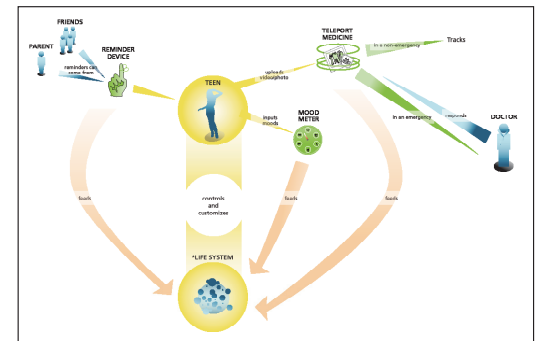


OUR PROTOTYPE

We started with the assumption that a PHR system enabling teens to manage their own health can be more than an archive of medical information or reminders of upcoming office visits. **Input from the teens showed us that a PHR if it's to be meaningful (and used) must live within the teen world and help to improve their quality of life as defined by the teens.**

The Quality of Life Timeline (QLT), our primary innovation, is an aggregate of real-time data flows that are visualized in the context of a teen's life goals. This holistic approach promotes the teen's ability to choose long-term or short-term goals that contribute to their perceived quality of life (i.e., attend the prom, skateboard, surf, etc.) and for the health care team to optimize the medical components necessary to achieve this goal.

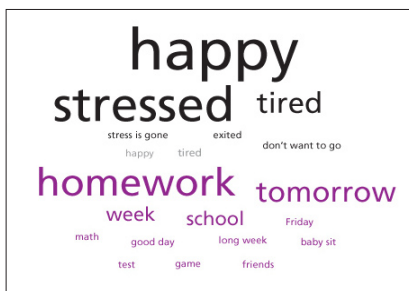
The interface has particular features and functions in and of itself that are key to understanding the individual data flows or modules. These enable teens to personalize their PHRs according to their ever-changing interests, goals, and milestones. A powerful feature is its real time representation of data in combination with its historic and future views. Teens have the ability to turn modules on or off and have full control on which parts to share and to whom. The caregiver can also communicate medical advice, guidelines, or prescription information into a specific zone of the system that's reserved for doctor input. The teen and caregiver(s) can review the tracking information for any time period to identify patterns, facilitators, and barriers to reaching teen-determined goals.



Preliminary diagram of the QLT

We are working with three discreet PHR modules that will provide the teen user with three distinct data flows:

The **Mood Meter**, a widget that has two distinct ways of capturing information. The first capture concept comes from our participating teens who said they would like to convey how they feel on any particular day as a way to let their friends know when they need "extra space." The idea of teens posting their moods on a social page (e.g. Facebook, Myspace) is not new, however this Mood Meter archives a teen's intentional and public entries (text/image) into a private relational database that provides various filters such as, time of day, week, month, or year.



Interpreted moods derived from research

The **Reminder Object**, a device that uses ambient technology to address underlying fears of forgetting to take meds and, more importantly for the teen, being alone. Every teen interviewed appreciated a reminder from his/her Mom regarding compliance. No one likes to be nagged, but a reminder from someone who cares is highly valued and is psychologically significant for our teens. This device is located in the teen's environment and communicates via Bluetooth. The

public interaction is simple and meaningful to the teen, yet ambiguous to everyone else—similar to a string tied around a finger. It may also provide the means for a teen to observe his/her behavior over time.

Teleport Medicine, connecting patients and MDs who are miles apart from each other using image and text communication. It's inevitable that mobile phone video streaming will provide a critical interface for emergency situations as well as a more ritualistic vmonitoring for rashes or swelling. Teens will be able to send video or still images to the clinic in the case of a health event or accident. Doctors will be able to respond via text and/or voice. All communication will be archived in the patients PHR and EMR.

One of the most profound discoveries of this study thus far has been the specificity of the communication gap between teens and health givers. Our hope is that our PHR tools fill this gap with the social and emotional needs that teens have so aptly expressed, allowing them to not only manage their own health care but in turn begin to change the relationship between health givers and their patients.

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