



**Customer:** Varian Medical Systems  
**Website:** [www.varian.com](http://www.varian.com)  
**Customer Size:** 5,400 employees  
**Country or Region:** United States  
**Industry:** Healthcare—Medical devices  
**Partner:** iLink Systems

#### Customer Profile

Varian Medical Systems is a medical-device and solutions manufacturer based in Palo Alto, California. Its products are used in clinics and hospitals worldwide.

#### Software and Services

- Windows 7 Enterprise
- Microsoft Visual Studio
  - Microsoft Visual Studio Team Foundation Server 2010
- Technologies
  - Microsoft .NET Framework 4
  - Microsoft Expression Blend 4
  - Microsoft Silverlight 4
  - Windows Communication Foundation 4

#### Hardware

- Slates

For more information about Windows 7, go to:  
[www.microsoft.com/windows/windows-7](http://www.microsoft.com/windows/windows-7)

## Medical-Device Firm Supports Oncologists with Solution on Slates

“Oncologists are the textbook definition of mobile workers, and they need access to information as they travel from dosimetry to the treatment area, from the clinic front desk to the consult room, and beyond.”

Shridhar Parvatikar, Health Information Systems Architect, Varian Medical Systems

Varian Medical Systems produces advanced equipment and software solutions used in the treatment of cancer and other medical conditions. The firm also produces cancer-care management solutions designed to help oncologists and their staff work more productively. Recently, the firm launched a proof of concept for such a solution that would run on Windows slates and might be able to boost oncologists’ productivity and enhance the firm’s reputation as an innovator.

#### Business Needs

From its origins in 1948 as manufacturer of the first linear-beam vacuum tube to generate electromagnetic waves at microwave frequencies, Varian Medical Systems has grown to provide an array of products and services used in the treatment of cancer and other medical conditions. These products range from state-of-the-art radiotherapy-delivery systems to everyday productivity software for clinicians and support staff. That software includes cancer-care management solutions, which run on the Windows 7 operating system and streamline communications, access to records, and collaboration.

Despite the utility of such solutions, they have one drawback: They tend to be accessible only by someone seated in front of a workstation—and that’s not the way oncologists work, explains Shridhar Parvatikar, Health Information Systems Architect at Varian Medical Systems.

“Oncologists are the textbook definition of mobile workers, and they need access to information as they travel from dosimetry to treatment areas, from the clinic front desk to the consult room, and beyond,” Parvatikar says. “This means that for these professionals to access scheduling, treatment plans, vitals, lab reports, and

other data while they are on the move, they must request that data from a person who is seated in front of a workstation. This requires effort and delays delivery of the information."

What many oncologists need, therefore, is a powerful and highly integrated cancer-care management solution running on a device that they can carry in their pockets—but in the past, there were no such devices. "Many smartphones lack the image quality required for viewing paired images, for example, and laptop computers are a poor fit with oncologists' highly mobile usage model," Parvatikar says. "Even tablet PCs, which can display radiotherapy images and can go where the oncologist goes, have traditionally lacked support for the applications required as part of an effective cancer-care management solution."

## Solution

Today, however, there are devices that can run a sophisticated cancer-care management solution and fit in an oncologist's pocket. They are Windows slates—tablet PCs that operate without an integrated physical keyboard and that run Windows 7 and the applications and technologies in that operating system environment.

"Physicians had been asking us to provide them a truly portable cancer-care management solution, and when we learned about Windows slates, we wanted to do it," Parvatikar says. "We were eager to take advantage of support in Windows slates for stylus and hand-printed-text input and to apply our experience with Microsoft development technologies.

In April 2011, working in the Microsoft .NET Framework 4 environment, Parvatikar and

his team launched a proof-of-concept (POC) project for a cancer-care management solution for Windows slates. For the POC—which is not available for licensing—Varian Medical Systems developers are providing the concept, scope, and client component. Designers and developers from iLink Systems, FY2011 Microsoft Mobility Partner of the Year, are redesigning the user interface and working with the core functionality requirements of the Varian Medical Systems cancer-care management solution that now runs in the desktop and laptop environment to optimize it for Windows slates.

Parvatikar describes a typical usage scenario. "Consider the oncologist who arrives at the hospital or office in the morning and pulls a slate from his or her pocket," he says. "With a few gestures, that oncologist can access the day's schedule, any urgent questions from staff or patients, and whatever records are required to answer those questions. Then, during each of the day's events, the oncologist can consult the relevant records, for example, to review a treatment summary or explain changes to the treatment plan. On a break, the oncologist can review email, academic studies, or whatever else might help in preparation for the next event."

## Benefits

Based on the results of POC, Varian Medical Systems is considering the possibility of building a product version of the solution, which might be able to make a big difference in the way oncologists access and use essential information. Such a solution might also serve to expand opportunities for Varian Medical Systems and bolster its reputation as an industry innovator.

## Raising the Value of Information

For example, with more direct access to patient data, physicians might be able to increase the value of that data and the efficiency of their efforts. "Using a Windows slate, an oncologist could easily 'flip' through a patient record for a big-picture view, dig deeper for more details, or access data in other ways that may be useful in making decisions about treatment protocols or medication, whenever a question might arise," Parvatikar says.

## Enhancing the Patient/Physician Relationship

Physicians also might be able to involve patients more directly in their own care. "In the exam room, the oncologist could easily show patients radiotherapy images, for example, to better explain treatment options," Parvatikar says. "This could possibly help patients to play a more active role in their treatment."

## Expanding Opportunities

According to Parvatikar, by offering oncologists a cancer-care management solution that runs on Windows slates, Varian Medical Systems might be able to enjoy cross-sell opportunities for its current solutions and strengthen its name as a company that listens to its customers.

"With this solution, we could reinforce our reputation as an innovator, particularly in the mobile arena," Parvatikar says. "And with the Microsoft .NET Framework development environment, we could continue producing innovative solutions rapidly."