2019 CHIO COUNCIL ANNALS

25 FEBRUARY 2019

20181201 SBAR NITRIC OXIDE TASK AND DOCUMENTATION

SBAR

S: Riley PICU/NICU/CVICU recently implemented a protocol for administration of Nitric Oxide. The task that fires to RT is a one-time task, but needs to fire Q6H to match the specifics of the protocol. Also, it was thought that additional RT documentation was not needed; however, now that the protocol is up and running, it has been determined otherwise and RT is requesting a new DTA on the Nitric Oxide PowerForm.

B: The physician-driven protocol was implemented about a month ago after completion of the PowerPlan build. With everything up and running, it has been determined that RT needs to document their actions and they need the task to stay active while the Nitric Oxide protocol is live.

A: If the task is not changed to a Q6H frequency, RT risks missing following the protocol appropriately since not all patients are on the protocol when on Nitric Oxide. The task is the reminder RT needs to continue weaning/managing the gas. The DTA on the Nitric Oxide PowerForm/iFlowsheet will allow the RT to document their protocol interactions which in turn loads to the RT detail flowsheet for MD review.

R: Respiratory Care is requesting changing the one-time task to a Q6H task and adding a DTA to the Nitric Oxide PowerForm/iFlowsheet. See attachment for screenshots.

CHIO COUNCIL DELIBERATION

Discussed live at the 25 February 2019 CHIO Council Live Session.

VERDICT

DENIED / FURTHER INVESTIGATION REQUIRED.

Summary of Discussion: There is no indication that systemwide nursing/RT leadership has been brought into this equation – this is a problem given the imperative to decrease nursing/RT task burden. We have indeed over the course of the last year adopted the Cerner Essential Clinical Dataset in all things nursing/RT/allied health services, and continue that march toward minimalism.

Further we wonder what a Cerner Model Standard-compliant approach to this problem would be. There is no indication on this SBAR as to that investigation. As such, we are forced to undertake that investigation ourselves. The way the SBAR is written, we also see a probable opportunity: we should not be creating PowerPlan builds without a full accounting of workflow and consequences. The days in which we build, then tweak, then build, then

tweak, are definitively over. We have neither the engineering resources nor the performance headroom to sustain such activities any longer. In conclusion, we will consult with Cerner Model Experience resources to fully define the space. Lovely and Ivory of the CHIO Council are assigned to drive this matter to closure.

20181211 SBAR INTERDISCIPLINARY REHAB CARE PLAN OTHER BOX

SBAR

S: The Interdisciplinary Rehab Care Plan under the Nursing Goal tab for Safety Interventions in Cerner is missing an "Other" box for free-form individualized interventions.

B: CMS regulations for IRFs (Inpatient Rehab Facilities) state that all goals and interventions must be individualized to the patient and we are held accountable to this through random audits. Failing to meet the regulations can mean a financial reimbursement reduction. Currently staff are attaching comments to the pre-existing interventions for this specific category but this is very hard to see when we do audits and does not always make sense with the intervention they are attaching it to. The fear is that this will not be captured sufficiently in a financial CMS audit – especially if someone from our unit is not gathering this information to be sent to the auditor – which is common practice for HIM to gather these documents initially asked for in an audit.

A: It was missed in the original creation of this Care Plan because we had asked for "other" boxes for each item to allow individualized free-form.

R: An "Other" box be added to the Interventions under Safety for the Interdisciplinary Care Plan to meet regulations and match for continuity throughout the document.

CHIO COUNCIL DELIBERATION

Discussed live at the 25 February 2019 CHIO Council Live Session.

VERDICT

FURTHER INVESTIGATION REQUIRED.

Summary of Discussion: This entire PowerForm stack appears to be custom. We first need to do a full Cerner Model accounting – what does the Cerner Model version of this (if it exists at all) look like? Is it more appropriate that we adopt it (again, if it exists at all), as opposed to continuing down custom content creation?

If we are already in a Cerner Model-compliant state in this space, this becomes a more straightforward discussion: we certainly have these "Other" boxes elsewhere in other goals in that exact PowerForm stack so this does appear to be an oversight in that respect. However, the discussion of whether or not we are in a Cerner Model-compliant state, as always, takes precedent. Park of the CHIO Council is assigned to fully investigate and chart a path forward.

20190129 SBAR CARE MANAGEMENT POWERFORM

S: Union and Clinton Hospitals have requested changes and updates to the existing PowerForm known as "CM Discharge Planning". This PowerForm is currently used by all discharge planning acute case managers in the IUH organization. They have asked for several fields to have "last charted value added", additions of comment boxes to 2 yes/no/NA DTAs (*e.g.* 'assistance needed with medications') and adding "none" option to a few DTA sections that do not currently have a "none" option.

B: Prior to Union/Clinton conversion (11/2018), a redesign of the PowerForm was completed and built for go-live. After using the form extensively for the past few months Union/Clinton have asked for these additions/changes to improve their current workflow and documentation standards. The suggested changes have been mocked up by the CIS Population Health team and were reviewed by the statewide data tech committee serving the needs of all acute case managers for the system. Approval from the committee happened on 1/14/19.

A: The Acute Case Management solution was implemented statewide for IUH in 2/2018. At that time careful attention was placed on ensuring the build was to Cerner Model Standard. The CM Discharge Planning PowerForm is a Model PowerForm. However, Model does not dictate that LCV/None radio buttons or comment boxes would or would not be included. Many places in the PowerForm do have these items, but some sections were missing these consistently across the many form sections.

R: CIS Population Health team, Statewide Department of Integrated Care Management and Union Health CM stakeholders believe these changes would make a positive impact to the consistency of the documentation derived from the form. Having weeks of practical usage of the system and this form in particular have led to this request. We recommend that the build changes occur as requested in the attached mock-up for Cerner SR#3098878.

CHIO COUNCIL DELIBERATION

Discussed live at the 25 February 2019 CHIO Council Live Session.

VERDICT

FURTHER INVESTIGATION REQUIRED.

Summary of Discussion: We are impressed by several things in this SBAR. First a question: if this is a Model PowerForm, how was it redesigned prior to the Union/Clinton conversion? Was this simply the taking of the latest Model Experience content, or did we customize at this point in time? Assuming that this PowerForm is currently in a Model state (which is what we believe this SBAR is stating), we congratulate all stakeholders involved for (a) their restraint and (b) following the correct process. We are very well-poised to powerfully influence Cerner Model given our zeal in adhering to the Model Experience in all things, and this arena is no different.

This is therefore not a denial – it is a pledge to escalate this matter up the Cerner command chain for speedy resolution. As the requestor notes, there is an open SR with Cerner to begin with – and the requestor's SBAR appears reasonable for adoption by all Cerner ACM clients (or at least for consideration). Park of the CHIO Council is therefore assigned to drive this matter to resolution with our partners at Cerner / Cerner Model Experience.

20190201 SBAR SIP PEDIATRICS CERNER IMPLEMENTATION: RN QUICK ORDERS

S: During current state observation it was noted that all 5 SIP clinics are fully staffed with RNs. They do all well child visit documentation along with ordering immunizations via protocol before the physician even enters the room. When looking at future state workflow, the easiest way to enable this is for the RN nursing position to have access to the Pediatric Quick Orders MPage to be able to access all the well child immunizations care sets. AMB Nursing position would also benefit from the MPage: Future Orders to be added.

B: All nursing positions have the general Family Medicine Quick Orders which aren't relevant to the majority of ordering the RN Pediatric nurse's will utilize. Up to this point, Uplift has consisted of giving the specialty providers their own quick orders but haven't accounted for nursing protocol workflows. The nursing position also has MPages for adult charges and pediatric charges.

A: We have over 100 nurse's between the 5 clinics so it would be difficult to customize all Quick Order pages to include Immunization care sets and any other peds charges that would be useful.

Option(s)	Pro(s)	Con(s)
Option 1: Add Pediatric Quick	Will be much easier workflow for	Can't add every specialty's Quick
Orders to the AMB RN position.	finding correct immunization	Orders to one position.
	orders for appropriate age group.	
	No negative impact to CPOE/MU	
	because protocol orders are	
	excluded from the measure and immunizations aren't included in	
	the medication CPOE category.	
Option 2: Add Adult Immunizations	This aligns with the content	
& Child Immunizations to current	suggested for Model nursing Quick	
nursing Quick Orders MPages.	Orders MPages.	
marsing Quien er usis in agest	orders im ages.	
	Allows for ease of ordering	
	immunizations via protocol and	
	efficient use of Informatics time to	
	not help customize everyone's	
	orders.	
	No negative impact to CPOE/MU	
	because protocol orders are	
	excluded from the measure and immunizations aren't included in	
	the medication CPOE category.	
Option 3: Create AMB Nursing	Will be much easier workflow for	Added position for maintenance.
Pediatric Position.	finding correct immunization	Added position for maintenance.
rediditie resident	orders for appropriate age group.	
Option 4: Leave position as-is with	N/A	Will cause significant strain on
no Peds Quick Orders.	,	setting up personal Quick Orders or
		order favorites for 100+ nursing
		staff.
		Difficult maintenance that won't be
		kept up with.

R: Option 1 or 2. Family Medicine providers have General Family Medicine orders and Pediatric Quick Orders, so it would be nice to have all nurse's within Family Medicine and Pediatrics to have access to the same Quick Orders. The AMB RN position already includes Regular Quick Orders MPage, Adult Charges MPage, and Peds Charges MPage. This will be greatly beneficial with the future of Model Charging also when order workflow will have significant impact to revenue.

CHIO COUNCIL DELIBERATION

Discussed live at the 25 February 2019 CHIO Council Live Session.

VERDICT

DENIED / REQUIRES REWRITE.

Summary of Discussion: While this is an exhaustively written SBAR, it is also a poorly written SBAR. We are unable to understand whether the requestor means "Quick Orders" or "Future Orders", and there is haphazard reference to both of these disparate concepts throughout this request. It is also unclear as to where Cerner Model fully falls – and while the thrust of this current SBAR appears to be about immunizations (if we were to hazard a guess), the problem statement and the proposed solutions are by no means clear. The way this SBAR could be read, indeed radically differs depending on whether this is an ask for Quick Orders, Future Orders, or both!

We therefore require that the requestor rewrite this SBAR. We provide the *Annals* in part so that the community can know the difference in between well-written SBARs and poorly-written SBARs. As we have noted in prior editions of the *Annals*, we have long stated that there would come a day when poorly-written SBARs would be summarily denied. The time to operationalize those summary denials has now come.

We also understand the time sensitivity of this request. In that spirit do we point out the following: when time is of the utmost criticality, that is the point at which one must absolutely, positively, not cut corners. If something is worth doing, it is worth doing right, so that we might leave a golden and enduring example for future generations to follow.

In the meantime we have been performing an analysis of Model in this space. Model is the following:

- Ambulatory RNs, LPNs, and MAs share the same collection of MPage tabs (Workflow, Quick Orders, Demographics, Future Orders), but not necessarily the same position.
- Quick Orders content is client-defined.

Here Model currently ends. As for our own Quick Orders MPages:

- We currently have an Outpatient Pediatrics Quick Orders MPage, but this is only on Pediatrics Physician positions.
 - If this is the Quick Orders MPage listed on Option 1 of the SBAR, then it would indeed be an option to put it on the AMB RN position.
 - This is technically fairly easy.
 - This could lead to significant bloat of the position over time; one could certainly see a scenario in which there are so many different specialty Quick Orders tab on this single position that it would be un-navigable.
 - o It is certainly possible to add more content to the current AMB RN Quick Orders MPage.

- This SBAR suggests that addition of Adult Immunizations and Child Immunizations to the current AMB RN Quick Orders MPage would solve the problem.
- This seems reasonable *prima facie*, but are there other orderables that should be on the unified AMB RN Quick Orders MPage?

We will therefore look forward to the rewriting of this SBAR, with further detail. We will attempt to adjudicate that SBAR as soon as possible.

20190201 SBAR SIP PEDIATRICS CERNER IMPLEMENTATION: OP+IP WORKFLOW MPAGES

SBAR

S: SIP Pediatrics providers that work in the Ambulatory clinics also see their newborns in the Inpatient setting. Some providers always follow their own newborns and other providers take turn covering call in a week rotation basis for newborns.

B: General Family Medicine position have workflows for both OP & IP settings on one position for ease of switching to appropriate workflows depending on where they are seeing their patient.

A: Current Peds positions are set up to have a separate position for OP and a separate position for hospitalist newborn workflows.

Option(s)	Pro(s)	Con(s)
Option 1: Add hospitalist workflow	Easier for providers to access	
MPage to the OE: PC Provider Peds	documentation they need for their	
position.	patients.	
	Consistent with other positions	
	when the provider goes IP & OP.	
Option 2: Give these providers	Allows providers to still access both	Providers must manually switch via
MyExperience to switch between	workflows they need.	MyExperience.
the two positions.		
Option 3: Self Service.	The simplest technical solution in	Providers must log out, self-service
	some ways.	in, and log back in.

R: Option 1.

CHIO COUNCIL DELIBERATION

Discussed live at the 25 February 2019 CHIO Council Live Session.

VERDICT

FURTHER INVESTIGATION REQUIRED / REVERT TO CERNER MODEL

Summary of Discussion: This SBAR is one of several requests that are similar in spirit: the addition of other Workflow MPage components (or wholesale Workflow MPages) to a particular position. We have been asked to consider this particular request, and we have also been asked to consider a similar request for the addition of NICU

Workflow MPages for those outpatient pediatricians who sometimes also are attendings (primarily in the NICU of IUH North). While it is tempting to simply add MPages to existing positions, for every MPage tab you add you are asynchronously adding to the JavaScript load burden – thereby degrading user experience for every person in that position. There is, as in many other things, a balance to be struck.

We have therefore been doing an investigation alongside Cerner in this regard. In Model, there exists a single Pediatric physician position that spans both inpatient and outpatient care. It does have the Workflow MPages for Outpatient, Hospitalist, and NICU/Neonatology. Our build differs from this in that we have separate positions for Outpatient Pediatrics, Pediatric Hospitalists, and Neonatologists. Each of these positions have different settings, each with broad but not granular alignment to Model.

Cerner recommends that we revert to Model in the following, graceful, stepwise fashion:

- For the 3 Pediatric physician positions, add the "missing" Workflow MPages. For OE: PC Provider Peds, for
 instance, this would be the addition of the Pediatric Hospitalist and the NICU/Neonatology Workflow
 MPages.
 - o Build on this would initially amount to simply giving those Workflow MPages as tabs.
- There is a general recognition that this will cause an undesirable increase in upkeep for the positions.

 Transition these positions to the singular Model position.
 - This transition is a difficult one, because it can involve deletion of Favorites and other user-level settings.

Webber of the CHIO Council is assigned to put this plan into action.

20190205 SBAR GENETIC COUNSELOR CERNER POSITIONS

SBAR

S: Genetic counselors are currently listed in Cerner as AMB: Non-Certified Medical Assistants. As of 2019, Genetic Counselors are credentialed and considered Advanced Practice Providers (APPs). They need to be able to bill for their services at IU Health. They need to be able to create and sign notes as well as independently enter non-medication orders. However, the AMB: Non-Certified Medical Assistant role is hindering their ability to bill as APPs since this position is not enabling their recognition as billing providers. This position has the Clinic Support View Workflow MPage with no provider documentation components – only enables them to access DynDoc from the drop down menu in the Documentation component, and requires an Ordering Provider.

B: In the last year the number of genetic counselors at IU Health has grown considerably to meet the increased needs of patients. While genetic counselors are within the scope of their license and practice to serve as independent advanced practice providers (APPs) and bill for their services, only in 2019 have we made changes that enable these providers to more consistently bill across subspecialties using established CPT codes. As providers, they need to complete/sign documentation that reflects the outcome of these clinical encounters and place non-med orders. At present there is no Cerner position of "Genetic Counselor" and most counselors are in the "AMB: Non-Certified Medical Assistant" Cerner position. This position has hindered the ability for genetic counselors to bill for their services, sign their clinic notes, and enter non-med orders independently. The designation of AMB: Non-Certified Medical Assistant therefore is not accurately reflective of the roles/responsibilities and therefore is becoming a hindrance to billing, efficiency, and workflow.

A: Review of current positions done in CERT. Majority are listed as AMB: Non-Certified Medical Assistant. They do not have standard provider view; no access to a provider workflow MPage, no documentation components, no ability for independent order entry (not requiring an Ordering Provider).

R: Based on the limitations of the above assigned position, and due to the rapidly increasing number of genetic counselors at IUHP, we are recommending that a position of OE: Genetic Counselor APP be created in Cerner. This would include a provider view with a Workflow MPage and order entry non-med capabilities. This would solve the billing and workflow issues.

Model Recommendation from Rob Busch: there is no Model build specific to Genetic Counselors, so build using foundation of an APP role.

Genetic Peds/Adult Uplift is scheduled to begin April 1 but they would like this position built prior to Uplift due to billing and workflow implications. Based on history some ancillary providers are not in scope for Uplift so cannot assume they will be part of Genetics Uplift.

CHIO COUNCIL DELIBERATION

Discussed live at the 25 February 2019 CHIO Council Live Session.

VERDICT

DENIED / AWAIT UPLIFT.

Summary of Discussion: We applaud this group's wish to have an appropriate position, and to use Dynamic Documentation. However, during this time we do not have the engineering resources to do a build and redo that build a month later. From that perspective, we cannot authorize the new build of a position when one will absolutely be built in a month's time or so. Build of positions takes a large amount of time, and it would do both the Uplift Program as well as the Genetic Counselors a disservice to simply put a solution in that would not stand the test of time.

We are further concerned with the idea of utilizing an APP position as a base – doing this would generally give the resultant position privileges to write medication orders alongside the rest of the catalog. This is clearly not something that is desirable; furthermore, it would cause regulatory problems. Indeed, in our past experience (e.g. at Community Health Systems) we have experienced citations (from TJC <u>et al.)</u> due to such incongruities in between positions and their actual privileges. We know, therefore, that we must exercise maximum caution.

There is no question that the AMB: Non-Certified Medical Assistant role is inappropriate for Genetic Counselors; however, there is also a clear disconnect in between the outcome desired in the SBAR and the capabilities of the APP role within Cerner. Therefore, while the verdict from this Council is a denial at this time, it should not be read as a straightforward denial – we are all in agreement that in principle, having a position like this is the correct thing to do. Unfortunately, circumstance and the impending Genetics Uplift have made the decision clear.

As such, Webber of the CHIO Council is assigned (alongside Busch of Cerner) to drive this matter to closure, when the Genetics Uplift occurs.

20190207 SBARS FOR CERNER REFERRALS (SPINE PROTOCOL, SPINE SURGERY CONSULT)

SBAR 1: SPINE PROTOCOL

S: Patients seeking care within IUHP for back/spine pain can enter our system through a variety of different paths – primary care, primary care sports, PM&R, neurology, or orthopedics. As we strive to create a multi-disciplinary approach to spine care, we need to streamline our referral mechanisms by phone and within Cerner. Primary care physicians are asked to refer to a specific specialty vs. to a 'program' and we would like that to change in the future in order to enhance patient care.

B: The current referral process is based upon specialty specific silos of care vs. a programmatic model of coordinated care.

A: Current state does not allow for coordinated care. As we move toward centralized Cerner referral management, access standards across all specialties, and a programmatic model of care delivery, we need to ensure that Cerner is able to support this vision.

R: We would like to add a Cerner referral for Spine Protocol. This referral will flow to IUHP's appointment navigator team and/or to a nurse navigator who will have access to all specialty care providers participating in this program. This centralized approach will ensure that our patients are offered the correct provider based on clinical need as well as demographic preferences.

SBAR 2: SPINE SURGERY CONSULT

S: Referring providers are unable to differentiate order requests for Neuro versus Orthopedic Spine. The options within Cerner are "Neurosurgery Consult" or "Orthopedic Surgery Consult". Today, these referrals flow to different teams in terms of scheduling patients. As IUHP builds a neurosurgery department, we need to ensure that our spine surgery consultations are handled appropriately within the organization and that consultation orders are able to route to one team who will centrally support both departments from a spine program perspective. The referral coordinator will then assist the patient based on clinical need.

B: The current referral process is based upon specialty specific silos of care vs. a programmatic model of coordinated care. Historically, all spine care within IU Health was performed by Goodman Campbell. The Department of Orthopedic Surgery hired two spine surgeons in November of 2017 and they have been working without an Orthopedic Spine Referral option. This has hindered growth of their practices as many primary care physicians did not know that Ortho Spine was an option within the organization based upon Cerner referral options.

A: Current state does not allow for a primary care physician to refer a patient who needs a spine surgery consult to either Neurosurgery OR Orthopedic Surgery. As we moved toward centralized Cerner referral management, access standards across all specialties, and a programmatic model of care delivery, we need to ensure that Cerner is able to support this vision.

R: In future state, we would like to see the order type "Spine Surgery Consult" as an option for referring providers. Having this order type will more clearly delineate the Cerner referral order types for our referring providers, allow for more efficient routing of the referral for scheduling, and allow the patient to get to the most appropriate provider as quickly as possible.

VERDICT

ACCELERATE CERNER REFERRAL MANAGEMENT.

Summary of Discussion: We applaud IUHP for two very clearly written SBARs, which do indeed delineate the needs. These two needs are more similar than they initially appear, and it is worth noting that in our own consultations with Cerner, this highlights the need to (a) accelerate our course on adopting full Model in Cerner Referral Management and (b) utilize the actual sanctioned Cerner solution (which we have already paid for) instead of creating our own systems. Indeed we have now reached a point in our evolution as an IDN that our myriad building projects have exerted tremendous pressure on what engineering resources we have – and as such we cannot afford to build anything bespoke out for anyone, especially when a full-bore standard solution is coming.

Park, Webber, and Schaffer of the CHIO Council are assigned to work alongside the team currently exploring implementation of Cerner Referral Management. The imperative is to attempt to accelerate development of and deployment of that Cerner module, with the following guidelines:

- 1. Model and Model alone
- 2. Rapid deployment; Cerner notes that Referral Management is notoriously difficult to pilot and that the major benefit is seen in going all in
- 3. Zero design decisions that already have a Model answer

We are no longer in a place in our history where we can "kick the tires" and attempt to customize the solution to fit what we believe our needs are. When our system decided to aggressively expand, and to aggressively build buildings, this had consequences on all centralized units, including IS and Informatics. One of these consequences – clearly illustrated by the recent difficulties we have had with Portal – is that we shall henceforth only perform Cerner Model-compliant builds, no questions asked. We simply do not have the engineering or the Informatics resources to do anything more.

20190208 SBAR LRU_FREE_MAX_THRESHOLD

SBAR

S: DynDoc editor intermittently gives an error of "This page cannot be displayed".

B: CareNet has received provider helpdesk tickets reporting of the above error within DynDoc editor. After consulting with Cerner Solution Architects, it was identified that we do not have this preference that was introduced in 2015 code level set in any domain.

A: The cause of the DynDoc error is due to a preference (or, in our case, lack of this preference) called LRU_FREE_MAX_THRESHOLD. LRU stands for "least recently used". The system's memory usage exceeds the value defined on this preference which Cerner currently sets at 1.3GB as a primary memory limit with a max of 2GB in 2015 code and 128TB in 2018 code (the exponential leap is due to the transition from a 32-bit to a 64-bit codebase). The setting of this preference to 800 will allow the system to run an internal logic to clear unused views in the patient chart that are open but not currently active. The preference applies to open, inactive patient charts only; it does not affect the active patient chart you are currently viewing.

R: Cerner recommendation is to set the default reporting threshold to 800 as this is the standard by which windows session monitor Olympus timers (RTMS) report memory alerts.

- **Option 1:** We can set this preference as 800 at a position level and only set it for IS and Insider positions. This will allow us to monitor performance impact if we can get enough volume of usage.
- **Option 2:** We can set this preference globally as 800 and monitor performance with a backout plan of deleting the preference if unintended issues arise or performance is negatively impacted.

CHIO COUNCIL DELIBERATION

Discussed live at the 25 February 2019 CHIO Council Live Session.

VERDICT

APPROVED (OPTION 2).

Summary of Discussion: This one is a no-brainer. The lack of this particular setting causes insidious memory leaks that are widely reported as a source of frustration by our physician community. We will therefore take Option 2 at earliest opportunity, with strict monitoring and a backout plan. This should (a) have zero impact on any clinical workflow and (b) cause a nice bump in MPages performance.

20190211 SBAR RIGHTFAX FOR AMB: APP NAV (ANT) ROLE

SBAR

S: The IUHP Referral Services Team handled over 50,000 consults from our IUHP Primary Care Providers and Urgent Care facilities, in that there are timely tasks associated with printing pages of records in order to send information to other non-IU/IUHP practice locations.

B: As a result of volume and multiple steps to complete faxing, the following gaps and/or barriers were identified:

- Numerous amounts of time and effort related to refaxing
- Various stacks of packets that were faxed being held to prevent reprint and/or waste
- With a team of 15, multiple times of the day reams of paper have to be sorted in order to match up patient records that were printed in order to fax
- Delays in availability to fax, as there are 2 fax machines for 21 referral coordinators within the entire department

A: Data analysis shows the following:

- The team handled over 50,389 consults
- 10% of those consults involved printing and faxing records
- During an RIE we conducted a time study for the following steps:
 - o Time associated with sorting through pages of records
 - o Time associated with waiting for a fax machine to be available
 - Time associated with walking over to the fax, actually faxing the requests and awaiting confirmation

- Additional shred bins needed to support disposing of documents, which equated to additional costs
- In 2018, the team utilized more than 30 boxes of paper (more than 150,000 sheets) for printing, reducing the cost of paper could assist in being utilized for other office needs and/or the setup of a virtual printer
- During a RIE we also worked with multiple partners in IS and the Cerner team to trial different uses of technology that would help reduce referral steps and help increase productivity

R: Applying a modification to the Cerner role for the AMB: APP NAV role. This would allow the referral coordinators to send the necessary order, medication list, insurance card and clinic/testing notes associated documents to a virtual printer. In doing so, this will give the coordinators the ability to utilize RightFax. This modification and change will allow the team to gain efficiencies in their work and increase productivity. Testing was conducted to ensure that this modification would be beneficial.

CHIO COUNCIL DELIBERATION

Discussed live at the 25 February 2019 CHIO Council Live Session.

VERDICT

FURTHER INVESTIGATION REQUIRED / ACCELERATE CERNER REFERRAL MANAGEMENT.

Summary of Discussion: This is a poorly-written SBAR; the S section in particular does not delineate a situation (it provides background), and the exact modification being asked for is not laid out in the R section clearly. It appears that the crux of this request revolves around providing those in the AMB: APP NAV role to utilize RightFax – the root-cause problem here being similar to the root-cause problems highlighted in the SBARs on Cerner Referrals. The correct approach here, as with the SBARs on Cerner Referrals, is to utilize Cerner Referral Management.

This therefore devolves down into how much time it would take to enable RightFax and whatever other modifications were thought necessary to that AMB: APP NAV role (and again, those modifications are absolutely not made clear in this SBAR). If it takes more than a minimal amount of time, we do not have the engineering or the Informatics resources to expend on this effort. As we have noted on other verdicts on this docket, we have now reached the point where our system priorities (in expansions, building buildings and going Epic-to-Cerner @ Arnett) have trumped other concerns, meaning that resources for other build are now zero.

It is preferable, therefore, to accelerate Cerner Referral Management and implement it in a Cerner Model Standard fashion. This will be our ultimate path to solving this issue.

20190211 SBAR APHERESIS DEPARTMENT TO CERNER SCHEDULING

SBAR

S: The Apheresis department has been using a paper schedule to log patient appointments and maintain staff schedules. They would like to move to Cerner's scheduling application and discontinue using paper.

B: A number of weeks ago, the Director of Apheresis, along with the Apheresis staff, worked with Clinical IS and the Scheduling teams to have patient appointments and staff scheduling templates built in Cerner Scheduling. Initial training was complete. At that time, it was discovered that staff did not have access to the scheduling application for patient appointments nor the database tools to build and maintain the staff schedule.

A: To be able to use Cerner Scheduling and to maintain and edit their staff schedules, two positions (PathNet: BBT Manager and PathNet: BBT Apheresis) need access to the Cerner Scheduling application and the database tools, which would allow them to build and maintain their schedule templates. There are two other positions (PathNet: Pathologist and EV Phys: Physician Assistant) that have the Cerner Scheduling application icon already on the toolbar, but do not have access to the database tools.

R: Add the database tools to the PathNet: Pathologist and EV Phys: Physician Assistant positions. Add the Scheduling icon to the toolbar, along with access to the database tools, for the PathNet BBT Manager and PathNet: BBT Apheresis positions.

CHIO COUNCIL DELIBERATION

Discussed live at the 25 February 2019 CHIO Council Live Session.

VERDICT

DENIED / FURTHER INVESTIGATION REQUIRED.

Summary of Discussion: We applaud the fact that the Apheresis Department wishes to go all-in on Cerner Scheduling. The problem here is the ask for the database tools – in general, to give access to those database tools is to give unrestricted administrator access to the entirety of the Cerner Scheduling system, with all of the resultant pitfalls thereof. **That is not within Model.** We therefore need to make a careful accounting of the ask, the desired end effect, and what is possible with what we have.

Park of the CHIO Council is assigned to lead an investigation on this matter.

20190214 SBAR RESPIRATORY TO PLACE MIDLINE

SBAR

S: Union Hospital has requested a new inpatient order called "Respiratory to Place Midline". This order is to mimic the current order and functionality of the orderable "Respiratory to Place Arterial Line" currently used by the Union Hospital Inpatient Providers. Asking for this order, as this is within the scope of the Respiratory staff, however there is no ablility to document the written order within Cerner PowerChart.

B: The Union Respiratory staff will begin this new procedure starting the week of March 11, 2019. The new respiratory policy for midline placement for Union Hospital is being approved by a multi-disciplinary team at UN. IU Health currently does not perform this procedure within their respiratory department, hence this orderable has not been built within the IUH Cerner domain.

A: There is no comparable order within our Cerner platform that can be made viewable to satisfy the needs of UN. A comparable order ('Respiratory to Place Arterial Line') is available that could be mimicked for the build, including the setup of the Multi-Patient Task Lists, the Order Services, and Reporting. The midline access procedure is accessing the venous system, therefore cannot utilize the "Respiratory to Place Arterial Line" order. Cerner Model has the "Midline Catheter Insertion" order available, however Union is requesting a specific Respiratory Therapy order that includes clear delineation of the intended group performing the procedure as well as backend routing of tasks, prints, and reports. Within Cerner currently, UN staff have current ability to document the Midline

Placement and Assessment on the I/O Flowsheet and no changes are needed to that documentation functionality. Union Hospital is only requesting the ability to order this procedure in the first place.

R: Union Health stakeholders believe this change would make a positive impact in the ordering capabilities as well as allow the UN Respiratory team to move forward with this advanced procedure. This order is the last piece that will allow the team to process on this patient care.

CHIO COUNCIL DELIBERATION

Discussed live at the 25 February 2019 CHIO Council Live Session.

VERDICT

FURTHER INVESTIGATION REQUIRED.

Summary of Discussion: This is a strange matter, and we thank Union Hospital for having brought it to our attention. In the first place, it does not appear that "Respiratory to Place Arterial Line" is Model or Model-aligned. This raises a question as to whether we had built this category of orderables out incorrectly in the first place. Would it, for instance, be more Model-aligned to provide a drop-down menu of options in the Midline Catheter Insertion orderable instead (and, by association, similarly for the Arterial Line Insertion orderable)? Or is this a case where the fact that it would be preferable to have a separate orderable due to the fact that Respiratory may place Midlines only at Union at current?

This is worthy of further investigation. We will be performing just that investigation alongside Cerner. We are aware of the time pressure mentioned in this SBAR, and hope to deliver a speedy resolution for our client.

20 FEBRUARY 2019 (CIRCUIT-BREAKER DOCKET)

20190211 SBAR REFERRAL TO PHARMACY TO MODEL

SBAR

S: Medication Orders that are "hidden" in our Order Catalog will show as **Unavailable** during *Cross Encounter Reconciliation* that is planned to go live the week of 4/8/19. They will therefore not be converted to Inpatient Orders on the new encounter. To order a replacement for the unavailable orders, the provider is to select the 'resolve' action for each order. Current state, the resolve action will open the Convert to Inpatient pop-up box, which will not provide any appropriate options as these orders are "hidden".

B: Pharmacy and Therapeutics Committee has determined that some medications should only be ordered as PowerPlans so the single orderables have been "hidden" and cannot be ordered outside of a PowerPlan.

A: This creates patient risk as medications that were intended to be ordered for the patient are not available for inpatient orders on the new encounter.

R: Cerner recommendation is to enable Referral to Pharmacy functionality (allowincompletetopharmacy preference set to 4). This allows the Unavailable orders to be sent to Pharmacy as "incomplete" orders. At that time the Pharmacist can review the order and contact the provider if necessary. The pharmacist is then able to make appropriate changes to the order details or void the order and enter a new order.

This functionality will also eliminate the "Convert to Inpatient" box that presents to providers today during Admission Med Reconciliation when a match cannot be found in our formulary (e.g. Multivitamins or nonformulary medications). These orders would also be sent to pharmacy for clarification and entry if all required order details are present.

https://wiki.cerner.com/display/public/PhysicianExperience/PS0901+-+allowincompletetopharmacy

CHIO COUNCIL DELIBERATION

Override: Park

VERDICT

APPROVED.

Commentary by Park: This is a much-needed piece of functionality that is a critical blocker for Cross-Encounter/Transfer Reconciliation, which is a critical blocker for the Cerner Discharge project. This combined with the fact that it is a Cerner Model reversion makes it worthy of an override approval. As further commentary – override/veto verdicts are becoming more and more rare as our processes get better and better. The vast majority of the current docket of submitted SBARs have been adjudicated as not suitable for such circuit-breaker verdicts (as there is much more investigation to be done on them). This makes them no less important, simply worth saving for the next CHIO Council Live Session.

20190214 SBAR ORGANIZATION/ENCOUNTER SECURITY VS. DOCUMENT/MEDIA EXCLUSION

SBAR

S: In both the Cerner Behavioral Health project and multiple clinic implementations, we have run up against questions regarding the appropriate usage of the various security options that exist within Cerner. We are bringing this SBAR to the CHIO Council for a final adjudication of this matter on a strategic basis. This SBAR is of high importance because of the clinics that are currently going live, and because of the regulatory and patient privacy/safety issues that arise.

B: Cerner has four different kinds of security/access restriction in clinical data, of which one is definitively not recommended and two are so closely linked that they have to be done together. These options are as follows:

- 1. Organization/Encounter-Level Security: This is the oldest of all the Cerner security types, and the most straightforward. It disallows access to any clinical data *except that which is associated with the Person entity rather than the Encounter entity* [medication list, allergies, histories (social, family, procedure), demographics]. Of note, we are one of a handful of Cerner-deploying IDNs that do not utilize this option at all.
- 2. Security Levels: This is the second oldest of all Cerner security types, and is definitively **not recommended for use by Cerner**. We expect that Cerner will completely deactivate this security type in the future.
- 3. Document Exclusion Groups: This is the predominant form of clinical data security utilized on our IDN today. A Document Exclusion Group can be most easily conceptualized as a category of document that cannot be seen or accessed except by those roles that have the requisite security clearances to do so. Traditionally, in the PowerNote world this has led to gaps in security, as the Document Exclusion category had to be selected on a per-note basis (and if the wrong category was selected, then the note would be visible to all). We have two different Document Exclusion Groups currently:
 - a. General Behavioral Health
 - b. Psychotherapy
- 4. Media Exclusion Groups: This is not done at IUH, but is tightly interlinked with (3). The only reason why it has not yet been done at IUH is because this is a CareAware MultiMedia (CAMM) setting, and though we will be deploying CAMM globally for images this year, we have not yet deployed. When that global implementation of CAMM occurs, we would be building out Media Exclusion Groups that exactly mirror our Document Exclusion Groups.

A: Cerner Model resources were consulted, and a comprehensive analysis of our current Security build was performed. Findings are as follows:

- Due to our wide-open PRSNL_ORG_RELTN strategy, we are one of a handful of Cerner-deploying IDNs in the world that does not utilize Organization/Encounter-Level Security.
 - Traditionally, this is the kind of security used in multitenant (e.g. Cerner CommunityWorks) RHO domains to isolate individual clients from each other.
 - Given the implications on, well, PRSNL_ORG_RELTN, this option has almost unacceptably high performance impact.
- Although the list of options is convoluted, the Cerner Model recommendation is a straightforward choice in between Organization/Encounter-Level Security (hereinafter Option A) and Document+Media Exclusion Groups (hereinafter Option B).

- Cerner Model further stipulates that it cannot provide a molecular level of detail on this recommendation because regulations differ on a per-nation and per-state basis. However, in absence of such molecular detail their recommendation is a straightforward algorithm:
 - If regulations for a clinical service (and only regulations; no other reason is acceptable) require
 zero disclosure of all clinical data (emphasis being on all), then for those services utilize Option

 A.
 - If regulations for a clinical service (and only regulations; no other reason is acceptable) require
 zero disclosure of some but not all clinical data (usually narrative documents and images), then
 for those services utilize Option B.
- In our environment, there exists only one set of clinical services that have regulations that require Option A: Chemical Dependency Clinics (IOP).
- While we cover for General Behavioral Health and Psychotherapy separately, there are two other
 Document+Media Exclusion Groups that would be required by regulation: Child Abuse and Sexual Abuse.
 - An inpatient service covering matters of Child Abuse at Riley, for instance, would utilize the Child Abuse Exclusion Group.
 - Suzie's Place (which deals with Child Sexual Abuse) is an example of a service that would utilize the Sexual Abuse Exclusion Group.
- Document+Media Exclusion Groups (Option B) have significant performance impact, although not as high as Option A.

R: Revert to Cerner Model in this space in our domain. This means the following:

- For Chemical Dependency Clinics (IOP), build out Option A.
- Build out **Option B** otherwise, with two additional Document+Media Exclusion Groups (Child Abuse and Sexual Abuse).
- Utilize Workflow MPages on a per-role basis to make sure that the appropriate personnel are utilizing the correct Exclusion Groups with Dynamic Documentation (via Quick Links, et cetera).
- In the case of Suzie's Place in specific, **Option B** utilizing the Sexual Abuse Document+Media Exclusion Groups.
- In all things, **only build out what is required by regulations and by the law**. Both Option A and B have significant performance impact, and should only be done when absolutely required by the law, not by preference.
- Stick to all of the above points as the systemwide strategy for Cerner clinical data security/restriction going forward.

CHIO COUNCIL DELIBERATION

Override: Park

VERDICT

APPROVED.

Commentary by Park: There has been so much dialog that has swirled around this topic from the very beginning of time here at IU Health. Recently, we had a set of meetings with Cerner and its Model Experience team that were

initially confusing, and did lead to further opportunities for clarification. At the end of those clarifications, it did become clear that:

- 1. There indeed is an exact Model recommendation, but because of the way it was phrased it had originally been perceived as optionality on top of optionality.
- 2. This Model recommendation is something that fits well with what we currently have, with the exception of Chemical Dependency Clinics most of which operate on paper right now anyway.
- 3. This is an opportunity for us not only to take Model, but to help steer it in a more and more useful direction. **This is our major rallying cry** to "blindly" take Model but to help it get better.

This SBAR rises to the level of a circuit-breaker verdict because of the implications on clinics that are currently going live (primarily in the South Central Region). For the vast majority of them, **Option B** is the way we will operationalize unless regulations exist that force them to go on **Option A**.

28 JANUARY 2019

20180626 SBAR PAINAD

SBAR

S: The FLACC score is the current pain observational tool available in Cerner for the adult medical surgical and progressive care non-verbal patient population. This tool has not been validated as a best-practice assessment tool in this patient population.

B: In review of the literature, McCaffrey and Pasero wrote in their latest Pain Assessment and Pharmacological Management book (2011), "FLACC may seem like a good tool to use with older persons. However, the FLACC was based on children's development and has not yet been demonstrated to be reliable and valid for older persons" (p. 127). As evident by a met-analysis from the City of Hope Pain Resource Center, the PAINAD is the highest scoring tool for reliability and validity when assessing pain in non-verbal older adults. The PAINAD has been studied in adults in long-term palliative care settings (Van Lersel & Mullie, 2006). The American Society for Pain Management Nursing, Clinical Practice Guidelines for Pain Assessment in the Patient Unable to Self Report (2011) recommends the PAINAD as one of the tools of choice for adult end of life patient populations.

A: Current nursing policy and Cerner include the use of FLACC in nonverbal patients, which is preventing IU Health from providing the best care to their patients since it is not a validated tool. PAINAD is in Cerner Model.

R: Take the Cerner Model recommended build for the PAINAD scale and remove the verbiage in parentheses that says "65 years of age or older with advanced dementia" since the PAINAD pain scale is not limited to patients 65 years and older with advanced dementia. Also, add verbiage indicating that the FLACC scale is only to be used from 38 weeks gestation until adolescence if the patient is unable to self-report pain.

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

DENIED.

Summary of Discussion: This is not a straightforward denial, and it should not be read as a straightforward "no". The requestor has clearly done much legwork in ascertaining what the Cerner Model recommendation was, and should be commended for that. We unfortunately note the following:

- 1. As the requestor notes, FLACC is written into nursing policy as well as the EMR. We cannot simply approve an EMR change in the absence of a nursing policy change.
- 2. There is a systemwide initiative underway toward the standardization and rationalization of pain scales, and there is apparently much discussion about FLACC vs. PAINAD vs. other at this time.
- 3. No matter what the consensus reached by the systemwide initiative, a large-scale retraining and education effort would be necessary.

As such, this Council defers the decision to the ongoing systemwide initiative, and denies this request at this time due to this. Saysana and Ivory of the CHIO Council are assigned to come back from this systemwide initiative work with a final system verdict.

20181129 SBAR CHART XR FOR BMT COORDINATORS

SBAR

S: The IU Health Bone Marrow and Stem Cell Transplant Program needs to gain access to Chart XR to view and print the laboratory results generated by the IU HLA Lab. These HLA results are necessary to select the best donor for the recipieints requiring bone marrow / stem cell transplantation for treatment of their leukemia and/or other hematologic conditions.

B: The IU HLA Lab currently prints each Chart XR report, scans, and emails the scanned reports to the IU Health BMT Coordinators. The HLA Lab produces 10-20 reports daily and batches reports to email when possible. Each report is detailed and lengthy and it is imperative for all data to be communicated accurately. Coordinators cannot always access email during clinic visits and are at a loss when this critical information cannot be accessed in Cerner. The Chart XR reports are printed by the BMT coordinators so they can make notes on them and clinicians' decisions and patient treatment plans are based on the HLA Lab results.

A: Communication efficiency is of utmost importance when dealing with a patient suffering with a morbid and rapidly declining condition requiring treatment. The convoluted process currently in place is not efficient. Cerner is available to securely communicate the pertinent medical information the BMT coordinators need and would increase efficiency for both employees and patients. The information they need is not accessible in the HLA results within Results Review. The BMT coordinators that need Chart XR access are currently in the AMB: Oncology Nurse position. The solid organ transplant coordinators have had access to Chart XR since 2006 (per Janet LaFara); therefore it would also be appropriate for the Bone Marrow Transplant Coordinators to have access as well. We asked Rob Busch and Janet LaFara for their input from a Model standpoint, and both agree a new position needs to be built.

R: Create a new position for the BMT Coordinators that mirrors their current position (AMB: Oncology Nurse) with the addition of Chart XR access to HLA Indiana University and HLA IUH Methodist.

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

APPROVED IN PART / FURTHER INVESTIGATION REQUIRED

Summary of Discussion: This has been an ongoing saga. We first approved the request for BMT Coordinators to view HLA Reports as of 23 July 2018, only to find that it was still impossible for BMT Coordinators to see the detail in the HLA Reports. It does therefore make sense for BMT Coordinators to have Chart XR access. However, there are several questions that arise:

- 1. Do solid organ transplant coordinators have their own position? If so, how are Bone Marrow Transplant coordinators different?
- 2. Does it make sense for the AMB: Oncology Nurse position to have Chart XR access globally?
- 3. Is it truly Model for there to be a separate BMT Coordinators position in Cerner?
- 4. What other positions should have Chart XR access (per Model) that do not currently at IU Health?

Busch of Cerner notes that he is taking this for further investigation at Cerner. As such, Schaffer of the CHIO Council is assigned to drive this issue to closure alongside Busch of Cerner.

20181129 SBAR IMPLANTED DEVICES

SBAR

S: PAT nurses and hospitalists collect implanted electronic device information on paper for Anesthesia.

B: Currently, PAT nurses and hospitalists collect Implanted Electronic Device information on a piece of paper, which is then scanned into Cerner under the Operative / Implant Device Records folder in Clinical Notes. This information is viewed by Anesthesia and other providers on the day of surgery. The Device Rep phone numbers on the current form are for the entire state. The PAT RN calls the number and they get a call back from a local representative who then assists with determining if the patient needs a magnet and/or if a representative from the company needs to be present on the day of surgery.

A: Currently, the only similar build in Model is the "implants" tab within Histories. This change will increase efficiency in automating a process that is currently manual for scanning the document. Anesthesia uses this information to see what type of device the patient has; why it was placed; what mode it is in; whether it paces, defibrillates, or both; what happens if a magnet is put on it; how old it is and if it has been interrogated recently; and if an issue arises whether to expect a broken lead or a dead battery. This is information that is used across the system prior to surgery.

R: Since the system is looking at the patient's implanted device, add the "Implants" tab to Histories with the addition of other fields, such as date of most recent interrogation, reason the device was placed, "is the device an ICD?", "is the patient pacemaker dependent?", "will the surgery prevent a magnet?", "is it acceptable to place a magnet?", "what is the expected function if the magnet is applied?", "contact device rep name & phone number", and "is the device rep planning to be available in the pre-op area to adjust the device?"

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

DENIED / REVERT TO MODEL / FURTHER INVESTIGATION REQUIRED.

Summary of Discussion: It is indeed Model to have an "Implants" tab; however, it is not Model to have the additional fields requested in this SBAR. The need for further investigation here is clear, and it is paramount that we tackle this proposed change and any other proposed change in an absolutely Model-compliant fashion.

Schaffer of the CHIO Council is assigned to take up this investigation, and propose a final solution.

20181129 SBAR REMOVING AUTOMATIC DELAY SEGMENTS FROM PERIOP DOCUMENTS

SBAR

- **S:** The "Delays" segment is automatically turned on for some Periop Documents at IU Health, even when it is not needed.
- **B:** The "Delays" segment is automatically turned on for some Periop Documents at IU Health and there is often not a delay to document. Therefore, when this segment is on and not needed the staff have to right click to discontinue the segment.
- **A:** There is no Model recommendation for preference cards at a procedural level as they are tailored more to the facility's needs. That being said, Kyle Davis of IUH OR Solutions has spoken with Cerner; Cerner has stated that the "Delays" segment should be pulled in on an as-needed basis, not automatically on each Periop Document.
- **R:** Standardize the view across the system and remove the "Delays" segment from all Periop Documents within IU Health and make it so staff will pull in the "Delays" segment when it is needed.

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

APPROVED CONTINGENT ON RULING FROM ANESTHESIA CLINICAL COUNCIL.

Summary of Discussion: It will indeed be Model in the future for the Delays segment to not be automatically pulled in. However, we note that this is a change to clinical workflow. If the requestor is correct, it will likely be a welcome change – but we have had issues in the past where seemingly innocuous changes had widespread negative impact. As such, we would only proceed with a maximum of caution. The requestor is to bring this matter to the Anesthesia Clinical Council for a further ruling. If the Anesthesia Clinical Council approves, we will begin a widespread educational push, as such a thing will be warranted in this case.

20181212 SBAR ALLEGED CHILD ABUSE FORM FOR IN DEPT OF PUBLIC WELFARE

SBAR

S: Integrated Care Management (ICM) leaders at Riley Hospital currently use a manual method (Excel spreadsheet) for tracking the cases of suspected or alleged child abuse that they report to the state. Each month, the data is presented to Riley Senior Leadership, the Child Advocacy Committee (which includes Child Protect Team, Leadership from ED, Security and Legal) for review. ICM is requesting a more robust automated tool for gathering and tracking this data through the use of both the EDW and a PowerForm in Cerner.

B: The Indiana Department of Public Welfare report Alleged Child Abuse is a paper form that is filed. After the ICM staff complete the form, it is manually scanned into Cerner. At discharge (from either the outpatient or the inpatient setting), staff complete an internal paper form called the Data Sheet. They turn in a facesheet, copy of the 310, and the Data Sheet to the ICM leadership at Riley. A designee in ICM manually enters the data into Excel.

The inability to track patients with open cases of alleged neglect or abuse has also resulted in patient satisfaction survey calls mistakenly being placed to the parents after discharge, resulting in low scores and/or negative comments about the patient's care.

A: The Data Sheet contains demographic information, but also gathers information about the type of neglect, any delay in discharge, and the discharge disposition. Manually transcribing data from the paper form into an Excel spreadsheet presents a transcription error risk. An inquiry was sent to the EDW team to review any existing flags or problem/diagnosis codes available to gather this information. Aside from demographic information, the content necessary for tracking these cases and monitoring the patients as they come and go into the facility does not exist in the EDW.

R: ICM uses the Acute Case Management module in Cerner. ICM is requesting a PowerForm version of the Data Sheet used for tracking the department's work to notify the state of alleged neglect or abuse. Providing the ICM team with a PowerForm to complete at the time of filing the state paperwork will reduce the risk of manual data entry errors. The CIM team will also request a report to pull the data on a historical basis and send to the ICM team for their reporting needs.

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

APPROVED IN PART / FURTHER INVESTIGATION REQUIRED.

Summary of Discussion: Spaces like this are interesting due to the fact that Cerner cannot call a single entity Model – after all, 50 different states have 50 different regulations and methods for tracking. Minimally, however, we must partner with Cerner and lead them along the path of declaring that it is Model to **have** such tracking as a PowerForm in the first place (with the content of that PowerForm being left to a state-by-state interpretation). We are confident that Cerner would be happy to make that judgment – and so Webber of the CHIO Council is assigned to make the ask at the next Cerner Pediatrics Leadership Council.

In the meantime, there is groundwork to be done. In a world where Open Notes and things like the Apple Health API exist, you now run a danger of exposing data elements such as these to potential public view in a way that you did not before. The same is true of anything Behavioral Health, and of anything Reproductive Health in the teen population. Therefore, like most requests that come to the CHIO Council, this is not a request that can be fulfilled right away. We open ourselves up to a potentially catastrophic security failure if we are not very careful about the parameters with which future PowerForms of this kind are designed from the data layer on upward. We will therefore ask Clinical IS to roadmap this development for the future, especially as the Cerner Event Set Hierarchy is being remapped.

20181212 SBAR BABY STEPS TO HOME

SBAR

S: In 2016, the IU Health Neonatal Professional Practice Council (IUHNPPC) – a nursing-led council comprised of representatives from all IU Health NICUs – identified several inconsistencies in discharge teaching, including the number of relevant education documents available, when and how the education was provided, and the lack of ability of the nurse to accurately document education.

Currently, discharge teaching is based on each IU Health facility's own NICU standards of care or guidelines. The topics, materials used, and timing of the education varies from nurse to nurse and unit to unit.

NICU Education is currently documented in Cerner on the I/O / I-Flowsheet in the NICU Patient Education band. Education topics vary in location under the wide range of categories currently in Cerner, while some of the necessary topics do not exist at all for documentation. Current documentation makes it difficult to capture what has and has not been completed, resulting in missed topics, inconsistent teaching methods, and variable timing of teaching.

B: The IUHNPPC understands the wealth of information (diagnoses, medicines, patient care skills) parents need to learn on their journey to assuming responsibility for the care of their NICU child, and as such has begun the work of finding evidence-based education documents that align with the ideals and standards of the participating NICUs.

The discharge teaching module *Baby Steps to Home*, authored by the National Association of Neonatal Nurses (NANN), was chosen as an evidence-based, comprehensive resource. Implementing *Baby Steps* allows the nurse to more systematically and thoroughly prepare the parents for discharge. In this model, topics are discussed throughout the hospital stay rather than at the end. This evidence-based model has shown to help with the learning and retention of NICU parents.

The IUHNPPC has been reviewing Krames and IUH Custom education documents that will be used with the *Baby Steps to Home* topics, in order to standardize the education resources for nursing. Cerner build for this was actually in progress prior to the moratorium (August 2017). Steps 1-5 were built in CERT. Steps 6-10, except the reference text, were nearly ready for CERT build. Although Cerner build was placed on hold, work has continued on the resources that would be used in this model.

A: Although variation can be appropriate based on the individual patient needs, standard process and content are guides for better outcomes. Riley Clinical Informatics, NICU Educators, and Patient Education performed a crosswalk of NICU education and discharge topics available in Cerner Open House to the topics recommended in the *Baby Steps to Home* resource. Open House has topics arranged in 4 Phases vs. 10 Baby Steps. There are a few topics missing in Open House that may need to be added, such as Respiratory Syncytial Virus and some topic in the IU Health Your New Baby or Developmental Care handouts.

NICU Clinical Practice Council has approved the Cerner Open House **NICU Education – Discharge** band as a means to incorporate the *Baby Steps to Home* concepts.

R: Adopt the Cerner Open House NICU Education – Discharge band as soon as possible, rather than wait for the future Nursing Uplift I-View changes.

In Cerner on the I/O / I-Flowsheet:

 Adopt NICU Education – Discharge band to replace the Patient Education band for users in the NICU Profile.

- 2. Crosswalk the Model NICU Education Discharge DTAs to the NANN *Baby Steps to Home* topics and add reference text to each. The reference text will outline the approved IU Health materials to be used for the corresponding education topics, as well as the definitions of the Teaching Evaluations options.
- 3. Add the few DTAs/topics from Baby Steps to Home that are not in Cerner Open House (e.g. RSV)
- 4. On the NICU Education Discharge band, where Teaching Evaluation options are the nomenclature, modify to the standard options that currently exist for IU Health.
- 5. In Cerner Open House, Teach Back is under the DTA: Teaching Method. Remove Teach Back from here as it is really not a method but rather a means of evaluation.

It is the strong recommendation of the IUHNPPC to make modifications to the NICU discharge education process, referencing approved documents for each discharge teaching topic or "step" along the patient's pathway to home. Using a crosswalk from the NANN *Baby Steps to Home* model or the Cerner Model NICU – Discharge topics will provide the needed NICU education topics documentation. The NICU education can then be standardized across IU Health to provide evidence-based references to families, increasing nursing documentation compliance, increasing nursing confidence in providing education, and increasing the overall patient/family satisfaction at discharge.

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

FURTHER INVESTIGATION REQUIRED.

Summary of Discussion: We congratulate the requestor for a comprehensive and well-written SBAR. There are a few issues here that stopped us from giving wholehearted approval.

- In light of the impending release of the inpatient Cerner Model Standard Discharge Process, this radically changes what is possible in this state. A re-evaluation of what is possible should be made only after this is deployed.
- 2. The modifications that are being asked for should not be done without a full-on discussion with Cerner. When it is that Model does not meet our needs, it is no longer our stance to make modifications (even and especially the most well-intentioned); we will instead work with Cerner to figure out the best Model-compliant path forward.
- 3. We appreciate the IUHNPPC's zeal in wanting the NICU Education Discharge band. It is worth noting, though, that these Discharge bands (across the system, not just limited to NICU) have strong dependencies with the Cerner Model Standard Discharge Process and as such one should not be built without the other. Fortunately for us, we are steering toward a release of the Cerner Model Standard Discharge Process in March 2019.

We consider this an opportunity for us to do the right thing, for IU Health as a system and for Cerner as an EMR. This is extraordinarily exciting. Webber, Ivory, and Lovely of the CHIO Council are assigned to drive this investigation home in the most appropriate manner possible. We look forward to being able to roadmap this item with confidence in the future.

20181212 SBAR PROVIDER COLUMN IN MESSAGE CENTER POOLS INBOX CONFIGURATION

SBAR

S: We have started the process of moving all 46 of our offices to Cerner Model of 3 message pools per practice. As we do so, we need to standardize our work when managing these pools. In the offices that have large volumes of messages in their pools they put the PCP (care team provider) name in the subject line in order to sort to the provider first; however as we move to this new model we need the subject line to be very specific (*e.g.* Triage, FMLA).

B: Currently, when messages are created and sent within Cerner, staff members add the patient's PCP (care team provider) to the subject line in order to sort and prioritize messages. This is a manual process that reduces efficiency in the clinic workflow and fills up the space in the subject line.

A: Primary Care Messaging RIE team identified the need for all messages that are being sent to the pool to have a very clear and identifiable subject line. In some offices they need to be able to sort by their PCP (care team provider). This will allow for a different way to sort and meet the workflow for those pools that have large volumes in them. We are very concerned that we are at risk for not caring for our patients in a timely manner (with the possible overlooking of an urgent matter due to this). We are combining all patient needs together and will no longer have a Triage pool separate for patient symptom/clinical concern calls.

R: Enable the provider column that currently exists to be added to the Cerner user's inbox configuration to eliminate the need to add the provider's name into the subject line allowing clinical staff to easily prioritize, sort, and take care of patient needs quickly and effectively.

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

APPROVED / FURTHER INVESTIGATION REQUIRED.

Commentary by Park: Busch and I have taken this matter up for investigation; it is our understanding, indeed, that the functionality requested by the requestor is actually the way Cerner is supposed to work in the first place. However, our investigation of Cerner Model domains shows that (just as with IU Health) this is not the way the backend preferences are actually being honored (or not honored, as it were). Busch is therefore leading an investigation with Cerner to find out why this behavior might be occurring. We have already alerted the requestor as to this news, and we will keep the requestor informed and involved throughout the investigative process.

20181212 SBAR ALIGN PROBLEM MANAGEMENT TO MODEL ON REHAB POSITIONS

SBAR

S: Rehab positions enter their problems through a Problem control on their designated PowerForms used for clinical documentation and billing. The problems are entered under the Medical category, which in turn drives the problems to display on the global physician problem list.

B: During the Hospitalist MORE Uplift, one pain point discovered at most facilities during workflow analysis is that the Rehab problems are displaying (inappropriately) on the problem list as a Medical problem. This requires Hospitalists to edit the Problem List and/or delete the associated Rehab problem from their note.

A: Resources gathered from Cerner, Coding, and Rehab clinical leadership to review the current workflow. After determining Cerner Model and downstream impacts, entering problems under the Interdisciplinary category is Cerner Model and there is no concern from a reimbursement perspective.

R: Update the Physical Therapy, Occupational Therapy, Speech Therapy, and Rehab Management positions to default to the classicifaction of Interdisciplinary problems as Cerner Model recommends.

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

APPROVED.

Summary of Discussion: It is an artifact of a prior time in IU Health history that we allowed the Problem List to become this polluted over time. Indeed, no one other than physicians / providers are to be entering problems with a Medical classification. All others are to be entering problems with an Interdisciplinary classification. To do otherwise is to rob Dynamic Documentation of its power and its minimalism.

Schaffer of the CHIO Council is assigned to make sure that this change is (a) implemented as soon as possible and (b) implemented for all applicable positions, not just the ones mentioned in this SBAR. As we are transitioning entirely to Dynamic Documentation this year, it is of highest priority to get this change performed in our EMR.

20181212 SBAR SURGICAL SITE INFECTION PREVENTION

SBAR

S: In July 2018, Adam Karcz (Director, Riley Infection Prevention) coordinated efforts with an interdisciplinary group of clinicians to draft proposed revisions to System Infection Prevention Policy 4, Pediatrics: *Prevention of Pediatric Surgical Site Infection*. In August 2018, the proposed revisions were reviewed and approved through the SCR, WCR, ECR, Riley, and West Hospital P&T Committees. In September 2018, the proposed revisions were reviewed and approved through the System P&T Committee. In November 2018, the Prophylactic Antibiotic Reminder 're-dosing' alert in SurgiNet reviewed by Infectious Disease Clinical Pharmacists Michelle Kussin and Armisha Desai, and updates to the alerts proposed, based on System Infection Prevention Policy 4, Pediatric and Adult.

B: Infection Prevention team members have previously informed Pharmacy Team members that there is a prophylactic antibiotic reminder 're-dosing' alert in SurgiNet in place that needs to stay in alignment with information in the adult and the pediatric surgical site infection prevention policies/appendicies.

The prophylactic antibiotic reminder 're-dosing' alert in SurgiNet has been described to us as "when they document the prophylactic antibiotic there is a rule that starts a timer. When the time is up and the patient is still in Surgery, there is a pop up in Cerner that re-dose the antibiotic."

A:

- Change Metronidazole alert to:
 - < 18 years: reminder at 5.5 hours</p>
 - ≥ 18 years: no reminder
- Change Vancomycin alert to:
 - < 18 years: reminder at 5.5 hours
 ≥ 18 years: reminder at 9.5 hours
- Change Ampicillin alert to:
 - o Remove alert; NOT recommended for SSI prophylaxis at IU Health

R: Proposed changes to the prophylactic antibiotic reminder 're-dosing' alert in SurgiNet are listed below:

- For metronidazole, patient less than 18 years old: alert reminder at 5.5 hours
- For metronidazole, patient at least 18 years old: no reminder
- For vancomycin, patients less than 18 years old: alert reminder at 5.5 hours
- For vancomycin, patients at least 18 years old: alert reminder at 9.5 hours
- For ampicillin, remove SurgiNet alert

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

DENIED.

Summary of Discussion: This is a poorly-written SBAR, which confuses the purposes of every section and as a result addresses neither the necessity nor the informatics reasoning behind the approach. Furthermore, we have recently seen a large volume of requests to tweak or add alerts and while we are sympathetic to what we believe the intended outcome is, we are also well aware of the fact that we still are one of the highest-alerting Cerner builds in the world – and we have not seen an increase in quality with the volume of alerts we have. As such, we have been instructed by top-level IU Health leadership to question every single alert as it comes up for review – and retire every alert entirely if at all possible.

We thus require a total re-evaluation in this space. It is entirely possible, for instance, that we could use a pre-existing Stanson alert; that possibility should be investigated. It is also entirely possible that the pre-existing alerts either have or do not have efficacy as interventions — our dismal past history in alert implementation makes us inclined to think that there are nearly zero alerts in our system that have any efficacy at all. In the absence of the willingness to rigorously study the effect of alerts, we will deny every single request for alerts (or even alert modification that does not demonstrate a clear performance benefit) that come up.

At the same time we are sympathetic to the overall thrust of the argument that we think is being made in this SBAR. Webber and Park of the CHIO Council are assigned to drive this matter to closure. This is a matter, for instance, that must be brought before the Anesthesia Clinical Council. It is also high time to formalize and strengthen the ties between Pediatric P&T, System P&T, System Infection Prevention, and existing Pharmacy IS/Informatics governance groups (e.g. Pharmacy CIS) systemwide. We note that we are getting disparate and often conflicting requests from these multiple groups, and in this time of decreased human resources we are being forced to be judicious about where we direct our efforts. Indeed, in the absence of evidence of a unified approach, we will be forced to summarily deny all future requests.

20181212 SBAR ASTHMA ACTION PLAN DOC TYPE FOR HEALTHEREGISTRIES

SBAR

S: The IUH Quality Teams and CIS Population Health request a net new Asthma Action Plan document type to be built and added to the document hierarchy for the new MPage based Asthma Action Plan rendered document as well as the current PowerForm rendered document, so they can be mapped as satisfiers for HealtheRegistries.

B: Historically IUH has mapped unique document types to satisfy ambulatory quality measures through HealtheRegistries when the document itself is the expected satisfier for a measure or the document type will be used to scan unique test results. The Adult and Pediatric Asthma Registries contain a measure for Asthma Action Plan that expects the document itself to be created, printed, and supplied to the patient as the satisfier for the measure. Until the rollout of the new MPage, Asthma Action Plans have been completed through a PowerForm and the document has been rendered to the Asthma Assessment document type. When the new MPage process was implemented, they flowed this same document hierarchy process for the new rendered form, but this document type is not unique to Asthma Action Plans, so in turn cannot be mapped to satisfy the measures within HealtheRegistries.

A: Document types have been used to satisfy quality measures and HealtheRegistries measures. A few current examples are Colonoscopy, MM Mammogram Diagnostic, MM Mammogram Screening, and the recently created Indiana Tobacco QuitLine Smoking Cessation document. We evaluated the Cerner ESH Model Experience, and it appears this document is recommended to be built as Asthma Action Plan Note and is housed under the Progress Notes folder.

R: After review with IUHP Quality, AMB Quality Workgroup, AMB CIS, and CareNet, we believe rendering the completed document generated by either the MPage Asthma Action Plan or the Asthma Action Plan PowerForm to a unique Asthma Action Plan document type would be the best way to have this measure satisfied for quality and HealtheRegistries purposes, as well as follow Cerner Model for this type of documentation.

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

APPROVED.

Summary of Discussion: This particular SBAR is a high-priority ask, because of both the regulatory as well as the risk dollars that are involved. Furthermore, we have the opportunity here to "do things right" the first time around, as opposed to doing cleanup later on. This is a matter that must be prioritized, and while we are aware that there is intense ESH rebuild work occurring, this should be a matter that is put in its proper place now. Park of the CHIO Council is assigned to drive this work to closure in a timely manner.

20181212 SBAR DIRECT EMAIL ADDRESSES AND CERNER MESSAGE CENTER

SBAR

S: We are looking for direction and approval from the CHIO Council on the best known way to build and maintain Direct Email Addresses moving forward.

B: IU Health is expanding its use of interoperability and needing functionality to allow outside clinicians as well as our own clinicians to communicate between offices for transition of care documentation, referrals, and follow-ups.

A: Current state is that some clinicians currently have a Direct Email Address but not all. There is a need with the influx of electronic transition of care documentation and referrals to be able to easily and quickly send documentation securely to another provider or clinic.

R: We have two recommendations from Cerner and one IUH idea:

- Cerner Recommendation: Provision Direct Email Addresses to every user and build out Message Center
 pool routing rules by recipient and message type. This would mean that each individual user would have
 a Direct Email Address and could give that out to outside clinicians and when documentation is sent into
 Cerner the Message Center rules would drive it to either a Pool or the provider. Our current build
 supports this.
- 2. Alternate Cerner Recommendation: Provision a single Direct Email Address (naming convention could be to call it the name of the clinic) to a group of users (all members of the clinic). Then Message Center Pools could be created based on the one Direct Email Address and message type and routing would go to the clinic pool. IU Health's HIM department has used a variant of this for a few years now.
- 3. IUH Idea: Create a single Direct Email Address per clinic, similar to (2), associate the single Direct Email Address to a generic user account that does not have a username and password but is in a position with message center functionality. Message Center Pool rules would then be used back on that generic user and message type to route the message to the correct Pool. Union has an address like this for HIM Refusals.

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

APPROVE OPTION 1 (CERNER RECOMMENDATION).

Summary of Discussion: While Option 1 requires the most front-end work, it is also the cleanest and most Model-compliant from a maintenance and longevity perspective. When you create single Direct Email Addresses for

groups of people you run into large-scale consequence when a person leaves that group, or when a person joins the group temporarily (and you know that person will leave later). Furthermore, we have such heterogeneity of approach in this arena right now that we do not see Options 2 or 3 as being serious contenders at this time.

We recognize the complexities that may be brought by Referral Management; it may well be that there is room for hybrid approaches in the future. It is not, however, necessary to muddy the waters with unnecessary complexity now. The provisioning of 1-to-1 Direct Email Addresses has multiple benefits no matter what path we tread in the future; this should be considered a cornerstone of our future interoperability approach no matter what else may come.

Park of the CHIO Council is assigned to help the IUH Clinical IS Core Events team drive this effort to a satisfactory conclusion.

20181213 VASCULAR VENOUS ORDERS INDICATIONS AND CODESETS

SBAR

S: Non-specific or unspecified indications are often entered on vascular orders and result in IU Health being denied by insurance companies for reimbursement. Indications on the current list are not considered appropriate or payable by Medicare LCD guidelines.

B: Reimbursement for vascular exams occurs when an appropriate use criteria indication is used. The indications in the Vascular Venous Code Set for the Vascular Venous orders utilized at IUH does not list the terms identified as appropriate use indications which may result in denial for reimbursement.

A: Code Set 100652 is used for the Vasc Clarian Venous Indication field as a component of the Vasc Clarian Venous Order Format. This order format is used on four primary orders:

- VL Saphenous Reflux
- VL Venous Ablation or OR Guidance
- VL Venous Duplex Extremity
- VL Venous Reflux Plethysmography
 - Reflux Plethysmography has only been ordered twice in the past 2 years!

R:

- 1. Deactivate or filter out terms in Code Set 100652 that do not meet the appropriate use criteria and replace them with terms that do meet appropriate use criteria empowering providers to select appropriate indications for the exam.
- 2. Deactivate Reflux Plethysmography order since it is no longer used. See attached excel document for current and proposed indications.

CHIO COUNCIL DELIBERATION

Override: Park

VERDICT

APPROVED IN PART / FURTHER WORK REQUIRED.

Commentary by Park: We appreciate the effort to make sure that appropriate use criteria are met, and we especially appreciate the effort to deactivate tests that are no longer used. We do, however, need to make sure that (a) the entire system is aware of and approving of this work, and (b) we do not have untoward clinical, regulatory, or financial impact when we move forward with any initiative such as this.

Schaffer of the CHIO Council is assigned to take on this investigation and reach an appropriate conclusion.

20190122 SBAR HEART RATE AND PULSE RATE FIELDS

SBAR

S: The staff in Day Surgery are requesting for some way for the pulse from the pulse oximeter to pull into the I-Flowsheet via BMDI/P2DA like their other vital signs.

B: Currently, only the heart rate from an EKG pulls into the "Heart Rate" field in the I-Flowsheet for Phillips monitors, not the pulse from the pulse oximeter. The Day Surgery staff do not use the EKG leads on each patient; they routinely use the pulse oximeter. Therefore, the Day Surgery staff at UH have to open the Acquired Data band for each set of vital signs and document the pulse rate from the pulse oximeter manually while all other vital signs pull in via BMDI/P2DA.

A: After discussing options with Jeff Lane from the BMDI/P2DA team, he has said that the only way to resolve this issue is to have two separate fields. One for the Pulse Rate, which would pull in from the pulse oximeter, and one for Heart Rate, which would pull in from the EKG leads. Cerner Model includes "Peripheral Pulse Rate" and "Heart Rate Monitored" DTAs within the Vital Signs documentation.

R: Change our current "Heart Rate" DTA to "Heart Rate Monitored" and add an additional DTA for "Peripheral Pulse Rate". Then map the EKG heart rate to the "Heart Rate Monitored" DTA and the pulse oximeter pulse rate to the "Peripheral Pulse Rate" DTA.

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

APPROVED / FURTHER INVESTIGATION REQUIRED.

Summary of Discussion: This is yet another artifact of our convoluted past as a custom Cerner client. Indeed it is true – we are supposed to have entirely separate DTAs for Peripheral Pulse Rate vs. Heart Rate Monitored. The only question is – what further customizations have we hung from this initial customization, and what clinical workflows would we be breaking if we mandated this change today?

This is a good example of a seemingly simple ask that will have larger clinical consequences than intended. We do not shrink away from making such changes – indeed, where Model exists we have declared many a time we will do Model even knowing what the consequences will be. Such is the case here. However, we also must make sure

that (a) we standardize the foundations and the structures built atop those foundations as we approve initiatives like this, and (b) we communicate as aggressively and as often as possible.

Lovely of the CHIO Council is assigned to drive this matter to closure.

20190122 INFECTION PREVENTION CONTACT PRECAUTIONS POLICY CHANGE

SBAR

S: The System Infection Prevention Steering Team, which is made up of an Infection Prevention expert and Medical Director of Infection Prevention from each region, has made the recommendation to eliminate Contact Precautions for MRSA and VRE for all facilities **except Bloomington**. This change in practice has been presented and approved at the System Quality Council. This change will require a revision of the current Cerner rule that orders contact precautions on admissions for patients with an active resistant organisms long term alert. The planned date for implementation is 1 April 2019.

B: Patients in Contact Precautions have been shown to have less interaction with caregivers, increased depression and increased risk for noninfectious harm events compared to patients not placed into precautions. Over the last several years, there has been a growing body of evidence that demonstrates healthcare facilities, including large academic centers, have eliminated Contact Precautions for MRSA and VRE without increasing infections. In several studies, HAI harm events decreased with this change in practice.

Facilities that have eliminated Contact Precautions focused on reliable performance of horizontal infection prevention practices such as hand hygiene, standard precautions and patient hygiene. Inappropriate use of standard precautions is one of the greatest gaps identified by the IUH system IP team yet is the basis for team member safety.

A recent publication reported that after the elimination of Contact Precautions for MRSA and VRE, the facility found no significant change in the rate of infectious adverse event rate however they did find a reduction in the noninfectious adverse events by 72% in the patients with MRSA and VRE.

A: There is an upcoming practice change that requires amending the current Cerner rule for multidrug resistant organisms.

R: Edit the rule as follows:

- Drop MRSA, MRSA and VRE, and VRE from the current Cerner Rule for all sites except for Bloomington
- Once Bloomington comes onboard this practice change, remove the Bloomington exception

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

APPROVED.

Summary of Discussion: This is a well-written SBAR, and highlights the exciting practice change that is occurring. Furthermore, while initial modification of this rule will not increase performance, it will not decrease performance either – and will result in far less alerting of clinical personnel. We also look forward to being able to drop the Bloomington exception when the appropriate time comes. We ask our colleagues in Clinical IS to put this work on the roadmap to be completed by 1 April 2019.

20190123 SBAR MED-ALLERGY RECONCILIATION FOR INPATIENT NURSING

SBAR

S: Support electronic referral loops by receiving and incorporating health information is a Promoting Interoperability (PI) measure for eligible hospitals (EH) and/or Critical Access Hospitals (CAH) for 2019. Information can be received from a Summary of Care that is sent or from querying CommonWell. CommonWell will probably be the more common workflow to receive outside health information within the Inpatient setting. The 3 key data elements that need reconciled are Problems, Medications, and Allergies.

B: Inpatient nursing staff went live with Workflow MPage functionality last year. However, the ability to add/modify/reconcile from the component was not implemented at that time.

A: In order for the reconciliation to be captured within the PI reports for 2019, nursing needs to be able to perform the add/modify/reconcile from their Workflow MPage. Per Lizzie Dale (Associate Consultant, Care Delivery INA from Cerner), it is Model for Nursing to be able to complete these functions within the MPage workflow. The Mark As Reviewed functionality / workflow is something the Model team at Cerner is evaluating to determine if that functionality is still needed.

R: Implement the functionality to add/modify/reconcile on the nursing Workflow MPage for Allergies and Home Medications. It would be for those positions that were Uplifted and have the Workflow in place currently. This would work in coordination with the request from the Interoperability Team regarding Outside Records. This functionality will need to be turned on for Outside Records reconciliation.

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

DEFER TO CLIPBOARD STEERING TEAM.

Summary of Discussion: This particular SBAR fills us with excitement – this is the next critical step in our journey toward a truly open, truly patient-driven EMR. At the same time, we must note that the monolithic and integrated nature of our system means that dependencies abound. In this particular case – the major dependency is on Clipboard and Portal. The Reconcile function is not fully built out here at IU Health, and indeed the Home Meds component of Clipboard only goes live on 25 February 2019 – you cannot build out Add/Modify/Reconcile until that component has landed.

Fortunately for us, Webber of the CHIO Council is also the TC Leader for the Clipboard project. This matter is thus rightfully assigned to her for further work. Make no mistake – we are very excited to be giving this functionality to

Inpatient Nursing. Sequencing is simply very important here – and that sequencing will happen under Webber's guidance.

20190123 SBAR PROBLEM RECONCILIATION FOR PROVIDERS

SBAR

S: Support electronic referral loops by receiving and incorporating health information is a Promoting Interoperability (PI) measure for eligible hospitals (EH) and/or Critical Access Hospitals (CAH) for 2019. Information can be received from a Summary of Care that is sent or from querying CommonWell. CommonWell will probably be the more common workflow to receive outside health information within the Inpatient setting. The 3 key data elements that need reconciled are Problems, Medications, and Allergies.

B: Providers have been using the MPage workflow for some time. Problems is a component within the workflow currently and Histories is as well.

A: At this time, the Histories component is the only component that allows a provider to reconcile Problem data from an outside source. This is the only current functionality within Cerner and using the Histories component to review Problems is not in the providers' workflow. Per the Regulatory group at Cerner, the functionality is coming to the Problems component with MPages 6.12 and that is not scheduled to be released until 31 May 2019.

R: Implement MPages 6.12 as soon as IUH can to allow training time. Denominators can be monitored when the reports are ready in Business Objects and training can be done regarding the use of the Histories component prior to the MPage upgrade. However, the best workfl;ow for providers is to have this embedded in the Problems component. This would work in coordination with the request from the Interoperability Team regarding Outside Records. This functionality will need to be turned on for Outside Records reconciliation.

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

APPROVED / FURTHER INVESTIGATION REQUIRED.

Commentary by Park: This is indeed part of the reason why we have fully disambiguated MPages upgrades from Cerner Code Upgrades. For instance, we are currently on MPages 6.10 and on Cerner Code 2015.01.26 – and normally we would have gone to MPages 6.10 at the same time that we went to Cerner Code 2018.01.04 (on 10 February 2019). The CHIO Council is in widespread agreement that we should fast-track the installation of MPages 6.12, even if this means skipping the MPages 6.11 release. Furthermore, the CHIO Council is willing for us to take some risk by becoming Testing Partners, so we can take MPages 6.12 as soon as possible.

There is of course a risk to doing this. Whenever we go Testing Partners, we are accepting some amount of bugginess. However, it should be noted that we were briefly Testing Partners for MPages 6.10, and the critical bugs in PowerChart Touch had not been discovered until we came around – and indeed MPages 6.10 became Generally Available with those bugs intact. This is to say that we might as well go the Testing Partners route, as we appear to discover unique bugs due to our unique dependence on Workflow MPages and PowerChart Touch.

Park of the CHIO Council is, of course, assigned to drive this initiative to closure.

20190124 SBAR DIFFICULT AIRWAY ORDER AND SMARTZONE ALERT AT NORTH

SBAR

- **S:** At IUH North, there is no way for providers to be made aware of adult patients that have had a difficult intubation. There is a Difficult Airway Form where this can be documented, but it does not alert the provider.
- **B:** There was originally a notification that displayed on the Banner Bar that was created from the same Difficult Airway Form as of October 2018. When the Banner Bar was updated to Cerner Model, this alert was removed and the SmartZone Alert replaced it, but only for Riley, Riley North, and Ball (adult and pediatrics).
- **A:** There is a current Difficult Airway Order and SmartZone Alert that is set up for Riley, Riley North, and Ball. Dr. Paul Calkins (CMO, IUH North), Dr. Laura Pesavento (Section Chair, Anesthesiology and Surgery, IUH North), and Dr. Robert Spech (Intensivist, IUH North) have all requested that the Difficult Airway Order be viewed and the SmartZone Alert be turned on for IUH North.
- **R:** View the Difficult Airway Order and turn on the SmartZone Alert for IUH North. Provide education to Anesthesiologists, Hospitalists, and Intensivists.

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

APPROVED AND EXPANDED.

Summary of Discussion: This is a model that has by now been thoroughly tested, and deserves to be spread systemwide. We are pleased that the CC leadership of IUH North has stepped up, and will certainly comply with their ask. However, we will also be gearing up to activate the Difficult Airway Order and the SmartZone Alert systemwide, with a requisitely aggressive education and publicity campaign.

20190125 ADMISSION DOCUMENTATION ON CLINICAL LEADER ORGANIZER (CLO)

SBAR

S: The 'Admission Documentation' column on the Clinical Leader Organizer (CLO) is pulling results for previous encounters into the column. This gives a false indication/visual cue that a Nursing Admission History PowerForm has been completed on the current encounter.

B:

A Nursing Admission History is required to be completed for each admission by the Indiana State
Department of Health, the Centers for Medicare and Medicaid Services and therefore The Joint
Commission and other accreditation organizations.

- More importantly, completion of the PowerForm activates appropriate ancillary services and supportive care for the patient and family.
- The 'Admission Documentation' column was implemented per Cerner's recommendation as a visual cue
 to support individual nurse and unit level accountability for completing this form on every patient, every
 time.
- All other columns on the CLO are set to and only pull from the current encounter.
- This column is set to pull only PowerForms from this encounter; however, there is a defect for this column whereby this column does not honor the 'current encounter only' build. This defect was not obvious during testing and was not discovered until PROD implementation.

A: We validated the column in set to pull in only forms completed for the current encounter and submitted an SR to Cerner. Cerner's response was that this is a known defect with no immediate fix available. We reached out to the Cerner Senior Solution Strategist who has shared that there will be no fix for this until MPages 6.12 and 6.13. 6.12 is due to be published September 2019 and 6.13 is due to be published December 2019.

R: We recommend the column be removed from the CLO as quickly as possible to eliminate the risk of not completing this key documentation for each patient on each encounter. Our Cerner Healthcare Executive and the Cerner Senior Solution Strategist also make this same recommendation. Our Cerner Healthcare Executive continues to advocate with her leadership on the importance of addressing this defect as soon as possible versus waiting until Q3/Q4 for resolution.

CHIO COUNCIL DELIBERATION

Override: Park

VERDICT

APPROVED.

Commentary by Park: This unfortunate circumstance is a true no-choice scenario. Furthermore, it points out another very good reason for disambiguating the MPages upgrades from the Cerner Code upgrades. We of the CHIO Council do believe that going Testing Partners for MPages 6.12 is the correct approach, even if it means skipping the MPages 6.11 upgrade altogether. This particular SBAR is simply more fuel for that particular fire.

20190125 SBAR TRAUMA FLOWSHEET NURSING

SBAR

S: Registered nurses here in the Emergency Department of Methodist Hospital are required to document many findings related to trauma cases that present to the ED. This is accomplished by completing documentation on the Trauma Flowsheet Nursing – Level One PowerNote.

B: The Trauma Flowsheet Nursing – Level One PowerNote was created to ensure that Methodist Hospital meets/exceeds the regulatory requirements needed for Level One certification. Cerner does not currently have a solution to capture the data. Therefore changes are requested to ensure that Methodist Hospital remains compliant with the regulatory requirements to meet/exceed Level One certification.

A: Three areas in the current PowerNote need to be updated. A screen print of these areas is attached for reference.

- 1. *Trauma Surgeon:* The current list is out of date. List needs to be updated to match current surgeons here at Methodist hospital. Metrics are pulled around each surgeon to ensure compliance is maintained with each surgeon.
- 2. Level One Criteria: Currently this has 2018 criteria; it needs updated to 2019 criteria.
- 3. Level Two Criteria: Currently this has 2018 criteria; it needs updated to 2019 criteria.

R: In order to meet regulatory requirements and continue with our Level One Trauma certification, it is recommended the above changes be made.

CHIO COUNCIL DELIBERATION

Discussed live at the 28 January 2019 CHIO Council Session.

VERDICT

PROVISIONALLY APPROVED / FURTHER INVESTIGATION REQUIRED.

Summary of Discussion: At this late hour, we should not and will not be encouraging the usage of PowerNotes, especially to meet regulatory requirements. It is absolutely required that we maintain our Level One Trauma certification, so we need to have an absolutely appropriate solution here – this will likely mean transitioning to a PowerForm. We are also sensitive to time pressures here.

As such, Schaffer and Lovely of the CHIO Council are assigned to perform the further investigation, and recommend a final (non-PowerNote!) solution. This solution will have to be prioritized once approved.

20190128 SBAR PHARMACY CONSULT NOTE RESEQUENCING

SBAR

S: Pharmacists working in the Clinical Specialist role are often asked to consult on dosing levels for medications. They utilize the Pharmacy Consult Note that is attached to the IP Workflow, and they are the only ones that use this note type.

B: During the Pharmacy Uplift the group was not sure exactly what was needed for the note. They discovered as soon as they started to utilize the note that they needed to re-sequence the Pharmacokinetic Data Section and Header. This way, the Assessment and Plan are below the Global Autotext that drives the assessment.

A: This is all within Cerner Model and supports a pharmacist's workflow.

R: Allow for the re-sequencing of the Pharmacist's Consult Note such that the Global Autotext for Pharmacokinetic Data is sequenced prior to the Assessment & Plan.

CHIO COUNCIL DELIBERATION

Override: Park

VERDICT

APPROVED.

Commentary by Park: This is indeed the correct thing to do, and within the spirit of both Model and the Uplift Program. That being said, we are appreciative that the requestor brought this SBAR forward to the CHIO Council for deliberation. We are pleased to give this request full-fledged approval.