Data Analytics + Business Intelligence = Operations Insights



"Leveraging Technology to Transform Cancer Care Delivery and the Patient Experience" is the theme of 2022-2023 ACCC President David R. Penberthy, MD, MBA. As one component of Dr. Penberthy's president's theme, ACCC is developing resources on how technology can be used to identify ways to reduce disparities, to mitigate workforce shortages, and to improve efficiency and sustainability of quality cancer care delivery. Learn more at accc-cancer.org/presidents-theme.

s oncology practices work to succeed in today's environment of decreasing reimbursement and the increasing cost of new drugs, having an efficient and effective charge capture program in place is absolutely essential to practice success. Every oncology practice will readily admit that charge capture is an important process to perform in order to prevent lost charges for services provided."

Sound familiar? These are the opening sentences of a 2008 article, "Charge Capture: Does Your Process Ensure Accuracy of the Revenue Cycle?" published in the *Journal of Oncology Practice*.

Whether care is provided in an outpatient ambulatory clinic, in an independent oncology practice, virtually, or in person, optimizing revenue cycle management in oncology is both critical and complicated.

Over the past two decades oncology business operations—billing, coding, prior authorizations, denials, drugs costs, contracting, forecasting, and more—have continued to experience unchanging pain points. What has changed, however, is the availability of data analytics technology applications specific to the business of oncology. Today, oncology business intelligence (BI) platforms harness technology to perform those revenue cycle tasks best suited to automation, freeing business and revenue staff to tackle issues that require human intelligence and intervention.

And yet, as a recent article, "Leveraging Business Intelligence for Healthcare Management," explains, complexities remain: "Healthcare organizations have very quickly learned that they cannot simply snap their fingers and instantly access all of the data, reporting, and decision support they need to foster an intelligent business."²

Tackling the Pain Points

Kim Woofter has an insider's perspective on the critical role of data analytics in oncology practice management. Upon graduation from nursing school, Woofter began her nursing career in the oncology inpatient setting. In the mid-1990s, she transitioned to the business operations side of cancer care, managing Michiana Hematology Oncology, then a small medical oncology practice in South Bend, Ind. She found a passion for the work of building a practice with the mission of delivering high-quality patient care. Over time, the practice thrived and expanded, adding radiation oncology, radiology, and gynecologic oncology to medical oncology services; providing care in 11 locations; and growing from 4 physicians to 19.

About six years ago—in the midst of healthcare's evolution toward value-based reimbursement—Michiana Hematology Oncology recognized that data analytics were becoming essential to sustainability as an independent practice, Woofter recalled.



Kim Woofter, executive vice president, Strategic Alliances, AC3

"Initially we wanted analytics around the way we used our pharmaceuticals and moved them to different [practice] locations in our hub-and-spoke model, and to look at data utilization trends," she said. The practice engaged a local data analytics firm and the results from this first foray into integrating data analytics were "an eye-opening experience," Woofter said. The practice realized the advantages to automating specific, repetitive, backend tasks, such as identifying underpaid claims, and the ways in which technology could increase business staff efficiency and improve the bottom line.

The practice partnered with the data analytics firm Aunalytics, eventually spinning off an oncology business intelligence platform, AC3, as an independent company. After a career spent building a successful oncology practice, Woofter was hooked. "To have solutions that don't require more manpower, more expense, it was really exciting for me," she said. In 2016 Woofter left her role as chief operating officer at Michiana Hematology Oncology to become executive vice president of strategic alliances at AC3. In a conversation with *Oncology Issues*, Woofter shared her perspective on the versatile benefits cancer programs and practices can realize from leveraging data analytics solutions for streamlining revenue cycle management, for greater clarity on insurance claims data, and for more transparency on key performance indicators (KPIs) of cancer program business health.

Oncology Issues. We've seen so many clinical advances in oncology over the past two decades. But we haven't seen as much progress on revenue cycle challenges. Oncology programs and practices continue to struggle with recovering missing reimbursement, burdensome prior authorization processes, diverse payer plans with varying fee schedules, reducing costs for claims processing, and more.

Woofter. You're correct about what hasn't changed. We understand clinical practice. We've put a lot of energy into patient care with new technology—new ports, new pumps, new ways to deliver care. But if we're to keep community oncology sustainable, we must be able to bill and collect and do so with confidence to keep our business alive.

For example, a core problem for the oncology revenue cycle team is knowing exactly what you are supposed to be paid [under each patient's commercial plan]. Practices usually have contracts with a small number of payers. But in providing care for patients, you accept payment from payers from other states or elsewhere in the country. Medicare fee schedules are published publicly, but getting a handle on what you will be paid by private payers is challenging.

Oncology Issues. How does a BI platform, like AC3, help?

Woofter. Using business intelligence and technology, we are able to automate and build in these fee schedules and codify into the technology the business rules around billing so that the practice knows what the allowable amount is for more than 90 percent of its payers. That's the foundation you build on.

The goal and benefit of AC3's technology is that it empowers cancer programs to not only know what they will get paid—to be able to track and predict [revenue]—but also to look at 100 percent of transactions. Technology can do that; humans cannot. Combining business intelligence with data analytics, we can leverage technology to show what was paid and then apply business rules—for example, was the provider an NP [nurse practitioner]? An assistant surgeon? Was there a modifier? And through this automated process, we can identify underpayments.

What we have found is that practice management systems frequently use the EOB (Explanation of Benefits) statement as the source of truth—rather than the actual fee schedule. Because the EOB often lists differing amounts that are incorrect and understated when comparing exceptions, payers will often inappropriately adjust or write off partial amounts. What you were paid wasn't right and you don't know it because the practice management system automatically adjudicates that claim.

Oncology Issues. How is this information and data communicated back to the client?

Woofter. In our case, AC3 provides claims intelligence detailing the root cause of discrepancies and uses color codes to prioritize claims based on recovery probability and timeliness. It's hard to hire experienced staff. Color coding helps. New billing and revenue cycle staff, for example, who have never reprocessed claims, can be given items [flagged] in green that are easier to handle, allowing more experienced staff to handle harder items.

It's leveraging technology to provide staff with actionable insights versus staff searching through files for the "needle in the haystack." Technology serves up the exceptions. Ninety percent of claims are correct. It's that 10 percent that are not, and there is a lot of money in that 10 percent.

Oncology Issues. So it's leveraging machine intelligence to optimize the revenue cycle process and free up business and revenue staff to address those issues that require human intelligence to sort out.



Examples of Claims Dashboard-Pay Vs. Allowed MEDONC

Woofter. AC3 truly provides business intelligence, because you have the data set and the people who can build a dashboard for the cancer program as needed. Business intelligence can answer the questions that are most important to that cancer program.

Oncology Issues. Can you give an example?

Woofter. We have a pharma solution that provides intelligence when payer reimbursement does not cover the cost of the drug—what's commonly called an "underwater drug." An alert is triggered at the time of prior authorization. For patients on active therapy the solution looks forward [so that you can see] in the next 10 days which patients are coming in to receive a drug that is underwater. Rarely have I seen an active on-treatment plan changed [because of this information]. What it does is provide the intelligence and transparency we are all looking for.

Another example is when sequestration went away [during the pandemic]. The beauty of technology: you make one adjustment and every fee schedule that had a sequestration—it's now removed. Now sequestration is back, and all you have to do is tell the technology that sequestration is now 1 percent for these payers. It replaces a human having to go through all the fee schedules. You're able to make real-time adjustments quickly.

Oncology Issues. What does the AC3-client interaction look like? What's the onboarding process?

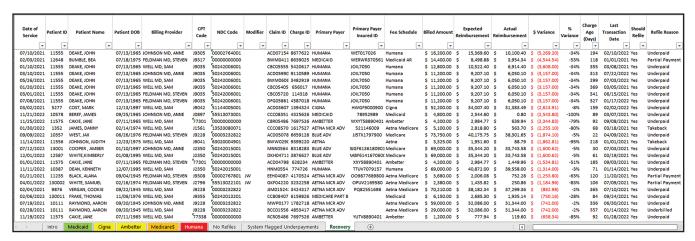
Woofter. Onboarding takes about 90 days—understanding, digesting, and researching all the fee schedules and contracts. We

AC3 has a quarterly executive business review with clients in which we go over what the technology has uncovered and highlight for the cancer program leadership that "in working with your team, this is what they've found." We are the silent partner that makes your billing team shine.

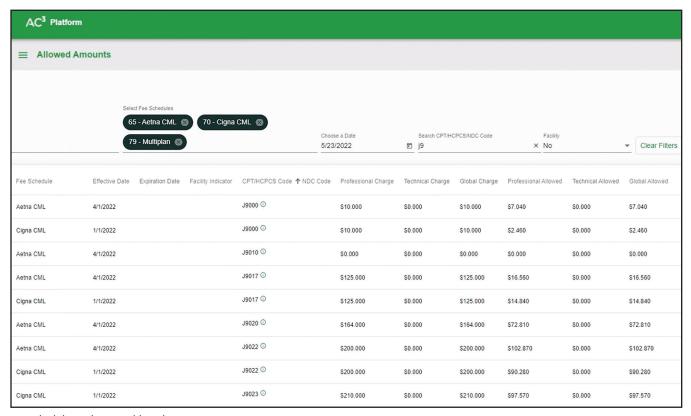
see ourselves as a tool for the billing and revenue cycle team. We are a long-term tool. Instead of staff digging through software [to find missing revenue], AC3's technology processes billions of data points a day and translates these into simplified, actionable insights for clients. It will show the team in real time what was underpaid and how to act on it.

AC3 has business intelligence "advisors" and "client success managers." Our advisors are always looking at the client's data. Another tool is a KPI dashboard that allows the revenue cycle director to see net collections, lag in charge entry, etc.—it's another set of eyes watching that [data].

The cancer program or practice should be able to reduce the cost per claim that it's processing. Let technology do what it does best and let humans do what they do best.



Claims Priority Intelligence Download Report



Fee Schedule Analyzer Dashboard

Oncology Issues. What's the average recovery practices see on underpaid claims?

Woofter. About 70 to 80 percent. It's money that the cancer program wasn't even addressing before. It's not like a denied claim. It's an underpaid claim. The practice does not have to validate why it's the wrong amount; AC3's technology and staff help with that.

Oncology Issues. What impact, if any, does implementation of the BI platform have on patients?

Woofter. The way it is impacting patients is the transparency around pricing. It helps the physician educate them [about costs] and make informed decisions. Now a physician is able to know what a treatment plan is really going to cost with that patient's payer—a good faith estimate that is pretty accurate because we have accurate fee schedules. So, you get accuracy and transparency. It helps billing teams to get it right and allows patients to resolve issues in a timely way with their payers.

Oncology Issues. What is the business office staff reaction to AC3 technology? Do revenue cycle staff ever feel threatened by potential job loss?

Woofter. This [issue] was important to all of us. We've all been in those shoes where new technology comes in and makes you look like you've been missing something and are not doing your job well. Our approach is that we are a tool for the revenue cycle team, and the cancer program is investing in a tool to streamline the team's workflow and results. AC3 routinely meets with the revenue cycle team to collaborate on the process for achieving the desired results.

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References

- 1. Albano P, Britt F. Charge capture: does your process ensure accuracy of the revenue cycle? *J Oncol Pract.* 2008;4(3):124-125. doi: 10.1200/ JOP.0833001
- 2. Bresnick J. Leveraging business intelligence for healthcare management. *Health IT Analytics*. July 21, 2017. Accessed May 5, 2022. healthitanalytics.com/features/leveraging-business-intelligence-for-healthcaremanagement

Editor's Note

The images in this article contain fictitious demo data. No real personal identifiers (patient name, provider, date of birth [DOB], patient ID, date of service, claim ID, charge ID, payer ID, fee schedule, transaction date) are used in these images.

Insights Available in the AC3 Revenue Cycle Management KPI Dashboard

- Accounts receivable aging (A/R aging); billed A/R and allowed A/R
- Days in A/R, days to payment
- Allowed revenue and cash collections A/R (total allowed net sequester, cash as a percentage of allowed, cash collected by date of service)
- Charge entry success (claim and charge volume, days to bill)
- Financial assistance KPI
- Adjustments KPI
- Authorizations KPI

Technology in Practice

Highlands Oncology Group is a freestanding cancer center located in the northwestern corner of Arkansas. The multispecialty cancer center operates four clinical sites with a staff of 450 and sees nearly 6,000 patients annually. Highlands Oncology Group providers include 11 medical oncologists, 3 radiation oncologists, 2 supportive care physicians, 5 surgeons, 52 registered nurses, 4 oncology pharmacists, 2 genetic counselors, 4 social workers, 2 physical therapists, and 2 massage therapists. The cancer center uses OncoEMR for its electronic health record and the G4 Centricity practice management system.

At the end of August 2021 Highlands Oncology Group officially went live with AC3's oncology business intelligence platform.

One problem Highlands Oncology Group looked to the AC3 platform to resolve was missing reimbursement from payers, said business office manager Terry Cardona, RHIA. Keeping up with all of the payer fee schedules and updates manually was unmanageable. In addition to any fluctuations in fee schedules, the business office wanted to leverage the technology for alerts regarding drugs on which the group would be underwater.

Six business office staff received the AC3 onboarding training, which went off without a hitch, Cardona said.

The AC3 team provides the business office team at Highlands Oncology with color-coded spreadsheets of audited information. At first, spreadsheet review can add to the workload Cardona said, because "you're seeing things you've not seen before." But the color coding helps by prioritizing those items that need to be addressed first. AC3 auditors provide notes and are available for Highland Oncology Group staff questions. Currently the practice has two business staff working with these spreadsheets, one in medical oncology and one in radiation oncology.

True to plan, one of the most important benefits of integrating the business intelligence platform has been automating the process for updating fee schedules and identifying missing reimbursement, she said. On occasion, the cancer center still encounters challenges in having the most up-to-date fee schedule on hand, but the team from AC3 will help by communicating what information needs updating. Once the updated schedules are obtained, the AC3 team works quickly to identify any underpayments.

Another AC3 feature that powers efficiency, Cardona said, is the dashboard generated by the AC3 platform, which she uses to identify billing trends and performance drivers. "The improved visibility from the dashboard allows us to act fast on implementing or changing workflows." Highlands Oncology Group continues to work with the AC3 team to develop additional dashboard solutions, which provide that "ready-to-view information" that business office staff need, Cardona said.

Bottom line: She would encourage other programs and practices to consider adopting an oncology business intelligence platform. "The data is always there, but we don't always have time to drill down. This is real-time information."