

# Microsoft Seeks RFID Support for HealthVault

The software giant is encouraging companies to develop RFID applications for the free online medical database service it recently launched.

By Claire Swedberg

Oct. 17, 2007—Although Microsoft currently has no RFID partners for its free online medical database service, known as HealthVault, the software company says it is open to including RFID technology in its HealthVault platform, and encourages the RFID industry to innovate solutions.

Launched in a beta version on Oct. 4, HealthVault allows consumers to set up their own private health-record repository, and is designed to enable users to manage their health and wellness information online. The personal information a consumer chooses to input is stored in encrypted form. The user sets up personal privacy controls, including a password, and determines which information goes into the account—and who can access it.

"Consumers are the primary target audience with HealthVault," says Sean Nolan, chief architect for Microsoft Health Solutions Group. "Microsoft has designed the HealthVault platform so that consumers are in complete control over their personal health information. They decide who can access their information, and when." Nolan adds that "Microsoft is interested in leveraging RFID and smart-card technology within the HealthVault ecosystem, in particular as a form of in-person identity management."

Currently, Nolan says, there are 16 devices and applications that work with the HealthVault platform. Microsoft is working with more than 40 organizations, including device manufacturers, health-care organizations and hospitals, to build solutions that can provide greater accessibility to the data required by patients and physicians.

Among Microsoft's existing partners for this system are Home Diagnostics and Johnson & Johnson for blood glucose monitors; Omron and MicroLife for hypertension and weight monitors; and Polar for heart-rate monitors. These devices can be used to download data directly into a HealthVault account, enabling consumers to track their health on a regular basis and make that data available to their health-care providers if they so choose.

"Microsoft is encouraging partners to continue to innovate," Nolan says, "and would expect RFID to ultimately be a part of the solutions within the HealthVault ecosystem."

Independent of HealthVault, RFID tags—both active and passive—are being used by the health-care industry to locate patients, staff and high-value equipment, track and verify the authenticity of prescriptions drugs in the supply chain and ensure that patients receive the proper medication and treatment. In some cases, RFID is also being employed in smart-card technology for access to secure areas or data.

With HealthVault, says Randy Vanderhoof, executive director of the Smart Card Alliance data security will need to be a top priority. "Microsoft will need to provide a sound method for the medical establishment to log

in a secure way," he says. "Accessing HealthVault means, I would hope, strong security technology like smart cards." Microsoft has supported the use of smart-card technology in the past, he adds, as a method for securing data.

To retrieve medical records stored in HealthVault, Vanderhoof predicts, a medical professional would likely use an ID card containing a microchip encoded with a unique ID number to access data on the Web browser. That chip could use RFID technology to transmit its data, Vanderhoof speculates, but would not require it. "Those [RFID] applications are primarily used with high volumes of people where speed is a concern," he says.

One health-care data-tracking systems provider currently using RFID is MedicAlert, which has been testing an RFID bracelet used to access important health-care information about the bracelet's wearer (see MedicAlert Aims to RFID-Enable Medical Records) and VeriChip. VeriChip's VeriMed system utilizes RFID chip implants to identify patients and operates a password-protected online database for storing those patients' medical information. (VeriChip has not responded to calls from RFID Journal regarding HealthVault.)

Ramesh Srinivasan, MedicAlert's VP of business development, says he has been following the HealthVault release and views Microsoft as a potential partnership. MedicAlert bracelets include an RFID chip on which a user's unique ID number links to a patient's name and vital health details on MedicAlert's server. "It's commendable what Microsoft is doing," he says. "They are confirming there is a need for patients to be empowered with access to their own information."

Srinivasan says he envisions a scenario in which a MedicAlert chip would include information to access a HealthVault account for users who want their data to be accessible to health-care providers. If, for example, a patient being treated in an ER is diabetic, the MedicAlert wristband can provide that information, while the patient's diabetes treatment history could be available on HealthVault.

To put it simply, Srinivasan says, "HealthVault is like the patient's résumé, while MedicAlert is the bullet points. That's where I see the synergy between HealthVault and MedicAlert." Therefore, if such a partnership were created in an ER, the RFID tag embedded in the patient's wristband could provide pertinent facts regarding any allergies or chronic conditions, as well as a HealthVault account number where the health-care provider could access additional details.

Organizations that have already signed up for HealthVault projects with Microsoft include the American Heart Association (AHA), New York-Presbyterian Hospital, MedStar Health and the Mayo Clinic. The AHA has launched its own service, known as Blood Pressure Management Center, which is built on the HealthVault platform. The service will allow patients acquiring a HealthVault account to also establish a blood-pressure management account through the American Heart Association, where they can enter their daily blood-pressure readings, amount of daily physical activity and weight, as well as how they feel.

"One of the major goals of the AHA is to reduce the number of people with uncontrolled high blood pressure in the United States," says Daniel Jones, president of the American Heart Association, "which is why our first tool on the HealthVault platform focuses on high blood pressure."

RELATED\_ARTICLES "We know the Internet is a powerful place to reach people with health information," Jones says, adding, "The HealthVault platform will empower consumers to take a more active role in their health care. It will no longer be just about doctors treating patients, prescribing drugs and checking back in now and then. With these tools, the focus should shift to management over time and the consumer having a larger stake in—and understanding of—their health conditions. Going forward, we will look at ways to expand this tool beyond blood pressure into other conditions and lifestyle factors." As one example, Jones cites high cholesterol. However, he says, the American Heart Association has no specific plans to incorporate

RFID technology at this time.

MedStar Health is launching its own pilot, also built onto the HealthVault platform, known as MEDSEEK. Hospital patients who have been discharged can use MEDSEEK to access health information based on their hospital stay, in a private health record stored within HealthVault. The patients can then make that record available to other health-care providers. Microsoft hopes individuals will give doctors, clinics and hospitals permission to send their records directly to their HealthVault account, Nolan says, bringing the health-care industry into a more active role.

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