MSKCC Web Core

Webcore is an institutional resource dedicated to the development and implementation of software interfaces for clinically relevant data. Webcore builds interfaces for both patients and clinicians, including those that both obtain and display data. Although coding is naturally a key activity, core competencies of Webcore include the following:

- Prediction modeling: many of Webcore's interfaces invoke complex algorithms for clinical decision support, such as the probability that a patient will recover function after surgery based on their current functional status
- Design: to ensure that Webcore's interfaces are attractive and user friendly
- Medical knowledge: some of Webcore's interfaces were design in the light of detailed knowledge of medicine and medical practice
- Psychometrics and questionnaire design: to aid users in the choice of survey instruments
- Clinical workflow: Webcore staff work in clinic with doctors, nurses and other staff to ensure that Webcore tools fit smoothly into the clinic workflow

Above all, Webcore has engendered a culture of user-centered design, in which we work closely with users to ensure that their interfaces meet their needs.

Webcore maintains servers for secure administration and storage of data. Webcore surveys are capable of communicating with MSKCC institutional database (IDB), which is the institution's standard data warehouse for clinical, financial, operational and research data as well as MSKCC Clinical Trials Research Database (CRDB), which is the institution's standard repository for secure storage of patient study data. Webcore surveys can also communicate with Caisis, which is an open-source, web-based cancer data management system that integrates research with patient care.

The server configuration and specifications for the Web Core are compliant with current standards for data safety and privacy and have undergone formal privacy and security review. Complex functionality of surveys including skip patterns, interactive questions, and two-way communication is available. Surveys can be accessed from any computer or other device connected to the Internet. Services

available from Webcore include online survey development; usability testing; survey maintenance during studies; data storage; and data retrieval for analysis.

The director of the Webcore is Andrew Vickers, PhD. The senior programmer is Marwan Shouery, and Project Manager is Ling Chen.