

challenge | outsourcing the mind

Elizabeth wants to use her brain power on things she is good at and ignore everything else.

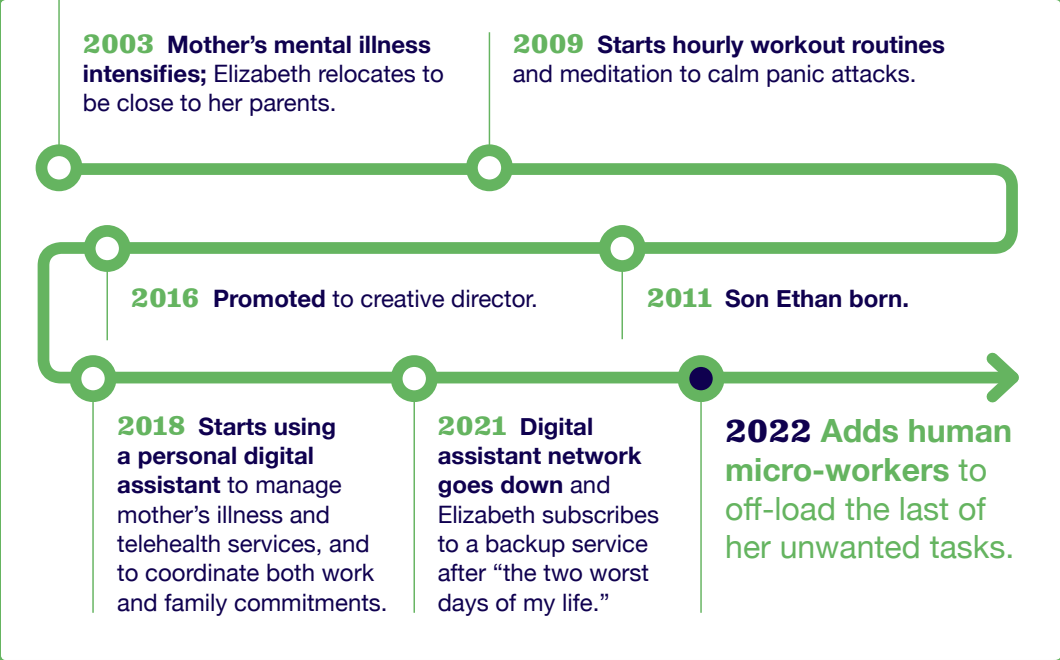


Elizabeth

age 42  
profession Creative Director  
city Kansas City, MO

“My creativity and compassion are my best qualities. They’re what I’m good at and what I love—and I no longer do anything that doesn’t involve them.”


How Elizabeth got here




utopian

Her strategies


cognitive off-loading | Elizabeth depends on her personal digital assistant to seamlessly juggle her commitments, complete routine digital tasks, and enlist human resources for micro-tasks like getting groceries.

utopian 

digital dieting | She carefully chooses the information she lets into her sphere—just enough to know headlines—and compulsively avoids upsetting news.

utopian 

sharing health devices | Elizabeth uses her mom's many diagnostic devices on herself, her husband, and her son.

pragmatic 



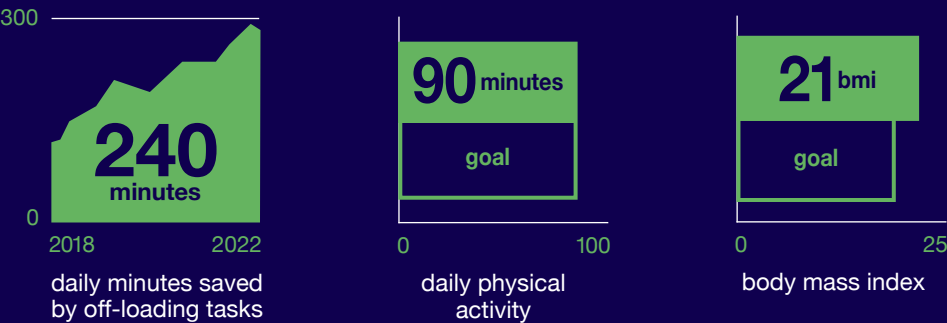
# Elizabeth

**Elizabeth realizes time is her biggest asset, so she goes to great lengths to outsource anything she doesn't want to do herself.** She enjoys her demanding career as creative director at a communications firm, juggling dozens of projects requiring her creativity, but she hires micro-workers to do the more menial aspects of her job, such as scheduling and writing communications. Elizabeth is also deeply satisfied spending time with her husband and 11-year-old son and, together, caring for her aging parents, who live just down the street. Every night, Elizabeth has them over for dinner and family time. Though she enjoys cooking and many aspects of caregiving, she off-loads planning and details—such as picking up prescriptions or ingredients, and making the nutritional calculations for her menu plans—to her digital assistants.

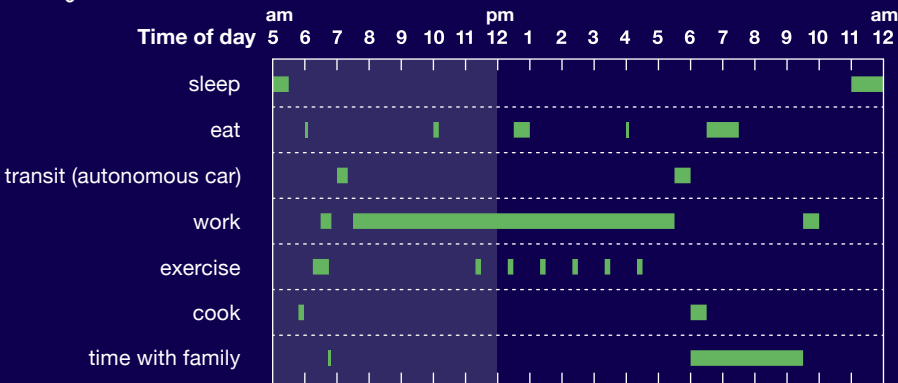
## Settings for Health

- **HOME** the home health center
- **CLINICAL** ubiquitous health interactions
- **WORK** anytime, anyplace work

## What Elizabeth is tracking



## Hour by hour



## challenge | outperforming age

Jacob believes that with help from the right technologies he can maintain his youthful energy and avoid the traditional health care system.



### Jacob

age 23

profession

Freelance  
Programmer

city

New York, NY

“My parents think I’m being reckless, but every time I go to a bar I’m actually planning ahead.”

### How Jacob got here

**2005** Father survives prostate cancer, struggles with imperfect hormone therapy.

**2010** Jacob assembles his first Arduino board and realizes that he can truly make anything he wants.

**2019** Jacob begins tracking personal hormone levels so his natural levels can be recreated later in life when needed.

**2013** His school district in upstate New York bans hand sanitizer and raises awareness of friendly bacteria.

**2020** Graduates from Cornell with a degree in human-computer interaction.

**2022** Moves to NYC, sells belongings, and starts a “co-living” lifestyle.

utopian

### His strategies

**future proofing** | Jacob tracks and banks his hormone levels with a start-up to create a snapshot of his biology he can reference later in life to restore him to his “natural” healthy state.

utopian 

**digital dieting** | With a degree in human-computer interaction, he understands better than most the ill effects of media overload, and his biometric feedback system alerts him to any potential overdose.

utopian 

**dropping out of health** | Disenchanted with the medical establishment, Jacob avoids doctors and relies almost exclusively on his own measures of health.

speculative 



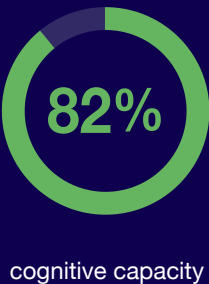
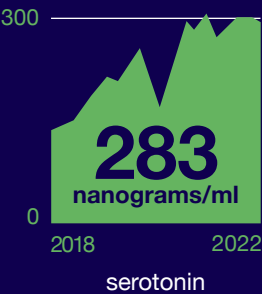
# Jacob

**Notorious for his off-the-charts energy level and wide array of projects and hobbies, Jacob moved to NYC determined to avoid the fate of his friends who are slowing down as they approach 30.** Jacob is planning ahead, utilizing embedded sensors and microbial optimization to ensure he maintains vitality for decades to come. Sensors collect thousands of data points for a decision-making mechanism programmed to keep his energy high and his brain function higher. Even his frequent pub crawls enhance health by expanding and diversifying his social network and boosting his immune system. His parents worry he sleeps too little and drinks too much, but he feels great and is certain he will always reap the benefits of a fun-filled life.

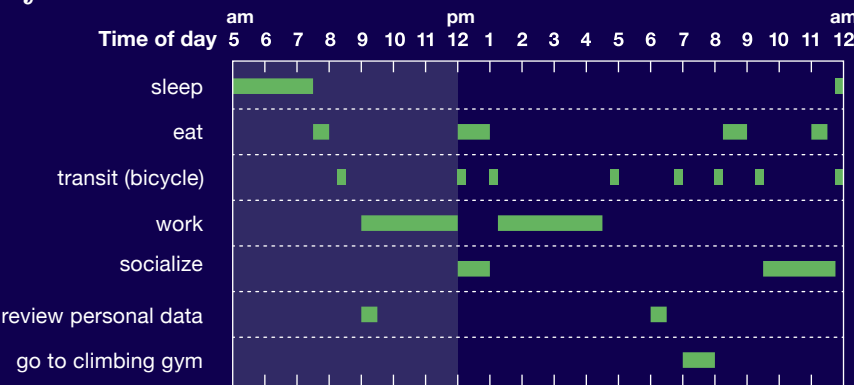
## Settings for Health

- **HOME** the connected apartment
- **WORK** optimized workspaces
- **CLINICAL** ubiquitous health interactions

## What Jacob is tracking



## Hour by hour



challenge | **managing data as a health asset**

Barbara wants to make sure her daughter gets the most out of her personal data and manage her profile properly.



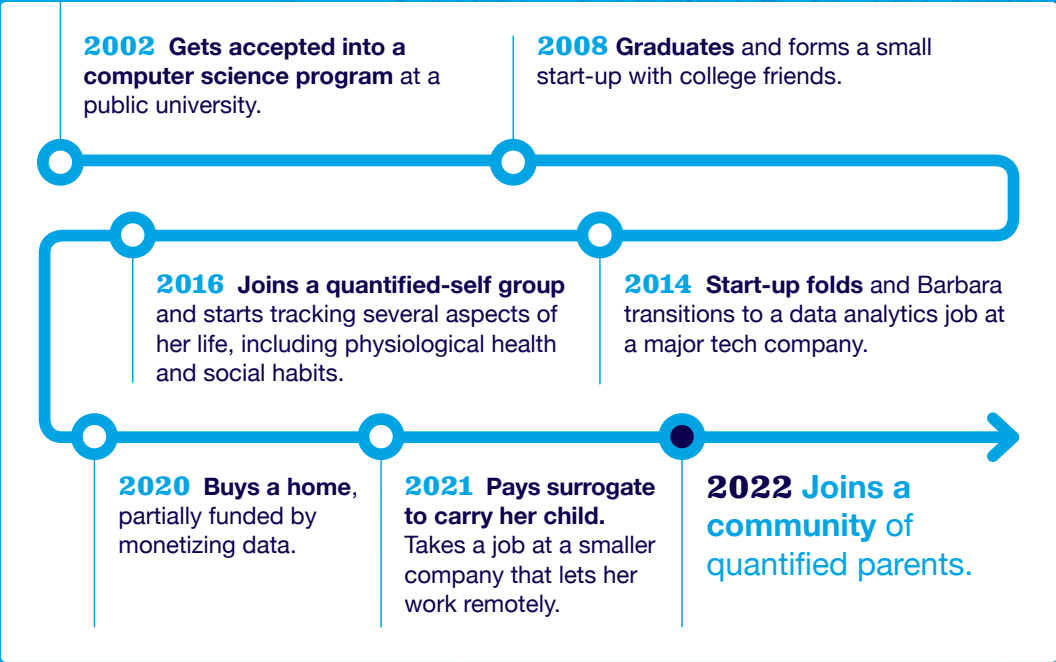
**Barbara**

age 38  
profession  
Data Analyst  
city  
Cupertino, CA

“By collecting and managing it right, I’m going to make sure my daughter’s data will be a resource she can tap into whenever she needs it, at any point in her life.”

pragmatic

How Barbara got here



Her strategies

optimizing health choices | Barbara is a savvy data manager who teaches mothers which data to collect and how to bank and pool it to maximize its value. pragmatic

cognitive off-loading | To be a better parent, Barbara off-loads many tasks, letting bots make food choices and schedule social activities for optimal enjoyment with minimal time demands. utopian

taking the fiction cure | Barbara is creating a customized fiction prescription balanced among media that will maximize her daughter’s physiological and intellectual health, and overall sense of well-being. speculative





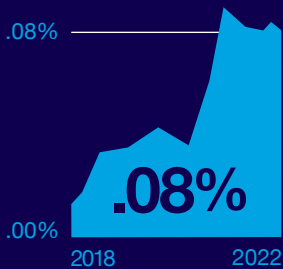
# Barbara

As soon as she decided to hire a surrogate to carry her child, Barbara started thinking about how to maximize her daughter's opportunities. She now invests time exploring educational and social opportunities for her child to keep her happy and healthy. Her data literacy gives her an advantage over other parents because she understands the benefits and risks of collecting personal data. Some of the home retrofits Barbara and her partner have made are data based—for instance, installing the appropriate sensors to ensure that the data gathered will be the most valuable for her child. She's already started a data savings account for her daughter and plans to choose carefully when to dip into it.

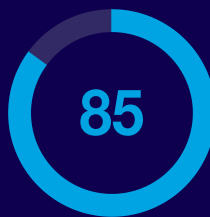
## Settings for Health

- **RETAIL** automated shopping systems
- **WORK** anytime, anyplace work
- **ON-THE-GO** self-driving cars

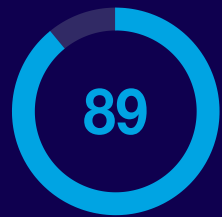
## What Barbara is tracking



data value appreciation

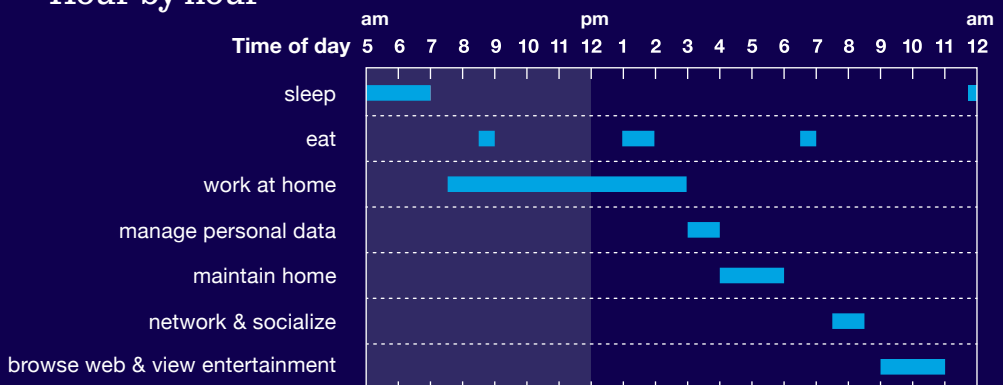


fetal well-being index



home health score

## Hour by hour



challenge | **preserving community health**

Robert is trying to use health data to enhance community health—and his own.



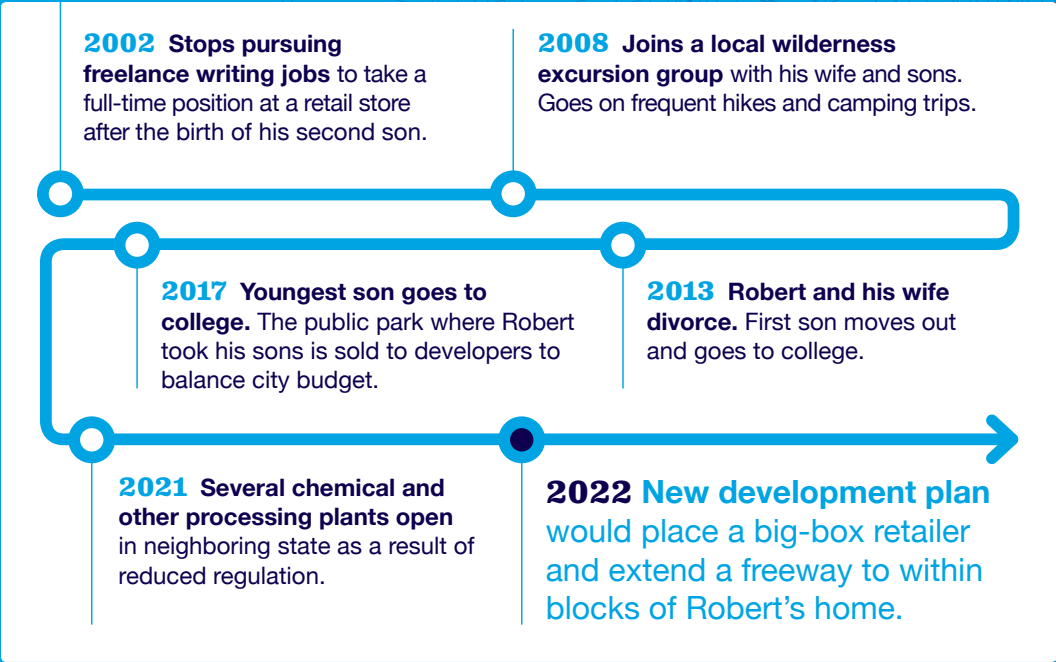
**Robert**

age 60  
profession  
Manager at  
Outdoor Gear  
Store  
city  
Boulder, CO

“I’m not about to let a freeway ruin the future health of my neighborhood.”

pragmatic

How Robert got here



His strategies

sharing health devices | By designing community health devices, Robert brings transparency to the neighborhood’s health risks. This strengthens social connections and community well-being. pragmatic

optimizing health choices | Through community organizing, Robert manages data that he and his neighbors collect as an asset when needed to advocate for change. pragmatic

creating pre-sick identities | Robert’s group is using the community’s risk profile to define his neighborhood as pre-sick to request specific resources from the state and federal governments. speculative



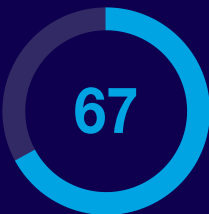
# Robert

**Robert's neighborhood is among the healthiest in the nation—and he's committed to keeping it that way.** When it was announced that a new big-box retailer was coming to his neighborhood, along with a freeway expansion, Robert joined a group that believes the development represents such a threat to the community's health that it would make the entire population pre-sick. Now, in his free time, Robert facilitates the donation of old personal and home sensors and diagnostic tools so they can be turned into community health monitors by embedding them in public spaces. And he participates in outreach events to engage community members in mapping the area's risks and resources. On the weekends, his group even plants trees and retrofits public structures to reduce light and noise pollution.

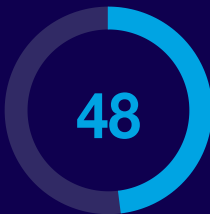
## Settings for Health

- **ON-THE-GO** the digital information layer
- **HOME** the connected apartment
- **CLINICAL** primary care reinvented

## What Robert is tracking



neighborhood stress score

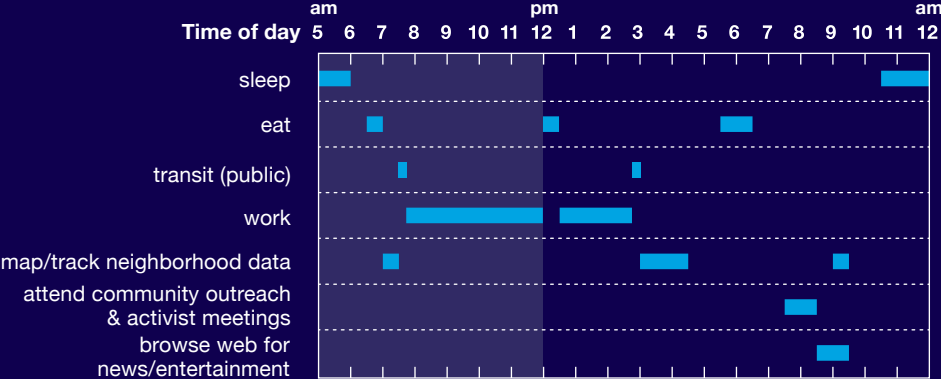


neighborhood air quality score



lung capacity

## Hour by hour





Regardless of her diagnosis, Melanie wants to focus on staying happy, alert, and connected to her friends and family.

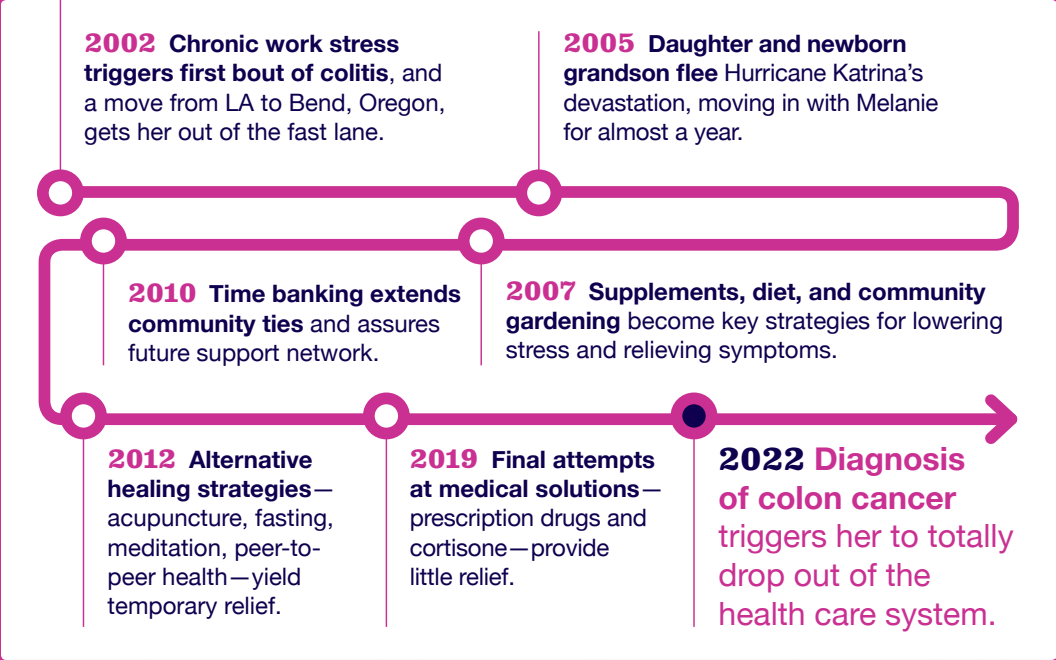


Melanie

age 74  
profession  
Retired  
Animation  
Film  
Scriptwriter  
city  
Bend, OR


“Chemo is no fun, and it might not even work; I might as well scrap all that and spend my last years with my grandson exploring virtual worlds together.”

How Melanie got here




Her strategies


**taking the fiction cure** | Inventing and embodying alien creatures through augmented sensory realities provides pain relief—and she believes it has a better impact on her health than treatments.

speculative 

**dropping out of health** | Melanie has turned her back on both the traditional and alternative health paradigms—“No more health thinking,” she says.

speculative 

**profile pruning** | Melanie and her grandson, Donovan, are recasting their online identities in terms of their off-planet world—and capturing an encoded family history at the same time.

pragmatic 



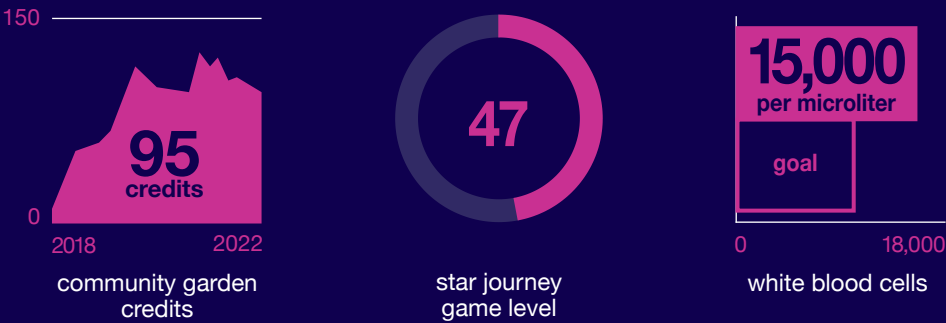
# Melanie

Melanie has always been a great believer in the power of the creative process to transform daily experience, so when she was diagnosed with colon cancer, she rejected the treatments she thought would dull her creative edge and set off instead on a final “journey to the stars” with her teenage grandson. Together they’re using sensory-augmented reality tools to create a shareable world of noncarbon off-planet life forms, which she feels, deep down, could actually beat her cancer into remission. Her personal avatar eats digital data, purging invasive digital trails as she goes about her daily routine of community gardening and (most engaging) motion capture of the people on the streets around her to animate her fantasy life forms.

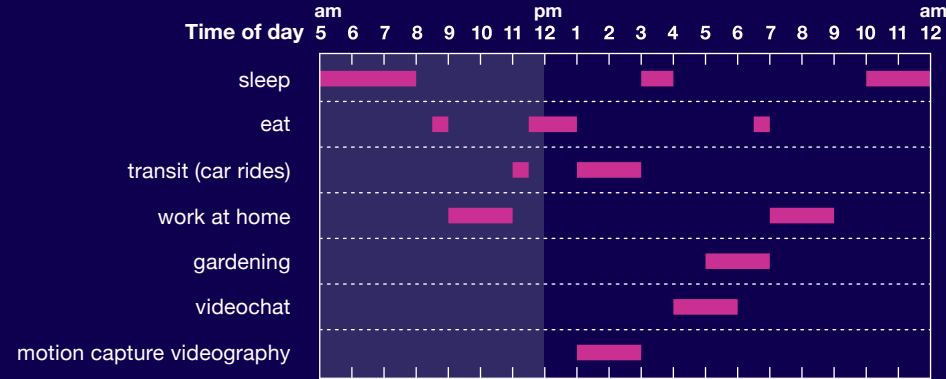
## Settings for Health

- HOME the home health center
- ON-THE-GO the digital information layer
- RETAIL data-driven supermarkets

## What Melanie is tracking



## Hour by hour



## challenge | designing away risk

With a genetic predisposition to Alzheimer's, Charles needs to ensure that his family's life is designed around preventing its onset.

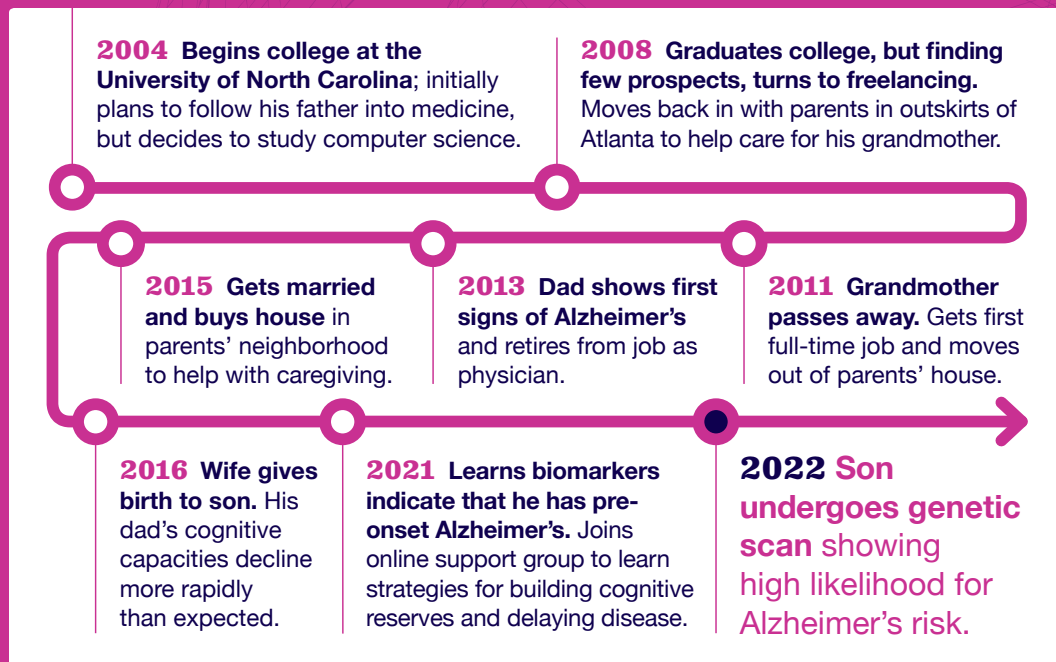


### Charles

age 36  
profession  
Software Engineer  
city  
Atlanta, GA


"My dad is declining and my doctor says I'll have Alzheimer's in 20 years, too. I don't want my son to have to deal with this."

### How Charles got here



### His strategies

**creating pre-sick identities** | After being diagnosed with pre-Alzheimer's and with his son given a high probability for the disease, Charles spends time pondering how his future disease will limit his health.

speculative 

**future proofing** | To optimize his cognitive reserve, Charles is remodeling his house, buying products, and even organizing his son's nursery based on the latest neuroscience research.

utopian 

**profile pruning** | After actively participating in pre-Alzheimer's social networks under his own name, Charles is now trying to figure out how to protect his son's online reputation.

pragmatic 



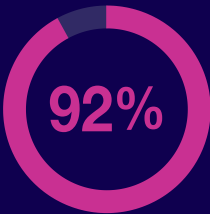
# Charles

Since being diagnosed with pre-onset Alzheimer’s, Charles has been re-evaluating his day-to-day priorities. Family has always been important to him, and he has decided to cut back on work to make more time to care for his young son and ailing father. Determined to be there mentally for his son throughout his childhood, he spends at least an hour a day participating in a pre-Alzheimer’s community to learn how to design routines such as frontloading his workday for peak performance and to retrofit his house to maximize brain health. These responsibilities have taken their toll on Charles’s career and marriage; he and his wife are still happy, but they rarely have a chance to escape and relax together.

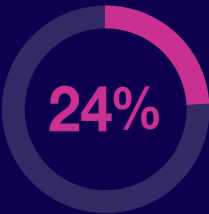
## Settings for Health

- CLINICAL ubiquitous health interactions
- HOME the home health center
- WORK anytime, anyplace work

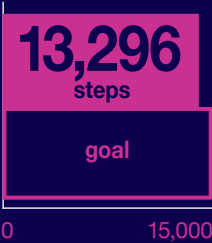
## What Charles is tracking



average recall  
daily memory test



father's daily  
memory test



number of steps  
taken daily

## Hour by hour

