SYSTEMS FINAL PROJECT | PRODUCT SERVICE ECOLOGY - WELLNESS

Part 1 - Modeling the Current State

DIABETES

What is Diabetes?

Diabetes is a disease that occurs when blood glucose (also called blood sugar) is too high.

It occurs when the body does not make enough or any insulin (a hormone made by the pancreas) or doesn't use insulin well.

Insulin helps glucose from food get into the cells to be used as energy. A lack of insulin means glucose stays in the blood and doesn't reach the cells.

DIABETES HAS NO CURE

Steps can be taken to manage diabetes and stay healthy.

Different treatments are prescribed based on the type of diabetes.

The in the the year.

cause of death

n the United States in he year 2017

Types of Diabetes

Type 1 Diabetes

In this type of diabetes, the body does not make insulin.

The immune system attacks and destroys the cells in the pancreas that make insulin.

Usually diagnosed in children and young adults. People with type 1 diabetes need to take insulin every day to stay alive.

Type 2 Diabetes

In this type of diabetes, the body does not make or use insulin well.

Can develop at any age, but mostly occurs in middle aged and older people.

It is the most common type of diabetes.

Other types

Gestational diabetes - Develops in women when they are pregnant.

Monogenic diabetes - an inherited form of diabetes Cystic fibrosis-related diabetes 415 million people

are living with diabetes across the world.

The figure is expected to rise to

642 million people living with diabetes worldwide by 2040



of people with diabetes are undiagnosed

of the world's adult population has diabetes

What does a diabetic person measure?

Blood Glucose level

A person with diabetes measures the blood glucose level. Doctors call high blood glucose hyperglycemia.

They can do this with blood glucose meters with a finger prick or continuous glucose monitoring (CGM) which includes a sensor and a reader.

How do they manage blood glucose levels?

By taking insulin

Apart from diet, exercise and medication to lower blood glucose levels, a diabetic person may need to **take insulin.**

They can do this with a needle or syringe, insulin pens, pumps, inhalers (only for rapidacting insulin), injection port or jet injector.

Monica Poddar

1.1 UNDERSTANDING THE CHRONIC CONDITION

CCA MDES IXD, SPRING 2020

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PHARMACY

Apollo

Part 1 - Modeling the Current State

THE CAREGIVING NETWORK

FRIENDS

options to stay healthy.

The patient was diagnosed with Type 2 diabetes at the age of 38.

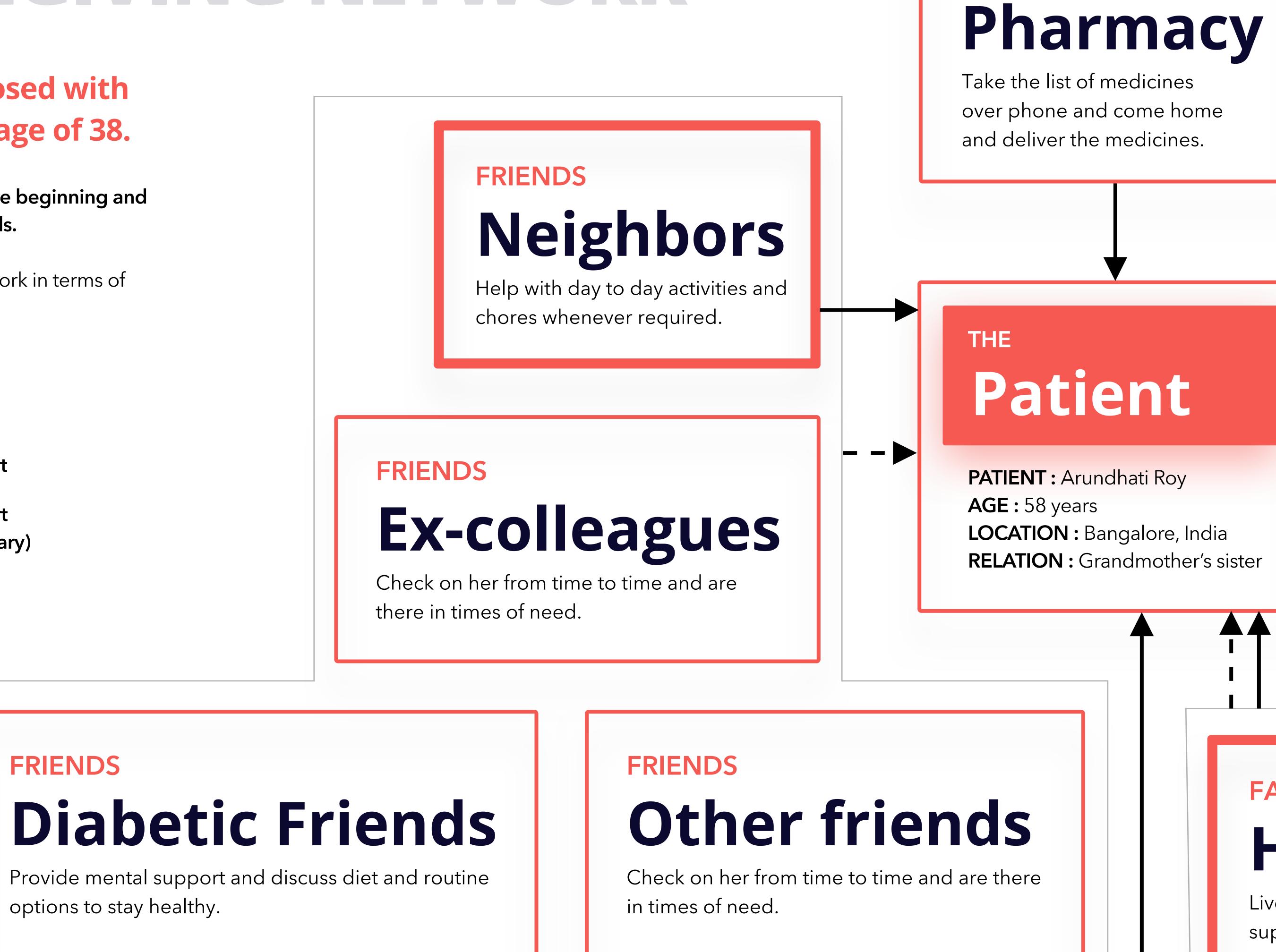
She started with oral medication in the beginning and switched over to insulin 1997 onwards.

This is a model of the caregiving network in terms of physical and mental support

Emotional Support Functional Support (Physical + monetary)

Daily support

Non-daily support



MONETARY SUPPORT

Health Insurance

Helps her manage her high medical bills and cover her diagnostics costs.

Husband Son

Lives with her and is the main Lives in Seattle. Visits her once a support person.

Doctor

the past 6 years.

Visits every 3 to 4 months.

Dr. Pramila is her 5th doctor.

She has been treating her for

Nurses, diagnostics people etc.

Other health-

care personnel

FAMILY

year and pays for her medicines.

FAMILY

Extended family

FAMILY

←J¦

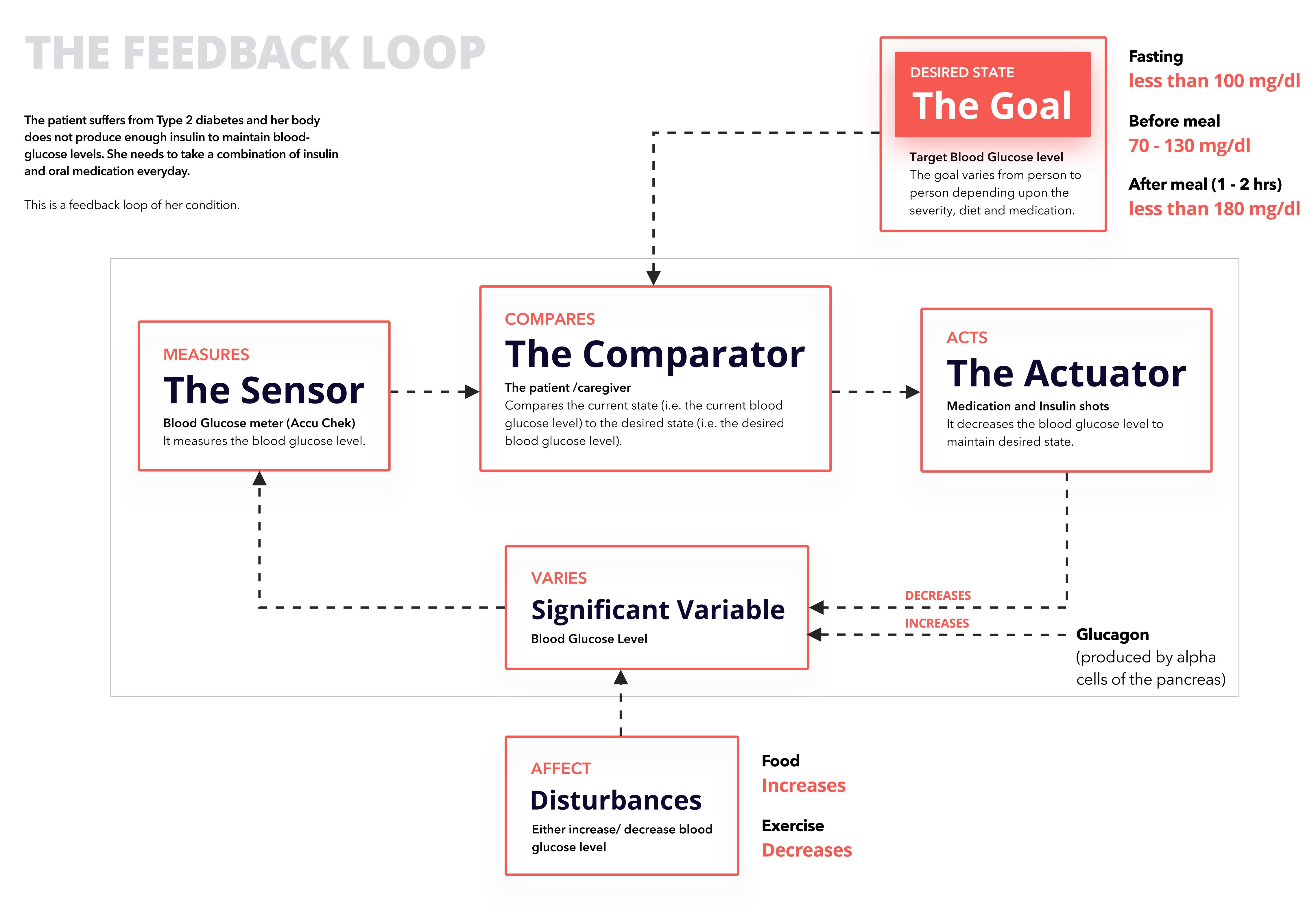
Check on her from time to time and are there in times of need.

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1.2 MODELING THE CAREGIVING NETWORK CCA MDES IXD, SPRING 2020 SYSTEMS FINAL PROJECT | PRODUCT SERVICE ECOLOGY - WELLNESS

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1.3 MAPPING THE FEEDBACK LOOP

Part 1 - Modeling the Current State

ADAY IN HER LIFE

