



Incorrect and missed charges in radiation oncology can cost health systems and clinics millions of dollars annually. S!GNAL, a software solution developed by Fuse Oncology, is revolutionizing the industry by proactively catching issues before they materialize to drastically improve revenue cycle and clinical staff efficiencies. By minimizing errors in the coding and documentation process, S!GNAL enables radiation oncology professionals to practice at the top of their licenses while uncovering lost revenue operationally.

While mistakes are perceived as inherent in the rad onc coding environment, errors don't have to be the norm. One private, not-for-profit healthcare delivery system, Cone Health, in Greensboro, N.C., grew frustrated with complex audit processes and the shortcomings of disparate software solutions and decided to take control of their charge capture, realizing remarkable results and adding more than \$2MM direct to their bottom line.

With a foundation of proactivity, automation, and efficiency enabled by Fuse Oncology's suite of solutions, radiation oncology leaders nationwide are transforming billing processes — with the promise of additional, significant improvement in time to treatment for patients.

"The technology is very accurate at predicting the correct charges for each patient daily. It's an all-around great technology that is very useful in our clinic."

– Brian Lamonds, RT(R), Lead Radiation Therapist, Cone Health

SIGNAL

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CODING SNAPSHOT AT CONE

For years, the radiation oncology department at Cone Health tried to manage their charge capture process, using the standard industry approach. They spent great time and effort to correct problems and manage the complicated process of billing. The clinical team, internal billers and coders, and outside consultants toiled to check charges and supporting documentation for accuracy. They're not alone: one study found that more than 13% of patient treatment courses exhibit a charge error.¹



"At Cone Health, we spent a lot of time and attention to detail to make sure we got it right," explains B.J. Sintay, PhD, DABR, executive director of radiation oncology and chief physicist at Cone Health and CEO of Fuse Oncology. "We didn't want to send things out wrong or make mistakes, so we used multiple layers of audit manually on the front end. Even after all that effort, many of our charges were still not correct," he says.

With millions of dollars at risk annually, the clinic, like others nationwide, was certainly incentivized to solve its billing problems. Software that would catch problems before they occur later in the revenue cycle was the optimal remedy, according to David Wiant, PhD, CTO and co-founder of Fuse Oncology and director of innovation at Cone. The S!GNAL solution does exactly that, using automation and data from electronic medical records (EMRs) to apply customized configuration rules to a provider's existing technology, verifying that services were captured and/or documented correctly.

INDUSTRY BILLING CHALLENGES

Many radiation oncology departments today are struggling to keep up with growing workloads amid staffing shortages and tighter reimbursements. In theory, staff is supposed to check every treatment, match dates of service, ensure there's supporting documentation, and guarantee correct billable units. A group of four radiation therapists at Cone, for instance, was spending up to six hours a day doing document verification and coding reviews. Brian Lamonds, RT(T), lead radiation therapist at Cone Health, certainly felt the pressure.

Fuse estimates that a 2% error rate translates to \$140,000 per year in net revenue lost for every linac in a practice.

"We did countless hours of charge review and experienced

the stresses that go along with ensuring that each charge is correct daily," Lamonds recalls.

"We really weren't allowing our staff to work at the top of their license to provide quality patient care. Much of their day was spent reviewing charges manually in a very inefficient process," adds John Strider, RT(T), MHA, COO at Fuse Oncology, and former lead radiation therapist at Cone. While traditional scrubbers and code-checking solutions can make an impact on billing, huge gaps remain in their inability to catch errors early in the process or validate documentation, explains Strider, who has spent many years consulting as a billing expert in dozens of radiation oncology clinics, finding billing errors and identifying instances of missing revenue. "The scrubber is simply looking at relationships between codes on a single date of service, it's not verifying supporting documentation or managing an episode of care. It doesn't understand what's going on in the clinic," he says.

Furthermore, assessing coding success using percent of denials simply isn't effective, Dr. Sintay adds. "People who are getting paid 98% of the time say, 'We're not getting denied much so we're doing a good job.' But you're not going to get denied charges you don't put in or that you forget about. Additionally, Fuse estimates that a 2% error rate translates to \$140,000 per year in net revenue lost for every linac in a practice."



Error Rate	Annual At-Risk / Linac
2%	\$141,341
4%	\$282,681
6%	\$424,022
8%	\$565,362
10%	\$706,703

Estimations based on a single linear accelerator with hospital-based billing treating 25 pts / day

SIGNAL AS THE SOLUTION

SIGNAL technology was implemented at Cone to examine daily charges, flagging the ones that required attention and "signaling" the appropriate employee to rectify the issue to facilitate a healthier revenue cycle overall. The feature-rich, cloud-based solution also integrates business and clinical intelligence capabilities and a workflow framework to maintain the pulse of operations in any busy radiation oncology department.

Fuse technology leverages health system-wide data of existing technologies, including EMRs and record and verify (R&V) systems, to make connections that enable radiation-oncology-specific tools to transform the way a department functions. By combing medical records including documents, code-capture information, and discrete data—both structured and unstructured text—it performs hundreds if not thousands of checks daily in the clinic to verify presence of needed information. The automated engine, running in the background, actually provides a front-end view with the ability to signal the radiation oncology team about a potential problem that requires attention. By proactively identifying issues via push notifications, texts or dashboard flags, staff members can see in real time the actions that require follow-up or correction, which prevents many of the problems that are typically discovered on the back end.

"S!GNAL is a proactive solution that catches problems up front at the point of care in the clinic," Strider says. "The earlier you can find the problem, the better. We're really looking both for things that should

be there and also verify that there's documentation to support what was captured," he says, citing opportunities SIGNAL unveiled at Cone that achieved both increased revenue and higher quality, medically necessary treatment for patients.

Further, the proactive approach of S!GNAL resolves the disconnect commonly experienced between clinical and coding teams. With daily feedback and cleaner codes moving through the clinic, there's a deeper understanding of workflow and what's captured for all involved, realized "better, faster, and cheaper with software," than manual review, Strider adds, describing a true process of learning.

"After implementation of S!GNAL, we're experiencing months straight with zero errors." Fuse works hand in hand with customers to make recommendations for rule-writing prior to implementation based on a review of a clinic's retrospective reports and historical practices as well as Fuse's radiation oncology coding expertise. Applying customized configuration rules to a provider's existing technology, Fuse verifies services were captured and/or documented correctly. Applied consistently, these rules are built to match your specific workflow and call out "exceptions" to those rules every single time. Nothing is overlooked and there are no shortcuts. Further, suppose a

team created a billable dosimetry plan and documented the service accordingly but forgot to capture the codes. S!GNAL reads the database and available documents to predict these missing codes and/or billable units, S!GNALing you that something is potentially missing. This "exception" is then flagged on the worklist for review.

REALIZING RESULTS WITH S!GNAL

Routine internal Cone audits typically found between 30 and 40 charges a week that were incorrect, equating to over \$2MM a year at risk in radiation oncology. After Dr. Sintay saw how S!GNAL's protype software successfully ran through each day's treatments to show what was charged, what was expected, and the difference between the two, he laid out his expectation to the Cone Health team: zero billing errors for patients.

"Going from the challenge of having at least a 9% error rate, the staff thought this was way too lofty of a goal. They thought it was outrageous and wanted to negotiate," recalls Strider, to no avail. The goal remained in place. "Now, after implementation of S!GNAL, we're experiencing months straight with zero errors."

Furthermore, the technology yielded a 96% increase in efficiency at Cone for revenue cycle team members.

"[The software] has been extremely beneficial for us and has created a more efficient workflow," says Shannon Horner, RT(R)(T), lead radiation therapist at Cone Health, who reports that S!GNAL provides a snapshot of charges and the discrepancies between what was captured versus what was expected. "This has cut down on time spent checking charges for every patient so we can focus only on those where there was a noted difference. It has saved us lost revenue by finding charges that were not captured, and also helps to check that documentation is appropriate."

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Staff that regularly spent between five and six hours daily on charge review now complete the task in a mere 15 to 20 minutes.

"Prior to having the software, I would have to click several times per patient for more than 100 patients a day. That can take so much time to click and check every document and every charge per patient," recalls Jehnna Caviness, RT(R)(T), radiation therapist at Cone. "But now, it will give me a small list of errors that I can run through in just a few minutes."

Lamonds agrees. "The most positive changes are the time-savings that allow more focus on other tasks, and a reduction in the monthly charge capture errors metric. The technology is very accurate at predicting the correct charges for each patient daily. It's an all-around great technology that is very useful in our clinic."

"We've identified about \$8MM in gross charge errors over the past four years," reports Strider. "These contributions along with other technology that Fuse is bringing to market have resulted in about a \$4MM improvement to the bottom line at Cone Health."

ADDITIONAL BENEFITS



As SIGNAL continues to demonstrate its impact on billing and coding practices in rad onc clinics—reducing errors, uncovering revenue, and freeing up staff time—Fuse Oncology is commercializing additional solutions already proven at Cone that have generated significant improvements, perhaps best quantified by Cone's average time to treatment.

Traditionally, the unfolding of treatment commencement after initial diagnosis is complex and time-consuming, with a nationwide average of more than four weeks for time to treatment.² The delay is largely caused by communication and coordination among providers and the related documentation this level of care necessitates. Manual movement of information among disparate systems by humans who must manage it is a very serial and inefficient process.

By creating technologies that eliminate the traditional inefficiencies, Cone has reached an average time to treatment of 4.5 days. The team at Fuse Oncology is commercializing the Cone technologies with a vision to enable a 24h time to treatment.

"In cancer care, we have to figure out a way to work faster and more efficiently," Strider says, noting that the focus always goes beyond the revenue cycle and to the patient. "Fuse is doing that through software innovation."

REFERENCES

- 1. https://www.redjournal.org/article/S0360-3016(18)31536-0/fulltex
- 2. https://newsroom.clevelandclinic.org/2017/06/05/cleveland-clinic-research-shows-timeinitiating-cancer-therapy-increasing-associated-worsened-survival/

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