CME

SANDY POGONES, MPA, CPHQ, AMY MULLINS, MD, CPE, FAAFP,
AND GAIL GUERRERO TUCKER, MD

Put Your Clinical Data to Work With a Registry

© iSTOCK.COM / FRANKRAMSPOTT

Unlike most EHRs, registries can make patient data accessible and actionable, leading to better outcomes and easier quality reporting.

Medical practices collect large amounts of data in their electronic health records (EHRs), but using that data to make informed decisions can be challenging. Historically, EHRs have proven to be ill-suited for population health management, quality improvement, performance reporting, and care management. Registries can make electronic data more accessible and actionable.

WHAT IS A REGISTRY?

A registry is a population health tool that excels at organizing data for a group of patients and providing timely, actionable reports that can be used for care management and quality improvement.

ABOUT THE AUTHORS
Sandy Pogones was formerly the senior strategist for health care quality at the American Academy of Family Physicians (AAFP). Dr. Mullins is medical director for quality and science at the AAFP. Dr. Guerrero-Tucker is a family physician in Safford, Ariz., and serves on the AAFP Board of Directors. Author disclosures: no relevant financial affiliations.

The registry obtains data from EHRs, other electronic data sources, or manual data entry. It then organizes and analyzes the data and presents it in dashboards and reports for easy interpretation. Information can be used to make clinical and administrative decisions, such as reaching out to patients to close care gaps or proactively identifying at-risk patients who may need more intense care so the staff can develop intervention strategies.

The registry obtains data from EHRs, other electronic data sources, or manual data entry.

A registry may be used primarily at the practice level for patient care, or it may be a national or regional database registry.[1]

A patient care registry is used at the point of care to inform treatment decisions, highlight gaps in care, and manage care of high-risk or high-need patients. It is maintained as part of the practice's daily workflow and updated in real time.

A national or regional database registry is used for population management, setting benchmarks, comparing performance among participants, value-based payment, risk stratification, strategic planning, contract negotiation, quality improvement, and reporting. Reports are generated at regular intervals, such as monthly, and fed back to the practice. These types of registries are not generally designed to be used at the point of care due to the data lag.

A registry may include the entire patient panel or only a subset of patients who share a common chronic disease or condition, such as diabetes, coronary artery disease, or asthma. The population included is determined by how the practice intends to use the registry. For example, if the practice will use the registry to report Merit-Based Incentive Payment System (MIPS) data, then all patients should be included. If the practice will use the registry only for diabetes management, then only patients with diabetes should be included, or the registry should be able to segment patients with diabetes from all patients.

Registries are normally maintained electronically for optimal efficiency and use. A simple electronic spreadsheet is the most basic form of registry and may be used in a small practice to manage a small group of patients with a specific disease, such as tracking A1C levels for patients with diabetes. Many EHR vendors offer more sophisticated registries as add-ons for their systems. These types of registries are useful at the point of care because their data is accessible and updated in real time as part of the routine office workflow. Third parties also offer registries that extract data from digital sources, such as EHRs and administrative claims. These tend to be regional or national database registries.

KEY POINTS

- A registry is a population health tool that organizes data for a group of patients and provides timely, actionable reports that can be used to close care gaps or identify high-risk patients who may need more intense care.
- A registry may be a simple spreadsheet populated from paper or electronic records, or it may be a more robust application available through an EHR or a third-party vendor.
- Data validation ensures accuracy of the information so that practices can be confident using the registry to report quality measures.

HOW CAN A REGISTRY HELP FAMILY PHYSICIANS?

Registries allow physicians to capture data once and use it for multiple purposes.

The most common reason family physicians use a registry is quality reporting for MIPS or alternative payment models (APMs), such as Primary Care First or accountable care organizations. Routine registry reports help practices track their performance on quality measures and eliminate gaps in care. Dashboards present a high-level summary of information with links to patient-level data, enabling the practice to see which patients don't meet certain measures and to take action to close care gaps prior to the end of a reporting year.

There are other ways a registry can help a practice. Feedback reports allow results to be shared among team members, which encourages collaboration, enhances team communication, and can contribute to standardization of care. Performance data from a registry can be used to support accreditation, certifications, patient-centered medical home (PCMH) functions, continuing medical education, maintenance of certification (MOC), and licensing. Registries help care teams track treatments, services, complications, and social determinants of health. They are also useful for identifying patients affected by product recalls and can highlight areas where quality improvement efforts are needed. Organizations that have multiple EHR systems can use a registry to aggregate, consolidate, and standardize their data into a single database.

Registries increasingly offer advanced analytics that provide actionable data to practices, reducing time physicians spend analyzing and interpreting data themselves. Registry data can be used to advance clinical knowledge, update standards of care, contribute to research and clinical trials, and assist in the advancement of family medicine.

HOW TO GET STARTED

First, explain to all staff why you're planning to implement a registry and how it will help the practice with population management, closing care gaps, care management, quality improvement, and reporting. Involve your staff during selection and implementation as well. This will help build buy-in.

Next, decide what you want your registry to do. If you will be using the registry for patient care and disease management or prevention, identify the data elements that are important to monitor. These may include lab values, tests, screenings, emergency department visits, inpatient admissions, patient self-care training, and referrals. If you will be using the registry for population management, planning, improvement, and reporting, pay close attention to the dashboard. For many physicians, the dashboard is the most important component of a national or regional registry, so make certain it includes all the quality measures and statistics you're interested in and that it will allow you to drill down to the patient level.

If you are planning to participate in a national or regional database registry, discuss features that are important to you with several registry vendors before making your selection. Here are some key questions to ask:[2]

- Is the registry a qualified registry (QR) or a qualified clinical data registry (QCDR) for MIPS reporting? (CMS provides a list of QRs and QCDRs each year, which can be accessed here: https://qpp.cms.gov/resources/resource-library.)
- Can it report the three reportable MIPS categories (quality, improvement activities, and promoting interoperability)?
- Does it offer the quality measures important to your practice or health system?
- Does it offer any other non-MIPS (QCDR) quality measures to support family medicine that are important to your practice?
- Does it include the full age range for patients in your practice (pediatrics and adults)?
- Does it support individual and group reporting for MIPS?

Once you've selected a registry, identify at least one superuser to receive advanced training. Now is also the time to make certain staff and physicians consistently document data in structured fields or templates, at least for the data elements that will be collected in the registry. Offer training and support as needed so data can be collected or extracted accurately.

You'll work collaboratively with the vendor's information technology (IT) staff to complete data mapping (which ensures different systems can meaningfully exchange information), data validation, and transmission. This process is known as onboarding. Your team can help by accessing and reviewing the data and feedback reports to validate accuracy.

Once you're confident in the accuracy of your data, begin using the registry to identify opportunities to improve care, using protocols and standing orders as guidelines. Download and discuss summary reports during staff meetings, during huddles, or as part of quality improvement initiatives. Maintain and validate accuracy throughout the year.

If you are using a national or regional database registry, you will use it to submit data annually to CMS for MIPS, unless you're exempt. You will also want to coordinate data submission for APMs and other initiatives in which you're involved.

Routine registry reports help practices eliminate gaps in care.

Participation in a registry may not require a capital investment, but there will be some up-front costs to get data from your EHR (or paper system) to the registry in standard format. Fees may include data mapping, interfaces, EHR vendor fees, or labor fees related to making workflow changes, capturing and validating data, and training. There may also be annual fees for data submission to MIPS/APMs, maintenance fees, or fees for custom reports. Check your contract carefully so you understand all costs.

LESSONS LEARNED

Mark Hinman, MD, is a solo physician in Longmont, Colo., with 1.5 FTE nurse practitioners. He uses two registries.

The first is offered through his EHR vendor (Aprima), which he uses for quality measure reporting and Comprehensive Primary Care Plus (CPC+) risk stratification. The second registry, PRIME, was free through the American Board of Family Medicine's Evidence Now initiative to improve hypertension, and he also uses it for MOC purposes. "I compare PRIME and Aprima data to see if numbers correspond. This is helpful for checks and balances," Hinman says. "I also use PRIME for patient-centered measures" — the Person-Centered Primary Care Measure (PCPCM) and the PHQ-9 depression measure. PCPCM is a QCDR measure that looks at the value of primary care in terms of first contact, coordination, continuity, comprehensiveness, care management, and patient engagement. (For more information, see https://www.aafp.org/journals/fpm/blogs/gettingpaid/entry/pcpcm_survey.html.) The registry distributes the PCPCM survey to patients annually and then aggregates and displays results on a dashboard. Data for the PHQ-9 is extracted from the EHR. "My practice is PCMH-recognized, so I use these patient-centered features to meet these requirements," Hinman says.

> "The red and green indicators give a quick sense of how you are performing on a measure."

The onboarding process was fairly simple. He did most of the work himself, working with the registry IT staff, and it took about five to 10 hours over the course of two months. "Now, I spend less than an hour per month keeping up," he says. "The software runs in the background so there's not much effort. Data is easy to pull up. The greatest challenge is finding time to learn to use all the reports and features."

John Machata, MD, a solo physician in Rhode Island, began using the PRIME registry to see if data mining worked. "It does. It's not perfect, but the results are quite accurate," he says. "I review my dashboards every month and close care gaps. I also collect patient-reported measures through the registry and always get a very high score."

The biggest challenge was the initial mapping process. "I'm not a computer guy, so I relied on the registry staff to complete the process, which wasn't hard but was tedious," he says.

He recommends physicians take the time to validate and correct their data — during and after the initial mapping process. "Make sure your data is accurate, and correct any data that doesn't look right. It takes time, but it's worth it," he says. "Most important, your data will be accurate for end-of-the-year reporting."

Machata uses the registry as the main basis for reporting to payers and for National Committee for Quality Assurance (NCQA) measures. Even though there are some differences in measure specifications among payers, the registry "eases the burden of data collection and is great for physicians who don't want to worry about reporting," he says.

"The registry is just short of fabulously easy to use. The red and green indicators give a quick sense of how you are performing on a measure. I routinely drill down and view details for patients who did not meet criteria. This is one of my favorite aspects," he says.

A POWERFUL TOOL

Registries can lead to operational efficiencies by standardizing, organizing, analyzing, and presenting patient data through dashboards and reports, either intermittently or at the point of care. Registries are more user-friendly than EHRs, and reports can be used to support care management and quality improvement and to help close care gaps, thereby improving outcomes. Practices that prioritize data validation and accuracy find that end-of-the-year reporting for MIPS, APMs, and other value-based payment initiatives becomes a minor task handled by the registry, instead of a major undertaking. FPM

---

1. Patient Care Registries: Proactively Manage Chronic Conditions. AMA Steps Forward. Updated April 24, 2021. Accessed Oct. 10, 2021. https://edhub.ama-assn.org/steps-forward/module/2702745

2. Clinical Data Registries. AAFP TIPS. Accessed Oct. 10, 2021. https://www.aafp.org/family-physician/practice-and-career/managing-your-practice/aafp-tips.html

Send comments to **fpmedit@aafp.org,** or add your comments to the article online.