

THE UNIVERSITY OF TEXAS
MID ANDERSON
CANCER CENTER

Making Cancer History[®]

Better Systems Lead to
Improved Patient Care

About MD Anderson Cancer Center

- ◆ M.D. Anderson Cancer Center was created by the Texas Legislature in 1941 as a component of The University of Texas System.
- ◆ This year, more than 74,000 people with cancer will receive care at M.D. Anderson, and roughly 27,000 of them will be new patients. Approximately 1/3 of these patients come from outside of Texas.
- ◆ M.D. Anderson has ranked among the nation's top two cancer hospitals in *U.S. News & World Report's* "America's Best Hospitals" survey since the survey's inception in 1990. Recently, M.D. Anderson was ranked number one for the fourth time.
- ◆ M.D. Anderson employs more than 15,000 people.

MD Anderson Cancer Center Statistics

- ◆ 21,221 hospital admissions
- ◆ 927,414 Outpatient clinic visits, treatments and procedures
- ◆ 7,849,558 Lab/Pathology procedures
- ◆ 412,924 Diagnostic Imaging procedures
- ◆ 1081 Active Clinical Research Protocols

Challenge/opportunity

- ◆ *MD Anderson faces a number of challenges when developing new functionality. Some goals we hoped to achieve by using iRise were:*
 - Reduce the amount of time clinicians were removed from the floors.
 - Accommodate both Inpatient and Outpatient business processes
 - Reduce development time
 - Improve communication between stakeholders and developers
 - Shorten requirements definition cycles
 - Improve Use Case and UI Specifications

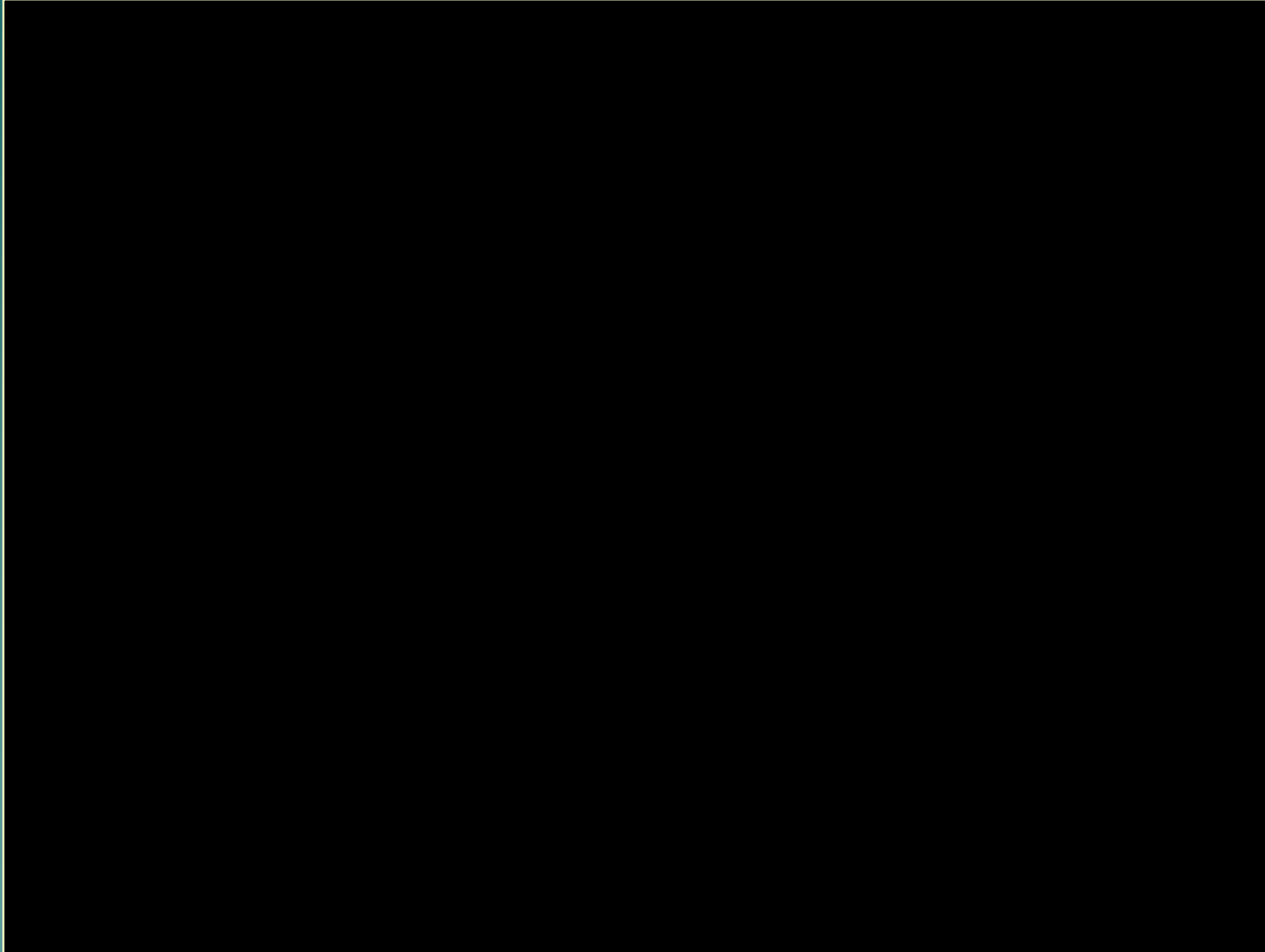
Decision criteria

- ◆ *MD Anderson's decision to use iRise came from the realization that there was:*
 - Opportunity for better requirements gathering
 - Opportunity to conduct more efficient requirements gathering sessions
 - Narrow the gap between users and developers
 - Ability to reduce development time

Process

- ◆ *Our approach:*
 - Understand the current workflow
 - Develop a low-fidelity simulation as requirements are gathered to help understand future data flow.
 - Develop Use Case Model
 - Develop High-fidelity simulation to help finalize requirements and business rules
 - Write use Cases and Develop UI Specifications
 - Obtain sign-off
 - Hand off requirements package to developers.
 - ◆ Simulation
 - ◆ Requirements Matrix & Business Rules
 - ◆ Use Cases
 - ◆ UI Specifications
 - Write test cases & test plans using the use cases and iRise simulation

Testimonial



Results

- ◆ Reduced development time for Nursing Needs Assessment by 50 - 60% (when compared to previous Nursing Documentation project)
 - 10 months of development for Nursing Vital Signs & Allergies (without iRise)
 - 4.5 months of development for Nursing Documentation –Patient Needs Assessment (with iRise)
- ◆ Allowed developers to concentrate on developing other projects and not have to keep redeveloping prototypes for Stakeholder sign off.
- ◆ Improved relationships / communication with the end users

iDoc Demonstration

- ◆ iDoc for Nursing Patient Needs Assessment
- ◆ The purpose of the simulation was to first gather requirements and get an idea of the data flow.
- ◆ Starting with a low fidelity simulation helped us achieve that goal.
- ◆ As requirements were gathered and the flow of the data and business rules were tightened up, the high fidelity simulation came into play.