Registries: Powerful tools to track, manage chronic disease

The practice of medicine is shifting from one rooted in episodic care to one that focuses on better managing chronic disease conditions and improving the overall health status of a physician's patient panel.

Helping to fuel this transition is the emergence of new pay-for-performance models and federal mandates that tie physicians' financial health more closely to the health of their patients.

Some of the electronic health record (EHR) systems have built in this functionality to
enable you to easily compile and review aggregate data relating to some of the most common—and often preventable—health conditions, including obesity and diabetes, as well as others that can be more effectively managed, such as hypertension, arthritis, and heart disease. But not all systems have this functionality.

So just how can small family or internal medicine practices track and monitor data to improve care of patients with chronic illnesses if the EHR system used in the practice does not include this capability? How can you identify the top areas to track within your own patient population, including immunizations, pre-hypertension and hypertension, obesity, and other conditions? What are the best strategies to use population health statistics to better develop programs for the most common conditions seen in family and internal medicine practice?

“Registries,” says Bruce Bagley, MD, medical director for quality improvement for the American Academy of Family Physicians (AAFP). “Registries, registries, registries. They’re the answer to every one of those questions.”

In its simplest form, a registry can be built as a way to track a disease or condition in your patient panel, or you can join an open registry to share and compare data with other providers about a chronic disease condition.

Like their big brothers, full-blown EHR systems, disease registries can be used to track clinical patient data across a wide range of conditions and measure the quality of patient care against various payer and government standards.

According to the Health Resources and Services Administration, part of the U.S. Department of Health and Human Services, registries can help a practice with:

- printed patient reports at the point of care, which remind practitioners of appropriate tests and interventions as well as record-updating responsibilities;
- progress reports, which provide information about patient improvement or areas of concern;
- registry-generated exception reports, which point out patients due for care as well as those whose results do not fall within acceptable ranges; and
- stratified population reports, which look at patients across a practice.

Bagley unabashedly believes that registries represent the single best way for small primary care practices not just to meet the mandates of meaningful use, but also to help take the best possible care of patients who have chronic conditions such as diabetes, asthma, heart disease, hypertension, and depression, among others.

Registry realities

Registries can be labor intensive to launch and maintain, at least in the early stages of implementation.

According to the AAFP, the typical family medicine practice patient panel includes anywhere from 10 to 20 patients with chronic obstructive pulmonary disease to 150 to 200 patients who have diabetes and associated conditions.

Like EHRs, many open registries still suffer from a lack of interconnectivity, the technical...
term for the systems’ inability to “play well” with outside systems, such as those operated by radiology clinics, laboratories, and even transcription services.

“Something needs to be said about interfaces to labs, hospitals, radiology, etc.,” says Neil Treister, MD, FACC, medical informatics officer at the Sharp Community Medical Group in San Diego, California. “Those are incredibly problematic and expensive. And yet having that information electronically is critical for making the office paperless. I think 90% of our frustration is connecting to other entities.”

“He’s right,” Bagley says, “but the technology’s getting better all the time, and vendors are beginning to address those issues with advances in the technology.”

In the meantime, Bagley and other physicians offer the following suggestions for leveraging electronic health information to improve care of patients with chronic conditions:

- **Metrics: Start small, and retain control.**

“Decide on a single metric, and commit to measuring it,” says Jason Mitchell, MD, assistant director of the AAFP’s Center for Health Information Technology.

Alan Wynn, MD, FACP, who operates a two-physician family practice in Woodbridge, Virginia, agrees.

“Tackle just one or two diseases, and understand how the EHR can help,” he says. “I would suggest selecting a high-volume disease, an area in need of improvement, or an area of interest. For example, if diabetes, I would want to know my quality statistics and want to show that I provide excellent care.”

Although defining metrics and objectives was difficult in the past, they now exist for some areas, Wynn says, noting that the National Committee for Quality Assurance provides population standards for diabetes and hypertension management.

“I also used Healthy People 2010—now Healthy People 2020—for other goals such as colonoscopy and mammogram rates,” he says. “Centricity voluntarily collected data from users and had a database with several million patients, and I could compare my results to this database.”

Another key for smaller family and internal medicine practices, Wynn says, is to focus on metrics that can be easily controlled.

“I can administer [pneumonia] and flu shots, but many of my patients see a gynecologist for mammograms and Pap smears,” he says. “Sometimes, the gynecologist would send me a copy of the results, but often I had to rely on the patient telling me the test was done. I made the decision that the time and effort to track down the hard copy of the results is not a good use of office staff time.”

- **Don’t rely solely on vendor promises or off-the-shelf products.**

“Meaningful panel management and quality improvement requires intensive customization of EHR systems or the addition of other systems to your existing EHR to get real results,” Mitchell says. “Unfortunately, it is a lot of work and it really shouldn’t be. Meaningful quality measurement and improvement should be a by-product of appropriate clinical care.”

- **Foster a culture of continuous quality improvement.**

“Firing up the latest expensive health information technology quality improvement tool will
not make a bit of difference if your practice doesn’t have the capacity and commitment to adapt,” Mitchell says.

- Data entry: Go team!

“The real bang for the buck is using the office staff to complete the quality data,” Wynn says. “For example, if a patient has diabetes, the [medical assistant (MA)] should have the patient remove [his or her] shoes for the foot exam. If the MA is trained, [he or she] could even perform and chart the foot exam. Protocols can be set up for staff to administer vaccines to selected patients and enter orders for mammograms and colonoscopies.”

Treister agrees. “Data collection has to be tied to the care delivery workflow whenever possible,” he says. “Duplication of efforts to collect data for chronic care management is too resource intensive.”

The bottom line

Ultimately, leveraging electronic health information to improve the physical health of your patients with chronic disease while improving the financial health of your practice relies on a multi-pronged approach involving teamwork and flexibility, both in terms of data and the infrastructure being used to gather and employ it.

“Data liquidity is the key,” Mitchell says. “Monolithic EHRs are not the only way to manage health information effectively and, in fact, dependence on a single system from a single vendor may be seriously impeding our ability to improve the care we provide.

“We need to be able to collect health information once and leverage it across multiple systems for multiple purposes, all in the interest of improving our patients’ health and wellness,” he concludes.

Resources

The American Academy of Family Physicians (AAFP) offers resources for getting started with patient registries:

- “Improve Care with Patient Registries.” This AAFP video reviews the purpose, functions, and benefits of patient registries and offers advice on getting started. www.aafp.org/pcmh/videos

- “Set up a Patient Registry.” This Web page summarizes the steps involved in developing a registry. www.aafp.org/pcmh/registry

For more information: www.aafp.org/pcmh/registry

Setting up a registry

Steps

- Install a patient registry system.

- Input data.
Integrate data collection into the care process.

Identify needed care.

**What you will need**

- A patient registry function, available in certain electronic health record systems, a database program, or Internet access.
- Time to input data.
- Training to learn how to use the registry system.

**How to choose and use a registry**

Here’s what to focus on if you are looking to a registry to help you manage chronic conditions in your practice:

- Choose a registry that supports the chronic conditions you most frequently see in your practice.
- Be sure the registry fits within the technical and financial limitations of your practice. If you are choosing an electronic health record system, buy one with the capabilities of a registry or the capability to interface with a registry. Otherwise, for a stand-alone registry or open registry, you will need one or more computers and an Internet connection or private network.
- Be sure that the data you enter are up to date, complete, and accurate.
- Incorporate use of the registry into your normal workflow. Rethink how you prepare for and conduct patient visits, create new processes for follow-up, and produce and distribute feedback reports.

Source: “Using Computerized Registries in Chronic Disease Care,” California HealthCare Foundation

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