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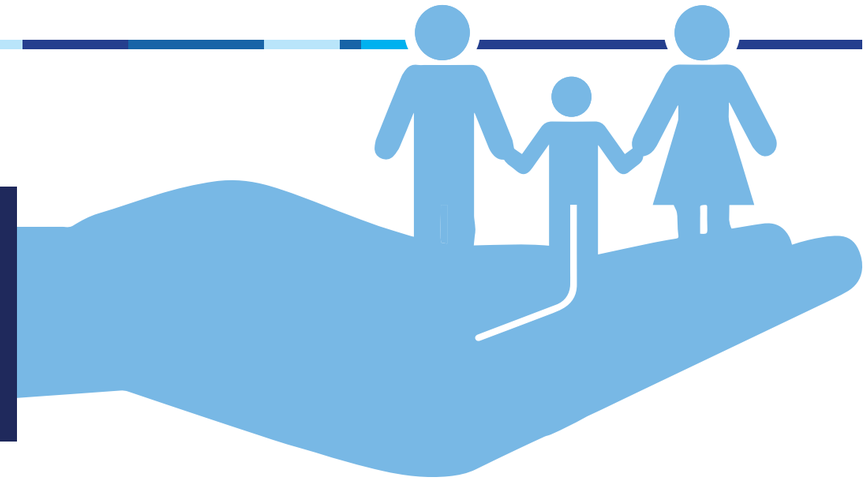
A Key for Effective Population Management:

Use of Proper Risk Adjustment Data



The way that America pays for healthcare is changing completely. We are moving away from a "fee-for-service" healthcare system, where clinicians are paid for every service provided, to a "fee-for-value" one where teams of clinicians are paid to keep individuals healthy in a cost-effective way. Studies have shown that "fee-for-service" payment incentivizes too much care, which is often inappropriate or simply wasteful. In a value-based payment world, hospitals and health systems will profit by caring for populations and enabling better health outcomes at lower costs.

The first step to cost-effective care is to identify individuals and group them ("stratify") based upon their likelihood of incurring higher costs over a defined period. Higher costs may result from deterioration of their health (e.g. worsening heart failure, poorly treated diabetes). Studies have demonstrated that over half of all healthcare costs result from caring for the sickest 5% of a population.

If a health system could identify these high-end users of healthcare and target the appropriate resources to them, we could significantly reduce costs to the entire system. For some patients, consistently high costs might be unavoidable, such as someone with end-stage kidney disease on dialysis. For others, costs may be avoidable, such as monitoring and proactive treatment of a person suffering from heart failure to avoid a costly hospitalization.

Still, health systems and payers have historically risk stratified patients in a flawed way. They have used diagnosis, prescription, and procedure codes in medical billing data ("claims") to target individuals, given its availability. However, using claims tends to either under- or over-represent diseases given the many problems inherent in applying the diagnosis codes.

First, since physicians and their staff place codes on claims primarily to get paid (more than 75% of all health plan contracts remain "fee for service"), there is little attention paid to the specificity of the diagnosis. For example, a patient may have "pre-diabetes" (which could likely be metabolic disease), but "diabetes" is coded.

Why Shouldn't You Use Claims Data for Population Management?

There is little attention paid to the specificity of the diagnosis.

Claims data lacks particular clinical context for disease.

Physicians are often not familiar with all of the code types available.

Diagnosis codes on claims may no longer be relevant for the individual.

Second, claims data lacks particular clinical context for disease, which is an important predictor of future costs (e.g. colon cancer stage 4 has a much different prognosis than stage 1) given the limitation of the diagnosis code set.

Third, physicians are often not familiar with all of the code types available—there are 50 different codes for diabetes—and therefore misapply them to claims.

Lastly, diagnosis codes on claims may no longer be relevant for the individual to predict near-term cost. An example is breast cancer in remission for fifteen years.

Wrong stratification leads to misallocation of resources for population management. Outcomes suffer, costs continue to creep upwards. Population health is called into question. And this is a GIGO problem—garbage in, garbage out.

Wrong stratification leads to misallocation of resources for population management. Outcomes suffer, costs continue to creep upwards, and population health is called into question

Rather than relying upon poorly coded or mis-coded information for stratification purposes, health systems should use data abstracted specifically for risk adjustment purposes.

In the case of global payment setting on an individual basis, applicable for Managed Medicare or Medicaid, or for transfer payments applicable for non-grandfathered Affordable Care Act (ACA) plan products, there is a yearly process of reviewing patient clinical records to determine whether the encounter visit documentation supports one or more conditions being actively treated.

Each applicable chronic condition and its severity applies towards a "risk score", a score of how sick a patient is compared to others. Since these codes are the result of a close read of the medical chart, and attention is paid to the details of conditions which have near-term cost implications, they are well suited for analysis to stratify populations and target individuals for particular intervention.

What comes out of the risk adjustment process is probably the closest thing that we will have to true understanding of disease and its severity across large populations. It can augment our understanding of populations to enable the right care at lower costs for each individual.

A Data Science Defense of

ICD-10

In Fall 2015, healthcare organizations started using a new naming convention for conditions that patients have: ICD-10. The previous ontology, the ninth revision of the International Classification of Diseases (ICD-9), was 40 years old, and deeply in need of an update. When ICD-10 was first announced it struck fear in the hearts of the healthcare ecosystem. Now that it has been in use for over a year, it seems clear that the worry around the transition was misplaced. But the important question is why was there anxiety in the first place— and the answer is only partly because the new code set is more extensive and complex than the old one.

The real source of provider anxiety is that ICD codes are tied to healthcare billing, and if physician offices don't supply the correct codes, they might not get paid for the healthcare services they provide. Indeed, the angst about the new coding system is primarily a concern about breaking the billing system, which in a fee-for-service healthcare economy is a bad thing.

An even deeper understanding of this truth, is that if the coding system that describes what conditions patients have is being held hostage by billing concerns, what does that say about the healthcare software infrastructure at large? How beholden is it to "billing concerns"? The answer is "a lot." In, The Digital Doctor, author Robert Wachter reflects on the impact of wholesale adoption of Electronic Medical Records (EMRs) and makes the observation at one point that EMRs are in large part better billing mechanisms. This doesn't make EMRs intrinsically bad, but when the bias for creating a system is to assure that it can safeguard billing information (which is not the most clinically relevant data), other ideals like creating better models of the patient and improving quality outcomes are likely not being attended to.

The fact is, the new ICD-10 coding system will help us better achieve these goals. ICD-10's complexity enables more supporting information about patients' conditions, and in the current billing-centric healthcare data environment, this is a big deal. Every step taken to supply more information that is less noisy helps. The healthcare ecosystem should wholeheartedly support the adoption of richer coding ontologies, because each bit of better data helps make our understanding of patients that much richer.

Unfortunately, while ICD-10 is a small step in the right direction, it isn't going to yield enough data to enable truly useful patient models. Plus, ICD-10 has been stalled for years, so we're not likely to see another federal regulation to increase healthcare data anytime soon. Given these constraints, one might ask, how is progress every going to be made in analytics to add value back into the healthcare ecosystem?

Well, it turns out there is a valuable source of data right in front of us that has not been taken full advantage of: doctor's clinical notes about the patients they see. As Wachter explains in, The Digital Doctor, doctors write text notes about their patients that provide a lot of rich information. These notes can be stitched to condition codes for billing and patient metrics/measures (labs) to produce a useful picture of patients and the care they receive. Creating these patient models involves a lot of heavy lifting and it takes time to develop infrastructure and models to acquire, manage and analyze raw patient records.

My team and I at Apixio have been on this mission to create useful patient models from available clinical documentation for the past four years. Our initial product text mines patient records to enable a clearer picture of the risk status of Medicare Advantage patients. It's a starting point from which we hope to enable more personalized treatment and better quality outcomes, and a mission in which detailed data capture systems such as ICD-10 will play a valuable part.

What's wrong with Physician Coding?

Today physicians are increasingly dissatisfied with the practice of medicine, especially primary care providers. According to Merritt Hawkins' 2014 Survey of America's Physicians, 44% of doctors plan to cut back on patients seen, retire, work part-time, or seek a non-clinical jobs. This comes at exactly the wrong time. It is predicted that we will have a critical shortage of 46,000 to 90,000 doctors relative to the increasing needs of an aging population.

There are many reasons for this exodus. A common reason is that physicians are being asked to do more and more activities not directly tied to patient care. Not only does the physician need to chart the patient visit, but she must select diagnosis and procedure codes for billing, address health maintenance tasks, fill out referrals and prior authorization requests, reconcile patient medication use, reply to social service forms, and so on.

Many primary care physicians feel these days that talking with and caring for the patient is a side job. In fact, in many medical offices these days, the patient talks to the back of the physician as she is staring at a computer monitor, clicking a mouse, and typing on a keyboard—not exactly conducive to establishing therapeutic trust.

With the increasing adoption of electronic medical records, there have been studies which show decreasing productivity among physicians—one study found that ER doctors spend 43 percent of their time on data entry—exactly the opposite of what was promised.

Among the non-clinical activities which physicians are mandated to perform, an important one that suffers is the proper selection of the codes which indicate pertinent patient diagnoses and the treatments provided during an encounter. These codes are used for proper payment and are also increasingly used for data analytics related to risk prediction, quality of care, practice patterns, and resource allocation.

There are tens of thousands of diagnosis and procedure codes from which to choose, and the code set is growing with the adoption of a new set of diagnoses and procedures, otherwise known as ICD-10. In the older diagnosis set, ICD-9, there are 40 different codes for diabetes, which include different manifestations of the disease such as kidney disease. In ICD-10 there are over 110 codes for diabetes. Negotiating this transition is a bewildering activity for even trained coders.

In an era of payment-for-value, rather than payment-for-services, these codes become an important set of data. The activity of coding should not be left to the overworked physician with typically little to no formal training in coding. Improper diagnosis or procedure code selection following a patient visit in the clinic or hospital can result in inappropriate payment (too much or too little), inaccurate risk or quality performance measure results, or poor targeting for proactive management of costly patients.

One study undertaken in 2015 by a vendor which manually reviewed 100,000 charts from practices across 11 states found that 28 percent of the documented conditions were not coded on the billing claims submitted to the health plans. These codes were not essential for the physician to get paid for the service, but they are useful for other activities. This phenomenon, known as under-coding, causes health plans and healthcare systems to falsely conclude that their populations are healthier than they actually are.

Rather than try and clean up the issues created by physician coding, it makes more sense to train physicians to document well, and leave the coding exercise to the experts.

We can and should lean on coders, working in conjunction with technology platforms to read and code medical charts.

A cottage industry of certified (professional) coders who rework the submitted codes has grown up around poor physician coding. By reading the clinical documentation, these coders determine the correct code to represent a diagnosis or treatment provided.

It should be coders, not physicians, selecting diagnosis and procedure codes. The only obstacle there is that there is much more work than trained coders, especially with the transition to ICD-10. The team at Apixio has developed a web application to support coding activities. Built upon the insights from analyzing more than 50 million patient documents, our solution provides highly accurate text mining of charts for chronic conditions which contribute to significant financial costs and patient morbidity. And coders can review two or three times more charts during a given period of time than they are able to do on their own.

We can and should lean on coders, working in conjunction with technology platforms to read and code medical charts. This will allow physicians and their office staff to spend less time doing taxing back-office work and more time treating patients. It will enhance physician satisfaction and elevate the long-term sustainability of the medical profession for many doctors.

RISK ADJUSTMENT: HEALTHCARE'S SECRET WEAPON

Did you know that nearly 60 million Americans are covered by an insurance plan that requires "risk adjustment"? Why is risk adjustment important and how can it drive healthcare to a quality level we expect from consumer products like our smartphones?

It's important first to understand what exactly risk adjustment is. Risk adjustment is used to define the health and wellbeing of an specific individual, and then set how much a particular insurance company or health care provider will get paid for providing care for them. These payments are based on how sick or healthy their particular membership is, ensuring sick patients get the care they need and providers get reimbursed for providing that care.

The Affordable Care Act (ACA) ushered in new regulation, one that many other countries take as table-stakes: payers and providers cannot deny care or coverage based on a patient's pre-existing conditions. Before you think this isn't a big problem to begin with, remember that 34% of Americans are considered obese and that the prevalence of diabetes is growing at an alarming rate. In 2014, the Centers for Disease Control reported that 9% of the population had diabetes, or 29 million Americans. The level of wellness amongst the population is not evenly distributed amongst insurers or provider groups that care for them—putting significant strain on resources.

What is Risk Adjustment?

To illustrate the concept of risk adjustment, imagine that Insurance Company A, let's call them West Coast Insurance, has a relatively healthy membership, with few smokers, low obesity and low diabetes levels and who don't require medical treatment as often over the course of a year. Insurance Company B, let's call them North Coast Insurance, has a membership with relatively high levels of smoking, obesity and diabetes and who seek medical treatment three times as much over the course of a given year. Simply put, North Coast's patients are much sicker than West Coast's.

Medicare Advantage and Commercial Risk plans distribute payments on a per-patient basis not on a fee-for-service basis. In other words, payment is based on a set amount for each patient, not for each service delivered. In this scenario, North Coast's cost of providing care would be much higher because of their relatively sicker membership—putting severe strains on their resources and providing a disincentive to insure and care for sick patients.

What the risk adjustment process does is measure the health of each individual over the course of the year by tracking a series of conditions or disease states. At the end of the year, each insurance company and provider with members enrolled in Commercial Risk or Medicare Advantage plans submits the disease codes of their membership, which then get added up to create a risk adjustment score—an overall measure of the health and wellness of their membership. CMS then adjusts payments according to how sick or well their membership is in relation to all the others.

In our example, North Coast Insurance would get a higher reimbursement rate from CMS to fund the care their sicker patient population may need. Phased in over the coming years, the ACA will be including additional criteria to incentivize these payers and providers to improve the overall risk score of their members over time.

Apixio's Technology Eases the Risk Adjustment Process

For risk adjustment to function optimally and help ensure efficient and effective allocation of healthcare resources, it requires just one thing: accurate and long-term risk assessment. Sounds simple, right? Well, technically it is. The problem is that assessing a patient's overall wellness is largely a manual task. Coders go through hundreds of pages of documents to identify disease categories on a per-patient basis, for millions of patients, every year.

Powered by a cognitive computing platform that has been built on the analysis of more than 560 million patient documents, Apixio's HCC Profiler breaks down the risk adjustment processes into simple and straightforward coder and quality assurance workflows, improving productivity while reducing errors and closing gaps for improved accuracy and care.

The Data Analyst WILL SEE YOU NOW

NPR recently wrote an article about a project NYU medical school students are required to do entitled, “Health Care By the Numbers.” In the project, students are given access to a massive data set with more than 5 million patient records.

They are asked to analyze the records to draw conclusions about care quality.

The projects are not only interesting, they have produced some useful insights: one student measured the rate at which prices for a hip replacement varied in different parts of the state compared to the rate at which prices for a Burger King hamburger varied; another group looked at the rate of C-sections in districts across the state. As one of the professors said, “With literally millions of records, these in-class student projects often involved more patients than the published literature.”

What happens when physicians gain access to powerful healthcare data sets?

This class is forward-looking because in the future, more and more physicians will gain access to powerful health care data sets, through companies like Apixio. In the best-case scenario, these data will enable real-time data-driven feedback on clinical decisions. When faced with a 40-year old patient with diabetes who has nightly fevers, a physician may be able to draw on the database to see that similar patients with these symptoms previously turned out to have one of three different diseases. It would be up to the physician to examine the data, ask tough questions of it, cross-reference its conclusions with first-hand observations of the patient, and decide on a course of treatment. Physicians could also use the data proactively, for predictive care that enables earlier interventions and better outcomes.

But there are also many ways that offering this data to physicians could lead to poor results. If physicians are unable to use the software system to acquire the correct data or unable to understand the data, it could actually lead to worse care. This isn’t a far-fetched fear; the rollout of electronic health records (EHRs) in many systems bears it out. In a recent article entitled *Transitional Chaos or Enduring Harm*, in the New England Journal of Medicine, Dr. Lisa Rosenbaum describes the extent of physician fear and confusion over EHRs. She writes,

“There’s the critical care doctor who, unable to identify new information in daily notes, has begun printing them out and holding two superimposed pages up to the light to see what’s changed.” She also tells of an 18-year old who was given a near-fatal overdose of antibiotics after their doctor and pharmacist ignored several alerts in the EHR.

Where does the burden of using healthcare data lie, with software providers or physicians?

Certainly part of the burden to make the future look like our “best-case scenario” is on data software and data analytics providers to make a more user-friendly product. But part of the burden is also on medical schools to train a new generation of doctors to be able to use the massive data sets that will be available to them. Dr. Bob Wachter, a professor of medicine at the University of California, San Francisco, and the author of, The Digital Doctor: Hope, Hype, and Harm at the Dawn of Medicine’s Computer Age, recently gave a talk at the University of Pennsylvania’s medical school, in which he said that in the future every doctor will have to be a data scientist.

This may be going too far – we have professional data scientists at Apixio who would disagree that the typical qualification for their job, an advanced degree in computer science, is required for medicine. Moreover, strong healthcare data products have cognitive computing platforms that accomplish a lot of the real “data science” work (like data extraction and mining). But Wachter has an important point. Data analysis will be an essential tool for future physicians. Data isn’t just the domain of accountants and finance geeks any more – it’s for all scientific people, and that includes doctors.

Last week, CMS proposed expanding the risk adjustment audit program to cover all Medicare Advantage (MA) plans, every year. This is because they believe that mistakes in the diagnosis data that MA organizations submit to CMS is leading to a drastic misallocation of resources–some plans are overpaid for their patients, and some are underpaid. CMS currently audits only five percent of MA plans each year, so moving to a system where all plans are audited would be a huge policy change.

Three different contractors involved in Medicare Advantage RADV Audits

Given that every single MA plan will likely be audited in the future, it's important that everyone involved with MA be informed about what this new process is like. (It's officially known as Risk Adjustment Data Validation, or RADV). While before, MA plan audits had all been done by the government, CMS is now proposing that private contractors do the audits, so the program can be scaled up. The new process is extremely complex, weaving together actions by three different types of private contractors, who serve as checks and balances to each other.

There are **Part C Recovery Audit Contractors** (RACs) who are the first people to review the audit documents (e.g. medical records with diagnosis data on it) and who send the audit results to the MA plans. Then there are **Secondary Review Contractors** (SRCs) who double-check the RAC's work at each step. And lastly there are **Lead Analytic Contractors** (LACs), who select the beneficiaries in each MA plan who will be audited in the first place, and calculate the final overpayment/underpayment amount.

These contractors receive a portion of the money they recover for Medicare, so MA plans have historically complained that there's an incentive for them to find impropriety. For this reason, CMS has incorporated a cross-check into each step of the proposed audit process, so that every contracting team's work is verified by another. (This cross-check is also what makes the process so complicated and hard to follow!)

The contractors also help decide how the records are evaluated. According to the proposal, RACs and CMS will collectively develop coding guidance.

Five Steps in Proposed RADV Audit Process

There are five steps in the proposed audit process:

1. **Sample document selection.** The LAC selects a statistically-valid sample of patients from an MA plan that is being audited, and requests diagnosis and claims data from the MA plan for these patients.

2. **Intake documentation review.** RACs review the medical records the MA plan has sent over, to confirm they are from the appropriate time period and are the correct type (hospital inpatient, hospital outpatient, or physician office records). SRCs review all the documents that RACs determine are invalid a second time. If the RAC and SRC's judgments are in conflict, the SRC's wins out.

3. **Medical record review.** ICD codes are removed from the documents, RACs recode them, and then the new codes are compared with the old ones. This step must be completed within two weeks of whenever the RACs get the records from the MA plans–so it gets done fast. SRCs do a secondary review, and again, their decision trumps the RAC's in case of conflict.

4. **Payment error calculation.** For every instance where the RAC and SRC found that the diagnosis and claims data didn't match up, the LAC determines the impact of this gap on the patient's risk scores. They assume that the amount of error they found across the sampled patients is representative of the amount of error across the entire MA plan, and make a determination of how much the plan is being over or underpaid based on this. The RAC collects these findings, sends draft audit results to CMS, and then sends the final results to the MA plans.

5. **Administrative appeals process.** The proposal says that RAC shall have an "appeal overturn rate" of less than 10% at the first level of appeal, making it seem like very few decisions will be overturned via appeal.

Two Different Types of RADV Audits

It's important to note that CMS is proposing that this process be used for two different types of RADV audits. First, there are comprehensive audits, which review all patients and HCCs across a contract. Second, there are condition-specific audits, which review documentation for a specific HCC. The latter type of audit is necessary because CMS feels that there are certain conditions (like diabetes, which they specifically call out in the proposal) that they consistently overpay for.

This proposed audit means MA plans face a drastic increase in scrutiny by CMS of their medical records. Now, more than ever, it's important that MA plans have accurate, comprehensive evidence for every diagnosis they code. There's no telling which beneficiaries or records will be pulled for auditing, so all of them need to be verified.

You can read the complete statement of work here: modernhealthcare.com/assets/pdf/CH1031301228.PDF.

Results From Our Coding Community Survey

In January 2016, Apixio's user research team conducted a coding survey. We recruited coders, QA supervisors, and directors involved in risk adjustment coding via RISE's mailing list, Facebook groups, and LinkedIn groups. We secured 111 responses, from 52 coders, 23 coder managers, 13 director/ executives, and 23 other affiliations. Here are some takeaways:

RISE APIXIO

The Risk Adjustment Coding Community is an Experienced, Educated Group

55% of coders, coder managers, and directors have more than four years of experience in their current role (we chose to present options up to four years, so it's possible that they could have much more). Demographically, survey respondents are overwhelmingly female (89%), over half are over 45 years of age, and over half have a B.A. or Master's degree.

Coders Have a High Degree of Comfort with Technology

97% of survey takers feel "very comfortable" with computers. However, while working, 75% of coders say they use books as a resource, more than those who use ICD-10 websites or software. Survey takers work with both electronic and traditional chart formats; 82% of surveyed coders review EHR charts and 55% of them review PDF charts.

Coders Work From Home, but Managers Work From the Office

Coders and QA reviewers tend to work at home (59%), although coder managers and project managers tend to work in an office. In terms of where they are online, LinkedIn is the most popular social network, with over 70% of survey takers participating in the professional networking site, with far fewer survey-takers on Facebook and Twitter.

Most Managers Supervise Small Teams, without Coding Software

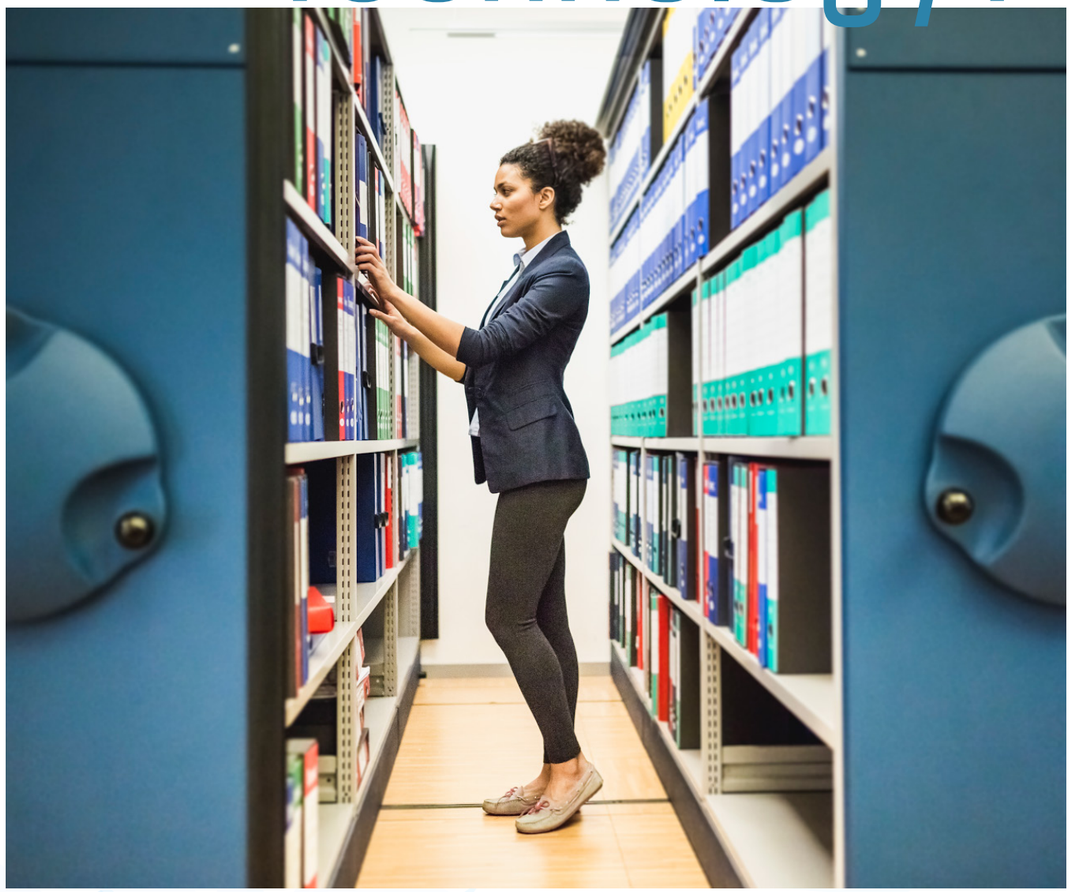
Most managers are in charge of small teams; half of managers manage 1-5 coders. A fifth of managers are outliers in this regard, managing more than 20 coders. Coding software [performance technology and analytics] is not yet a prevalent aspect of coding, Only 27% of managers use coding software to help supervise their team and only a slightly higher percentage use software to facilitate coding.

Accuracy is the Biggest Goal for Both Coders and Managers

The top three responsibilities cited by managers are: tracking project progress, setting up and managing a project timeline, and tracking performance. The top three goals are: being accurate in that all the codes found accurately represent the patient state, being accurate in that all the codes found will be confirmed by QA, and finding as many codes as possible in the shortest amount of time.

You can find more information related to the survey on the RISE website here: **risehealth.org/hcc-coder-survey-profile-of-the-community**.

WHY DOES RISK ADJUSTMENT NEED Technology?



Cognitive computing. Machine learning. Natural language processing. Two years ago, few people in the risk adjustment world had ever heard of these terms, and yet today they are becoming synonymous with risk adjustment. What are these technologies? Why do we even need them in risk adjustment?

Traditional risk adjustment just isn't efficient

Traditionally, risk adjustment has been done manually: Coders comb through thousands of pages of patient charts and look for documented chronic conditions. But this isn't the most effective or efficient process. It is time consuming and costly, and it doesn't make good use of coders' expertise. Coders often become frustrated when they work this way because they have to spend so much time organizing their work before actually starting to do it. Additionally, coders are often beholden to the slow and disruptive chart retrieval process.

Manual risk adjustment is also difficult for coder managers. With a manual process, it's tough to QA 100% of documents, because there are just too many to review and not enough time to do it. And without electronic oversight, it's difficult to have more than anecdotal insight into how your risk adjustment process is performing overall and identify ways to improve as an organization. This is critical from a management perspective, to manage their coders and other resources effectively.

Providers and payers face special challenges here. Providers may not receive or have access to all their patient's health information, which leads to missing critical information in the medical decision making process. For payers, in order to get charts, they have to bother providers, creating a big disruption in the provider's workday and unnecessary friction that will affect their relationship.

Risk adjustment will get bigger and the stakes will increase

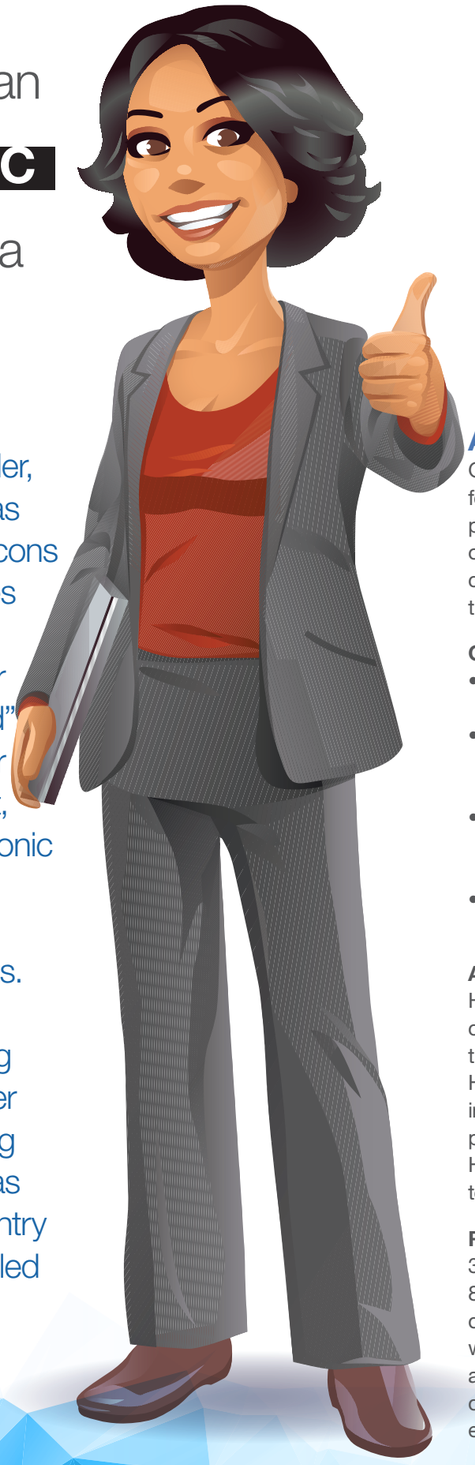
All of this would be concerning in an ordinary moment, but we are in an extraordinary one. Currently, only five percent of Medicare Advantage plans are audited every year, and whatever money is recouped from the audit sample is not extrapolated to all the plan's charts. CMS is considering audit changes this year that would entail 100% of plans being audited and audit findings being extrapolated to all charts. Given this, and the fact that Medicare Advantage enrollment is increasing by about a million patients a year, we can hardly afford for risk adjustment to continue to be this difficult and time consuming.

Risk adjustment is ripe for a technological revolution

In the past decade, technology has made our lives easier in many ways. Take, for example, shopping. Just a couple years ago, shopping for a household meant driving around to four different stores in your area. You might go to Kohl's to get a couple shirts for yourself, Sports Authority to pick up sneakers for your kids, the hardware store to get a can of paint, and finally the grocery store for dinner ingredients. Now, if you choose, you can buy all these things in a couple clicks, from the comfort of your home, with Amazon, while easily comparing price, specs, and even reviews. Think about what a huge transformation that is: We went from physically collecting objects at stores, to clicking on pictures of objects and then getting them delivered to your door. Technology has fundamentally improved the experience.

Just like Amazon has done for shopping, technology is improving the risk adjustment process. It has made risk adjustment coding more productive, accurate, efficient, transparent, and predictive.

How A Veteran Coder Used **Apixio's HCC Profiler** to Eliminate Data Entry Error and Double Productivity



A veteran HCC coder, Gloria Rodriguez has seen the pros and cons of many approaches to HCC coding. At the beginning of her career, she "chased" and reviewed paper patient charts. Next, she reviewed electronic records through the EHR system or scanned PDF charts. Gloria currently reviews charts using Apixio's HCC Profiler application. By using HCC Profiler she has reduced her data entry error rate and doubled her productivity.

About Gloria

Gloria currently codes charts for Kelsey-Seybold, a health plan in Houston, Texas which operates 19 multispeciality care centers and services more than 400, 000 patients.

Goals:

- To increase HCC coding accuracy and completeness
- To put expert coding skills to best use and eliminate administrative "grunt" work
- To create a simple, easy coding workflow that facilitated an enjoyable work experience
- To enable better insights and quality assurance of work.

Approach: Gloria used Apixio's HCC Profiler, a HIPAA-compliant cloud application that transforms the complex chart review and HCC coding process into a simple, intuitive workflow where coders are presented with evidence for one HCC code at a time, and asked to confirm or reject the findings.

Results: Gloria went from reviewing 3-5 charts per hour, to reviewing 8-10 charts per hour, with fewer data entry errors. She is happier with the type of work she is doing and has more time for provider documentation improvement education and personal enrichment.

Chasing and Reviewing Paper Charts an Exhausting Process

At the beginning of her career, Gloria coded HCCs for a large provider group.

The provider group gave Gloria a list with the number of patients at each physician office whose charts required a risk adjustment audit. Gloria contacted the physician offices and arranged to pick up charts for these patients. On the agreed-upon day, Gloria drove to the physician's office, collected the pulled charts, and reviewed the charts onsite, working out of a file room or employee common room.

A big pain point with this system was that only handful of physician offices Gloria was assigned to used an EHR, meaning that most of the patient charts Gloria read were handwritten. If a provider had bad handwriting, Gloria had to reach out to an office manager for assistance, and wait till they had time to help her. This dramatically slowed chart review.

Additionally, the provider group required that all HCCs be entered into their proprietary HCC coding software. When transferring codes and supporting information from her working Excel file to the HCC coding software, it was easy to err and transpose the numbers in an ICD-9 code or misspell a name.

Most significantly, though, the process of traveling to chase down charts and work around a physician office's daily schedule was stressful and exhausting. The provider group required that Gloria collect and review at least 150 charts per week— in just 40 hours.

PDFs Often a Disorganized Jumble and Difficult to Work With

Next, Gloria worked with a third-party contractor to serve a provider group with widespread EHR adoption. Through the contractor's system, all the relevant medical records were scanned into a PDF file, which Gloria would review.

The notes were easier to read, because they weren't handwritten, but other than that they were still very difficult to work with. The patient files could be anywhere from 1 to 1000 pages, and would contain all types of information, from lab and diagnostic tests results, to patient encounter notes, to patient letters. The pages came in no particular order, were sometimes upside down, and some pages were missing altogether.

Reviewing Directly in EHR Easier, but Still Leaves Room for Data Entry Error

Gloria eventually gained direct access to the provider's EHR system, thereby gaining access to better-organized patient charts. However, reviewing them still requires auditing with a naked eye. Productivity remained less than 5 charts per hour. And with both the PDF review process and the EHR review process, Gloria needed to transfer the HCC codes she found from the Excel spreadsheet that she worked with to a special coding system that the provider grouped preferred, which left room for data entry error.

HCC Profiler Enables Increased Personal Productivity and Fulfillment

Gloria began to use Apixio's HCC Profiler during her work with Kelsey-Seybold. Gloria did not have to go chase charts down from physician offices; in fact, she didn't even have to read them by hand. Apixio's HCC Profiler read the patient charts, identified potential HCCs along with supporting evidence, and presented them to Gloria for quick confirmation or rejection. It didn't show Gloria codes that had already been identified by Kelsey-Seybold, so she didn't do any needless work. With HCC Profiler's dynamic search functionality for ICD-10 and provider identification, and pre-fill of the member name, she was at lower risk for data errors and much more productive.

Most importantly, she was able to review charts quickly and accurately. With HCC Profiler, Gloria completes eight to ten charts per hour, up to 80 charts per day. She has time for advanced projects such as physician documentation audits and professional education. She was able to work out of the comfort of her home, and had the space to take a break— in fact, Gloria's eyesight improved. It's a far cry from the days of driving from office to office searching for charts, and it's a process that respects Gloria's value as an expert resource.

Top 5 Questions Facing Risk Adjustment in 2017

From the looks of it, 2017 will be a big year for risk adjustment. There is a new administration in power in Washington, which will have far-reaching implications for the entire healthcare industry. And the risk adjustment space specifically will have to look inward, as it manages the currents of technological change and pries itself away from outdated, manual workflows. With these factors in mind, here are our top five questions facing risk adjustment in 2017.

Will CMS move forward with broader RADV audits?

In late 2015, CMS proposed expanding the risk adjustment audit program to cover all Medicare Advantage (MA) plans, every year (with either a condition-specific or comprehensive audit). This is because they believed that mistakes in the diagnosis data that MA organizations submit to CMS led to a drastic misallocation of resources–some plans are overpaid for their patients, and some are underpaid. CMS currently audits only five percent of MA plans each year, so moving to a system where all plans are audited would not only be a significant policy change.

In 2017, how will CMS move forward with broader RADV audits? Will CMS build more infrastructure for the Medicare Advantage Recovery Audit Contractor program (a new flavor of RADV)? Will the agency start extrapolating any penalties it finds in a sample population to plans' entire MA cohort?

What happens to risk adjustment on the commercial exchange?

While it's an open question if, when, and how the Affordable Care Act (ACA) will be repealed and replaced, its future will hold important consequences for risk adjustment.

Risk adjustment is a key ingredient in how the ACA's health care exchanges are managed. Along with reinsurance and risk corridors, risk adjustment ('the three Rs') ensures fair treatment for insurers and patients in an environment where pre-existing conditions are not taken into consideration when pricing premiums. Should the ACA be repealed in part or whole, the exchanges would likely also suffer. Organizations could pull out of the exchanges or patient subsidies could shift or go away, thus altering the exchange population.

Now there are plenty of scenarios that could happen here. If access is expanded in other ways to compensate for ACA repeal (for example, through Medicare Advantage expansion) risk adjustment could actually become a stronger force within healthcare. But as of now, who knows?

What happens to the chart retrieval process?

As it stands, chart retrieval for risk adjustment is conducted in a completely backward way. Often, electronic charts are printed out, then scanned onto hard drives, then transported or transmitted to a coding vendor. The entire point of electronic records was that they would be more easily transmitted than this.

There are signs that this might change in 2017. Vendors (full transparency, Apixio is one of them) are figuring out ways to get charts directly from electronic medical records, without the runaround for paper charts. Risk adjusting organizations are understanding the benefits of direction extraction too; it offers less abrasion for providers and is cheaper and faster for payers.

Still, patient chart retrieval is one of the most delicate balances in healthcare and many different stakeholders (office managers, physicians, RA directors) have to change the way they work to execute direct EMR extraction. It's going to take a big effort to do this— but 2017 may be the year where technology can help get us to the utopia that Meaningful Use had intended.

How are readmissions risk adjusted via 21st Century Cures?

The recently-passed 21st Century Cures Act mandates that hospital readmission penalties must be risk adjusted. Currently, hospitals are penalized if patients are readmitted for the same illness within 30 days of discharge. Hospitals have complained that this penalty is applied unfairly, because very sick patients will be readmitted regardless of how good their original treatment is. This is a promising change, but the legislation included very few details about how readmissions risk adjustment would work. In 2017, the government is expected to outline the readjustment formula they will use to adjust the penalty. This will then be a new space for the risk adjustment industry to address.

By the end of 2017, will the majority of risk adjustment be done with technology-augmented coding?

Last year was a turning point for technology in the risk adjustment industry. Phrases like "machine learning" and "natural language processing" started cropping up at even the oldest of manual coding vendors. Given the increased rhetoric around technology in this space, will 2017 be the watershed moment when the majority of insurance plans and health systems move to a technology-augmented coding solution? A notable event to watch here is the RISE Tennessee conference in March, where the industry's leading plans, systems, and vendors gather.

There's lots coming on the horizon, but no matter what plays out in 2017, risk adjustment stakeholders have to be prepared.

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