

## HEALTHOWL MARKETING AND BUSINESS PLAN

### The Problem.

In 2011, an estimated 1.6 million people in the United States will be diagnosed with cancer, and approximately one-third of these people (572,000 individuals) will die of cancer. Cancer screening is a corner stone of the Nation's cancer prevention and control efforts. A number of cancer screening tests exist which are characterized by varying sensitivity, specificity and their ability to reduce cancer-related mortality. In addition, uniform recommendations for cancer screening across the various cancers do not exist. Thus, the burden of deciding whether to obtain appropriate cancer screening often falls on the patient. The HealthOwl App has been designed to address this problem, by providing a reminder system and decision tool for proper cancer screening behavior.

### Who would be interested in using or purchasing HealthOwl?

There are five potential constituencies who would be interested in using and paying for the HealthOwl app: 1) the individual users; 2) health care insurance companies; 3) large companies with a wellness program; 4) pharmaceutical companies and health care providers, and 5) Non-for profit organizations and patient advocacy groups. Each will be discussed in turn.

- 1) **The individual user.** The app will be made available at the various stores for iPhone, Blackberry and Android phones, as well as the Internet. To market the app we would publish a press release and be available for personal radio interviews. In the past we have engaged Tom Gallo from Gallo Marketing who was successful in advertising one of our clinical trials. Within 3 months I was interviewed approximately 12 times at various radio stations and had several write-ups in newspaper articles.
- 2) **Health insurance companies and companies with self-funded healthcare.** Health insurance companies and other payers can achieve substantial cost savings through cancer screening. Screening costs and potential treatment of disease that has been detected early is in general much cheaper than treating late-stage disease. For instance, the cost of treating a single case of localized (early-stage) cervical cancer averages \$20,255, while the cost of treating a single case of distant (late-stage) disease averages \$36,912 (both figures in year 2000 dollars).[1] The cost of a conventional Pap smear test will vary depending on location, type of provider, and the patient's age, but average within the range of \$9 to \$64. [1] Even adding the cost of several years of screening to the cost of early stage disease (\$20,255) it is still more cost effective than treating one instance of late-stage disease (\$36,912). [1] Furthermore, the years of life gained from early detection and treatment are valuable to families, businesses, and the community at large.[2] In comparison to other preventive interventions and to commonly accepted cost-effectiveness benchmarks, cervical cancer screening is highly cost-effective.[4]

The cost savings for colon cancer are even more dramatic. The annual expenditure for colorectal cancer had been estimated to be \$5.3 billion in 2000 [5]. Recent census projections predict that the hospital admissions due to colon cancer will more than double by the year 2050, from 215,000 in 1992 to 471,000 in 2050. The cost associated with lost productivity has been estimated to be \$106 million. A HMO based study reported that the average cost associated with carcinoma in situ, which is most frequently found during colonoscopies was \$7,002, compared to \$11,624 at a local stage, \$13,367 at the regional stage, and \$15,276 at the distant stage (figures are in 1992 dollars). [6] Costs of screening and early treatment are significantly less than treatment at a local or regional stage. Again, even when considering the costs incurred from screening, early treatment and detection of colorectal cancer is still more cost effective than treating late-stage disease. [8]

For both prostate and breast cancer screening the evidence for cost saving is not as clear. However, for individuals with a family history and in certain high risk groups, screening is fundamental,

recommended, and highly likely to reduce costs incurred by health insurance companies if the cancer is detected at an earlier, localized stage.

Given these cost savings, a health insurance company might be interested in investing in software that would increase screening adherence and thus minimize potential treatment costs. In the case of colon cancer alone this is a \$5,840 saving for a colonoscopy with removal of carcinoma in situ and treatment at local stage. The cost savings are even larger when compared between colonoscopy and removal of carcinoma in situ and treatment for regional stage (i.e., \$8,274). In addition to the potential cost savings HealthOwl would provide, it would also offer the opportunity for individual branding (e.g., HealthOwl by Blue Cross/Blue Shield) and thus represent another vehicle for a company or organization to be present in the mobile health market.

- 3) **Companies with a wellness program.** A similar argument can be made to companies who have a corporate wellness program (e.g., Whole Foods, Starbucks, Google, JJ, etc). Providing HealthOwl for free to all employees shows that the company is concerned about the well-being of their employees. It also makes financial sense as a disease that is detected early is usually treated less aggressively, involves shorter hospital stay (if at all) and is less costly. For instance, J&J estimates that wellness programs have cumulatively saved the company \$250 million on health care costs in the first decade of 2010; from 2002 to 2008, the return was \$2.71 for every dollar spent [9].
- 4) **Pharmaceutical companies and health care providers.** Adopting HealthOwl for pharmaceutical companies and other health care providers, including physician groups, provides an opportunity to market to one's constituency and to portray the company in a positive light. For these companies the opportunity exists to brand Healthowl. The HealthOwl team would charge a license fee that would include regular program updates and maintenance.
- 5) **Non-for-Profit Organizations.** Preliminary talks with representatives of the American Cancer Society (ACS) have resulted in interest of adopting the software for their members. In addition to the information provided in HealthOwl, the ACS has an interest to incorporate ACS specific resources and information.

**Potential Payment Schemes.** There are several payment schemes possible. For example, there is a one-time licensing fee, plus individual download fees per member. Additionally, a maintenance package could be offered that would keep the program up-to-date and would incorporate changes in screening recommendations and screening technology. Alternatively, there could be a one-time licensing fee without a download fee, plus a maintenance package. In addition, the opportunity to brand HealthOwl would bring in additional revenue.

In sum, any company which has an interest to minimize health care costs could be interested in investing in software that would increase screening adherence and thus minimize potential treatment costs.

## References

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