Problem	Method	Solution
The traditional procedure for cancer symptom assessment is a paper questionnaire completed by the patient. Through a paper-based questionnaire, a patient can not readily describe the location and the intensity of the pain. This issue coupled with a high cost of data collection from the patient and the management of written questionnaires leads to a low utilization.	We address the problem by research about a IT solution to replace the traditional procedure. We look at the usability, efficiency and appropriateness of symptom management in the VHI system, through a series of research studies. Initial research includes a formative usability study and participatory interface design.	Visual Human Interface (VHI) is a project addressing the problems of the paper-based process. GHI, using web-based technologies, constructs an interactive visual human model for the patient to localize and describe his symptoms. With GHI the patient can edit his inputs, and have a graphical representation made available to clinicians for assessment.

Visual Human Interface Design by Robert Tai

School of Nursing

Design Capstone 2005 Client: Dr. Donna Berry of UW

Intervention 1: User analysis and System Functions

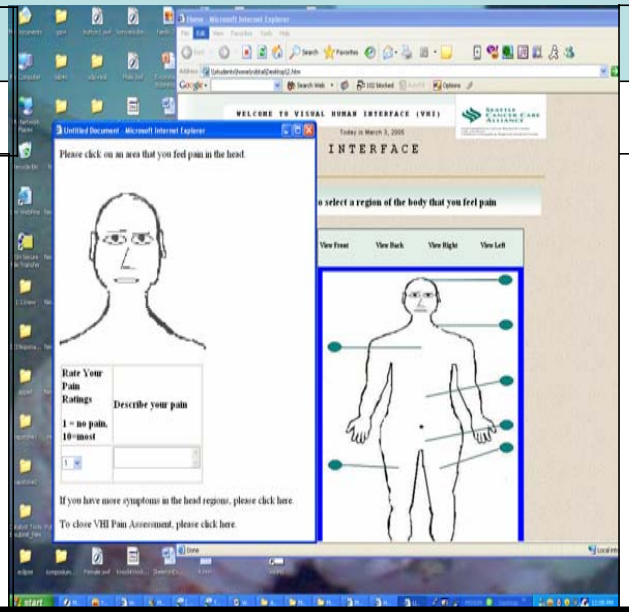
Objective: understand the user and system requirements.

Methodology

1). Interview with Clinicians

2). HTML mock-up to illustrate system functions

Results: Understanding of the Patient's needs and Doctor's needs, as well as the system requirements of VHI



Intervention 2:Visual Aesthetics and Information Design

Objective: designing an aesthetics pleasing and visually clear system interface in the Visual Human Interface

Methodology

1). Literature Review of Edward Tufte's work.

2). Heuristics Evaluation based on Jacob Nielsen's Principles

Results: Understanding of Information Design theories, the use of colors, and incorporation of more user-friendly interface

Intervention 3: Usability

Objective: Usability is important issues when developing any information system. For this Intervention, the focus on making the user can perform required task under reasonable time without significant need to learn the system.

Methodology: Scenario-Based Usability Study

The Results

Test#	Time for Complex Task	Time for Simple Task
1	14.44 sec	3.21 sec
2	8.22 sec	2.12 sec
3	9.45 sec	3.54 sec

Discussion: In Usability Test #1, because a flaw in the information architecture (the data-entry menu should appear after initial body area selection), which made the user confused and slow down his time.

In Usability Test 2 and 3, the error in IA was corrected (data entry menu after the selection) and the user took short time to complete the task

This shows how a more logical IA can makes a system more "usable"