

*HIT Taken to the Next Level:*

**NYS Practices that Have Successfully  
 Adopted EMR & PMS**

Since September 2006, *News of New York* feature articles have been explaining to physicians why they should – and how they can – adopt health information technology (HIT) into their practices. MSSNY's ultimate goal is to have every physician practice in NYS interconnected electronically by the year 2014. Up until now, MSSNY has presented physicians with theoretical information about HIT – strong statistics verifying how HIT can reduce practice overhead and improve the quality of patient care, increase office efficiency and give physicians more time for patients and family, help physicians research best practices and report patient care.

**Beyond Theory – Real Practices  
 Thriving with HIT**

Now, for the next two months, the *News of New York* will take readers to the real-time level, by showing how two NYS physicians have taken their practices to the next level – the focus of MSSNY's 2008 HIT educational programs and fairs – by fully integrating electronic medical records (EMR) and practice management systems (PMS) into their practices.

One doctor, Salvatore Volpe, MD, runs a solo practice on Staten Island. The other, Alice Andrews Loveys, MD, is part of a small group practice in Pittsford, a suburb of Rochester, NY. She is also vice chair of the Greater Rochester Regional Health Information Organization (RHIO), a pilot RHIO project of five practices that plans to eventually interconnect physician practices in nine counties. Dr. Volpe is board-certified in internal, pediatric and geriatric medicine; Dr. Loveys is board-certified in pediatrics. Both were born in the 1960s and are now raising young children. Both wanted to apply their medical education to treating patients while still earning a decent living, and both wanted to have enough time to properly care for and communicate with their patients while still having plenty of free time to spend with their families. Both have managed to achieve these goals by adopting HIT, and both were able to recoup their up-front costs within a year.

The following describes what Dr. Volpe did and how he did it. Next month Dr. Lovey's adoption of HIT will be featured.

**Dr Volpe -  
 Solo Internal Medicine  
 Practice, Staten Island**

Dr. Volpe's solo practice serves approximately 2000 patients on Staten Island who range in age from 13 to 103. He installed his electronic medical records (EMR) and practice management (PMS) systems in April 2006 and was able to recoup the cost of the initial installation and maintenance fees within one year.

**What he chose and why**

He chose a system that stores and runs all data on his in-office servers. Some physicians choose an application service provider (ASP) system that stores all the data and runs the program data offsite at an HIT vendor's data center and is accessed via the Internet, but Dr. Volpe chose his on-site system because it was more affordable for many reasons: He already

had several old computers that could be used as additional in-office work stations; he did not have to subscribe to a business-grade, broadband Internet provider; and he did not have to pay an expensive monthly ASP subscription fee.

Dr. Volpe pays a monthly subscription fee to use his EMR and PMS software, again because it was the least expensive option available. When he was researching HIT systems, the purchase price of software would have been approximately \$10,000; and software for an ASP system would have been approximately \$500 a month plus \$600 a month for two business, broadband Internet access connections. Because Dr. Volpe did not need to purchase much hardware (i.e. computers), his major expense is EMR and PMS software, which he is able to lease for approximately \$400 a month, which includes maintenance - \$240 for the software leases and approximately \$160 per month for off-site technological support.

His HIT vendor provided most of the on-site technical support during the first three months, but now he pays for information technology (IT) support as needed on a per-incident basis i.e. from an independent IT technician. Dr. Volpe's vendor can log in to his computer from its base to help solve most of the problems and provides a list of independent IT contractors for on-site support. They usually charge between \$85 to \$150 an hour. Telephone support at no extra charge is part of his contractual agreement with the vendor.

Dr. Volpe chose the same vendor to supply both his EMR and PMS systems, and he highly recommends that other physicians do the same. To run an efficient office, the two systems should be totally compatible and ideally share the same database. His systems do share the same database; and if the vendor tweaks one system, it supplies a tweak for the other system to maintain the compatibility of both.

Dr. Volpe started researching systems ten years ago but did not have the advantage of MSSNY HIT Vendor Fairs or MSSNY HIT Seminars available to NYS physicians today (See charts on page 8). At first he purchased a relatively simple PMS system but became so fascinated with HIT that he became a member of the national Healthcare Information and Management Systems Society (HIMSS) and finally converted to an almost paperless practice two years ago.



Dr. Volpe showing 2 patients how to access their health records from his web page.

and which products to purchase, Dr. Volpe analyzed their ability to meet the criteria that were most important to him:

- **Superiority to Paper** – To be worth the expense and bother, the EMR/PMS systems had to perform the same functions as paper, only better. He asked, for example, if the electronic records could include all necessary and relevant information, be neat and be accessed quickly?
- **Affordability** – The systems would have to cost much less than a few years earlier, which was \$25-45,000.
- **Navigability** – Staff would have to be able to move from one record to another and from one function to another and from the EMR or PMS system to the other – quickly and easily.
- **Adaptability** – The records and templates for information would have to be easily modified and customized as patient information and practice needs changed.
- **Track Record of Vendor** – Dr. Volpe wanted a company that had been in business for a reasonable amount of time and which was unlikely to go out of business in the near future. The one he chose already had 10,000 physician clients when he signed his contract.
- **Ease of Data Entry** – He wanted the system to be able to accept both handwritten and typed data. He did not need voice-recognition, but some systems do have it.
- **Certification** – and the systems, of course, had to be CCHIT-certified and SureScript certified so that they could be compatible with other systems. (The September 2006 *News of New York* explains why.)

**How he managed the transition**

Dr Volpe says that the transition from paper to the new electronic system was not difficult

for him or for his staff as it would have been to a practice inexperienced in HIT. They already had several years of experience beginning with an e-Prescribing system and then with Patient Portal. Because the practice already had a PMS system, Dr. Volpe switched to the new PMS billing system gradually. For the first 30-90 days his office staff continued to use the old billing software and computer server system to run off the old claims patients, and they used the new software for billing visits occurring after the on-site training. Eventually, all the old data was transferred to the new system; so he was able to completely switch to the new system and recycle the old server into a client (i.e. another computer work station) that he and his staff could use to enter and retrieve patient and other information.

First, he and his office manager just played with the new software for several weeks to see what they could do intuitively without training. A vendor representative trained the staff for four days. The vendor also provided staff with access to online webinars and an online manual; Dr. Volpe gave everyone a binder for taking notes. The office was closed for the first two days of training, but the staff began serving patients on the last two days of training to see if they could function with new software in a real-life situation. Dr. Volpe highly recommends that all practices do the same.

Of course, as forewarned, it took time for Dr. Volpe and his staff to rearrange and enter data into the new system and to adapt to using it, but it took his office only six weeks to start seeing the same number of patients in a day; whereas he had been told that it would take 18 weeks. He considers the lost time part of his investment, "which was well worth it," he said.

**Other things the systems do/How they work**

Dr. Volpe's system has "layered security," which means that some personnel are able to view and alter more and/or different data than others. The security system thus protects the patient's privacy concerns and the doctor's liability. Dr. Volpe, uses secure communication software to access his system remotely. Patients can access portions of their record after first logging onto Dr. Volpe's website, [www.svolpemd.com](http://www.svolpemd.com) (see picture of his home page below), but they can only access their own records.

Once logged into the patient portal, patients can access many features at anytime. They can update their demographic information, obtain lab results, treatment recommendations, request medication refills, sub-specialist referrals and non-urgent appointments. Patients can also ask Dr. Volpe and his staff administrative questions. The portal can be set to automatically remind patients of pending appointments, and preventative medicine recommendations. All this has significantly reduced the amount of staff time to answer or make phone calls.

Every night Dr. Volpe backs up the data from one server on to a back-up disc. He intends to eventually backup his data on a computer in another location also.

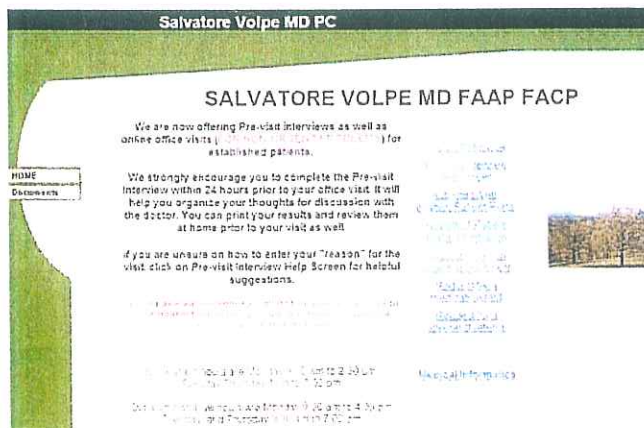
**How it has improved efficiency,  
 quality, patient satisfaction and the  
 bottom line**

Dr. Volpe's HIT system has totally changed his practice – for the better. Now Dr. Volpe has

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**Most important criteria**

In trying to decide which type of systems



## Practices that Have Successfully Adopted EMR & PMS

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an office that functions more efficiently and more effectively. Many tasks now take less time, require less effort, require a smaller staff and cost less. Patients get quicker care, better care and more attention from their doctor. Pharmacies, labs and other outside providers get faster and more accurate information that costs less to transmit. The efficiency and superior care provided to patients even saves health insurers time and money through improved compliance with medication formularies and better coordination with sub-specialists.

For example, Dr. Volpe's EMR and PMS systems help him avoid prescribing a medication that might be inappropriate for a patient because of an allergy or drug interaction. They help him select a medication that is part of the insurer's formulary and enable him to order the medication immediately from the pharmacy. As a result, the workflow of both the insurer and the pharmacy are speeded up, and the patient is saved from the hassle of waiting for a prescription to be filled and/or arguing with the insurer. All involved save both time and money. Dr. Volpe estimates that the insurer alone saves \$3 on each prescription.

Another example is patient charts. Dr. Volpe estimates that the total cost of an individual chart pull has been reduced from \$1-\$2 to pennies because paper, file cabinets and office space to hold them are no longer needed, and because staff no longer have to walk to a file cabinet to retrieve or file them. Based on the assumption that his office used to pull 60 charts a day, Dr. Volpe is now saving \$1000 a year.

Whereas he used to have a staff of six people working the equivalent of 3 full-time employees, he now has a staff of five working the equivalent of 2 full-time employees – the equivalent of one and one half medical assistants and a half-time practice manager. As a result, Dr. Volpe saves \$30,000 a year just in reduced salary overhead.

Of course, Dr. Volpe's office still has some paper because other healthcare providers, such as laboratories, still often use paper. His systems can usually convert that paper to an electronic record, however, and attach it to the correct patient record automatically. If a report is faxed to his office, a computer intercepts the fax and converts it into an image, which is then attached to the patient's electronic file with a few mouse clicks. What once took several minutes – with folders, paper clips and file cabinets – now takes 30 seconds.

Because Dr. Volpe can accept electronic information, a laboratory that also has HIT can save approximately \$3 with every report it sends to him because the lab does not have to print a report, pay for postage or courier service.

The HIT advantage that also helps Dr.

Volpe's bottom line, however, is his ability to easily assign the proper diagnosis and procedure code and be reimbursed by the health insurer quickly and fully. The EMR provides such accurate documentation that the insurer can find no reason to deny the claim.

In addition to saving Dr. Volpe time that can be spent with patients, his system also helps him provide the best care because his HIT includes built in clinical decision support. The e-prescribing, of course, provides drug alerts; and the SkyScape textbooks provide immediate diagnostic and best-practices treatment guidance. He can even earn CME credit just for reading about certain conditions.

Dr. Volpe's system includes a wireless laptop computer that can read his handwriting. It enables him to enter data while in an exam room with a patient and also gives him the ability to research clinical information immediately. He also has a Smart cell phone that he occasionally uses when not in the office.

### Overall Assessment

Within one year of installing his EMR/PMS systems, Dr. Volpe had paid off the cost of his new hardware; his office had returned to full productivity, and he was earning over \$30,000 more than he had the year before, due primarily to reduce overhead costs. The space that would have been allocated for additional patient charts can be used as an exam room.

What is Dr. Volpe's overall assessment of his conversion to HIT? He loves it; his family loves it; his staff loves it; and his patients love it. They all have more time to spend with their families and other activities instead of chasing paper.

### Further Details and More Information

To view the website that Dr. Volpe designed to educate, communicate with and obtain information from his patients, go to [www.svolpemd.com](http://www.svolpemd.com).

To learn more about how to integrate HIT into a practice, MSSNY highly recommends that you attend one of the upcoming HIT Vendor Fairs and also participate in one of MSSNY's HIT Dinner Seminars. (See charts for both below.)

Because additional seminars are still being scheduled and details sometimes change, MSSNY recommends that you contact Janice Morano for an updated schedule by e-mailing [jmorano@mssny.org](mailto:jmorano@mssny.org) or calling 516-488-6100 x302.

Additional questions about HIT can be directed to MSSNY's HIT Project Administrator, Ron Pucherelli at [rpucherelli@mssny.org](mailto:rpucherelli@mssny.org) or 518-465-8085.