Rob: … the title, The Practical Approach to Working with VA-Purchased Community Care Data. I’m going to turn things over to our presenter, Erin Beilstein-Wedel – and I hope I didn’t mangle your name too bad, Erin. Can I turn things over to you?

Erin Beilstein-Wedel: Yeah, sure. Thanks, Rob.

Rob: All yours.

Erin Beilstein-Wedel: Okay. So, as Rob mentioned, my name is Erin Beilstein-Wedel. I am an analyst at the Boston VA for the Choir Coin and I’m also an analyst for the CREEK Data and Measurement Science Hub, and CREEK is basically the coordinating organization between IVC and researchers.  
  
So, who is this taught for? It’s kind of broad. It’s for both investigators and analysts because we all have different roles at different points in time; those who have been told to pull community care data or those just that want to assess how difficult or easy perhaps using community care data might be for you and your project, and those who want to know what to put into a grant. So, what kinds of data sources you can maybe reference, if you may be concerned about fields or merging your data onto other domains, what kinds of things should we look for. And also, like concordance to media sources for community care.   
  
And I will just say, as I’m sure all of you know, that the VA purchaser community care data landscape is in flux and it’s often changing and that makes it a little difficult to stay ahead of it but we try. And all the statements and the missions in this presentation are my own, mostly because it’s always changing.   
  
So, today, I’m going to give an overview of what community care data is and then, I’m going to specifically focus on claims data sources, and de-duplication with claims and then, looking specifically at, I guess, like the three newer data sources; PIT, which is already on the DART, and then, CCRS/eCAMS, which are in the process of being added to the DART.  
  
So, what is VA-Purchased Care or community care? I’m very bad at saying, “VA-purchased,” so, I will probably just say, “community care,” for the rest of the presentation. But it’s care that’s paid for by the VA but delivered by providers outside of a VA facility. So, it takes place in hospitals in the community and doctors’ offices and the providers can be VA – people who work at the VA but they’re working at therapeutic intervention academic affiliate, for example, or DoD providers or any health service providers or providers who have no affiliated with the VA or the federal government.  
  
The Office of Integrated Veteran Care (IVC), formerly the Office of Community Care, oversees VA-Purchased Care. And in contrast to VA-Purchased Care, community care, VA-provided care is care delivered in a VA healthcare system, usually at VA facilities.  
  
So, just to kind of orient everyone, this is kind of my schema for thinking about community care data and how it’s organized. So, there are four general buckets; there’s consults, which we have in the VA. But then, there’s referrals, which are a step beyond consults. So, that’s where the veteran, it gets determined whether they’re eligible to go out to community care and like the SEOC, which is the Standardized Episode of Care, is selected.  
  
And then, so, they have a consult. And then, they get referral at community care. And then, they go and see that community care provider. And then, that community care provider submits claims so, that’s how providers get paid for the services that they’ve provided to veterans.   
  
And so, there are different kinds of claims; there’s institutional, professional, dental, prescription, and durable medical equipment claims. And so, once those claims are submitted, they come into various systems from the VA and then, we pay them after we adjudicate them or we don’t pay them. Usually, we tell them that there’s something wrong with their claim and they may resubmit the claim or they may not resubmit the claim.  
  
So, that’s kind of like the four buckets of community care data that we have at the VA. And I’m going to focus specifically today on the claims data because that’s usually what people want to use when they’re looking at things like utilization and who had what procedures.  
  
So, what exactly is claims data? I kind of gave you a general overview earlier. But it’s forms-based so, if you’ve worked with CMS data, you’ve worked with data that’s very similar to what we have in the VA. So, it’s either usually on a HCFA or CMS 1500 for professional claims, or a UB92 or 04 or CMS 1450 for institution claims. Those are usually what people think of as like inpatient claims, although that’s not quite correct.   
  
And the submissions are not electronic, which is wonderful, but they haven’t always been. So, when claims were initially being submitted, they were on paper and being scanned in via optical text recognition, which caused some interesting data quality issues. If you’ve ever used ORC, you probably know what I’m talking about.  
  
But claims identify when services were provided so, what kinds of procedures were provided, what kind of room was the inpatient staying in.   
  
They identify when services were provided and who provided the services so, which doctor, which hospital were the services provided at.   
  
And who the services were provided to so, what veteran or veteran dependent received the services.  
  
So, this is an example of a UB92 so, you can kind of – they’re hard to see and they’re hard to find online, these paper claims forms. But this is the form. And up here is usually where you have like – at the top, you have the patient name. And then, in the middle, you have a whole bunch of procedure and diagnosis lines.   
  
And then, similarly, on the HCFA forms, there’s an area for the patient’s name and address, Social, and then, an area for all the diagnoses and procedures on that claim.   
  
So, these – going out and looking at these claims or looking at the slides and the examples that I’ve provided is kind of helpful for orienting yourself around what kind of data you might find in this claims data in the VA, although the feeling is that the data might very well vary.  
  
So, the claims data structure in the VA; there’s usually a table, or tables, for the claim header. So, that is – contains information that is on almost every single claim. So, the person usually that the claim was – or that the care was provided to; usually, some sort of a date for when the care was provided, although you might not want to use that date, depending on what it is; and then, like usually some sort of like service facility so, where was the claim coming from, like what provider gave care.   
  
And then, when you step down to the next level at the claim level, our tables are usually, but not always – split into professional or institutional claims. So, those tables usually contain data specific to the kind of claim. So, for example, institutional claims usually have a type of bill that tells you the kind of care. So, that is one way to determine the kind of care received whereas professional claims usually have a place of service code that tells you if it’s like outpatient or at a pharmacy, those kinds of things.  
  
And then, there’s usually a claim line or a claim line detail table. There’s where usually the procedures are stored – are on that claim.   
  
So, this is kind of like the overall claim structure, the general claim structure, for data structure for claims in the VA.  
  
So, as I’ve alluded to, VA has multiple claims data sources a few of them – four – three of them are on the DART and there’s another two coming. So, what are you supposed to use? What are you supposed to say that you’re going to use in your claim? It can be complicated, to say the least.  
  
So, some considerations for selecting a claims data sources; the different sources cover different time ranges. There’s different sources of claims like primary versus secondary source, which I’ll get into a little bit more. And then, just ease of use. So, those are just some things to consider.  
  
So, in this table on the left-hand side, I have, I think, all of the claims data sources that are available to researchers on the DART except for the last three; so, CCRS, eCAMS are coming, and CDS is in process but further back.   
  
And in the second column is the claim time range. So, I went and I looked at what service dates were in these different systems. So, you can see that FBCS ends in 2019. They just kind of stopped it. That’s because eCAMS took over. And then, almost all the rest of them are current, or they have claims up to the current date, but they may not contain all the claims that you might want.  
  
And then, we have recently noticed that, for example, MedSAS, you use MedSAS as the fee tables, contain claims for the Plexis system. But for example, Fee does not contain those and nor does CCRS or eCAMS. But PIT does also contain like the Plexis claims.   
  
So, if you know what Plexis claims are and you really want to use them or you really want to be thorough in counting everything, then you probably want to check off PIT and MedSAS on your DART.   
  
CCRS is community care claims post-MISSION so, it stood up along with MISSION.   
  
And eCAMS is similar associated with MISSION but it’s non-network claims. It is the thing that replaced FBCS.   
  
And then, CDS is in process. IVC is currently still building it. But it should have all claims from all systems, which will be wonderful. It will make me so happy.  
  
And then, some of these are considered primary or secondary sources. So, PIT and CDS are both secondary sources that claims aren’t directly going into them from providers. You have to be careful using that, and I’ll talk about PIT – the issues with PIT – a little bit more later.  
  
So, I know this might be a little hard to see. But this is a breakdown of the number of claims in each system by claim type. So, at the top, we have CCRS institutional claims and you can see them starting to tick up around 2019; and then, CCRS professional claims, they’re also ticking up around 2019. Same thing with eCAMS and the eCAMS institutional.   
  
But you can see that the FBCS tables plummet pretty greatly in 2019, and same thing with the graph on the bottom, which are – that’s out of the Fee service provided table. So, while there are still claims in Fee, both an inpat invoice and Fee service provided. The number of claims there has gone down significantly. So, you can use Fee but you might want to also consider using PIT or eCAMS or CCRS may come online.  
  
So, PIT. I think a lot of people are using PIT still PIT is a program that is meant to detect fraud, waste, and abuse. A whole bunch of business rules spill into it. And that is like its main focus.   
  
So, IVC highly recommends against using it – I just want to make that clear. But it is the only way to access claims from some systems. So, right now, it’s the only way to access Plexis claims and CCRS/eCAMS claims until those come on the DART. And I think people like using it because it is kind of a consolidated system. Like it has FBCS claims in it, also.   
  
So, I would say that you should use PIT cautiously until CCRS/eCAMS come onto the DART. And you should also kind of like understand why you’re using PIT so that you can rethink those reasons as time goes on and the systems change.  
  
So, as I said, use CCRS and eCAMS when they come onto the DART, and use CDS when it comes onto the DART because that will probably replace PIT and be like the easy, all-combined system for everyone. It also shouldn’t have multiple resubmissions in it, which will be very nice.   
  
And if you can wait for CCRS/eCAMS and you have the resources to learn them, then, do so. Otherwise, you know, keep using PIT. And if you can wait for CDS, then do. But because they’re still building it, you’re going to have to think about how long that might be. I think right now, it’s been four months since we initiated the process to get CCRS/eCAMS on the DART and they’re still in process. So, CDS will be a while.  
  
And I will say that CCRS/eCAMS – and I’ll talk about this towards the end of this talk – their structures are different from each other and they’re different from PIT. So, and obviously, different from Fee. So, there’s always a cost to using the data in terms of time [interruption]…

Rob: And I’m sorry; we have a couple of questions that might help clear things up early on. One person is asking if you could mention the schema in CDW of the specific sources, if available – if applicable.   
  
And another person asks; What is Plexis?

Erin Beilstein-Wedel: Plexis has a lot of dialysis claims in it, if that helps. If you’re not interested in dialysis, then, you know, you’re probably okay, for the most part, not using it. But if you are interested specifically in dialysis, then, you’ll probably want to use a source that contains those claims.

Rob: Sorry to have interrupted; I just thought it was important.

Erin Beilstein-Wedel: No, you’re fine.

Rob: Thanks.

Erin Beilstein-Wedel: Yeah. And then, the schemas are essentially what’s listed on the data source page so, the Fee is under the Fee domain. MedSAS is only in MedSAS on the SAS grid. But if you use SAS grid and you have access to it, you should be able to find it.   
  
FBCS is only on AO6 or if you get a provision to your ORD, then, it’s under FBCS as the schema. And then, there’s the PIT schema, CCRS schema, the eCAMS schema. That’s what they are on AO6 CCRS and eCAMS. I assume that’s what they’re going to be when they get moved over to the RBO servers. And then, CDS is – should remain CDS but we’ll see if that name sticks in terms of schemas as it gets really stood up. I hope that that helped answer people’s questions.  
  
Now, I have to find where I – thanks, Rob, for pointing those questions out to me.  
  
So, because there’s so many systems and PIT being a secondary system, there’s duplication of claims for various reasons. So, you might have duplication in your data if, for example, you were looking for a procedure that was submitted both as an institutional and a professional claim. So, for example, I looked at knees – total knee replacements – and there’s often an institutional claim submitted by the hospital but, also, sometimes a professional claim submitted by the operating surgeon. So, if you stack those on top, they might become duplicates and so, that’s something to be aware. How you might want to handle those depends on what you’re measuring.  
  
There’s also multiple claim submissions or resubmissions. So, if the claim got denied and the provider resubmitted it, then, you will potentially see them in there multiple times; two, three, ten times. It can be a little interesting and difficult to sort through those. But that is the reason why you might see duplicates, or things that look like duplicates.   
  
There’s also, if you’re using multiple systems, the dates can be slightly different between systems. So, if you’re comparing claims in Fee and FBCS, for example, sometimes the dates are a little off because FBCS is a primary system and Fee, because it’s a VISTA system, someone was inputting that data so, the dates might be slightly different. And there’s some processing that happens behind the scenes with Fee, also, to sort claims. So, the dates just might be like off by like a day but everything else in the claim might be the same.  
  
And then, of course, if you’re looking across like all of the systems, then, PIT has most of the Fee and FBCS records and it has the CCRS and it has eCAMS. So, if you’re looking in multiple systems and you need to kind of think about how you might want to de-duplicate or – or, better yet – avoid duplication if you can at the beginning.   
  
So, some methods of de-duplication are to only include paid, accepted, and approved claims and current claims so, current flag equals why. In PIT, people use that pretty often. However, they don’t work well with CCRS claims at all. So, that’s something to be careful and aware of.  
  
And I think looking in FBCS, if you just select records that have a payment amount on them, that’s also a way to count the current flag in PIT to get around having duplicates.  
  
If you want to de-dupe between sources, the claim ID, which the field varies across the tables – and I’ll talk about that in a few slides – that is a good way to make sure that you’re just pulling the same claim but only from one system or getting it from a system you want instead of having like four rows for the same claim ID and then, wondering why your counts are off.  
  
And then, they can also de-dupe between or within data sources by patient and procedure. So, did this person have a cataract surgery? Or did they get this kind of a lab? You just want yes/no; then, you can de-dupe by patient or procedure after you have all your data pulled. And they can also de-dupe by patient day so, we need to do that one pretty often.  
  
But because there’s all these methods of de-duplication, you kind of have to think about what your goal is and what you’re measuring. So, for utilization, we usually suggest that people de-dupe at the patient day level. So, you might have multiple CPTs for something in the same day because the provider is billing the VA for each of those procedures. And so, but maybe you don’t – you just want to know if it happened so, you might de-dupe at the patient day.   
  
This method generally also allows for alignment between VA-provided and VA-purchased data because the community care data is claims-based and they are trying to recover money. They will bill and put in their claims that they’re doing that, but that’s not how the VISTA structure is set up. Or at least we don’t code as much, usually.   
  
If you’re interested in cost, you probably want to keep both institutional and professional claims so you can sum the payments together. So, there, you might not want to de-dupe at all but you might want to make sure there’s only one professional and one institutional claim for that procedure or that stay, depending on what you’re looking at.   
  
And if you just want to know how many people had X diagnosis, this is kind of a doozy and one to wrap your head around. You might want to keep the rejected claim. And I have heard this from IVC. We’ve asked them a few times about this. Because – just because a claim was rejected doesn’t mean that that diagnosis isn’t right or that that procedure isn’t right. It is probable that – for example, if the procedure could just not be included in the SEOC or it hit some VA business rule.   
  
So, you kind of have to think about all of it. Do you always only want to do paid and accepted claims? It’s really dependent upon the study. And with the SEOCs, there’s a whole bunch of restrictions on them now, too, that might make it so you want to keep those, or at least consider them, look at them.  
  
So, something else to consider when you’re de-duping across sources. The first one is the patient SSN. It is on almost – it is in every system. So, that’s a pretty reasonable way to de-dupe or to like match patients across systems. Of course, as you can see, I put the schema table and then, the column date in there and so, you can see that which column that Social is in differs wonderfully across every single system. But that should get you there. And again as I mentioned earlier, FBCS; if you go back far enough, they were optically scanned in so, there’s – and some of them, I think, were handwritten. And so, there’s some funny business, you can tell looking at the numbers. Like yeah.  
  
And then, the patient ICN is in every schema except for FBCS and it’s – yeah, we’ll get to why CCRS has insured ID for both SSN and ICN, yeah.  
  
And then, in eCAMS, you have to look where member identifier equals 20. So, you have to use two fields to get the ICN out of eCAMS. And then, you might also want to consider de-duping or excluding, depending on your order, of pulling by claim number. And so, VIReC in these two researchers’ notebooks that I have moved here show you how to do that. It’s very nice of them.   
  
And then, PIT Claim ID is the claim number in PIT and the claim ID in TCN in eCAMS; those are the fields that contain the claim ID.  
  
And then, these are some of the dates that you might want to consider de-duping by. So, I tried to include one, except for PIT, for – well, the HCFA or what you might want to consider outpatient and the inpatient tables.  
  
And the dates are usually pretty similar, although we have seen some funny business with Fee and FBCS and PIT. But not all of them, just a little; enough to keep you on your toes.   
  
So, those are the four kind of fields that I would consider de-duping by or making sure that you’re pulling everything up by is the SSN, the ICN, the claim number, and then, dates. Or at least that’s what we usually look at.  
  
Another consideration for ways to potentially avoid more hassle is to consider whether or not you’re wanting to include veterans or not. Because there are a lot of CHAMPVA claims, especially in PIT. And so, if you can exclude those to begin with, you might save yourself a lot of time and annoyance. And again, you can also use Patient.Patient to exclude non-veterans using – linking to that either by their ICN or their SSN.  
  
Okay. So, PIT. Yeah. PIT is used usually because it has claims from multiple sources. And as I noted earlier, it has claims from sources that we don’t, as researchers, have access to yet so, eCAMS and CCRS. But because there are multiple claim sources flowing into PIT, sorting through the data can be difficult; some might call it fun but it’s a challenge. Because each primary claims database has its own structure and that structure doesn’t always nicely align with PIT. There can be weirdness. And so, you have to use different claim statuses depending on which system you’re looking at, or be aware that the claims statuses are not the same across all systems. And again, be aware that the CurrentFlag = Y might not always get you just the most recent claim submission, unfortunately, anymore.  
  
So, how do you identify a claim source in PIT? Well, this does not technically flow into PIT but a lot of the VISTA claims are in FBCS and those do flow into PIT. So, you can identify those by looking at the PIT claim source system field and the PIT claim batch log key. So, for FBCS claims, the source system will say, “FBCS,” which is very nice.   
  
And then, the batch log key will start with this “R” and then, it will usually have a number and then, a “V” and then, a few other numbers. And that’s how you know that if you want to go, for example, and find other diagnoses and not all the diagnoses for FBCS come into PIT, that’s how you know that that’s actually probably a viable claim number to link back to FBCS with. Because, for example, you can see down at the bottom Plexis also has a source system of FBCS but it has a different batch log key prefix so, it has “VACBD.” So, if you take those claim IDs from Plexis and PIT – sorry, it’s very confusing – and you try to bring it back to FBCS, you’re not going to find anything, unfortunately.   
  
And then, CCRS, the source system in PIT claim is CCRS and the batch log key also starts with “CCRS.”  
  
For eCAMS, the source system is “CCNNC,” the community care non-network claims, and the batch log key starts with the same thing.  
  
So, that’s how we identify which source system the claims are coming in and that can help you kind of identify which claim statuses you might want to be looking at, or if you’re going to have issues like with claims in CCRS, probably see some funkiness there.  
  
And so, how do these sources compare to what is actually in PIT? VIReC has already compared Fee and FBCS to PIT nicely. And so, there’s the fact \_\_\_\_\_ [00:31:46] table that has the most information in it.   
  
CCRS; I have found that not all resubmissions that are in CCRS are in PIT. And I think mostly, that’s because there’s – I’ve seen a huge delay. So, the start date time and the end date time in PIT are usually quite a while after the processing date from CCRS. So, there is a lag.  
  
And I’ve also noticed that PIT doesn’t always contain – so, it might not contain all of the submissions. You might not be able to see the initial claim and the second claim and PIT might just have the third claim – the third resubmission in it.   
  
But also, I’ve noticed that it might not always contain the most recent submission from CCRS. So, you might have the first and second but not the third. And I haven’t been able to figure out any rhyme or reason to what is causing that. But it’s something to keep in mind; that even though PIT is probably our only way to access the CCRS claims, you might be getting the most recent claim anyways, which is annoying.  
  
Some people have also noticed that the claim status – so, people who are trying to de-dupe the resubmissions by using Paid, Accepted, or Approved claims, we’ve noticed that sometimes claim status might be missing in PIT, and this one threw me for a loop for quite a while. And it’s missing for these three specific sources so; Claim XM, EDI, and FBCS. Those are where we see that it’s just the NULL value for claim size, which is really not helpful. And it’s usually because the – at least for XM and PDI, the claims that are being fed into PIT institutional and PIT professional; those are unprocessed claims and the claim status only gets filled in for processed claims, if that makes sense. So, after it’s gone through all of the business rules to determine if we’re going to PIT or not PIT.  
  
So, you’ll see the NULLs in claim status and those are the systems that it’s for. For FBCS, if you use CurrentFlag+Y, it will remove 99.9% of these records so, that’s a good way of handling that issue for FBCS claims.   
  
But for EDI, it’s a little bit more complicated. The processed information – so, if you want to really only included paid accepted claims, you might want to look in PIT VA Payment tables, which we don’t – I don’t really ever use. But if you want those claims and you only want to include the paid ones, that’s where you should look. But there is no direct link between PIT claim and the PIT VA Payment tables. So, it’s a little bit of a challenge but it’s something to be aware, especially if you’ve decided to de-dupe by that paid, accepted, and approved claim status.  
  
So, there are also – this isn’t just specific to PIT. There are partition key issues. Sometimes the partition key isn’t the data that you want, like it’s not the date field that you’re interested in using. But there’s also no values in the partition key field. And we see that in PIT.   
  
Fee has a slightly other issue where we usually want – for FeeInpatInvoice, you probably want treatment from date time but that’s not the partition key. The partition key is InvoiceReceivedDateTime.   
  
So, how do you navigate around this? And I have come across this issue mostly because I’ve gotten yelled at, and I will absolutely admit it, for using the PIT tables and being told that I’m not using the partition key. And then, my response to \_\_\_\_\_ [00:36:22] is usually, “It’s NULL.” And their response is usually, “Oh.”   
  
So, what can you do? So, for example, in Fee, if you want a date field, you want to pull up the date field, other than the partition key, you just use both of them. And sometimes you might have to adjust your partition key date to be wider or go past the date field that you want. But that is the appropriate way of doing it.  
  
And in PIT where the partition key is NULL, you should look at your query plan. Yeah, and just be very cautious and try not to link a whole bunch of fact tables together at the same time. Because that’s the only way to really get around not getting yelled at.  
  
So, that’s PIT. And PIT can be a pain, especially with all of these new sources flowing into it that weren’t flowing into it when it was initially stood up that have made the PIT data more difficult to deal with and to sort through. Although it is still the only system that is mostly complete in terms of claims.   
  
So, the two new systems being stood up; the first one is CCRS, and this stands for the Community Care Reimbursement System. And it contains claims for providers in the Community Care Network, and this map shows the different networks. There’s five regions. And it was stood up along with the MISSION Act and there’s been kind of a rolling deployment, starting in mid-2019 and it just – everything started being inputted from each of the systems, for each of the regions, the beginning of this year.   
  
So, if you want information from 2019 onwards – we saw that drop off in the graph for Fee – it’s going into CCRS now and then, flowing into PIT. And you need CDW\_S patient permissions to access this once it gets put on the DART.   
  
In terms of the structure, this is where CCRS does not play nicely with PIT, or why \_\_\_\_\_ [00:38:52] doesn’t play nicely with PIT. In CCRS, the status is at the claim line level, not at the claim level. So, in PIT, the PIT claim table contains that status. That’s usually how you start kind of sorting through your claims.   
  
But in CCRS, it’s at the line. So, for each procedure, was it accepted or paid. It’s a different beast to work with. CCRS, like PIT and the other systems, contains resubmissions and I have some code that goes through how you might want to sort through those. And then, there’s test records in CCRS, also, and they contain missing – and then, with all this claim ID and actually, trying to envision that here. So, that’s an easy thing to sort through.  
  
This is a lot of information; it’s mostly just here for you to refer back to later. But these are the tables that you’re probably interested in using. And I’ve kind of tried to give like a claim header and then, a table name for you, and give where like the institutional claims are and the diagnoses and the procedures.   
  
I just want to point out that currently, at AO6 in CCRS, the main claim header table starts with “dim,” which if you work in CDW, you probably think is a little weird. And it is. And so, do the institutional claim information table but then, if you want the claim lines, those start with an “F”.   
  
So, this is mostly here for you to refer to and the naming you mentioned is just a little funky \_\_\_\_\_ [00:40:47].  
  
This is how a table of the – some of the foreign key and parent key joins. These are the ones that I use to join links together. It’s pretty straightforward; usually joined on claim key, which is nice.  
  
And then, how do you handle the resubmissions in CCRS? The claims are kind of tied together based on the resubmission. So, in Dim\_va­\_claim, there’s one row per submission. On each row, there’s also a field called “prior\_claim­­\_id” and “prior\_claim­­\_key,” which will link you to the one prior submission.   
  
However, there are claims that have been submitted five times. So, what do you do then? It can be like a really big – that’s a lot of left joints.   
  
So, one option is to use a ledger table. Not all resubmissions are in the ledger table but most of them are. In fact, has a field called “RootClaimKey,” which is essentially like the claim key for the very first submission. And then, all of the prior – all of the resubmissions also have that RootClaimKey so, you can figure out which one is most recent; have some screenshots and code to show you how to do that.  
  
So, I’ve also provided you with a number of resubmissions by year. So, at one point, I was trying to left-joint all of these claims together, doing left-joints on dim\_va\_claim­­ and using the prior claim ID, and I stopped. In 2019, there is a claim with thirty-two resubmissions. So, that’s thirty-two, thirty-one left joints. It gets better in – claims in 2020 and 2021; those just have a maximum of nine to ten resubmissions. But still, all left joint.   
  
So, this is an example query on how you might want to use this ledger table, which I have at the top in the CTE, to identify the most recent submission per claim. And that’s – the count’s in this iteration field and then, you have some joints to get you the final claim out of the dim\_va\_claim­­ table.   
  
Okay. And then, also, as I had mentioned, the statuses in CCRS are a little different than what we’ve seen in PIT before. So, this is the full statuses that are currently in CCRS. And then, the Meaning column contains information that I have gleaned from conversing with IVC about what these statuses mean and when you may or may not want to count them.  
  
So, obviously, Denied is apparent what it means. But these No Action claims, that’s a new thing that started appearing. The claims that I have seen that for – and you don’t know exactly why it got a no-action status on that line. But the ones that I have seen were for SEOCs where the community care provider provided too many of a kind of CPT and so, it got a No Action. So, it wasn’t paid, it wasn’t denied; it’s just kind of in like the middle ground. So, you might want to consider counting No Action out of CCRS depending on what you’re wanting to use.  
  
And then, there’s Paid, Pending Review, and then, Rejected and Void are similar to Denied.   
  
And then, the second system is eCAMS and it stands for Electronic Claims Adjudication Management System. And as I already noted, it contains the community care non-network claims. So, claims for emergency care are often in here, or more often in here. They are a high proportion of claims in these tables. And claims for providers not in the community care networks, and there’s not that many. But it often happens with emergency care where the veteran has to go and the provider did not want to sign up with the VA as a provider. So, this is where their claim ends up.  
  
The permissions are again CDW\_S patients. You probably want to use the eCAMS replica schema, which is – just have to remember. There is no eCAMS, I don’t think. So, I think it’ll be pretty obvious once you see it. But you probably want to use tables starting with Ad\_ because those are adjudicated claims. There are claims in the tables that don’t start with Ad\_ but those get moved through pretty quickly, like almost nightly. There’s not a huge backlog in there. So, it’s usually just better to use adjudicated claims; then, you’ll know that they were adjudicated.  
  
Root claim is usually – usually, but not always – in the original\_TCN field so, we’ve talked about root claims with CCRS. This is a similar thing with eCAMS.  
  
And then, the immediately prior claim is usually in the parent\_TCN. If you look very closely, there are some very funky values in those fields. But usually – usually – you’ll want to connect resubmissions, you would usually use those.   
  
eCAMS is weird in that the tables aren’t explicitly split into institutional and professional claims so, you have to use the values in invoice\_type\_lkpcd to determine the type of claim. So, these are a value that you will see. I pulled these out of the dim table. So, this is how you can split up your institutional and professional claims because in no place in eCAMS are they split up for you, which is weird, interesting.  
  
Claim status is a little complicated to get out of eCAMS. The dim table in eCAMS is a little bit like the dim table in Cerner, if you’ve had to use that, for some fields but not for all fields. So, this code here will get you the status because otherwise, you just see the second and third column to just see like 71 and 8, which is not helpful for figuring out if something was paid or denied. So, you have to joint to this status table in order to get the information out.  
  
And here, I have the tables that you’re probably mostly going to focus on using in eCAMS; again, similar to how I did it for CCRS. It’s mostly for reference for you guys. And then, how to join those tables together.   
  
And then, in summary, I hope this has been helpful for people. This is kind of what I spend most of my time doing and digging through and figuring out how to help people do.   
  
So, PIT is, as many people will say, the most complete source in terms of submitted claims. IVC will tell you, if you ask them, to not use it but it’s what we have to use as researchers right now.  
  
There is a delay in claims moving from source systems into PIT so, that’s something to keep in mind.  
  
PIT, especially the PIT claims, we have learned, contain unprocessed claims so, be careful and thoughtful about how you’re using claim status.   
  
Duplication of claims is an issue. Currentflag usually used to fix that when it was just FBCS claims going in there. But it no longer does; in part, because of CCRS with the claim status at the line level. But, also, with EDI and ClaimEX, you’re probably going to have an issue.  
  
eCAMS and CCRS are currently being added to the DART. When they are, just remember that they have different structures from each other and different structures from PIT. So, it is a learning curve, for sure. Start using those systems, if you so choose, as researchers and analysts.  
  
And the CDS is in development. It should contain claims from FY19 onward so, hopefully, you don’t need anything before that. You’ll have to use one of the other systems. And it will contain the most recent or summarized claims from all systems so, you shouldn’t have to – they’re saying that we won’t have to deal with sort through resubmissions.   
  
The initial iteration will be available for operations in December on AO6 and we are hoping it will be available for researchers in 2023 sometime.   
  
And I have this slide of references; these are all web links for you guys. The CMS claims manual is very dense but very informative for finding really funky things on your claims because it essentially follows the same thing. And that’s it. Hope it was helpful.

Rob: We have a number of questions queued up. We have about nine minutes left so, we’re going to jump right in asking you the relevant questions.   
  
One person early on asks; is CDS available now for the operations analysis? If so, where is it located?

Erin Beilstein-Wedel: No, CDS is not available now. They’re saying they are going to have it available on AO6 in, say, the next month. So, I assume that’s November; that’s what they told us earlier this week. I would give them until December, though. And it will be on AO6 to begin with.

Rob: Okay. Can we have access to demographics range of service and smoking data?

Erin Beilstein-Wedel: There is no smoking data in claims in the community care claims. There are some demographics in the – because they’re collected in the claim header like sex and date of birth. But those, I think, are the only demographics that are collected that you might see some of those tables.

Rob: This is a comment. Seeing the slides about de-duplication, numbers 16 and 17, I’m thinking a checklist or flowchart might be helpful. It could help people not overlook considering rejected claims, etc. A checklist is needed, program is used to file layout of the tables they use, most combined with old code examples. Care to comment on that?

Erin Beilstein-Wedel: I think that that could be a good idea. And if I make it and post on the CREEK website, then, I will post HSR&D list serve.

Rob: Thank you. Do you have an estimate of what percentage of VA utilization is community care? For example, if you added together all the visits at VA facilities plus all the community care visits in 2019 to present; what would the percentage – what would be the percentage that are community care? I’m not sure you can answer that.

Erin Beilstein-Wedel: I cannot answer that. It’s a lot and it varies by specialty; I know that. I also know that in terms of cost, the costs of that – the amount of dollars that we’re spending on care in the community has gone up astronomically over the last few years. But that is a very interesting question.

Rob: What is Claim XM?

Erin Beilstein-Wedel: It’s a cloud-based claim system that some small amount of claims are flowing into but it’s not – it’s nowhere. You cannot access the data anywhere; it’s not on TP52, it’s not on AO6. Basically, it’s like an internal IVC claim collection thing. Which is really frustrating to hear, I’m sure, because every time they tell me that, it’s annoying.

Rob: Thank you. What are the criteria, the process to specify a particular type of care in the community; e.g., hospice care?

Erin Beilstein-Wedel: So, I gave a VIReC seminar a couple weeks ago about – related to this. So, there’s a few different ways to identify types of care. They use the type of bill codes, the place of service codes. Usually, we do it by CPTs. I’m not sure that that really works with hospice care. With the SEOCs now, because almost every single claim is now actually attached to the SEOC, I’m not sure if there is a SEOC for hospice care. But that would be also something to look into because those SEOCs are now actually rather reliable.   
  
Yeah, but if you want help, you can always email me because I answer questions like that all the time.

Rob: This person asks; For the ten-year study 2012 to 2022, what sources would we use to get the complete picture?

Erin Beilstein-Wedel: So, right now, I would use the FBCS and PIT and just do a lot of de-duping. Which is a pain.

Rob: Do PIT/CCRS/eCAMS tables contain claims for Cerner sites? Or do we need to go to the Cerner tables for that?

Erin Beilstein-Wedel: They will contain claims for the Cerner sites. The transition to the Cerner HR has had no impact on the community care stuff.

Rob: Can you explain how to gain access to CCRS?

Erin Beilstein-Wedel: If you are Operations, it’s on AO6 right now in CDW. If you are a research project, it will hopefully be on the DART sometime soon.

Rob: Thank you. Could you please talk more about the differences between Fee and PIT?

Erin Beilstein-Wedel: Fee is considered a primary system so, the claims are coming in and being entered into it. Whereas PIT is kind of this amalgamation of claims that we send – the claims are sent through to detect fraud, waste, and abuse. There’s a whole bunch of business rules in PIT behind the scenes that rifle through the different fields to look for those things.   
  
So, that is the big difference between PIT and every single other system is that PIT is not – it’s a secondary system and it’s not – its sole purpose is to detect fraud, waste, and abuse. We just kind of got a little lucky in that in order to do that, they had to send all the claims through it and so, it kind of made this combined data source that we like to use.

Rob: This one seems complicated to me.

Erin Beilstein-Wedel: Okay.

Rob: I think you mentioned the type of identifiers. So, we will need SSN approval from local IRB to access the C data and keep a crosswalk from SSN to patient SID or SCR/SSN is needed to join with other CDWs – CDW cables in VINCI?

Erin Beilstein-Wedel: Specifically for Fee, I don’t think that you need real SSN unless there something that you need out of \_\_\_\_\_ [00:58:45] patient. Because it has – it’s the only table that has that patient SID to link back to a patient \_\_\_\_\_ [00:58:51], which will allow you – so, the patient, I think, is in every single of those normal VISTA tables, just not the community care ones.   
  
So, you wouldn’t need real SSN unless you wanted to use some of the other systems.

Rob: Okay. We’re almost out of time but we have just a couple of questions left. About how long is the lag in claims making it into PIT?

Erin Beilstein-Wedel: It varies. In CCRS, I’ve seen it range from a few days to like a couple of weeks.

Rob: Is there a way to directly glean community care wait times based on claims data?

Erin Beilstein-Wedel: No, you might want to use the consult table, though, con.consult; there are community care consults there that have – that’s how we usually calculate wait times.

Rob: Pretty late, somebody asks; What is IVC?

Erin Beilstein-Wedel: Integrated Veterans’ Care. It is the office that has replaced the Office of Community Care. It’s like the access office and OCC combined now.

Rob: Okay. This is the last question but before I ask it, let me just say anybody that needs to leave right at the top of the hour, please do fill out the survey form that pops up when you leave the webinar or when I close it.   
  
But for the last question, Erin; Is there any data dictionary or other documentation available for CDS otherwise available later or we just start to explore with queries when it’s released?

Erin Beilstein-Wedel: So, the hope is that I will give another one of these talks when CDS gets closer to being put on the DART and I will – if IVC doesn’t make documentation, then, it will fall upon me to make documentation so, no one is floundering as much as they have with PIT.

Rob: Wonderful. Thank you for the presentation today. We get a lot of people saying, “Thank you so much, thank you so much. This was very informative.” I don’t usually read those because I try to get to the questions but there were a lot of them. Would you like to make closing comments?

Erin Beilstein-Wedel: No, I guess just if you have further questions, feel free to email me.

Rob: Great. Thanks again. Have a good day, everybody.

Erin Beilstein-Wedel: Thanks, have a good day.