The Problem

How to support patients in a uncertain world?

The most significant interactions between patients and the health care system occur as dialog during the doctor’s appointment. But how much of these critical conversations do we remember? How much do we understand? Are we prepared to adapt to unexpected future circumstances? Without empowering takeaways or a means to capture and annotate our discussions with doctors, the value and richness of these interactions is often lost.

Rushed to move on to the next patient’s appointment.

Speaking with the precision of medical language.

Attempting to convey as much information as possible

Stressed out by the doctor’s diagnosis and unfamiliar with specialized medical jargon.

Overwhelmed by the pace of the conversation, but pressured to seem like he understands and is in control.

Unaware that he will be one of the few patients that experience the side effects of the prescription drug.
The Problem
How to organize and access the recordings?

Research began by looking at text and audio to see what was best for reviewing conversation. After transcribing a recorded doctor’s visit two important validations were reached: one, tone of voice and emphasis were lost in text subsequently diluting the importance of information, and two, mapping conversation to text did not enrich the information any more than the audio.

It was important to have as close to the original experience as possible otherwise context was lost. With the amount of information within an entire recording it was crucial to subdivide the dialog. Transcribing the audio revealed a pattern between the amount the doctor spoke (paragraphs) and the amount the patient spoke (one sentence).
The Problem
How should the device look, work & feel?

The reversal in dialog—where one person stops talking and the other starts—provides a clue into the mapping of dialog over time. This device needed to be on the table exposed. Sitting between the doctor and patient not as an observer but as a participant in the conversation.
Design Solution

Dialog Map

The timeline of the appointment is mapped to fit the medical cycle, a high-level model of medical practice. Broad phases: symptoms, diagnosis, and treatment and speaker reversals in conversation provide a meaningful frame of reference for organizing the audio recording.

Low Fidelity interactions, such as the doctor phase-marking, provide organizational value but do not distract from the human–human dialog.
Design Solution

MediLog Device

More than a recording device, MediLog enables the doctor and patient to jointly construct a visual mapping of their interaction. Through bread crumbs and phase labeling the enhanced recording promotes real-time comprehension of the dialog and provides a means for efficient access to key segments when reviewed.
At the Appointment
The doctors choice to use MediLog reveals her priority for supporting her patient. The device rests on the table at the doctor’s office in order to promote transparency and openness. The co-creation of the map reflects the responsibility shared by both stakeholders and promotes a trusting relationship. For this reason, MediLog is designed with powerful, but low-fidelity interactions to distract as little as possible from the human-human interaction.

Design Solution
MediLog Device

At the Appointment
The doctors choice to use MediLog reveals her priority for supporting her patient. The device rests on the table at the doctor’s office in order to promote transparency and openness. The co-creation of the map reflects the responsibility shared by both stakeholders and promotes a trusting relationship. For this reason, MediLog is designed with powerful, but low-fidelity interactions to distract as little as possible from the human-human interaction.
The conversation between patient and doctor is mapped, like a dialog shot in film, revealing the speaker reversals that structure the audio map.

The patient responds to the doctor’s question and this shift is revealed in the map on the device.

The doctor responds and continues to discuss the patient’s symptoms.

The doctor indicates a shift from the discussion of symptoms to her diagnosis. This high-level organization is designed to help the patient organize and browse in the future.

The doctor discusses her diagnosis of the patient’s symptoms.

The patient leaves behind a marker when he heard something that he wanted to double-check later. These temporal bookmarks can be added and annotated later.

The doctor continues to discuss the diagnosis.

MediLog Beyond the Appointment
After the appointment, the audio recording and map are transferred to the patient so that he can annotate the map, review the conversation, and share it with other care-providers.