

PM, EMR and Portals: A Primer on Healthcare-specific Software for Ambulatory Care

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Few industries are currently changing as much as the US healthcare system. While many perspectives and ideas are shaping the debate on how to change the system to meet current and future demands, most believe that technology can and will have a huge positive impact on the ability of the industry to deliver quality care in a cost-effective way. Network technologies that can support the ubiquitous exchange of health information in a secure, efficient and collaborative environment hold the potential to streamline and modernize the current system to maximize resources and positive patient outcomes.

The opportunities for improvement have generated a lot of buzz in both the private and public sectors, and incentivizing adoption of Healthcare Information Technology (HIT) through the American Recovery and Reinvestment Act of 2009 (the ARRA or "Stimulus" bill) has led to considerable interest in an industry often known for lagging behind in the adoption of new technologies.

For many, the healthcare-specific technical jargon and operational knowledge of how healthcare works can be as complex as the products themselves. Here then are descriptions of the three types of medical software used by ambulatory care providers.

Practice Management (or PM) Software

Practice Management (or PM) software has been in wide use in the healthcare industry for almost three decades. Its primary use is the collection of patient demographics, patient insurance detail and the healthcare services and related diagnoses provided. This information is formatted to conform to payer requirements and is submitted electronically to request reimbursement for services. PM software also manages the responses from the payers in electronic format and invoices any balance to the patient in the form of printed and mailed statements. PM systems can be all-encompassing in functionality or can be a la carte in modules.

Functions of Practice Management Software

- *Payer billing*
- *Patient billing*
- *Patient scheduling*
- *Patient recall for future appointments or services*
- *Referral management (inward and/or outward)*
- *Visit counting*
- *Patient eligibility and benefits determination*
- *RVU (relative value unit) reports for compensation by productivity*
- *Payer contract management*
- *A/R (accounts receivable) management*
- *Procedure / surgery estimating*

Electronic Medical Records (EMR)

and Electronic Health Records (EHR) Software

EMRs require and store some of the same patient information as PM software. Patient demographics, patient insurance information and scheduling are actually found in both types of software. When the two programs are integrated, one database typically serves both sides. While the PM system focuses on relating to the financial side of the practice, the EMR system organizes patient medical data.

Although the terms “Electronic Medical Record” and “Electronic Health Record” are used interchangeably by vendors and providers these days, the strict definition of the two terms provided by the Healthcare Information and Management Systems Society(HIMSS) defines an EHR as an individual record of a specific patient’s care, defining an EMR as the software platform that houses all of the EHRs the practice generates.

EMR systems are newer to and less evident in the outpatient healthcare industry. Tools to secure the system while making the data accessible, as well as installing hardware in clinical settings like exam rooms, are still fairly recent developments, especially for small to medium-sized private physician groups. As adoption continues, and the Federal government encourages entities to move to EMR, the interoperability of the software means a patient can easily and securely have records sent from one provider, healthcare system, or location to another – reducing mistakes and costs to inform providers and patients making decisions.

Functions of Electronic Medical Record Software

- *Capture and reporting of discrete data*

- *Coding assistance*
- *Clinical visit summary*
- *pdf record repository*
- *Data aggregation in graphical form*
- *Access to patient records from other locations*
- *Medication reconciliation*
- *Patient recall for disease management or medication review*
- *Standards of care protocols / algorithms*
- *E-prescribing*
- *Data collection for interface with research or accreditation registries*

Patient Portals

While PM and EMR systems seek to capture and organize patient data to support the practice's operations and patient care, Patient Portals facilitate communication of sensitive health information between patients and care providers. Most Patient Portals are web-based systems that attach to the provider's website to allow patients to securely send and receive information.

By allowing more data to be transferred securely in a digital manner, patients can save time and effort communicating with their healthcare provider. Some patient care (eVisits or virtual visits) can take place via the Patient Portal, and organizations can save overhead and human resources on phone calls and in-person visits when replaced by secure emails or chats with nurses, insurance clerks, medical records clerks or lab technologists.

Functions of Patient Portals

- *Online completion of patient paperwork – demographics,*

insurance information, medical history, Notice of Privacy Practices (NPP) and other signatures necessary to receive care

- *Online bill pay*
- *Medication/refill requests*
- *Appointment requests*
- *E-commerce – secure purchase of health products*
- *Secure email between physician and patients*
- *Online chat with staff*
- *Virtual Office Visits (reimbursed by some payers)*
- *Laboratory Results Communication*
- *Self-scheduling appointments*
- *Patient billing via secure email*
- *Online referrals (inward/outward)*
- *Exchange of patient records between physicians/providers sharing a patient's care*
- *Personal Health Record (PHR)*
- *Kiosk for patient check-in*
- *Patient submission of vital signs and other health data*

Putting it all together

All three types of software are designed to make information work for patients and providers without bogging down the delivery process with paper. By harnessing advances in network security, performance and usability, PMS, EMRs, and Patient Portals have the potential to make today's patient experience cost-effective, efficient, pleasant and safe.

There is No Such Thing as a 10-Minute Office Visit

I sat at the checkout desk in my practice last week for the first time and as always, it was a revelation. If you haven't worked your check-in and check-out desks recently, I highly recommend it. ❌

An insured patient that I checked out was shocked when I said the charge for her visit was \$100. She said, "But he was only in the room for ten minutes!" I was briefly at a loss for words. I recovered, we agreed on a payment plan, I made a note on her encounter form for the billing office and she left.

I've been thinking about our conversation, and thinking about what that \$100 is supposed to cover...

1. First, we **scheduled** the appointment, which was a work-in, so it took several people to **take the message, pull the medical record** (paper charts), **call the patient to assess the problem**, determine the need for the appointment and schedule it.
2. When the patient arrived, we checked to make sure her address and phone were the same, quickly checked her **eligibility** to make sure the insurance on file was still in force, and asked for a photo ID for **red flags**. An encounter form was generated at the nurse's station to notify her of the patient's arrival.
3. The nurse called her from the reception area, **weighed her**, and took her into an exam room to take her **vitals**, take a brief **chief complaint**, **review the medications** she is taking and check to see if she needed any chronic **medication refills** while she was there.
4. The physician came in to see her, asked about any **changes** since she'd last been seen, reviewed her **history**

of present illness and examined her. He talked to her about her illness and described a **treatment plan** for her upper respiratory infection given her chronic health problems.

5. He **prescribed a medication** for her problem, **updated her medication list** and **made a copy** for her to take with her.
6. He marked the **encounter form** with the level of service and her diagnoses and gave her the form to take to the check-out desk.
7. He **refiled the medication reconciliation** in the chart, finished **documenting the visit**, and placed the chart in the bin to be refiled. The **chart was filed**, and the **encounter form was sent to the billing office.**
8. At the billing office the **charges and any payment was posted** and the **claim was filed.** If there was no problem with the claim, it electronically passed through two scrubs and a final one at the payer.
9. If payment was not denied for any of a dozen reasons, the **payment would arrive at the billing office and would be posted.**
10. Since the patient did not pay at the check-out desk, the **patient-responsible balance is billed to the patient.** If the patient pays on the first statement, it has taken 45 to 60 days to receive complete payment. Since the patient has BCBS, there is a negotiated rate, so the payment will not even total \$100.

I know that patients often say "But he only spent 10 minutes with me." Checking back with the provider, I find it was typically longer. Patients tend to underestimate the time as it goes very fast.

The total visit encompassed the work of the phone operator, the medical records clerk, the triage nurse, the check-in person, the nurse, the doctor, the check-out person and the biller. It took 8 people, and at least 45 minutes of work to

make that appointment happen. Plus, that visit had to help pay the expenses for the rent, the utilities, malpractice insurance, medical supplies, computers, phones and janitorial services.

The practice, the patients and the overseers of healthcare want each visit to be non-rationed, safe, high-quality, error-free, holistic, pleasant, clean, accurate, efficient and reimbursable. It's what we all want. And it ain't cheap.

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