>> So, when we talk about cost, again, cost is a term that's a little--what's your definition. So, when we're talking about cost, are we talking about the type of service, the type of provider, the cost to whom. Are we talking about the cost to Medicare? Are we talking about the cost to the beneficiary? Are we talking about the cost to what the provider thinks they should be reimbursed? So, again, I'm going to kind of define from the claims information and from the med profile, the methods that you can use and what specific variables are needed to what I'm going to determine calculating cost. So, cost again when you're looking at the type of service or the provider. For the institution you've got hospital both inpatient and outpatient which are separate types of files, you've got skilled nursing facility, you've got the home health, you've got hospice providers and then for non-institutional you have physicians, you have nurse practitioners, other types of practitioners. The one kind of exception again for those of you that have been through 101 you know that ambulatory research centers free standing ASCs their facility charges are actually--are claims are actually in the carrier file as well even though you wouldn't consider them non-institutional. And then there's DME suppliers. So, when we're looking at the cost to whom in the claims data you can determine what the cost was or what Medicare reimbursed, what the cost was to the beneficiary, what their patient responsibility is. Again, from the claims data you never know who paid the beneficiaries part of it. Did they have a Medigap insurance policy? Do they have some other kind of--are they a dual that maybe Medicaid picked up their co-insurance. All you know is that this portion is responsible by the beneficiary. There is another payer. You do know that Medicare maybe wasn't the primary payer in this case that for this hospitalization it was a result of a car accident so some kind of car insurance was the actual payer for this hospitalization. You don't know what type of pair you just know was another primary payer besides Medicare. And then you can calculate what is really due for all these separate pieces to the provider. Now, does that equate what the providers says that caused us to--this care to the beneficiary that is for Faith [assumed spelling] to talk about tomorrow. But that is what we can look at as far as what the providers do in this data files. So, the definition of cost some people and again Faith will talk about that, Yvonne [assumed spelling] talked about this morning use cost to charge ratios, you can look at charges within the claims date as well. They do have total charges, they have non-covered charges and they actually have submitted charges as well, the physician level. So, there are charges in the files. Now, I'm going to talk briefly about them but for my perspective I never use charges to define cost. I use the claims data. I think charges are erroneous often times. For those of you that may have about a month ago, CMS released "a new data file" that had for every Top 100 DRGs, for every hospital they gave you the charges for these, what Medicare reimbursed in and so on. A lot of the variables that we talked about it. They've been there all along but they repackaged it and all of a sudden the media thought, "Oh my God, this is something new. This is outrageous." They talked about, you know, these hospitals. Hospital A to B could charge anywhere from 100,000 to 10,000 in these charges what's going on. For those of you that are working with Medicare, you know enough to not to care what the hospital charges in some respect because they don't pay based on what the charges are anymore. So again, when I look at cost I don't look at charges. But some of you may be interested

in that and that will be phase discussion tomorrow. But some of the claim file variables that we'll be talking about is the DRG price which is what we just tried to calculate, the Medicare payment or reimbursement amounts, what--again, I talked about the beneficiary responsibility because we never really know who paid it, if there were primary or other payers that paid for that claim, and then again there are charges in the file. If you're using the MedPAR file, I actually recommend if you're looking at inpatient and Skilled Nursing Facility to look at cost to use the MedPAR file because they've gone to all the work from taking the inpatient and the skilled facility--Skilled Nursing Facility Standard Analytical Files and rolled up any claims that what have been associated with the particular stay into one record. So, if I'm looking at long term care hospitals chances are if I'm in the hospital 90 days, that hospital has submitted more than one claim, you would find separate claims for that stay for potentially maybe two, one for 45 days the other one for the last 45 days in the inpatient file but the MedPAR file has already rolled up both of those claims and all the information into one record. So, it's much easier to use when you're looking at cost variables to look at the whole record and not try to get the cost, that hospitalization from the two separate files. But if you wanted to use the Standard Analytical Files, you do have inpatient skilled nursing facility, home health, outpatient and carrier. Currently the MedPAR, I already mentioned had just updated its record layout with the whole bunch of new variables that are related to a lot of these bundled payment initiatives, a lot of these modeling things. I currently don't have a file that has any data in it so I don't know and won't be able to comment on that but again that would be another reason at this point to look at the MedPAR file. And I'll be going through each one of these types--claim types of file and how to calculate cost or reimbursement by Medicare other payer, beneficiary, and then the total due to the provider. So, the MedPAR payment variables that you have, there is the DRG price which is exactly what we just try to do is to calculate what that DRG amount would be. There's also variable that gives you the Outlier Approved Payment Amount. Just know that that outlier amount actually gets into the payment amount. And then there's also a variable called Total Pass-Through Amount. Those are those amounts that are not included in a DRG price that are above and beyond and that should have to also account for if you're looking at cost. And then when you actually kind of getting to the payment variables, you have a Medicare payment amount. Again, I briefly touched on the fact for that a couple of years as some hospitals could get low volume, adjustment, additional add-on payments. That too is already included in the Medicare payment amount, so even though there's a separate field in the MedPAR file you wouldn't have to add it into it. There's a beneficiary deductible. So, these next three are related to the beneficiary, there's the co-insurance amount, their blood deductible. It's very rarely populated but there is the amount that if a beneficiary goes into a hospital uses a blood product, does not replace it. They will get charge to deductible. And then if there was another primary payer amount. So, these are the actual names of the variables that should find in the MedPAR file to calculate what I'm going to refer to as cost. So, if you were interested in looking what the payment made by Medicare, the beneficiary, the primary you have to maybe use more than one variable. So, to look within the MedPAR file, to look at the total payment made by Medicare you actually have to

sum two variables. That payment amount which is essentially the DRG with any potential add-ons including outlier amount, and then that total pass through amount that money have had some things that were not included in a DRG payment. So, you have to add up both of these in it to get to the actual total cost made by Medicare. So, then if you're looking at what the beneficiary is responsible for, there's the three variables that you would have to sum. We have the inpatient deductible. You won't always find the deductible on every record in the MedPAR because if they are readmitted or transferred, the beneficiary is only charged one deductible for that episode. So, you do find some zero populated field deductibles. Co-insurance, this really comes in to play when you're looking at long term care and inpatient rehab in psych hospitals because after certain days co-insurance kicks in for that beneficiary, and again the blood deductible. So, if you wanted to know the total patient responsibility, you would have to sum up those three variables for the MedPAR stay record. And then lastly, if you want to know if there was another primary payer, there is a field for primary payer amount. A lot of you may say "I don't care" but this is still a very important field and we'll talk more about that particularly when we go into some of the exercises and looking at the data. So, then if you want to know what is the total due to the provider, unfortunately there's not just one variable that says here's what the Medicare provider was due for the stay, you actually have to sum the Medicare, all those variables for what Medicare was responsible for, for what the beneficiary was, and the primary payer amount. So, there's five variables. You could also sum the DRG price, outlier amount and pass-through amounts. But I would actually recommend just using number one. It's a little bit more consistent.

^M00:09:59 Again, I would recommend if you're looking at cost to use the MedPAR but if you happen to have the Inpatient Standard Analytical File--again, here are the variables. These are the variable names found in the data dictionary. You have the claim payment amount, you--again, have a Claim Pass Thru Per Diem Amount, you have a Claim Utilization Day Count, you have an NCH Beneficiary Inpatient Deductible Amount, their co-insurance liability and their blood deductible, and again a primary payer amount. So, if you're looking at to calculate using the Inpatient Standard Analytical File, how to calculate the total payment made by Medicare you actually have to take the Claim Pass Thru Per Diem Amount and multiply it by the number of Claim Utilization Day Count. Because that Per Diem field itself is just what that hospital will get reimbursed for every hospital day that that beneficiary is in the hospital for covered care or utilization days. So, if I'm in the hospital five days, and my--the per diem for that hospital was 100, they actually get paid 500 dollars for the pass thru amount and not just the 100. So, be sure you used both variables. And then sum that additional amount to the claim payment amount to get the total payment made by Medicare. For the beneficiary again, there's three variables, the deductible, the co-insurance and the blood deductible. And you just need to sum those to get the total amount that the beneficiary is responsible for. And lastly, there's the one variable for the primary payer. So again, there's no nice variable that says, this was the total due to the provider. So, you do have to calculate it, has the sum of all those variables for what Medicare reimbursement was, the beneficiary responsibility in it, there was a [inaudible] primary payer.

There are revenues that are "payment variables" in the Inpatient Standard Analytical File. Unfortunately, they're not populated. They're all zero field. So, for the inpatient file you can only really make claim level payment calculations. You can use cost-to-charge rations with the revenue center. You do have charges at the revenue center item. Faith will be talking about that tomorrow. The SNF file is very, very similar to the inpatient. It's all this at variables. And again, it's true for SNFs. They too are in the PPS system. They don't break it out by the types of revenues, the Skilled Nursing Facility is building force so you won't find any information at a revenue center level. So, again, you can only analyze SNF payments at the claim level.
^M00:12:52
[Pause]
^M00:12:55
If you're looking home health, again, for the payment made by Medicare, here there's just the claim payment amount, the one variable. For our Primary Pair, there is the Primary Claim Paid Amount. And then when you get at the claim level, is there a payment made by--or what the beneficiaries responsible for? The answer is no. There's no claim level variable. Anyone want to guess why there is no beneficiary responsible information in the Home Healthcare File? There's no co-pays, right. Medicare covers so there's no co-pays. Now, that's not necessarily true for every single revenue center. There are some things that are--Home Health is a Part A Service. That's 100 percent covered by Medicare. There are a few Part B Services when you have--or missed a Part A and Part B that they have charged some co-insurance. There's nothing at the claim level because CMS never bothered with it. But there is something at the revenue center level. It's called Revenue Center Co-Insurance or the Wage Adjusted Co-Insurance Amount. There's two variables. It's populated less than 0.05 percent of the time. It's not populated a lot. It is there. So, if you want to get down to the nitty-gritty, there are some amounts that a beneficiary is responsible for. But again, because of the payment system and what Medicare covers, it's not a variable that, you know, maybe you worry about. So, if you look again to what the providers do, you would have to sum the claim payment amount in the primary. If you wanted to get down to the beneficiary responsibility, to add that in, you'd have to go to the revenue center. For the outpatient file, again, there's just the one variable for the claim payment amount, what Medicare reimbursed and one variable for what a primary pair covers. Very similar to inpatient care, you have the same three variables that you need to sum for what the beneficiary had to pay for, the part B deductible, the part B co-insurance and a blood deductible. So again, to get the total due, you'd have to some up those five variables. Now, in the outpatient file, this is the very first file that I start really talking about with the variables are. I talked about the home health revenue center a little bit, you can find some payment amounts for those home health episodes of care that are low visits. So typically, again, a home healthcare is paid for an episode not per visit unless you get to low utilization and I believe that the count is for or less and then they will actually pay you per visit. So, it's not a calculated episode of care cost. So, there are some variables in the home healthcare file when you get down to a revenue center that you can see payment information. Again, depending on what you're trying to do isn't

important to get down to those levels because of the way home healthcare is paid, you only have a handful of a dear--excuse me, a revenue center HCPCS codes that are build because again, it's an overall episode based on the number of visits. So, do you worry about the revenue center, yes or no? Some people were worried about it. I'm going to give you the caveat, I'm not going to dwell on it, I'm just going to tell you like it is and let you have to be concerned about what you want to do. Unfortunately, when you sum revenue center payment amounts in any of these files, it doesn't always equal to the claim payment amount in the claim part of it. Now again, that's the way [laughs] how you choose to handle it, I guess it's up to you. I'm going to be talking about costing procedures and so we have to go to a line level or a revenue center level when you're looking at outpatient care, it's a difficult decision to make. And I can't tell you what the right way is. We've always been told trust the claim payment amount because that's--in the end with the map, you know, cut the check for and that maybe if there were adjustments, they didn't get equated back down to the revenue center or to the line item. However, that doesn't help you when you're trying to cost a particular service or a particular procedure that you need the revenue center information. You can do sensitivity analysis on it to really determine it. But I will tell you, I don't have an answer has to which way to go and why it really happens. But we do know that summing up the line item information or the payment information does not always equal what you're going to find in the claim level payment information. And that is a big kind of issue when it comes to looking at cost of care particularly when you're looking at specific procedures. Going back then to the outpatient payment variables that you can find at the revenue center if you are interested in particular HCPCS. Again, keep in mind that for the outpatient, they're paid on APC so even though you have each individual HCPCS build, that HCPCS may have been bundled with another line HCPCS to get the payment only on one of those records. So, if you're looking at clean payment, you might see HCPCS one, two, three, four that has a payment but then five, six, seven, eight is zero. Well, if that was bundled with that same APC, it's really just a shared amount for both of those and you can't get to the individual cost 'cause they'll bundle it up. But if you are looking at the revenue centers in the outpatient standard analytical file, there is a revenue center payment amount. And again, for the--if there was a primary pair, it's actually more than one variable. There is a revenue center first and second Medicare secondary payer amount. Again, if you're worried about whether there's a primary payer, I'd look at the claim level and just either throw them out if you don't want claims that are paid by another primary payer or just use that amount, it's not really probably worth your time and trouble to do things at the revenue center for another primary payer. For the beneficiary, you do have a cash deductible, you have a blood deductible, you do have two variables for co-insurance, there's a revenue center co-insurance amount, and there's another one that's wage adjusted co-insurance amount and there's a reduced co-insurance amount. So, there's quite a few variables when you look at the beneficiary when you get down to this level. Again, if you're really concerned for the cost of that claim, what is the beneficiary responsibility, I would just use the claim level. So now, I'm going to talk about the carrier file where you would find the physician information. Again, at the claim level,

you'll find the claim payment amount and the primary payer amount. ^M00:20:05 Then for the beneficiary, they don't really have it at the claim level so you actually have to go to the line item, if you really want the details broken down for the line co-insurance amount and then sum it with a line beneficiary part B deductible. There is a carrier claim cash deductible applied amount that you can use at the claim level if you want. And then, again, if you want to look at the provider due, you'd have to sum up all those variables for Medicare beneficiary and primary payer. If you're looking at comparisons of a particular procedure at the line level, you do have the physician specialty code right there on the line so you would know the type of provider that did it to make comparisons of types of doctors. So, for--again, the carrier, you can go down to the line level, it is populated, there is a line payment amount, there is the deductible, it was mentioned earlier when you're looking at cost, how can you know this is really the cost or what Medicare reimbursed because there might be a deductible in January so it's the very first visit you had maybe Medicare paid absolutely nothing on that because it was all the beneficiaries responsibility because of their deductible. And then again, co-insurance amounts. Now, for part B, we know it's usually a standard 20 percent co-insurance amount. However, not all services provided under part B are standard co-insurance amounts. So, you do get a variety in there so it is important to include that in looking at co-insurance amounts. Most things are standard 20 percent, lab has no co-insurance so you'd never find a line co-insurance amount for a lab HCPCS. Some mental health that has changed over the years, it started out as 50 percent, they've now trying to reduce it down to the 20 percent like other part B cost by 2014, it's supposed to be down to 20 percent but it was the gradation, I believe it's 2010 is when they started reducing it so you would see differences in co-insurance amount and a lot of people are looking at that co-insurance amount and how is affecting the use of mental health services. So again, co-insurance is something that you can study to see how that affects service usage. So, as far as at the line level, again, you can look at the payment amount, the deductible, the co-insurance amount and the beneficiary prior payment. But, where has--I earlier said, I don't care about charges, I'm going to say I don't care about using charges for institutions. I do care about charges in the carrier file. Why? Because there is a variable called allowed charge amount, that is not something that is submitted by the physician. It is a field that CMS calculates. Based on the fee schedule, they say, "This is all we're going to allow you to get paid regardless of whether there is a primary payer or whatever. This is the allowed charge amount." And so, that field is at the line level, it's also at the claim amount. Again, this applies only to Medicare covered services, you will not find anything that's been denied having allowed charge calculated. So again, I'll talk about denied claims in a minute but it is there. And this is actually a nice variable to use because it allows--it says basically, "This is the total that I'm allowed to collect from all sources whether I have a primary, whether it's Medicare or whether the beneficiary's piece of it. This is the total amount due to the provider." So, if you want to--you can, you know, sum up all those different pieces that I talked about for the line level you have, what Medicare is responsible for their reimbursement, what the beneficiary's responsible for and if there was not a primary pair, but we, at ResDAC,

or what I guess would recommend using is just this allowed charge amount because it really is the total due to the provider. If you sum them up, it works. Now again, you have issues between line items and claim level, doesn't always manage. But that is the one charge field in the Medicare claims data that I highly recommend using. There are still a submitted charge in the carrier file, that is where I would say don't use again because it's submitted by the physician, it doesn't matter what the physician really submits. And it's interesting if you look at some of the submitted charges, sometimes it is less than what Medicare allowed, you know, for something it might be--they just throw in 5 dollars because they know that they're going to get allowed charge that it doesn't really matter what they submit. So, again, that submitted charge field don't bother using that comes from the physician but this allowed charge is the only charge field in any of the data sets that is actually calculated by Medicare and can be used and it represents the total amount due to that provider from all sources. Any other questions then, yes?
>> I have two questions. Does each line have a corresponding CPT codes?
>> So the question, does each line have a corresponding CPT code. In the outpatient file and in the carrier file, the answer is yes because that's how they bill by HCPCS. And you'll also find--and a CPT is just a level one HCPCS so the field itself is called HCPCS code. And you'll look at that this afternoon. You will, again, find HCPCS codes in the outpatient but maybe not a payment amount again because they pay on the APC. But you do see associated HCPCS. So again, when you're looking at--I'm going to move onto charges, some other charges because some of you maybe interested in charges if you're looking at cost reports and at a high level of what hospitals do, there are charges in the file. So, in the inpatient staff there is a claim level, claim total charge amount and there's also an NCH inpatient non-covered charge amount. At the revenue center level, you have a revenue center total charge amount and a non-covered charge amount. So, you can see if Medicare actually covered all the services on the actual bill. Often times, you'll find non-covered charges because a person has exceeded the length of stay or that hospital is actually billing for something that Medicare doesn't cover. Yes?
>> Follow-up of the last question. So, for procedure related diagnosis and diagnosis codes, what would be the--where would you find the variables for those?
>> So, like in the inpatient where--
>> Variables.
>> OK. You will find in the inpatient file, you'll know that they had what procedures they had and they're based on ICD-9 procedure codes. But again, for inpatient, they don't pay that you get paid for, you know, the cabbage and then if you happen to do, you know, put some layers is in the heart for a TMR, you'll get paid for something more. You just know what procedures were done but not what they were paid for that individual procedure because, again, it's paid on a DRG. So, you can find a procedure codes in the file. But you won't find associated payment variables with those procedures.
>> [Inaudible] codes?
>> You'll find diagnosis codes in the file as well. There's still ICD-9 diagnosis, they haven't moved to ICD-10 yet.
>> But how about drugs used in the hospital?

>> So the questions is can I look at the cost of drugs or what drugs are used. The answer is no. Again, very seldom, you might find a revenue center charge for pharmacy but you don't know the specific drugs. You can use the part D data if you're interested in looking at a prescription drugs. And unfortunately for this time period we don't have time to talk about part D. So, if you're interested in looking at drugs and drug cost, I would recommend looking into our part D workshop. So, real quickly try to get through this so you can go to lunch. Again, in the MedPAR file, there is a variable called the total covered charge amount so you can look at that. This is the total amount that the provider charges for the service. Again, it's determined by the provider and it has no rhyme or reason for what I consider, you know, what a hospital charges, they certainly have rhyme and reason why they want to charge what they do. But it doesn't make a lot of sense and that was why there was this uproar about this new file that came out with all the charges for particular DRGs. For the inpatient, there's the claim toll charge amount and again, have total charge amounts for the revenue center. MedPAR, again, they have revenue center groupings that you could see pharmacy charges, you can look at occupational therapy charges, you can look at ICU charges. So, they do have charges by all the different revenue center groupings that you can look at. Again, Faith, I'm going to let her really emphasize the charge fields. So again, the only charge field that you can really use is in the carrier file and then that is the allowed charge and that's Medicare calculating what is allowed to be paid for the provider for that service.
^M00:30:01 Now, overall, when you're analyzing the claims data there are a lot of things to consider. You do find deny of claims and or denied line items. And that can really impact if you're trying to calculate average cost of a particular service or things like that. So, you really want to get rid of these claims. So, the first thing that I always recommend and that we say in 101 too is once you get your data just clear out the denied claims and any denied line items because there's no necessarily can't look at them because one provider may submit all the claims whether they know they're going to get denied or not and another may not often times they're duplicates. So, they've already been build for. So, if you're trying to count services you could over count services if you include denied claims or denied line items. So again, keep in mind you do have that. And example of why again it's important that if we want to know what the average amount for a particular HCPCS in the carrier file if I just say, you know, here's the claim payment amount. What's the mean for that? And I include all line items, its going to come out for 36 dollars and 95 cents. But what was really paid if I get read of any denied claims the average was 42 dollars and 82 cents. So, it does make a difference in the prices. If you include those because anything that's denied will have a zero claim payment amount. It was also have a zero allowed charge amount. And you obviously don't want to include those in any kind of mean calculation, average calculations. At that claim level for institutional files the variable that you should use to get rid of claims is the claim Medicare none payment reason code for like the outpatient file they also have one at the revenue center its called the NC code. And there's I think up to five of them that you can see denied revenue center charges. Again, for institutional files its not quite as prevalent to have a denied claims a little bit more in the outpatient file just give the nature that it's a part B service. But again,

I would certainly recommend getting rid of any denied or line items. And again, you can't have zero payment amounts for services that are allowed. Depending on what it is that you want to do you have to think about how are those zero payments going to happen. Now, why would you find that? Well, it could be due that there's another primarily payer. So, Medicare pays nothing for that service. So, if you're more interested on what the provider was paid, then go to create your variable for the provider do to use that because then what the zero field for what Medicare reimbursed is upset by what the primarily payer paid. So, you could do that. But if you're really trying to calculate models what did Medicare reimbursed and interested in what Medicare, you have to be considered what you're going to do with the zero payment amounts. And again, it can also be deductibles. So, I go see my position, he charges me for an ENM code and evaluation for--the office visit. But its January 2nd, it's the first of the year, I'm going to have a deductible, chances are I have to pay for the whole covered cost of that service because of my deductibles. So again, depending on what it is you're trying to calculate, think about what happens when you have zero payment amounts? There's also negative payment amounts. Now, your question is how does Medicare negatively pay somebody? The reason why you would find negative payments amounts is because all these different pieces what Medicare reimburses what--if theirs a primarily payer what the beneficiaries responsible for, all of those total to either this DRG price or what, you know, the beneficiary, excuse me, what the providers do? And so, depending on who was responsible for. It could show up has the negative amount of responsibility for Medicare. You can see negative amount and the impatient file. Typically, that occurs when the beneficiaries charge to full deductible but maybe they were only in the hospital for one day and the service that they had was less than what the deductible is. So, then you again Medicare still collects the full deductible from the beneficiary regardless of what the cost of that DRG price was or what the providers do? And so, then it shows up has a negative amount to the Medicare reimbursement field. So, you can see negative amounts for that purpose. You can also see it if you have transfers. So, the deductible maybe on the first hospital claim but there's no deductible on the second. But that first hospital really did do too much other than transfer the patient to a different hospital because they needed different types of services and that hospital can't provide. The other reason it happens and this again really happens with long term care hospitals and impatient rehab hospitals is that if I'm in the hospital long enough for my coinsurance to kick in that coinsurance amount gets to be pretty excessive for the beneficiary. And so, it shows up has a negative amount for Medicare. Again, all these pieces have to equal what Medicare says the providers do. And so, we're which bucket that lands in, it may end it up into a negative amount for that. And will have some claims data that you could look at for some of this to look at some of these negative charges and you'll see that typically for long term care in our hospitals it's usually because the coinsurance exceeds the amount that Medicare pays for that stay. Any questions about negative amounts? But you as a researcher determining depending--depending on what it is that you're doing, how do you want to handle this zero and negative amounts? Do you really want to say, you know, that Medicare paid a negative amount for procedure? Or do you want to zero, you know, drop the floor at zero or, you know, something

else to determine what you're going to do? So, there are these fields or that have negative amounts or zero amounts that you have to decide depending on what is, what you want to do how to handle them. Other things to look at for those of you that interested like the impatient, or the skilled nursing facility, or home health. I told you what their payment system was based on. If you actually want it to know what the CMG was? Or for that hips or that [inaudible] called the case mix index. For these different ones you can find out what that actual case mix the CMG was, it's embedded in particular revenue centers depending on the type of facility is. So, for revenue center code 0024 that's in on every claim for impatient rehab facility, you'll find the CMB embedded into that line item that revenue center item HCPCS field. But it's actually the CMG that's embedded. And same for skilled nursing facility and home health you can find the RUG embedded for revenue center code and hick in the field for that for 0022 for skilled nursing facilities. And 0023 you can find the HHRG which is embedded into the hips code in the revenue center. So, you can kind of look out what the payment system was what they use to generate that payment for these different types of facilities. There are some other variables that you'll find that's like people think, oh, this is really, really great. I've talked about the fact that there is no variable that says this is the total that the provider was due to be paid. But there is a variable called provider payment amount. You would think, "Hey, that's what the providers suppose to get paid for this service." The answer is no, there's also variable called the beneficiary payment amount, what these fields are? So, they're just basically think about these fields has who did Medicare write a check out to and what was the amount? So, if I go to my provider and he bills me directly my provider payment amount is probably going to be exactly the same amount has the claim payment amount because the [inaudible] is actually paying and cutting the check to the provider. But there are some providers, some physicians and the carrier that don't want to bill. They make the beneficiary submit the bill and they get their check from the beneficiary. Well, Medicare doesn't want to reimburse the provider for that because it's the beneficiary that's already paid the provider. So, when this claim is submitted Medicare knows to pay the provider. So, you'd see in that case a zero amount in the provider payment amount field.
>> Beneficiary?
>> Well no, you find the zero in the provider payment amount because Medicare did not pay the provider. But then you've see the 250 dollars in the beneficiary payment amount field because the beneficiary actually paid the provider for that service. So, I just recommend not, you know, using this that really don't have a lot of meaning and they can get confusing to which you want to do. But, you know, if you were just going through the data dictionary you'd say, "Boy, this sound pretty darn good." But unfortunately they're not. Other examples, there was a question in what the relationship between the carrier file and the inpatient file some of this other files. Keep in mind depending how things get built, you may have to--for hospitalization go into more than one file to look at the total cost of that hospitalization. So, we're going to look at the MedPAR record where a personal was admitted on the eight and how to discharge date of the 12th. ^M00:40:00 They had a fracture, had some other second dairy diagnoses, some heart problems. And they had an open reduction of fracture

with internal fixation. So, basically they fix the fracture. And we have revenue center codes for pharmacy. We had supplies, physical therapy, we also maybe had lab radiology, anesthesia. So, we had total charges of 42,361 dollar for this MedPAR record. And what Medicare paid for based on the paths through amount plus the reimbursement amount was 13,000. Now, has the researcher if you looking at cost someone may say, "Well, the hospitals said that it cost them 42,000 for this." But it's that really your definition of cost? No. The cost really or what the Medicare would say the cost was 13,068 dollars to them and then there was a deductible. And so, the provider do is a lot different from what they charge. But this doesn't tell the whole story because we know that the impatient or the MedPAR file is based only on the facility claims. We know that that person probably had a surgeon and an anesthesiologist. So, we also know that through this time frame they had claim that was on the 7th. I had one line item, the specialty code was emergency medicine. So, we know this person actually started out in the ER, they had an entry to the hip, a fractured femur. So, they had an emergency department visit that had a claim payment amount of 132 dollars with a deductible of 33. And they also then had another claim that had claimed from and through date on the 8th and 9th. It had an orthopedic surgeon. And so, they had a diagnosis again of a fracture and initial hospital care visit, open treatment so on so for. So again, she obviously heard her cellphone the right side, had another claim payment of 996 dollars with a deductible of almost 250. And then we had some more claims that were in the carrier file for a certified nurse and anesthesiologist. Again, she build for her services with additional payments and co-pays and deductibles. And then, we had a diagnostic radiology claim, with the professional component in the modifier with a claim payment of 28 deductible so on and so forth. So, that whole hospital care episode had five additional claims from the carrier file. So, if you only care looking at what is going on with hospitals it's OK to just look at the MedPAR or the impatient file. But if you want to know a total cost of a care of a particular procedure you may have to go to more than one record. Now, typically we say the carrier file is the other one you have to go to. Now, think about critical access hospitals, I said, because they're not PPS paid other PPS exempt. You might have to go to the outpatient file maybe to see some services or the carrier file as well. So, they have a different way number files that you may need to look at. For instance, if you're looking for the total episode of this maybe she needed home health care afterwards or maybe it was serious enough that she went into an impatient rehab of facility for a few days. So, you have to look for another record. So, you have to define what your episode is? Are you only looking at the cost to that hospital for that particular procedure or you're looking for the whole cost of that episode of care, who are you looking for the total cost for so on and so forth. So, often times you do have to look in more than one file and get to create episodes of care for total cost for something. So, that is something that you do have to consider. Does that answer your question? OK. Good.

>> So, this example was based on the MedPAR data set? I have a question in part of your discussion just how you said--what we just went through reflects on the impatient and the MedPAR data sets. But in the impatient of somebody had an ER visit and then was admitted, doesn't show up in the impatient file?

>> Right. So, this example that I talked about is actually a combination of the MedPAR and the carrier. Let's say that you are interested in whether this person, we know that this person started to the ER, I only gave an example of what their carrier cost were but that--in this case she started through the ER and her ER services ended up on that impatient MedPAR claim. But let's say I was looking for cost of services that someone was admitted to an ER and then went home, that ER visit would be found in an outpatient facility. But then I still may have the ER doc in the carrier file. So, for that ER visit itself. So, if you're looking at what is the cost of ER care I still would have to go to 201s because I'm going to have the hospital outpatient facility ER visit as well as still the position or whatever--whoever they saw, or what are the things were done? Now again, you know, how far do you want to go in the carrier file, you'll find an ambulance, this person may, you know, fallen and couldn't get her self to the care, had to get an ambulance, do I consider ambulance the claims as part of an episode of care or the cost for this surgery. So, you have to really get aside what you want to include in episode to consider that. Lastly, the last side just again emphasize depending on what your research is understanding the payment system we'll help you understand what kind of payment variables you'll have. So, I talked about that you won't find any revenue center payment information for impatient or SNF because that's not how the payment system works. So, looking at impatient SNF and even at some level home health care I would say only analyze that the claim level, you can look at service level information for the outpatient, the carrier and the DME.