

October 10, 2020, 1:00-2:00 PM Eastern

## Meeting Information

Phone: 1-205-206-9624

Access Code: 698-262-944

Teams Meeting Link: [Join Teams Meeting](#)

## Attendees

	Dr David Fallaw; CMIO, Augusta University, GA		Dr Tinu Tadese; CMIO, Lake Health, OH
	Dr Pat Brown; CMIO, Centra Health, VA	X	Dr Marcus Scarbrough; CMIO, LMH, KS
	Jenna Lloyd; CNIO, Centra Health, VA	X	Dr Grace Wu; Maury Regional Med Center, TN
	Dr Ian Johnston; Chatham-Kent Hospital, ON	X	Dr Jose Rosa-Olivares; CMIO, Nicklaus Health, FL
	Dr Paul Clark; CMIO, Concord Hospital, NH		Rae Costanilla; Clinical App Mgr, Northside, GA
	Holly Ellison; CNIO, Concord Hospital, NH	X	Christie Wright; Dir Phys Team, Northside Hospital, GA
X	Sandra O'Loughlin; PA, Concord Hospital, NH	X	Dr Chris DeFlicht; CMIO, Penn State Health, PA
X	Dr Paul Snyder; Surgeon/Physician Liaison, Concord, NH		Dr Stephen O'Mahony; CMIO, RWJBarnabas, NJ
X	Tiffany Cross, Informatics Officer Anc; Covenant Health, TN	X	Dr Khalid Alyafei; CMIO, Sidra Medicine, Doha, QA
	Dr Daniel Duzan; Phys IT Lead, Covenant Health, TN	X	Dr Clay Callison; CMIO, UTMC, TN
X	Dr Mandy Halford; CMIO, Covenant Health, TN		Dr Claude Pirtle; CMIO, West TN Healthcare, TN
	Tommy Paterson, PharmD, Covenant Health, TN	X	Brian Kottenstette; MAKE Solutions Inc.
	Dr Alina Brebene; CMIO, Jackson Health System, FL	X	Patti Marshall; MAKE Solutions Inc.
	Mike Garcia; CIO, Jackson Health System, FL	X	Sue Steckle; MAKE Solutions Inc.
X	Dr Jigar Patel; CMO, Cerner Corporation		

## Major Agenda Topics

- Future Orders and Orders to Scheduling
  - Discussion with Cerner
- SchApptBook for Surgery Scheduling (Dr. Wu)
- Exposing I&Os via FHIR for consumption in other applications (Dr Clark)
- Innovations Session with Dr Clay Callison, University of Tennessee Medical Center

## Notes

- Mandy introduced Dr Jigar Patel, Chief Medical Officer of Cerner, who joined the meeting. Dr Kerschl has left Cerner to pursue other opportunities and Dr Patel has graciously accepted to join us and listed and help advocate for us and collaborate with Cerner.
- Introduction of Tiffany Cross
  - Informatics Officer for Ambulatory Practices and Diagnostics Services, for both acute and ambulatory at Covenant Health

## Future Orders and Orders to Scheduling

- I want to open up the floor to talk about some of the Future Orders and Order to Scheduling and some of the discussions that we had from last time just allowing Dr Patel to hear some of the conversations that we had
- Dr Halford
  - We have each of the sites in different places. Some people were using Future Orders, some people had it in place or a little while and have done some optimization and then others were considering both Future Orders and Orders to Scheduling.
  - Do we want to start with a reminder of where each site is at?
  - At Covenant we have future on orders on for ambulatory, not for the hospital or emergency room encounters, and we do use Orders to Scheduling at multiple facilities
- Dr Callison
  - At UTMS we have a version of Orders to Scheduling. It is more like orders to message basket that then gets scheduled due to issues with Centralized Scheduling
- Dr Snyder
  - In Concord we use Future Orders from the ambulatory setting as well. We use Orders to Scheduling for Diagnostics for Radiology, that kind of thing, we do not use it for Surgical Scheduling, for SchApptBook
- Dr Wu
  - Maury Regional is using Future Orders in ambulatory as well and we are using Orders to Scheduling for Radiology and we are using SchApptBook for surgery scheduling
- Dr DeFlitch
  - At Penn State we have Future Orders on for Radiology studies in all venues in. We default the Detail Value field in the ambulatory setting to future yes, but in inpatient and ED setting, we default to no, but they have the capability of switching it in all venues.
  - Our challenge is the logistics of arranging the Patient requested time to the Radiology requested time, and we've got a really clunky work around with a dual messaging function that Home clinic arranges the logistics with the Patient prior to the radiology tech scheduling. We've been trying to push the radiology tech centralized scheduling have the direct communication with the Patient, but frequently that is challenged because not infrequently in our academic center for specialists the images in the future are tied to future appointments and both a process and technology disconnect between appointments linking for imaging and scheduled visit.
- Dr Halford
  - Tiffany do you want to elaborate on some of the challenges we have had at Covenant?
  - Some of the challenges are similar in how you fill out the correct facility and get it aligned with the actual scheduled appointment.
- Tiffany Cross
  - Yes, so we do use Future Orders and Orders to Scheduling, and a lot of those are diagnostics for imaging and a lot of problems we have, we use performing location since we are multi-facility, so let's say for example, you know you are picking a CT, and you want the Patient to have it at our Park West facility, you have to choose that as the performing location. If you know the process and it is done perfectly, it works pretty well. Where it gets a little difficult is let's say you already placed the order and you pick Park West in the performing location and then after the fact the Patient tells you that they want you to schedule it at a different location. You can't edit the order. You can't go back and modify it and edit the performing location and just change it to the requested location because then it doesn't go to the Order to Scheduling queue. It just goes to the unknown queue and get lost in translation. This then requires the ordering provider to cancel and reorder, which is not a great workflow at all.
  - We haven't had any trouble with them linking up to imaging studies though. I was curious if the person that mentioned that, if they use RadNet as well?
- Dr DeFlitch
  - You described our challenges better than I did
  - We do use RadNet. The reason we could go to Future Orders is because we converted from a third party to RadNet. Our challenges are coordinating the two schedules when the Patient wants to change or cancel or no show – that whole reorder activity – there is a less than satisfying piece for everybody involved.

- Tiffany
  - The no show process is difficult in the scheduling venue as well. It just a hard process. It does make for a lot of duplicate workflows that have to occur.
- Dr Callison
  - Similarly, for us, if something is changed, whether it's a location or whether it's the date, or various things within the order itself, not going back to the queue to be worked on, that is were we have had our problems. With patients either not showing for their appointment or showing a month too early for their appointment, or something like that, so we have had similar challenges
- Tiffany
  - One thing for Jigar to hear as well, the queue that it goes into in the scheduling solution is one big queue. You can't split it out. You can't say "this facility work yours, that facility work yours", everything is in one queue so it makes it difficult. Even if it was in one queue, but you could split it out, it would be a little bit better, and more manageable, but obviously the best thing would be that if you modify the order that it has the smarts to go to the right queue, for the right facility.
- Dr Halford
  - I think the reason I wanted to discuss it today was most of us have tried to mitigate these risks through re-education and process flow, but we really feel like that there's some work that needs to happen from a functionality perspective.
  - We would welcome an opportunity to do that with the right contacts from Cerner at some point in the future
- Dr Patel
  - I would like to dig into this more from an individual perspective. It sounds like a couple of issues that I've written down here:
    - Logistics of Patient scheduling
    - The rework queue, as Tiffany mentioned
  - Those are a couple of the main things. One is a little bit of a people access thing and the other is the functionality.
- Dr Scarborough
  - Will you know we were just talking about that in this other meeting about bone densitometry. We have somebody admitted for a fragility fracture, but we need to get scheduled to bone densitometry in three to six months and it's not as easy as it should be. We're basically having to refer to either an outpatient provider or the care coordinator to follow-up later. Some of that may be insurance driven at some level, but that isn't one that needs prior authorization. Is that helpful? We're using a people process to set reminders to do it later, prompting people to enter orders manually.
- Mandy
  - But if I get the surgeon doesn't input that order himself and there is no way to get that power chart order sent to him or her to cosign, and I wasn't sure if anyone else had a better process in place or if they are encountering similar issues.

### **SchApptBook for Surgery scheduling**

- Dr Wu
  - I wanted to switch subjects along the same line. Someone mentioned SchApptBook for Surgery scheduling and I just wanted to see what was going on at other places because you know it's not uncommon, even though we have tried to teach our surgeons to enter the order for the surgery that they want to schedule, it often times goes in as a verbal order from the nurse, and so that queues SchApptBook to schedule. The process of scheduling ends up putting the surgery order into PowerChart. But if the surgeon doesn't input that order himself and there's I no way to get that PowerChart order sent to him or her to cosign, and I wasn't sure if anyone else had a better process in place or if they are encountering similar issues.
- Dr Halford
  - Our Surgeons refuse to order surgery. I hate to say it that way. The office is calling to schedule and then once the pre-registration encounter is created then the doctor goes on to plan their multi-phase PowerPlan. But we're not using the specific order to schedule surgery.

- Dr Callison
  - That is what we are doing as well
- Dr DeFlitch
  - Neither is Penn State. Penn State is doing the same thing
- Dr Snyder
  - We are doing something similar at Concord as well
- Dr Wu
  - So what I'm hearing is that the procedure order for laparoscopic appendectomy doesn't ever makes it into PowerChart for you guys?
- All Sites
  - No
- Dr Wu
  - I guess I am just wondering from a compliance issue on our end, because none of these orders are getting cosigned, but from what I'm hearing you guys that is a non-issue because the PowerChart orders for the surgery are never being placed?
- Dr Halford
  - In SurgiNet Scheduling has safeguards to say Surgeon X has privileges to do operations A, B, C, D, so that is how we say we stay within our guardrails. It's the surgeon's office calling our surgery scheduling department to schedule the surgery. Now we certainly are not going to perform anything not even a PAT, or on the day of surgery without the surgeons orders and that includes the additional information on what they say they are consenting the Patient for.
- Dr Wu
  - OK
- Dr DeFlitch
  - In additional to verbal, we do a lot of messaging, and we did this a long time ago before all of this Orders to Scheduling stuff was even a possibility. We created Smart Templates in eMessaging for the message scheduling pool to go start all the logistics of the pre-procedural activity much, at least in PA, requires pre-authorization so that whole process prior to actually booking and confirming
- Dr Wu
  - Thank you, that helps
- Dr Scarborough
  - If you can figure out how to get them to do it, please let us know
- Dr Snyder
  - At Concord we are piloting something that I think might be a good alternative to it. We created one generic request for surgery scheduling order that has a free text field on it where the Surgeon can dictate in the actual procedure that they are doing rather than the SurgiNet name, which often doesn't correspond to the surgery they are doing or doesn't include everything they are going to do. And then there are some other required fields for other data that surgical scheduler needs to be able to book the operation. They place that one order, and that order is actually a future appointment scheduling order and it goes to a queue in Rev Cycle. The surgical scheduler picks it up in the queue, uses the information to fax the paper surgery request form, which is how they're actually getting the information to the hospital scheduler. Then they use that appointment order to place an appointment on the surgeon's schedule for the day of surgery to correspond to how much time they're going to take, so it puts it on the surgeon's Ambulatory Organizer. So it kind of accomplishes the same thing, and is has the surgeon's signature on it
    - Just started last week at a single practice
- Tiffany
  - So Mandy that is similar to what we do for procedures, right? For like our IR procedures and other things like that, we do a very similar process to what Concord just explained, correct?
- Dr Halford
  - Correct. Let us know how it continues to go
- Dr Snyder
  - Yes.

- Dr Callison
  - How do you get the procedure on the Ambulatory Organizer? Maybe everyone else is doing this but us. We tried very hard to get the procedures on the Ambulatory Organizer but it always screws up our FINs. So we always have bad FINs that go there. So it's the wrong encounter that people end up documenting on. Have you guys got around that?
- Dr Snyder
  - Surgical operations, operations in the OR?
- Dr Callison
  - For example, in my life where we do GI and pulmonary, I would kill to have my 3 bronchoscopies this morning on my Ambulatory Organizer, and we tried that with our GI docs and we basically we did it and we kind of pushed it through, but it was giving it the wrong FIN on the Ambulatory Organizer and it was creating kind of dummy issues so documentation was getting all messed up
- Dr Snyder
  - So our surgical procedures, and things like bronchoscopies too are booked in SchApptBook. When the hospital scheduler is scheduling an operation they create 2 FINs: one is for the pre-surgical testing; and one is for the surgery itself. By way of scheduling the procedure, that actually creates an order so it goes into the Non-Categorized section in the orders – it actually creates the order for the surgery they are scheduling and that puts the encounter on the surgeon's Ambulatory Organizer by virtue of it having been scheduling in SchApptBook.
- Dr Callison
  - OK, because we have issues with multiple FINs with Ambulatory Organizer across the board when you have multiple visits scheduled that are kind of out there in the future and the wrong visit sometimes shows up on the Ambulatory Organizer. Are we the only place that has that issue?
- Dr Snyder
  - Boy that has never happened here, I don't know about others
- Dr Callison
  - We engaged Cerner and it's been, "that's kind of what happens" is what we were told
- Dr Snyder
  - I'll ask our Revenue Cycle people who really know much more about the glitches and errors that we have, but that isn't something I have heard of.
- Dr Wu
  - We haven't had issues to my knowledge of the wrong FIN being on the Ambulatory Organizer either
- Dr DeFlitch
  - You are testing my historical knowledge but I think that we had that in the past and that it had something to do with Cerner's best encounter logic, but don't quote me
- Dr Callison
  - Alright. It sounds like we need to dig that one back up then. Thank you.
- Dr DeFlitch
  - Since Jigar is here, I would love for him to be able to provide us a Cerner recommended workflow on Future Orders related to radiology and system that have Cerner Scheduling and RadNet, because I know there's probably been recommendations, and they throw around the work "Model" a lot recently. I'd be interested in a detailed best design approach. My guess is that since we have implemented, we probably haven't kept up with the most recent recommendations
- Dr Patel
  - I'll definitely get some information. Based on what it sounds like, the information you're looking for would be on the Model pages from a recommended workflow perspective, but I'll dig that out.
- Dr DeFlitch
  - Thank you

## FHIR and I&Os

- Dr Clark from Concord is working with Wellsheet and had asked if other sites were interested in getting access to the I&Os via FHIR.
- Dr Snyder
  - I can give you a little background on that. One of the frustrations that we've had in the 3 years since we went live with Cerner is that it is practically impossible to figure out the I&Os for your Patient are.
  - We asked Wellsheet, who we have been working with on innovative ways of displaying information in the chart that make it easier for users to see what is going on with their Patients. We asked them to see if they could give a better I&O display but they weren't able to bring it in via FHIR or there are some obstacles to Cerner working with them to be able to bring in the information in a different display
- Sandy
  - I would echo what Paul is saying. It has been escalated up through Cerner, but the issue with the I&Os through Wellsheet, through FHIR is really the way that it comes out of Cerner and the inability to get that in a meaningful way through the API. So I believe there's been some escalation of that through Cerner, but we haven't really had any luck in terms of pulling that over through the Wellsheet app.
- Dr Callison
  - I&Os has been a real challenge in Cerner. Problems especially in the NICU for example. I get a weekly email from the NICU. They count every milliliter, I mean they live and die based on their I&Os and we just have not ever been able to create something that looks good for them and something like that with smart on FHIR, that is a very nicely done display for them, it would be life changing
- Dr Snyder
  - Agreed
- Dr Patel
  - I've talked to a number of folks on the development side, smart on FHIR perspective, especially from a Cerner partner perspective is still evolving, is part of the answer. Many of these companies are using some proprietary APIs to get information out of, not just Cerner, but other systems because the FHIR spec is not fully realized yet and is in process, and various draft stages. So, there are issues ongoing with the FHIR standard I would want to understand from an I&O output perspective some of the issues that were described here. Again, if you have specifics, I'm aware of the NICU use case, which is very exacting, you are absolutely correct on that. If you catalog them for me, I can get some digging done and pull some people to bare on what this looks like. Just because I've experienced interacting with a number of these folks, especially on the smart FHIR side.

- **Dr Callison – Presentation of Innovations from UTMC: Identification and Documentation of Incidental Findings during Hospital Stay**
  - One of the things that we have been working on this last year from a quality improvement standpoint, trying to figure out how to identify incidental findings for our Patient in the hospital. This was really determined to be a significant issue from a medical/legal and Patient care standpoint. This is what we did, what we have done to help with that, and move forward.
  - Most of you know what Incidentalomas are. A CT scan is done and even though we're not looking for a specific thing, we happen to find something that is incidentally found that is now an incidental finding.
  - I ordered the CT, so now it is my responsibility to make sure something happens to follow it up. Frequently for us, from a pulmonary standpoint is going to be the kidneys, kidney nodule, or adrenal nodule or a thyroid nodule. Then, even though it doesn't fall into the world of pulmonary it is now mine to take over and do with as I need to.
  - So how do I identify these in the hospital, and what do I do with those?
  - We have been working with our trauma team and the literature is really quite scary. 25-60% of CT scans done for trauma Patients have incidental findings that then need to be followed up in some way, shape or form.
  - At UTMC we did 6,500 trauma scans in 2018. So if you can imagine that conservatively, ¼ of those had incidental findings on it, that is a lot of Patients that had incidental findings, some of which may be significant, and some of which may not be. Often times some of these are early cancers, and even though they may be relatively benign right now, in 2 years they could kill you. So trying to identify those and go from there.
  - What we did was retrospectively, really only 64% of our incidental findings on our trauma services are reported to Patient and documented to them. So we were missing 35% of our trauma Patients despite efforts on the part of our Trauma Coordinator to be able to do this – and that is just the trauma service.
  - On a hospital service, you get 70 year-olds admitted to the hospital all of the time and you know they've had 70 years' worth of time to develop incidental findings, so the question is how do you work through that process and what does that standardized workflow look like to capture them?
  - From a training standpoint from me it was, "if you ordered it, it's your responsibility". It is nobody else's job to follow it up. Traditionally speaking, that has been the case.
  - The problem is that it's the resident, NPs and residents who it kind of defaults to, who were taking care of the Patient in the hospital. You're not the person who's following them up in 3 or 6 month, or 6 weeks or a year with the follow up scans. So we've got to make sure that is indeed across the continuum of care, as Patients leave the hospital.
  - I've got a solitary pulmonary nodule. You may not have looked at it initially because it was buried in the Problem List, but that was something that needs to be followed up on. This note here doesn't really indicate it, but often times there is something indicated down here you know "needs follow up CT scan in 3 months", or something like that – but again, it gets lost in the laundry list of things that need to happen
  - if you look at when imaging happens, >80% of all imaging happens within the first 24 hours of admission, but the average length of stay (at least for our facility) is 5 days. So there are 4+ day time difference between when the incidental finding was discovered vs when the Patient is discharged. Quite frankly, the person who did the admission often times is not necessarily the one doing the discharge. So then you are having to relate across teams and if you have played the game of telephone, you know how poorly that can work out.
  - What we were working on was "How do we make sure this happens for our Patients?" and if you are OCD like I am, you know this is the stuff that keeps you up at night, and I'm not the Chief Quality Officer.
  - That small spot can turn into cancer if not dealt with early. In all the practice of medicine, this is the stuff that makes me nervous. You don't know if in 5 years you are going to get a letter and a lawsuit saying, "Hey, what's going on here".
  - I do thoracic oncology as a hobby and so you know it's not infrequent that I see Patients in clinic who come in and in hindsight, they had a CT in our system 2 years ago and I could see that little nodule that was there before and is definitely much larger now, so I definitely know it happens – that small spot can definitely grow
  - So we looked at the overall process for this.
    - We looked at the Radiologist and what they were doing.
    - We looked at how can the Provider document this in a PowerForm

- Captures incidental findings noted during hospital stay for the Patient during the transition of care or care after discharge
- Medical/legal document Patient/Family discussion
- Creates standardized process for documenting and communication incidental findings with Patients and post-discharge Providers.
- If you have read any radiology findings lately, these reports can be extremely long and often times what we found was there were little incidental findings that were in the very long body of the CT report
  - Not list in the impression but buried somewhere in the findings of the exam
- Worked with Radiology to create an incidental finding section at the very, very end, underneath, impression, so that by doing this, the definition of an incidental finding was at least something that required some kind of follow up.
  - So if they had hepatic steatosis, I don't need to necessarily make that an incidental finding, but a thyroid nodule needing follow up, that definitely needs to be an incidental finding
  - Some Radiologist take it farther and list anything in there that is significant that they think but they do specifically document what needs to be followed up. Some also include Fleischner Society Recommendations in there too
  - So this was the first thing, being able to pull out of the radiology reports
- Then we created a form that was accessible in many, many ways in the hospital, called Incidental Findings
  - Doctors like orders, so we mad it an order you can look up
  - Made it available on various workflows
  - Made it available in the Depart Documentation
- Sandy
  - Are you on Cerner Radiology
- Dr Callison
  - No, we are on GE, soon to be Fuji, but we are using RadNet
- Sandy
  - Is that a separate MPage component called Incidental Findings?
  - Do you use PowerForms for Physicians in other areas
- Dr Callison
  - Yes, we created a custom MPage section and made it a required section for the discharge
- Dr Callison
  - We created it as a form and each section has its own incidental finding (up to 5)
  - Required field
    - If you click "No" for "Were there any incidental findings" you are done, but that way you have documented that no incidental findings were discovered
    - If you click "Yes", conditional fields open up so you document:
      - Who you discussed it with
      - What the finding was
      - Who the follow up needs to be with, which we made free text so that if it's just the Primary Care Physician, even if you don't know who it is, you could still put in there
      - Recommended follow up testing
      - Recommended follow up timeline
    - So that it can go with the Patient on discharge
  - Finish then sign the form, like a typical form
  - You can do multiple forms as well if you needed to for the number of incidental findings that you have
  - Carries forward within that encounter, so within that hospitalization
  - In theory, from a workflow standpoint, if 80% of imaging is done within the first 24 hours of admission, in theory 80% of your incidental findings should be discovered during the first 24 hours, but that leaves 4 more days on average for the to be in the hospital, and so instead of putting the onus on the person at the very end to go back and clean up everything, if you found something you are supposed to go ahead and document at the time you find it. So that way you know you're cleaning things up and keeping things tidy for the next person behind you. That is frequently what happens.

- That is what Trauma has done to standardize their workflow on the admission process. When they do this it automatically pulls into
  - Clinical Summary, which goes to the PCP
  - Patient Summary, which the Patient receives, and signs a copy of
  - Discharge Summary, from a Smart Template
- So as long as somebody does the work up front, it will automatically populate all of the areas downstream, without anyone needing to think about having to insert it in there
- We also have it documented in a Flowsheet as well – we are still a flowsheet-centric facility since we have had Cerner since 1997, so we are slow MPage adopters
  - Face up on the flowsheet so that it is easy to see “Incidental Finding – No” or “Incidental Finding – Yes”, which is how a lot of the PCPs see it in Clinic afterwards
  - Then just double click to open the form so you can see the various incidental findings that you had
- Discharge Workflow
  - Incidental Findings “No” is face up
  - Incidental Findings “Yes” is face up along with the finding
- We do similar things for the Advanced Care Plan so that things are face up if they have been documented before
- Again, it is a required field so your really can’t discharge the Patient unless you document the field, as a fail safe
- We recently implemented this in the ED and even though they kicked and screamed about it for the first couple of days, we ignored them, magically, the kicking and screaming went away and they are now documenting incidental findings on all Patients, which from a medical/legal perspective, and Patient care standpoint, is a real win because so much happens in the ED
- Sandy
  - It sounds like the ED adopted it, is it widespread including specialists
- Dr Callison
  - Housewide, to discharge somebody it has to be done
  - Do people document it erroneously, they very well may, but it is required documentation.
  - We did turn it off for people who just have surgeries because hopefully you aren’t coming across an incidental finding while you are scoping them or something like that
  - This came from our specialists; it came from our surgeons. Then we moved it across to our Physician Advisory Council, and then we broadcast it everywhere
  - Trauma did an 11-month chart review after implementation and went from ~50% prior to implementation to > 90% post implementation
    - They got all the way up to 98.2% with post discharge when they saw these Patients in the clinic and were able to then look back, they were able to see it, but 90% were able to be done prior to the Patient leaving the facility
  - Now working on improving the capture of the Radiology reporting, it is hard to get them to change a process that they have had for 30 years. Now working on standardized templating within Radiology
    - Recently worked on some Smart Templates to pull in Radiology impressions and a Smart Template to pull in incidental findings section if it is within a document so that when you are going to discharge a Patient you are able to pull in and quickly see all of the incidental findings to make sure you haven’t missed something along the way
    - If someone has had a 30 day hospital stay, it is very easy to pull up all incidental findings and if there are none documented, you are able to confidently say “there are no incidental findings discovered during this stay”
  - This has always been a challenge for us.
  - We are working on similar things with for abnormal labs after discharge. We have been working on a standardized process to capture those in a centralized fashion through our hospital through quality improvement. I’ve been the physician champion for that. We have a nurse that reviews all abnormal labs, after Patients are discharged, that QI standpoint. We have been doing it over the last 11 months since it has

been live. I'm trying to figure out how many of them came back after discharge that were abnormal, and of those does a provider need to be notified, and if so, was the provider notified.

- For example, the urine culture can back positive, and it was resistant to the Augmentin you gave them, that prompted to change and trying to capture that information. So that is some of the QI stuff that we've been working on lately and how that relates to Cerner.
- Sandy
  - I have another question for you. Do you use PowerForms for Physicians in other situations? As you said, Physician like orders. We have toyed with the idea of using PowerForms for some things, but I wanted to hear about your experience with using them
- Dr Callison
  - Yes, we use them on a few items. There are not a lot of them. We also use them on Advanced Care Plan for Patients that have an Advanced Care Plan form that crosses encounters since it will automatically pull forward your last result, that way you have some discrete data. For example, the form is very brief, but it has code status as well as discussion surrounding code status, and we have alerts built so that if I document somebody in my Cystic Fibrosis clinic as being DNR but they come to the ED, there's 100% that I will not be the person seeing them in the ED. If they need to be intubated, with their DNR, if somebody enters the code status order that differs from the one that we had documented on that Advanced Care Plan form, an alter fires saying you need to go back and look at that. It may be appropriate, but you need to go back and look at it and talk to the Patient or their family to have that discussion.
  - We use PowerForms a lot for things that cross encounters
  - We use PowerForms for Oncology History, so some of those things that again cross encounter within the Oncology world and other disciplines.
  - We don't use them a lot, but when we do, they're very intentional and they have gotten significant position buy-in, prior to implementing them
- Dr Callison
  - This was going to be presented at various conferences that have been delayed and postponed and cancelled...so at this point, have at it.
  - This is the sort of thing that has been very helpful for our analysts. They don't see a lot of the Clinical aspects of all of this or the "wins" that they participate in so seeing this have been invigorating for them, to want to keep trying to find solutions for problems when they can see that it actually helps the Patients, instead of just making the Doctors happy.
- Dr Scarborough
  - How are you driving them to engage in the PowerForms
- Dr Callison
  - It's on the workflows. It's on the Discharge workflow that it is a required field
- Dr Scarborough
  - Right, so it is a required field. Is that part of the custom work that you did or is that standard in the Discharge workflow that you can require that?
- Dr Callison
  - We don't really do anything that is that custom here. So when I say that it is custom, it's not really that custom
  - And then if you use Depart, we made it yellow there because we found that some people like to use Depart, but we are really pushing them towards the Workflow. So we have it as "Provider to Complete" because a lot of the providers were pushing it to the nurses to complete and that is not the case
  - On day 1 of this a nurse called our CNO because they had HIV on there to discuss as an incidental finding with the Patient and they said that needs to be better done and I said, no, it is a win because clearly it wasn't going to be discussed with the Patient at all and the nurse happened to catch it because it was documented in the Incidental Findings. It was actually quite scary, but that is how we made it a required field
- Dr Scarborough
  - So but this is when they are doing the depart process you mentioned and I agree. Putting it as real time as you find it helps you know if you have a complicated stay and it is long. I'm probably like the rest of you.

How many times have you dictated a Discharge Summary and you're going through the reports and you say "Oh, crap, I didn't see that until now". So putting that further up. How do you nudge them to do that further in, if you have it required and the Depart Process as well?

- Dr Callison
  - We've added it to all of the workflows: H&P workflows; Daily Progress Note workflows, and then really a lot of this was just patience. I do a weekly email tip that goes out, new things or weekly tips (our Chief Medical Officer finally agreed to letting me do that) and apparently that's the best way to get the information out. A lot of our people end up reading it. Every few months I add this back. It is part of the resident onboarding process. I meet with a lot of our resident groups individually
  - Trauma group actually sent out letters to people who didn't disclose, almost like a QI letter that you might get from your hospital. They actually sent out an email format to the Radiologist, Discharging, Attending, and to the Discharging person on the Discharge Summary, which often times those are residents or nurse practitioners. So they actually sent that out all the way to really work on and drive that improvement process
- Dr Scarborough
  - This is great work. Thanks for presenting it. I have a couple of questions for you
  - What was the N on that PI study from Trauma? It seems like it would be potentially in the thousands?
- Dr Callison
  - It was only like 500, or maybe it was like 800. I can look that up for you and let you know
- Dr Patel
  - So a couple of things I was thinking, and one you highlighted that I would reinforce to this group is the little known capability of an Order launching a form. It is really smart. It is a think that it is a place they go a lot. They do a lot of orders, so linking it to an order so it has a workflow that starts with something that they are familiar with, then starting somewhere that they don't. So I think someone from Concord asked the question, how do you get them to think about forms from a physician perspective? This is a good trick. I've used it a couple of times myself. Others I know have used it as well – to try to make it easy. Lower the burden of entry for Physicians to use forms, and if it's structured right, like you guys have done, that makes it very, very easy. What was your conversation or thought around codification, because I know the American College of Radiology codification scheme for incidental findings? They are not that easy to work with for licensing, but there are some codification schemes out there that Millennium to my knowledge doesn't have, so that is another avenue. How are you codifying these things or are you really just pulling them out free text
- Dr Callison
  - It is pulling out on the Radiologists part. So it is up to the Radiologist to put them there
- Dr Patel
  - So there is future thoughts on some of this.
- Dr Callison
  - Yeah, that's a great idea
- Dr Patel
  - The notification piece of this, or tracking. Maybe I missed it. Is there a report or something else for follow up, or do you leave it up to the professional judgment of the individuals reading the discharge summary, PCP, etc?
- Dr Callison
  - We have not really followed them up once they leave the facility. In theory, we could do that with our University Health Network. Kind of more ACO pop-health brand. We could definitely do that. At this point we pretty much done and said, hey we've given to the Patient the document and we've sent it to the PCP in the discharge summary and we discussed it with the Patient or somebody else that should care. We've at this point kind of left it at that. So we've not actually followed this all the way through to know did they get their follow up US or did they get their follow up CT scan. That in theory could be a great next step.
- Dr Patel
  - Yeah, some of the clients that I have been working with recently in the government space. They're following things to the end point to the Nth degree. So we always had to think through how do we codify number one

and then secondarily, how do you follow up and close the process so that the student or resident group (that is the way they phrased it) if you have a large number of those at UT, they rotate right, and they move around, so it is hard to manage

- Sandy
  - I have one more clarification question, the Smart Template that the radiologists are using, is that just to call out the incidental findings as part of the report, or did you say that is specifically automatically pulling in somehow?
- Dr Callison
  - So that is just part of their report that they include that in their standard template and they put that below the impression. So it is kind of where the end user who would look at it.
  - We have created Smart Templates in Cerner though to pull this information out. We have Smart Templates pulling out the impressions from our Radiology reports that you can put in your notes. So we did create a Smart Template, similar type thing with the start word being Incidental Finding and the end word being kind of the end of the radiology report so that again not that we're creating a note with incidental findings alone, but it's kind of a nice quick hitter for the people that have been in the hospital for a while and you're asking the Hospitalist to review 30 days' worth of incidental findings, and that is kind of fraught with disaster. We did this more for them to be able to call in that Incidental Findings Smart Template so they can at least make sure there is nothing you have missed
- Sandy
  - ...and the Smart Template pulls the text from the report or pulls the PowerForm documentation?
- Dr Callison
  - Yes, it pulls the text from the report, the radiology reports. Kind of like we do with our Radiology Smart Templates right now.
- Dr Patel
  - For clarity, you're using RadNet for creating Radiology Reports, correct?
- Dr Callison
  - Correct
- Dr Patel
  - So, for everybody else here, and this is a pain point I've run across a number of times, it depends on what they're using, right, if they're using a PACS-driven workflow, they are often having a separate transcription or reporting tool, that Smart Template isn't amenable, but if you're doing RadNet report creation, then that does come into a separate section and can be reported from the Smart Template perspective, so there's some nuance there from a design perspective
- Dr Callison
  - Really the Smart Template we just started doing a couple of months ago because we didn't have an analyst who knew how to do that up until recently. So that is brand new off the press so that wasn't included in a lot of what we have been doing
- Dr Snyder
  - I just want to say that it's really nice work and I admire what you have been able to do.
- Dr Callison
  - Thank you guys for letting us share it and definitely I'll send Brian the PowerPoint so you guys are happy to take it and do with it what you will to see if it can be helpful in any of your hospitals
- Sandy
  - Thank you for sharing. It's great.
- Brian
  - Yeah, absolutely, I'll get that distributed. We appreciate the sneak preview since you haven't been able to present it anywhere else
- Dr Callison
  - I'm glad I was finally able to share this with someone

## Open Discussion

- No time left for open discussion this time

## CMIO Roundtable agenda for 2020

- November 4 – CNIO Roundtable
- December 9<sup>th</sup> - **Innovations** – 90 minutes
  - Presenters: Penn State, Northside

## Proposed agenda items for next meeting

- Updates from Concord on implementation of Intelligent Problem List (IPL) from IMO.
  - Understanding Cerner’s roadmap for the Problem List
- Operational Reports
- HealthIntent discussion
  - Who uses what modules
  - Strategic or patient benefits
  - How it fits into a clinical workflow

## Follow-Ups

- Dr Patel to provide recommended workflows for Orders to Scheduling and Future Orders
  - Model Experience Link: <https://modelexperience.cerner.com/>
  - Millennium Scheduling Process Alignment: [https://modelexperience.cerner.com/explore/Health%20System/Revenue%20Cycle%20Management/Patient%20Access/Millennium%20Scheduling?section=process\\_alignment](https://modelexperience.cerner.com/explore/Health%20System/Revenue%20Cycle%20Management/Patient%20Access/Millennium%20Scheduling?section=process_alignment)
  - Orders to Scheduling standard Workflow: [https://modelexperience.cerner.com/workflow/viewer/395?is\\_associate=1](https://modelexperience.cerner.com/workflow/viewer/395?is_associate=1)
- Brian and Dr Halford
  - Collate information around Future Orders and Orders to Scheduling in a format like we did for Meds Reconciliation for submission to Cerner
- All Sites
  - Provide specifics around use cases for I&O’s to Brian to collate for use with FHIR