ArcBITS Newsletter

ArcSys Hot Tip

Using the comma in a data entry field will paste the data that was last underlined-entered in a field of the same name. This is remembered from one type of screen to another and from day to day.

Using the minus sign in a "key" field or "lookup" field will retrieve the last used record of the associated table file.

Meaningful Use (MU) Musings—Part 1

The events associated with the rollout of Obamacare have been of interest to us. First, it is a massive software system of 5,000,000 lines of code. Second, it has come at a cost over $100 per line. Third, it is another example of how things that should be simple can become extremely complex when the Health and Human Services (HHS) Department tries to manage things. The bigger the organization involved, the more players there have to be. Thus the ability to communicate and coordinate drops like a rock. Regardless, the eventual success of Obamacare will hinge on the adaptation of MU by all providers. Hence, this newsletter is devoted to our thoughts and observations on a subject that will be with all of us for decades to come.

Because of our business size and having to write all of the code to meet MU2, we are intimately involved in knowing it from A to Z. Our newsletters in the past few months have been devoted to a number of new features that have been implemented to comply with MU2. What you haven't seen is the massive amount of work going on behind the curtain.

There are 38 criteria that a software system such as Red Planet must demonstrate to show its compliance. The official regulations cover about a 1000 pages. But, after you have followed all of the links and chased everything down, there is probably *closer to 5000 pages of information that is cryptic and in many case poorly written* that needs to be assimilated, understood, and implemented.

A good example of unraveling the mayhem is with respect to electronically receiving lab results. For the past 10 years we have built about 20 or so different lab interfaces. The standard for a lab computer system to talk to an EMR system has been to send a file coded in a format known as HL7. From a tree top view, lab HL7 files look pretty much alike. Labcorp has nuances that Quest doesn't and we just write a new interface to handle these variances. Which is what we have had to do since the ONC has their "new" flavor of a lab HL7. To what purpose, we ask ourselves. We don't see Labcorp changing their nuances. *It only seems logical what has been working in production should have been sufficient to meet MU.*

But, wait, there's more. In order for us to meet the MU standard for lab results, we have to be able to process a test file containing LOINC codes. Thus, in addition to building an interface, we also have to build a test program that prepares test data that can then be fed into the interface and prepare a printout that can be visually approved by an approved testing facility. Even though we have to deal with LOINC codes in order to meet compliance, few of the labs that we work with send LOINC codes. When we ask the labs if they have a map between their in-house codes and LOINC, many of them don't.

Musings—Part 2

It is the opinion of some observers that the real focus of Obamacare is to force everyone into a single payer model. We would submit that the same reasoning applies to MU. *If there was only 1 EMR system, then the world of collecting and analyzing data would be infinitely easier for HHS.*

This leads us to the discussion point of where are things headed? The world as we have known it for documenting the patient encounter is going to be changing because of MU. In the old days, it was sufficient to say the patient has pneumonia and prescribe an antibiotic. But then we had to have an ICD code to describe pneumonia and thus a table of 900 entries was born. Then someone felt that ICD was insufficient, and so everyone had to adapt to ICD-9 (15,000 entries). (*You can fill in the next sentence for ICD-10...*)

We are now on the cusp of bringing the world of SNOMED CT into the practice. It is a mammoth table of over 400,000 terms and phrases which can describe almost every known condition, cause, and symptom. Where HHS wants things to head is to be able to code everything about a patient using these numbers. Thus, it will become requisite to have people who are trained to speak this new language and know how to put the codes together to make sense. As time marches on, *some committee in Switzerland will decide that this table is still too small, more things need to be added and so they will ask the team in Australia to come up with more scenarios for frostbite.*

Why? With proper coding, it would then be possible for a machine to make the analysis and recommendations for treatment as well as who statistically qualifies for such care under a single payer system. The days of relying on sixth sense and experience will diminish. If you start with an infant and continue to code everything (properly), you won't be duplicating the time consuming history of present illness as their life progresses. Gave an immunization? There is a code for that. In the left arm? Yup, another code. Rash ensued? Yes, you got it right, there is a code for that, too. In the not to distant future, some monstrous computer program will be able to determine that kids how had an adverse reaction to MMR between 13 and 16 months had an early onset of dementia if they were born in the Southwest. Solution for this scenario? Only prescribe medication X because it is the cheapest and their expected mortality is 59 years.

Which brings us to the subject of syndrome surveillance. Another part of MU is being able to submit the "admitting" diagnosis and "encounter" diagnosis to an-as-of-not-yet-existing federal entity. The idea being that if an "outbreak" occurs, then the public can be notified. *But not to worry, the file currently doesn't contain names. Just codes like your zip, birth year, race, ethnicity and gender, to name but a few.*

In addition to SNOMED and LOINC, we mustn't forget Rxnorm. There are mappings between some of the data elements amongst all these files. *It is obvious there are unseen players in the backroom who have a staked interest in a certain coding methodology and no one has been able to budge them to a standard.* Time will certainly change that paradigm. And when that happens, everyone will be having to re-synch and re-certify their systems.

The unfortunate result of all of this is that it has a tendency to squelch creativity. A lot of meeting the requirements of MU are crossing Ts and dotting Is. Where Arcsys' strength has been to enhance software, we must now help medical staff learn how to cross Ts and dot Is. MU will clearly be forcing the medical staff to capture more data. *But, there are no guidelines in place to teach people how to use SNOMED responsibly.*

Everyone who has a part in health care will be needing to make decisions. Will doctors want to hire scribes to follow them around and code everything? Or, will they say "Phooey to this!" and set up boutique clinics that serve only people who are not on the government-mandated single health payer system? Will the software entrepreneurs go after the latter market? Is this a good time to become an expert on the coding systems?

In the meantime, we march on. After all, we are all in this together.