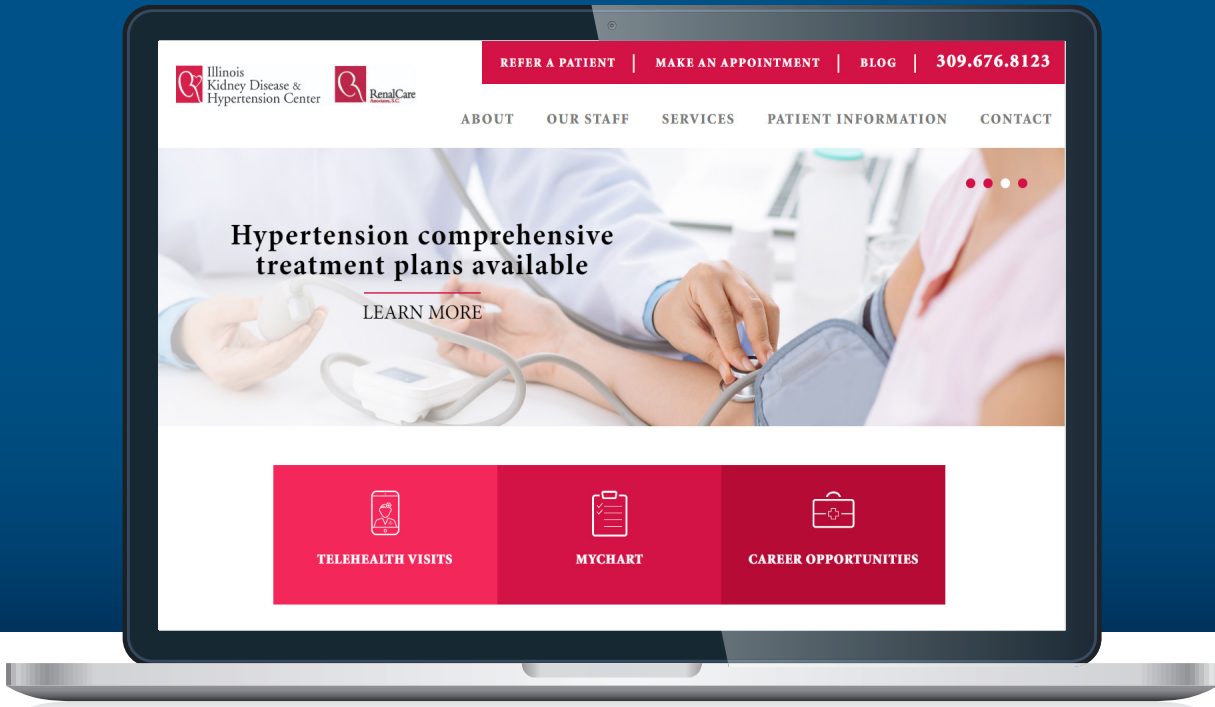


CASE STUDY

RenalCare Associates, S.C.



SUMMARY

- Operates in Peoria, Illinois, under the Illinois Kidney Disease & Hypertension Center umbrella.
- Specializes in treating and managing kidney disease, hypertension and related conditions.
- Also manages the Renal Intervention Center, which specializes in nephrology, vascular surgery, and vascular and interventional radiology, in Morton, Illinois, in affiliation with OSF Saint Francis and Heartland Home Healthcare, Inc.
- Has 17 board-certified nephrologists, two transplant surgeons; total staff of 73.

“We are now in a much better position to coordinate care and drive better outcomes, helping us make an easier transition to value-based care.”

THE CHALLENGE

- Improving patient data exchange with hospitals, primary care physicians, other providers and laboratories was a priority to improve outcomes and ease transition to value-based care.
- Checking eligibility and managing authorizations was a time-consuming, labor-intensive, manual process that still produced errors.
- Managing accounts receivable (A/R) was difficult due to a lack of timely visibility, hurting cash flow.
- Reporting in practice management system would take hours, yet client might still miss issues causing denials.
- Overcoming inherent inefficiencies in the clinician workflow in the practice management system was difficult, hurting productivity and staff satisfaction.

THE SOLUTION

- Implement Acumen 2.0 powered by Epic, the only nephrology-specific electronic health record and practice management system.
- Enable immediate interoperability with two local hospitals and primary care practices using Epic through Epic Care Everywhere, covering 75% of our total patients.
- Use analytics such as time in the waiting room, time being spent with patients by each provider, time to review labs, etc. to build dashboards to monitor clinical and practice management performance.
- Make patient-relevant information such as lab results and patient education available through Epic MyChart portal.
- Create electronic patient blood pressure diary in MyChart.

THE RESULTS

- Average accounts receivable has been reduced from 41 days to 21.9 days.
- The number of clean claims submitted is currently 78%.
- Productivity has increased by 10 minutes per chart by having Epic Care Everywhere available rather than making phone calls and waiting for return calls.
- Number of patients now using MyChart has risen from 3% to 10–15%, one of many ways the patient experience has been improved.
- Receiving \$1,000 to \$2,000 per month in online payments versus \$0 previously.
- Improved clinician workflows enable notes to be completed in less than a minute to ensure better documentation, leading to better information-sharing and higher-quality outcomes across all providers.

BACKGROUND

Chronic Kidney Disease (CKD), which includes End-Stage Renal Disease (ESRD), is a large and growing issue in the U.S., especially as Baby Boomers enter their golden years. According to the Centers for Disease Control and Prevention (CDC), an estimated [30 million people](#) (15% of the total U.S. population) have CKD. Yet 48% of individuals who have severely reduced kidney function but are not on dialysis, and 96% who have kidney damage or mildly reduced kidney function, are not aware they have CKD.

It's also a costly issue. In 2015, ESRD beneficiaries composed [less than 1%](#) of the Medicare population but accounted for an estimated 7.1% of the total Medicare fee-for-service spending, totaling more than \$33.9 billion according to the Centers for Medicare and Medicaid Services (CMS). The CDC says, in 2014, 118,000 people in the U.S. started treatment for ESRD, and 662,000 were living on chronic dialysis or with a kidney transplant.

Managing CKD and ESRD is extremely challenging, requiring specialized approaches and a tremendous level of coordination and information-sharing between nephrologists (kidney specialists), other

specialist providers (since 80% of patients with kidney disease have [three or more co-morbid conditions](#)) primary care physicians (PCPs), hospitals, laboratories, ambulatory general health and dialysis-specific clinics, and others. Achieving a high level of care coordination throughout the continuum has become even more important in the last few years as health care moves from fee-for-service to value-based care. The establishment of ESCOs (ESRD Seamless Care Organizations) by CMS, which builds on CMS' earlier Accountable Care Organization (ACO) model, adds urgency to finding a solution as financial risk around outcomes increases for all providers.

Given the difficulties of achieving full electronic interoperability in health care, much of the data exchange between providers typically occurs via faxes, CCD exchange, or even documents that are hand-carried by patients and which must then be entered/archived into the receiving provider's electronic health records (EHR) system.

Adding to the challenge of data exchange, most nephrologists prefer to use an EHR designed specifically for Nephrology rather than a general EHR due to the complex nature of their specialty. While this approach is better for the practice itself, it often creates an additional barrier between nephrologists and other members of the patient's care team.

THE CHALLENGE

All of these factors were in play for RenalCare Associates, S.C., a Peoria, Illinois-based practice with 17 nephrologists, two transplant surgeons and 73 total staff that operates under the umbrella of the Illinois Kidney Disease & Hypertension Center. The practice manages treatment for patients with CKD or ESRD as well as patients with hypertension.

In 2010, RenalCare Associates became an early adopter of Acumen 1.0, which at the time was the only EHR designed specifically for use by nephrologists. It was also using a separate practice management system to handle its financial/operational functions. While Acumen 1.0 had served them well in the intervening years, as health care technology in general became more sophisticated, its lack of certain capabilities was beginning to present some challenges.

“Probably the biggest issue we faced with the first iteration of the Acumen EHR was its lack of interoperability with other EHRs, especially those of the hospitals in the area,” says Tim Pfleiderer, M.D., President of RenalCare Associates and one of the practice’s active nephrologists. “If we wanted to share care information about one of our mutual patients, we’d have to do it via paper documents and the information would have to be entered into the EHR manually. That made it difficult to get an overall picture of the patient’s care, especially when volumes were high.”

It wasn’t just the clinical side that was impacted, according to Beth Shaw, Executive Director of RenalCare Associates. Incompatibilities between the EHR and the separate practice management system made it difficult to import claims-

related data. **As a result, RenalCare Associates faced multiple challenges around its ability to**

ensure accurate billing of payers and patients, determine what money had been collected and which claims had been denied (and why), and build reports that would help drive financial and workflow performance improvement – all of which affected accounts receivable and cash flow.

“We felt like we didn’t have a true picture of where we stood in terms of A/R,” Shaw states. “It would take me hours upon hours of running reports just to try to find issues, and even then, we might miss something that would lead to a denial. We would essentially have to look at nearly everything individually because the reporting capabilities simply weren’t there. It was frustrating, and it made it difficult to understand where we stood financially at any given time. Then I discovered that, if we wanted to enable real-time insurance eligibility verification, I would have to add another product onto the one we were using at an additional cost.”

When RenalCare Associates changed clearinghouses from the one that was part of the practice management system to one that was more advanced, it created even more issues with the practice management system vendor, especially around customer service.

“They seemed unhappy with us, and it showed in their response times,” Shaw says. “When we logged a help ticket, it might take a couple of weeks to get an answer. That delayed our ability to process claims.”

Despite the issues, RenalCare Associates hadn’t been planning to make any further changes. Then serendipity struck.

THE SOLUTION

While attending the Renal Physicians Association (RPA) conference in 2017, Dr. Pflederer and Shaw saw a presentation announcing Acumen 2.0 powered by Epic, which would be a significant upgrade to the Acumen EHR they were already using and happy with.

Acumen 2.0 is the one system that combines a nephrology-specific EHR with a practice management system both designed for nephrologists.

Dr. Pflederer and Shaw saw that adding intrinsic Epic interoperability as well as changing to a practice management system that is tightly integrated with the EHR rather than being a product from another vendor would solve many of the issues they were having. They wasted no time in making their intentions known.

“We went straight to their booth after the presentation and said, ‘We want to be an alpha tester,’” Dr. Pflederer says. “While we knew there could be some hiccups, we wanted the ability for our physicians and staff to provide input into the product they were developing to ensure it was as functional as possible and would thoroughly meet the needs of our nephrologists.”

CLINICIAN IMPLICATION

One of the most attractive features of Acumen 2.0 was that its core engine is the Epic EHR used by the hospitals the practice works with as well as most PCPs and specialty practices in the area. The Epic integration is particularly critical since 75% of RenalCare Associates’ patients are seen at hospitals connected to the organization via Care Everywhere.

“It gives us the best of both worlds,” says Annette Miller, M.S., R.N., C.E.N., C.N.E., Director of

Clinical Operations at RenalCare Associates. **“In Acumen, we still have an EHR designed specifically for the needs of nephrologists, putting the right information in front of them at the point of care and simplifying the data entry process. Yet we have now gained the benefits of**

the familiar Epic interface and the ability to connect to other offices, hospitals and facilities through Care Everywhere.

We can share our data with them, and we gain immediate visibility into the records at other providers without having to hunt them down or log into other websites. We are now in a much better position to coordinate care and drive better outcomes, helping us make an easier transition to value-based care.”

Miller also appreciates the expanded reporting capabilities within the Epic infrastructure, which make it easy to monitor the organization’s performance. For example, best practices require physicians to sign their notes for each patient. A dashboard shows those who are not falling within the organization’s guidelines so corrective actions can be taken to meet compliance needs. Another dashboard indicates which physicians have checked into the system and where, as well as showing where bottlenecks and delays in seeing patients are occurring so they can be addressed, both in real time and in practice design. Executives at RenalCare Associates can see how efficient each physician is with office visits, with the ability to drill down for more information, and how efficient physicians are with closing encounters.

In addition to being able to work within the same basic technology they use in the hospital, RenalCare Associates’ physicians appreciate the many upgrades Acumen has made in the latest version itself.

“It is now even easier to list and change things in the Problem List,” Dr. Pflederer says. “That’s important to us because, the easier it is to work with, the more engaged our physicians will become with the Problem List and the more likely they will be to keep it up. Acumen 2.0 also brings improvements to the Preference List, making ordering of medications and labs much more seamless than it was before. And we’re continuing to see even more improvements in that area.”

The Epic backbone has enhanced the clinical analytics capabilities in Acumen 2.0 as well, especially around population health management and quality measures. For example, RenalCare Associates can now track patients by diagnosis, such as CKD Stage 3, 4 or 5, to see what care has been

provided and what things still need to be done to prepare them for dialysis. Previously, they were only able to track patients by general parameters such as name, office and individual nephrologist.

“With Acumen 2.0, there is more data and better data at my hands as a provider as a result of Care Everywhere and the nephrology-specific orientation,” Dr. Pflederer says. “I can query and report on things that are particularly important to Nephrology, such as whether patients have been prepared for dialysis and whether they’re on the right medications for their stage of CKD. The registries within Acumen 2.0 let us manage populations such as CKD Stage 4 patients and ask within the practice how many have been referred to access, how many have had dialysis education and so forth. The better job we do in managing those quality factors, the better outcomes we can deliver for our patients.”

Another advantage to clinicians is that Acumen 2.0 is even more tightly integrated into their workflows. Physicians can now easily choose diagnoses, the level of service provided, when patient follow-up is required and many other factors within the visit workflow in Acumen 2.0 rather than having to go outside the system to find that information. They were also able to easily transition to seeing patients using the note capability and managing through the entire process.

“A common complaint with technology, especially from physicians, is that it interferes with the doctor-patient relationship,” Miller says. “We wanted to change that equation and make sure Acumen 2.0 became an enhancement instead.

The simplified workflow reduces the hunting and clicking normally associated with EHRs by half. That means our nephrologists, nurses and other staff members can spend less time looking at the computer screen and more time building an empathetic relationship with our patients. The improved workflows helped accelerate adoption by physicians along with the rest of the staff. They were all eager to use a technology that actually makes their lives easier.”

Miller says there is now more accountability around orders as well. Rather than being scattered, all orders fall into a work queue or basket, which ensures no orders disappear while enabling greater visibility into what happens with orders and patient follow-up calls.

“At any given time, I can see how many outstanding patient calls there are across all offices,” she says. “Each has its own work queue or basket, and I can see at a glance how many referrals, surgeries that require scheduling, refills, etc. are awaiting action. It’s made us much more efficient and put us in a much better position to serve our patients and drive better outcomes for them.”

The RenalCare Associates management team was aware that implementing changes, especially among physicians, can be challenging, so they took a unique approach.

“In the first week, we reduced office patient volume from our normal 12 to 15 patients in a day to give our clinicians time to learn Acumen 2.0,” Dr. Pflederer explains. “But after that week, we were able to ramp right back up to normal volumes quickly. It was definitely one of the smoothest technology transitions I’ve ever been involved with. I give full credit to the Acumen team for that.”

PRACTICE MANAGEMENT IMPROVEMENTS

The upgrade to Acumen 2.0 brought a host of financial and practice management improvements that improve cash flow – not the least of which is better visibility into A/R.

“The Epic backbone in Acumen 2.0 contains a lot of dashboards I can use to manage A/R,” Shaw says. “Rather than spending hours to get incomplete data, I can see exactly where we are in minutes. We can quickly see how many days each claim has been filed, and how many days it took claims to be paid. We can look for trends among payers to help us manage cash flow better and understand when we need to start following up. We can also discover if a claim went through clean within a few days rather than waiting weeks for a denial to come back.”

RenalCare Associates has implemented additional dashboards as well. Many of them are being used to ensure the organization follows best practices. For example, to close a chart on an encounter, the physician must sign the notes. This best practice wasn’t always followed in the past, requiring manual review of each chart. Now the requirement is automated, and a dashboard shows which physicians are adhering to the best practices as well as those who are not.

Other dashboards help RenalCare Associates track referrals and authorizations, how efficiently each clinician is working, and much more. The analytics also provide information about denials, work queues for

follow-up by the billing staff, how many accounts an individual in the billing department is managing, and how much cash is waiting to be posted. It even helps manage refunds. Rather than writing out the information from the practice management system, entering it into the account in the accounting system, cutting the check, and then reentering the information in the practice management system, Acumen 2.0 is connected to the accounting system so all the work can be performed seamlessly.

“Our old practice management system had a limited view of what was actually happening,” Shaw says. “I had to pull reports to obtain that information, and even then, I never felt like I was sure I had the answers. Now we feel like we’re really on top of how the entire practice is performing, because the information is updated every 24 hours. That view is critical as we continue to take on more shared risk. I’m sure it will get even better in time as we learn more of Acumen 2.0’s capabilities.”

PATIENT INDICATIONS

Acumen 2.0 has had a significant effect on encouraging patients to engage in their own care, primarily through the implementation of Epic’s MyChart patient portal. For example, RenalCare Associates now directs patients to the MyChart portal where they can see any normal lab results at their convenience rather than being interrupted by a phone call or hearing a lab is normal on a voicemail.

RenalCare Associates has added quality measurement dashboards that enable them to group multiple cohorts of CKD patients with additional risk factors such as a high HbA1c level, or how well patients are being prepared before starting dialysis, which has been documented as a key to starting healthier on dialysis. (Healthier patients can start with a permanent fistula or graft rather than a catheter, reducing their likelihood of

crashing into the hospital.) The organization can now also easily identify patients with Stage 3 CKD who will need access to a kidney transplant. **The ability to slice and dice data within Acumen is now almost limitless.**

Another difference-maker has been the electronic blood pressure diaries. In the past, patients were instructed to keep a daily record of their blood pressure on paper, then bring the diary in when they came in for an appointment. This process created two issues. The first was that patients may miss a few days, making the records incomplete. The second was that the information was weeks or months old, greatly reducing its value in driving care.

With MyChart, patients can enter their blood pressure online daily. If they miss a reading, RenalCare Associates can send them a reminder to take their blood pressure and enter it. Once the information is there, the analytics in Acumen 2.0 can check for unusual readings, enabling clinicians to intervene quickly when necessary to avoid a larger issue, here again adding to an improved doctor/patient relationship.

The impact is also being felt on the financial side for patients.

“With the increase in patient financial responsibility due to the growth of high-deductible health plans, we were looking at adding an application from another vendor that would enable patients to pay their bills online,” Shaw says. “Thanks to Acumen 2.0, we don’t need to. Everything we need for online bill payment is already there, and the revenue from this method is growing. The fact that we don’t have to send a paper statement is also helping save time and reduce administrative costs, so we’re winning on both sides.”

THE RESULTS

RenalCare Associates now has complete interoperability with the two hospitals it works with in the Peoria area, as well as the bulk of PCPs and other specialists with whom the organization needs to share information. This alone is a powerful benefit to the upgrade to Acumen 2.0.

“All the data from every provider is instantly available at the point of care through Acumen 2.0,” Dr. Pfleiderer says. “We don’t have to wait until phone calls are made and returned or data is manually uploaded or faxed and scanned. It’s now either available in the main view or is just one or two clicks at most away. As a result, productivity has improved by 10 minutes per chart. Additionally, since physicians no longer need to click in multiple places around the system to obtain the information they need, there is less risk of losing their notes because they exited the system before saving them.”

Having readily available data is particularly important for high-risk patients who have multiple morbidities. Their physicians can now see every medication they’re taking and every test that has been ordered while the patient is in front of them, helping avoid duplication of care as well as conflicts in treatment.

Turnaround time for note completion by physicians, which was one of the major goals at the onset of implementation, has improved by three days. Prior to implementation of Acumen 2.0, it typically took nine days for physicians to complete their notes so the record could be closed and billed. The current standard is six days, which is tracked and measured on a dashboard. This improvement has been aided by better workflows, which enable physicians to complete their notes in less than two minutes per appointment. Additionally, all note templates and documentation in encounters are available as discreet data points, enabling more expansive reporting.

On the financial side, RenalCare Associates is now achieving 78% clean claims in line with industry average estimates of [75–85%](#) clean claims rates for providers, which has helped reduce the administrative workload.

“We weren’t formally measuring our clean claim rates prior to implementing Acumen 2.0, but from experience I know they were very low,” Shaw says. “Most claims required some form of denial management. With the new version, I only have to review 22% of the total claims, which makes me very happy.”

One of the significant contributors to the clean claims improvement has been Acumen 2.0’s real-time eligibility checking, which has greatly increased billing accuracy. Across health care, [30–40% of denials](#) are the result of registration and pre-service related challenges. It has helped reduce check-in time as well. According to RenalCare Associates’ dashboards, check-in now averages four minutes, a change that has improved both productivity and patient satisfaction.

RCA currently boasts a 7% denial rate. Lowering denials has also improved revenue, adding to the bottom line by capturing more revenue up-front and eliminating the need for the staff to spend time re-working claims. (Industry statistics place the cost of working a denial at [\\$118 per claim](#).)

Cash flow has improved significantly, as A/R has been cut nearly in half, from 41 days to 21.9 days. In a practice like RenalCare Associates, speeding up the time to payment can have a significant impact. Improving patient collection through timely statement release, online bill payment, which accounts for \$5,000 to \$7,000 per month and rising, has been a major benefit as well.

Moving to Acumen 2.0 has even improved the patient experience. **Since the beginning of the implementation, the number of patients using the Epic MyChart feature to communicate with physicians or pay bills online has risen from 3% to 17%.** This increase has occurred even without a concerted effort to actively promote that feature. RenalCare Associates expects that figure to increase significantly once they begin to actively promote it.

Summing up the experience, Dr. Pflederer says, "Probably the best assessment of the process I can give is that, even though the product was still in the development stage, we would absolutely do it again. The benefits on the other side are definitely worth it. There is more and better data at my hands as a provider because of Acumen 2.0 and Care Everywhere, and the Nephrology specificity of the EHR lets me query and report on things that are particularly important to the specialty, such as preparation for dialysis, access placement and making sure patients are on the right meds for their stage of CKD. The registries within Acumen 2.0 make it easier for us to manage populations to ensure they're getting all the care they need at the highest possible level."

Adds Shaw, "The other element in the equation, apart from product quality, was the Acumen team.

They were with us every step of the way, and extremely responsive to any questions or requests we had. It was one of the smoothest technology implementations I've ever experienced,

which shows in how quickly we were able to start generating meaningful results. I can't say enough about how great they've been to work with, and I second Dr. Pflederer in saying we would do it again."



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