Mobile Technologies Offer New Approaches to Cancer Management

Treating cancer is becoming more complicated and multidisciplinary in nature, and patients are increasingly getting medical information from the Internet rather than health care providers in order to make complex treatment decisions. Unfortunately, this information can often be overwhelming, anxiety inducing, and inaccurate.

The Solution

Michael Sabel, M.D., has developed the University of Michigan Breast Cancer Ally clinical companion mobile app—a disease-specific technology that helps patients navigate the multiple facets of medical care by delivering information and tools based on the appropriate stage of treatment. This “just-in-time” approach to clinical information delivery offers a number of valuable features including disease stage-specific instructions, notifications, reminders, management information, and more.

The U-M Breast Cancer Ally is the first in a potential suite of apps designed to enhance the patient-physician relationship and provide specific education based on patient-reported outcomes. Components can be added, deleted, or modified, making it easy to update the educational materials as well as customize the materials for individual institutions/treatment centers.

This project was funded by the University of Michigan Translational Research and Commercialization for Life Sciences Program, also known as MTRAC. MTRAC works to “fast forward” projects that have a high potential for commercial success, with the ultimate goal of positively impacting human health.

MTRAC has been made possible by the Michigan Economic Development Corporation, the Michigan Institute for Clinical and Health Research, and the generosity of friends of the University of Michigan.
**The U-M Breast Cancer Ally** is the first in a suite of clinical companion apps that provide patient navigation, disease and institution-specific education, and disease management tools to assist in recovery after treatment.

** Significant Need**
With the overwhelming volume of medical information available online, patients are increasingly getting medical information from outside sources rather than their individual health care providers. This information can be inaccurate and incompatible with the patient’s medical situation. In addition, it can lead to a lack of communication between patient and physician.

** Compelling Science**
Disease-specific technology that promotes physician interaction and delivers customized information and tools based on the individual patient’s stage of treatment.

** Competitive Advantage**
Today, most medical apps are primarily informational, with minimal oversight regarding the clinical content and a tendency to replace the patient/physician relationship rather than enhance it. The U-M Breast Cancer Ally is disease-specific, providing the tools and information needed for a patient to navigate the multiple facets of their medical care. Components can be added, deleted, or modified to customize the materials for individual institutions.

**MTRAC Project Key Milestones**

- Release U-M Breast Cancer Ally, version 1.1 to the iTunes App store
- Identify, collect, and design essential interactive components for colorectal cancer management
- Modify the U-M Breast Cancer Ally into a U-M Colon Cancer Ally version
- Identify and collaborate with an outside health system to create a non-U-M institution-specific version of Breast Cancer Ally, then modify for release
- Generate colon and rectal-specific educational material and institutional-specific information in mobile format
- Evaluate usability and functionality of U-M Colon Cancer Ally
- Release U-M Colon Cancer Ally, version 1.1, to the iTunes App store

**Overall Commercialization**

**Commercialization Strategy**
- Direct-to-consumer for U-M patients.
- Enterprise-level customization service available for purchase by other health-care organizations.

**Regulatory Pathway**
U-M Breast Cancer Ally and University of Michigan Colon Cancer Ally will not be the focus of FDA regulatory oversight, but do have some features for which the FDA may exercise enforcement discretion.

**Intellectual Property**
Trademarked names under the “Cancer Ally” family.

**Engage Investors**
Seek venture and SBIR/STTR funding. NIH R-level funding for impact studies.

**Product Launch**
U-M Breast Cancer Ally and a potential suite of disease-specific apps.