



**RWJBarnabas Health: Improving
Clinical Workflow and Patient Care**
Using Wellsheet Reduces Doctors' Time in Chart by 40%

RWJBarnabas Health (RWJBH) is the largest integrated healthcare delivery system in New Jersey, by the way of serving more than 5 million patients annually across nine counties, and employing 33,000 individuals, making it the state's largest private employer. As a national health system leader, RWJBH recognizes clinician burnout as a complex workplace syndrome, affecting not only physicians, nurses, and staff who deliver care to patients, but also patients and their families. Executive leadership at RWJBH included clinician wellness among its strategic imperatives and recognizes it as crucial to achieving its mission of providing consistently outstanding levels of patient care services.

Spearheading an approach to improve wellness is Dr. Stephen O'Mahony, MD, FACP, Vice President and Chief Health Information Officer (CHIO) at RWJBarnabas Health. "The clinical team understands that the electronic health record (EHR) helps the organization maintain the highest quality and safety standards," said Dr. O'Mahony. "Clinicians are spending way too much time entering data into the EHR, and then searching for that data to pull it back out of the EHR to support clinical decisions and patient care. These systems were not optimally designed with the clinicians in mind. All this time in the EHR can take clinicians out of their natural workflow, and worse, take them away from being able to really engage with patients. It can be a hefty toll to pay."

A recent consensus report by the National Academy of Medicine states that up to one half of doctors and nurses, and perhaps even more medical students and doctors in training, are experiencing the cardinal symptoms of burnout,¹ which are emotional exhaustion, depersonalization, and a lack of sense of professional accomplishment.² In another recent survey of almost 9,000 physicians, the number one physician dissatisfier is no longer about arguing with insurance companies to approve and pay for patient care (or insurance "prior authorization"). Poor EHR-user design and inadequate EHR interoperability top the list.



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DR. STEPHEN O'MAHONY, MD, FACP | VICE PRESIDENT AND CHIEF HEALTH INFORMATION OFFICER | RWJBARNABAS HEALTH

Craig Limoli, CEO and Founder at Wellsheet Inc., hears concerns from industry leaders across the country about the EHR's deleterious effect on the patient-doctor relationship. “We cannot continue to use the EHR to encumber physicians with yet one more trivial data entry task that should have been automated away years ago. The bottom line is we need to fundamentally rethink the clinical design and usability of the EHR so that the computer is working hard to support the clinicians and patients, and not the other way around. So, with the advent of new FHIR API standards, ONC and HHS federal leadership support, and EHR vendors embracing open app ecosystems, I believe we have enough ingredients to transform how busy clinicians engage with the electronic patient chart.”

Implementing a predictive clinical workflow

As an innovator in the healthcare space, Dr. O'Mahony and other leaders at RWJBH spend a great deal of time thinking about ways to reduce the EHR burden imposed on clinicians. After completing a thorough assessment of major EHR pain points, he and his team realized that instead of requiring clinicians to hunt through different pages in the EHR chart to find needed information, they needed the ability to gather pertinent patient information in one place.

“Normally, we spend a lot of time looking for the information,” he said. “When it comes time to make a clinical decision, I may have to search 10 or more parts of the chart to find all the data I need to determine a course of care. Finding a way to quickly pull that knowledge from the chart and giving doctors that knowledge and insight right away saves our clinicians a lot of time.”

That is why RWJBarnabas Health decided to implement Wellsheet — a predictive clinical workflow system that pulls data from the chart, prioritizes clinical content through specialized machine learning algorithms, and optimizes the provider workflow. Mr. Limoli said the predictive workflow system assembles pertinent information in a meaningful way, anticipating the needs of the doctor to help facilitate a more effortless episode of care.

“Wellsheet pulls out the right information and lays it out on the screen in an intuitive workflow that allows doctors and nurses to go from one area to the next in a way that makes clinical sense. In doing so, it allows you to arrive at the right clinical insights,” he said. “Having this layer on top of the EHR gives clinicians the ability to understand what needs to be done for the patient right in front of them without having to compromise the provider-patient interaction.”



Since implementing the system at its first two sites, RWJBarnabas has reduced the average time physicians spend in the EHR chart by approximately 40%. It has also increased patient throughput by 20% and produced improvements in care quality across the health system.



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CRAIG LIMOLI | CEO AND FOUNDER | WELLSHEET INC.

“Wellsheet lives on top of the EHR and knows who I am as a provider, who this patient is, and provides me with the data I need in a way that is really easy to digest,” Dr. O’Mahony said. “It helps show our physicians a total picture of the patient. Wellsheet highlights care gaps, opportunities, and how to best treat the patient in real time. It’s all wrapped up in a package that’s easy to understand and navigate. It can save our physicians a couple of hours each day, and they appreciate it. As a physician myself, it’s one of the most immediate, and meaningful, ways I have been able to give back to front-line clinicians.”

Ease of implementation

Traditional implementation timelines to integrate other technology vendors with the EHR are usually prolonged, cumbersome, and costly affairs. Not so, says Dr. O’Mahony, at least when using the new evolving standard for healthcare IT system integration, known in technical circles as the Fast Healthcare Interoperability Resources (FHIR) application programming interfaces (APIs). The FHIR API enables Wellsheet to pull and prioritize key patient data from multiple data sources and allows for an accelerated implementation and deployment timeline. RWJBarnabas had Wellsheet up and running within a few weeks.

“Typically, whenever you are dealing with changes to the EHR, you are looking at a long development cycle. It can take many, many months — even years,” he said. “Through use of Wellsheet’s API-based integration, we were able to easily and securely implement the application at a pace we’d never seen before.”

Mr. Limoli said the FHIR APIs allow a standardized, quick and deep integration with popular EHR platforms, which most major health systems use across the US and in several large countries, such as the UK and Australia. “The FHIR API allows us to present Wellsheet as a seamless part of the EHR, not some ‘klugey’ add-on that requires a separate login and password,” he said. “Additionally, using the FHIR API standard means we can extend the experience to any web browser and any device, such as a tablet or mobile phone, with the same fidelity, and look and feel, across different environments. This is a huge plus for clinicians working across various sites of service in the same facility, or across different EHRs between facilities and different health systems.”

Working to reduce burnout, one chart at a time

The positive clinician response at RWJBarnabas was so significant that the healthcare system quickly advanced the project in a matter of months from a small trial of 20 doctors to more than 500 physicians across a variety of specialties. Today, Wellsheet is deployed across the enterprise at 7 of its 11 hospitals, and is being considered for deployment across the remaining hospitals and outpatient settings.

“We need to keep investing in our physicians to improve wellness,” Dr. O’Mahony said. “If we don’t make it a priority, if we don’t give them tools like Wellsheet to help with the EHR burden, it will be an uphill climb.”

Mr. Limoli wholeheartedly agrees. While the healthcare industry has long heralded the so-called “triple aim” priority of decreasing costs, increasing quality, and improving the patient experience, it is organizations that work to fulfill a “quadruple aim” — i.e., adding the goal of supporting clinicians directly — that will be the success stories we hear about in the future.

“The first three aims are only possible if providers who deliver care are getting what they need to do their jobs, and can spend time attending to the patient instead of the computer screen,” he said. “It’s imperative that we find ways to support and give back to the clinicians and other staff who are delivering front-line care day in and day out. In doing so, you not only support them, but you also support the collective mission of every caregiver and every health system to deliver the highest quality care possible to patients.”

References

¹ The National Academies of Science, Engineering, and Medicine. “Taking Action Against Clinician Burnout: A Systems Approach to Professional Well-Being.” October 2019. <https://nam.edu/wp-content/uploads/2019/10/CR-report-key-messages-final.pdf>.

² Massachusetts Medical Society. “A Crisis in Health Care: A Call to Action on Physician Burnout.” March 28, 2019. <http://www.massmed.org/burnoutpaper/#.Xh3atvxMFEY>.

³ An Examination of the Professional Morale, Practice Patterns, Career Plans, and Perspectives of Today’s Physicians, Aggregated by Age, Gender, Primary Care/Specialists and Practice Owners/Employees. The Physicians Foundation Survey, 2018, on behalf of Merritt-Hawkins. <https://physiciansfoundation.org/wp-content/uploads/2018/09/physicians-survey-results-final-2018.pdf>.

RWJBarnabas Health is an investor in Newark Venture Partners Fund, LP, an early stage venture fund based in Newark, N.J., which has invested in Wellsheet.



About Wellsheet

Wellsheet’s predictive clinical workflow platform uses the FHIR API standards to work within an existing EHR to surface the most relevant content for physicians in a view that is contextualized and prioritized for their needs. Its AI-powered, cloud-based intuitive workflow is integrated with both Epic and Cerner to reduce a physician’s time in the EHR, lessening physician burnout and improving the quality of patient care. Wellsheet’s SaaS-based offering is deployed in large healthcare providers. Learn more at www.Wellsheet.com or follow us on Twitter @Wellsheet_Inc