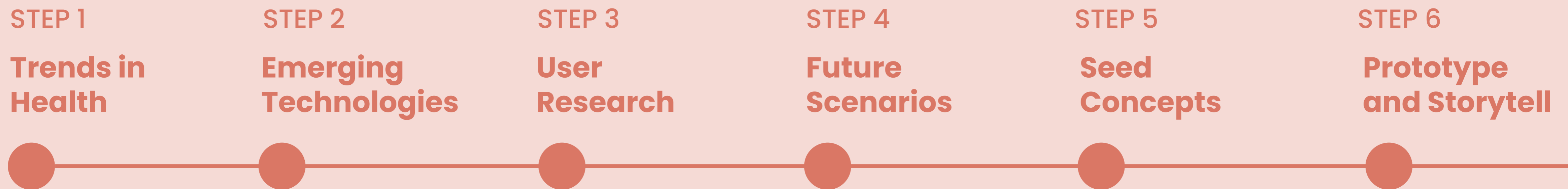
USC Iovine and
Young Academy
*Arts, Technology and the Business
of Innovation*





How might **emerging technologies** and other societal trends reimagine **experiences of 'care' in the future?**

Our process:



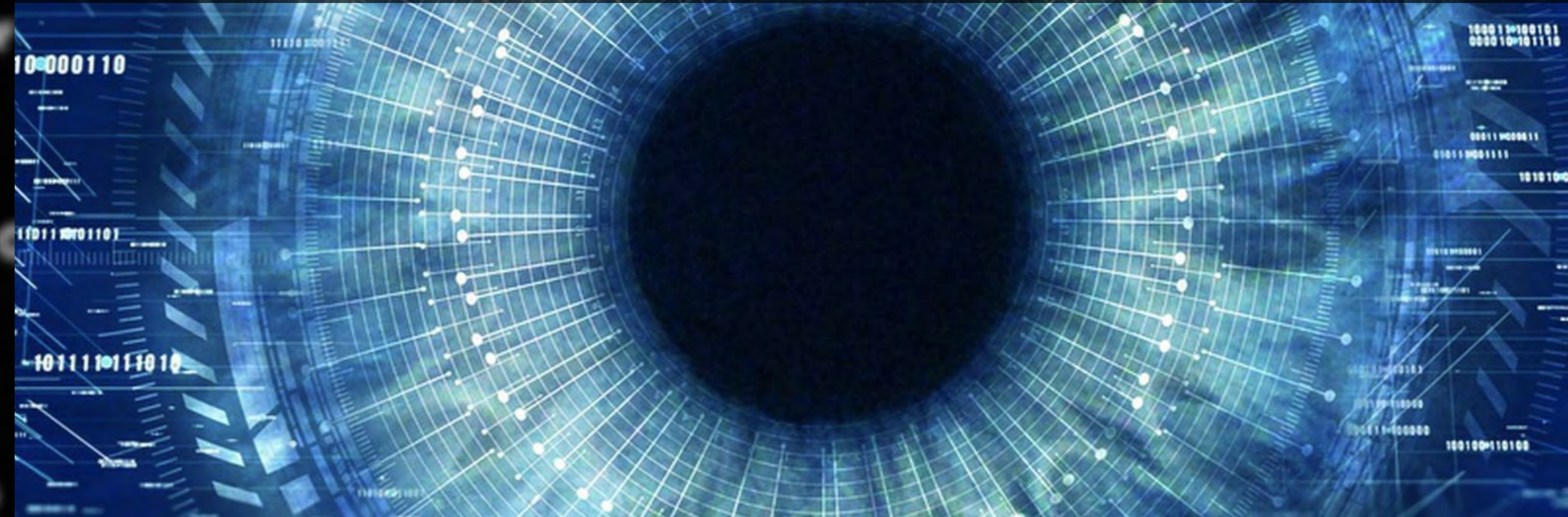
Future Vision 1 | **Advancements in AI**

A future where AI developments increase at an exponential rate but equitable health policies are limited.



Future Vision 2 | **Big Brother**

A future where healthcare is over-regulated by government and the public is overly trusting of technology.



Envisioning Futures

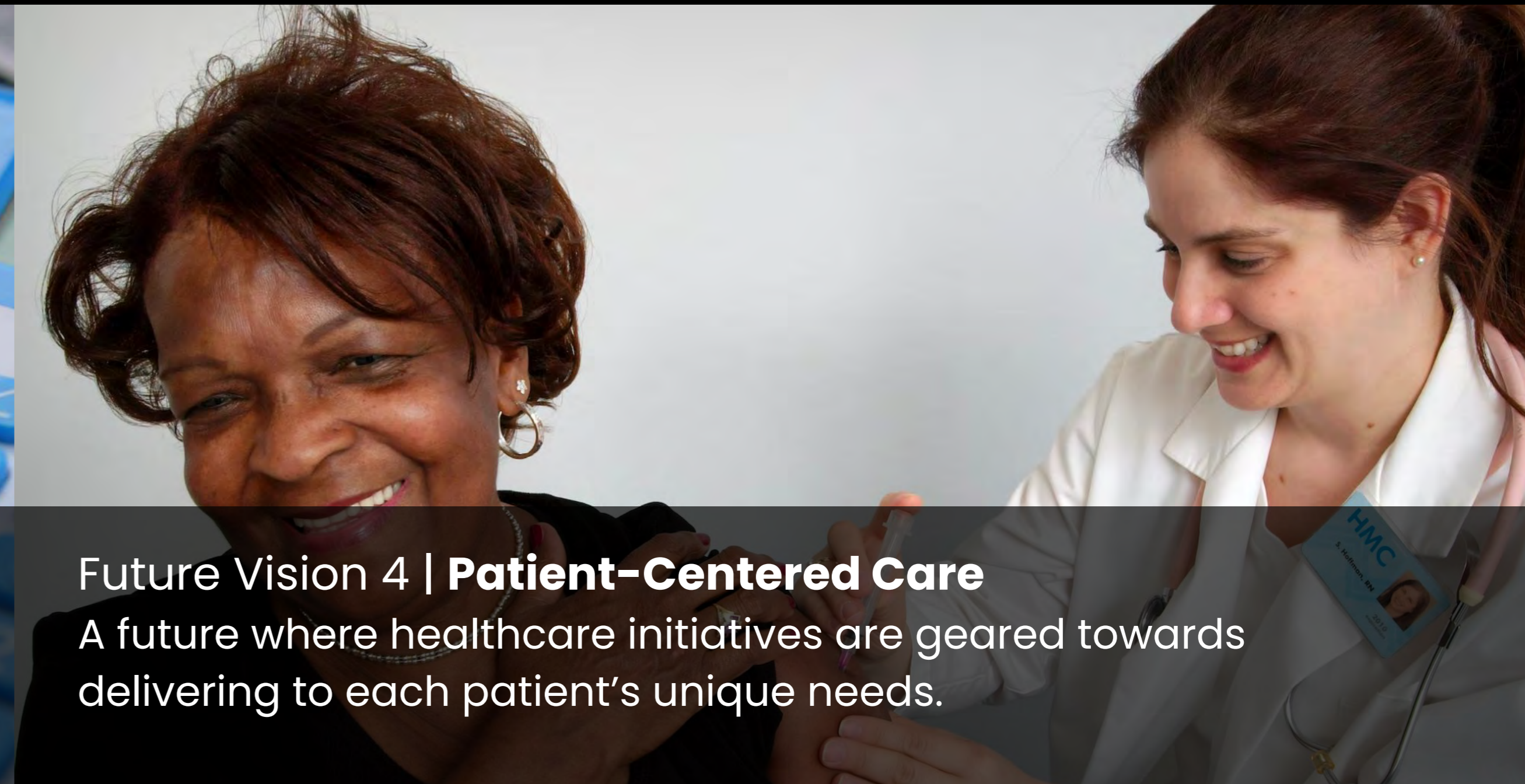
Future Vision 3 | **Radical Medicine**

A future where there is no government interference in healthcare, resulting in a rapidly innovating healthcare system at a cost.



Future Vision 4 | **Patient-Centered Care**

A future where healthcare initiatives are geared towards delivering to each patient's unique needs.



Concept 1 | **Anatomy**

What if patients could have a better understanding of their medical condition and treatment?



Concept 2 | **Pharmafluid**

What if pharmacies were fully autonomous, from prescription to aftercare?



Responses to the Futures of Care



Concept 3 | **Health Credit**

What if your everyday decisions determined your premiums?



Concept 4 | **MedStock**

What if facilities could have accurate and precise inventory management that eliminates waste and generates impact?

Team 2

Nora, The Friendly Robot Nurse

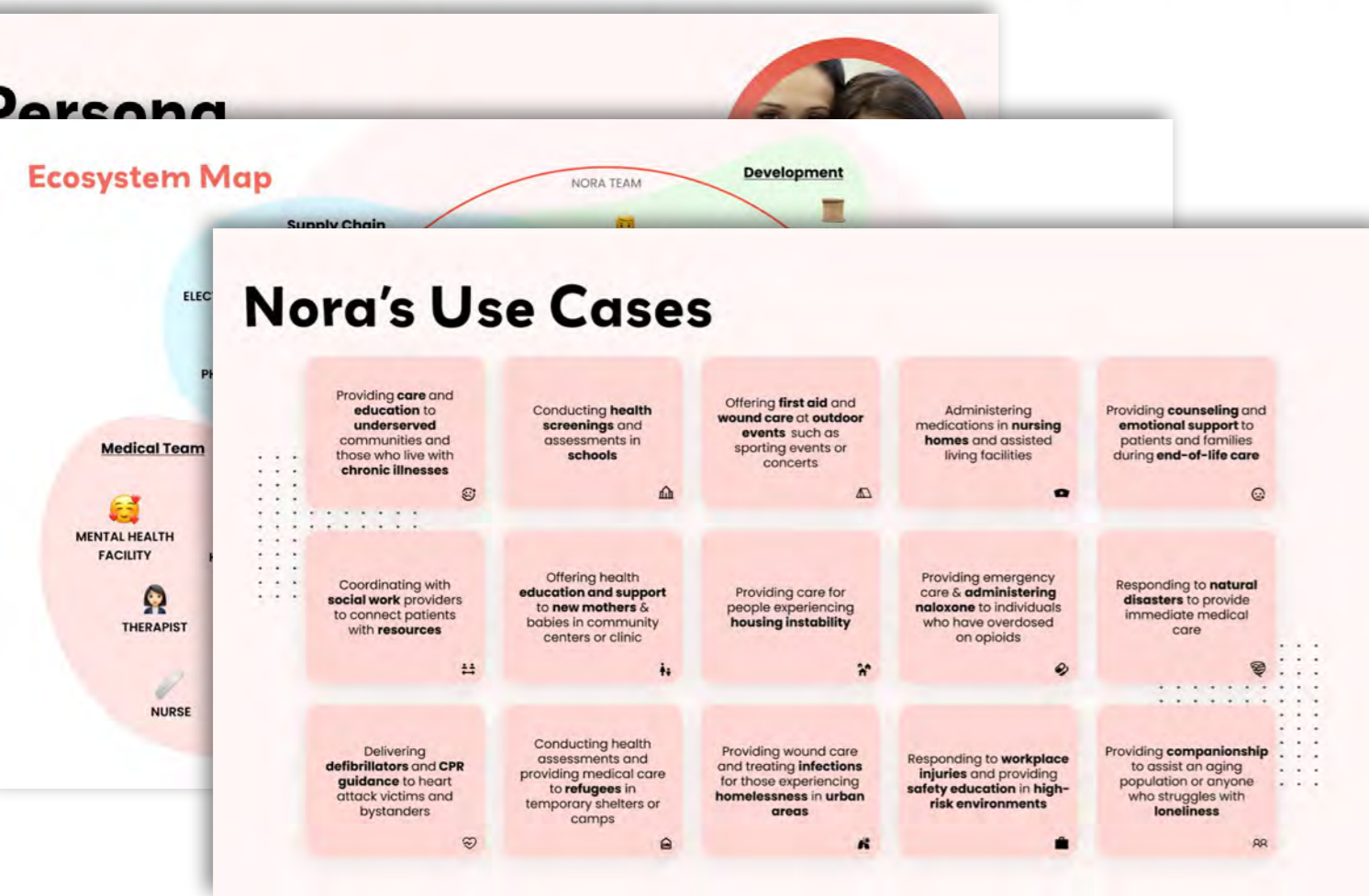
Adi Guruprasad, Alicia John, Ire Omitowoju, Jasmine Liao, Kai M. Vincent, Connie Xu

Nora is an intelligent public healthcare robot that patrols neighborhoods and populous areas to provide personalized care through easy access to medical equipment and vital health scans.

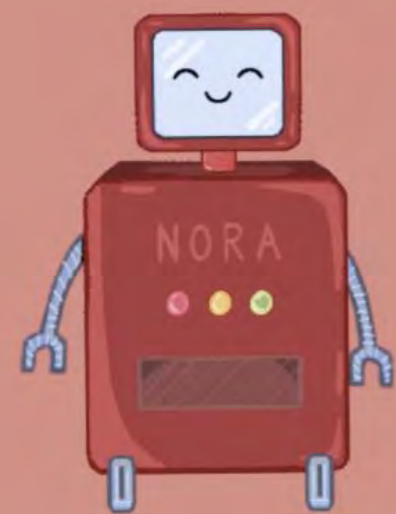
User Persona Laura

Laura is a single mother who lives in a rural area. She works at a hospital and is often on call. Her 10-year-old daughter, Sofia, suffers from asthma.

One day, Sofia has an asthma attack and Laura is far from the hospital. She is worried about what to do.



NORA



THE FRIENDLY ROBOT NURSE

Nora, The Friendly Robot Nurse



Nora is an **intelligent public healthcare robot** that **patrols neighborhoods** and **populous areas** to **provide personalized care** through easy access to medical equipment and vital health scans.

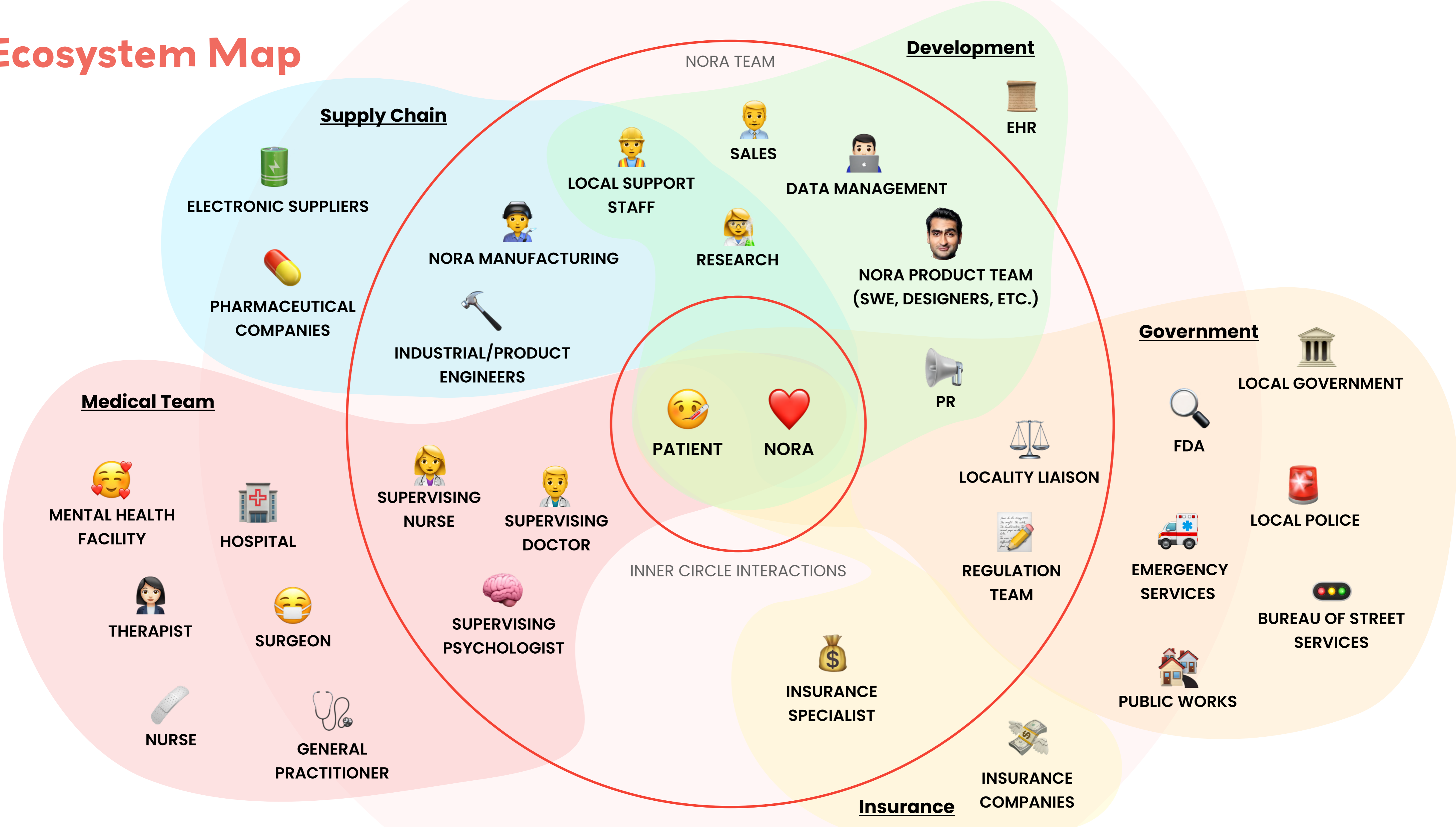
User Persona Laura Sanchez




Laura is a **single mother** to her daughter, Sofia. Laura and Sofia live in a **rural low-income neighborhood** with the nearest hospital being a 30 minute commute away. Unfortunately, Sofia suffers from **epilepsy**.


One day, Sofia faces a **bad seizure in the park**. Laura is **concerned and confused** about what to do as she **lives very far from the nearest hospital**.


Ecosystem Map




Supply Chain


ELECTRONIC SUPPLIERS


PHARMACEUTICAL COMPANIES


NORA MANUFACTURING


INDUSTRIAL/PRODUCT ENGINEERS


LOCAL SUPPORT STAFF

NORA TEAM


SALES


DATA MANAGEMENT


RESEARCH


NORA PRODUCT TEAM
(SWE, DESIGNERS, ETC.)

Development


EHR


PR


LOCALITY LIAISON


REGULATION TEAM


INSURANCE SPECIALIST

Insurance


INSURANCE COMPANIES


Medical Team



MENTAL HEALTH FACILITY


HOSPITAL


THERAPIST


NURSE


SURGEON



GENERAL PRACTITIONER


SUPERVISING NURSE


SUPERVISING DOCTOR


SUPERVISING PSYCHOLOGIST

INNER CIRCLE INTERACTIONS


PATIENT


NORA

Government


FDA


EMERGENCY SERVICES


PUBLIC WORKS


LOCAL GOVERNMENT


LOCAL POLICE


BUREAU OF STREET SERVICES

Nora's Use Cases

Providing **care** and **education** to **underserved** communities and those who live with **chronic illnesses**



Conducting **health screenings** and assessments in **schools**



Offering **first aid** and **wound care** at **outdoor events** such as sporting events or concerts



Administering medications in **nursing homes** and assisted living facilities



Providing **counseling** and **emotional support** to patients and families during **end-of-life care**



Coordinating with **social work** providers to connect patients with **resources**



Offering health **education and support** to **new mothers** & babies in community centers or clinic



Providing care for people experiencing **housing instability**



Providing emergency care & **administering naloxone** to individuals who have overdosed on opioids



Responding to **natural disasters** to provide immediate medical care



Delivering **defibrillators** and **CPR guidance** to heart attack victims and bystanders



Conducting health assessments and providing medical care to **refugees** in temporary shelters or camps



Providing wound care and treating **infections** for those experiencing **homelessness** in **urban areas**



Responding to **workplace injuries** and providing **safety education** in **high-risk environments**

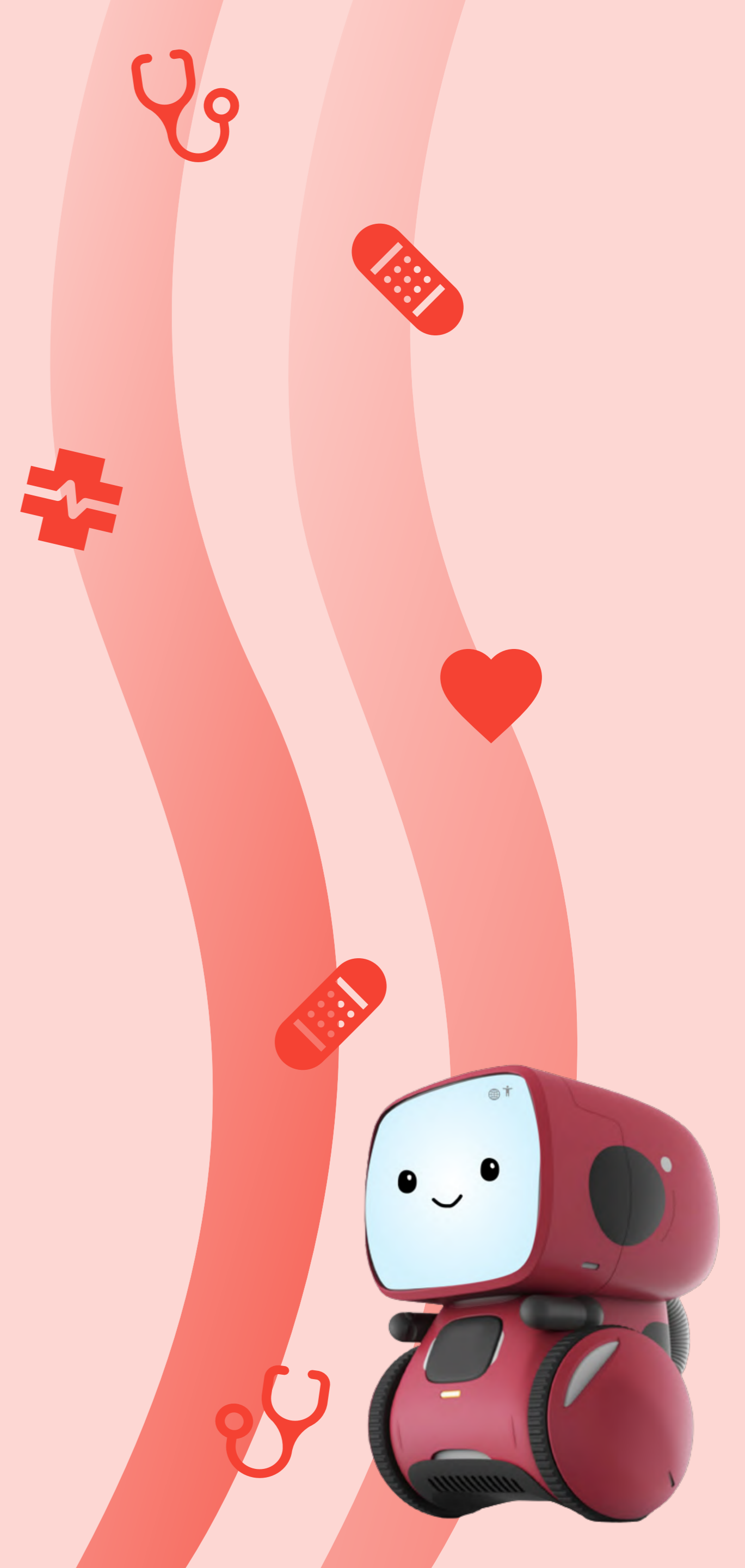
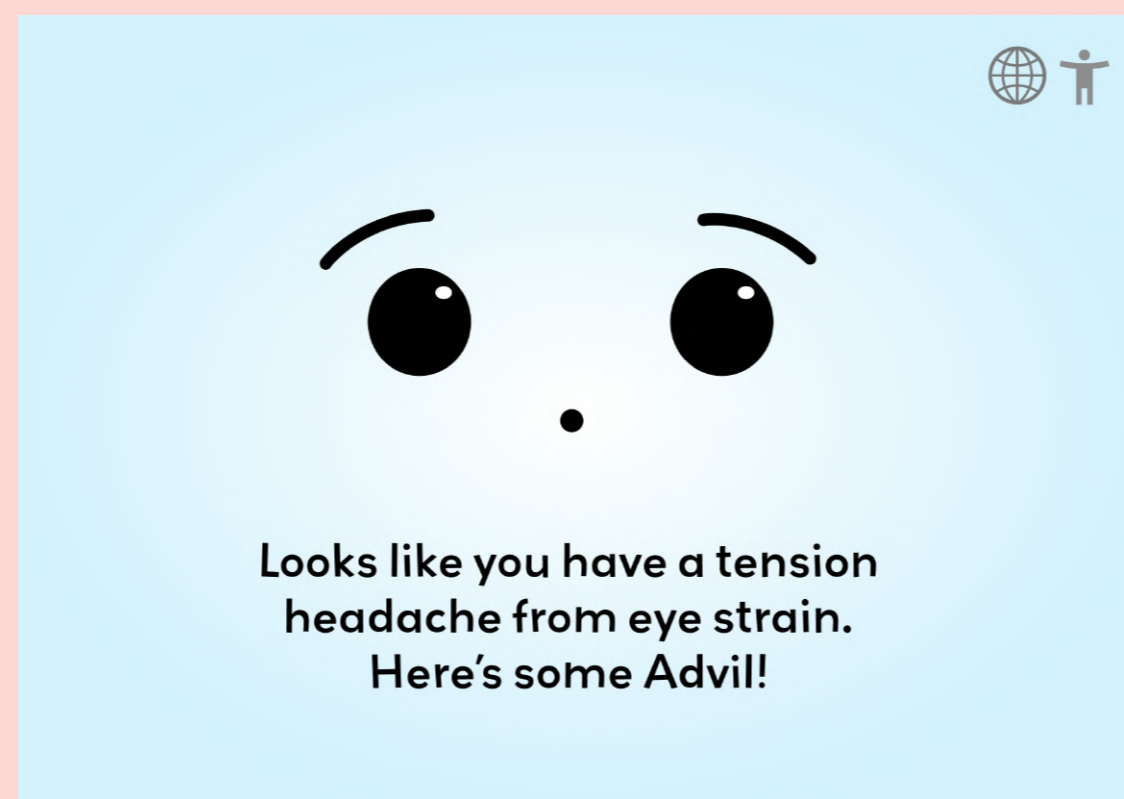


Providing **companionship** to assist an aging population or anyone who struggles with **loneliness**



Physical Prototype Demo

User Journey



"Working with the Lovine and Young Academy is a natural fit, as the focus across design, technology, and business is precisely the skillset and multidisciplinary thinking we need from our future consultants. Academy students are already making a huge impact in their roles at EY and working with students in the classroom is a great way to help impact future talent."

Mike Kanazawa

EY Global Innovation Realized Leader