Speaker 1 (00:00:00):

Hey, good afternoon. I'm Emily Evans. Uh, I'm the head of health health policy research here at hijack. Uh, thanks for joining us this afternoon for the second part of what is going to be a three-part look intense. Look at how COVID is changing the health care system in America. If you have any questions, send them into Q a at [inaudible] dot com and we'll answer those at the end. Um, and with let's just get a go at it right now. Um, Eric, uh, slide four, if you put that up, I'm just wanna, um, remind everybody that, uh, last week we talked about these macro drivers of change that are quite different from what healthcare has experienced in the past. Um, the huge influx of money capital from the federal government, uh, like we've never seen before, um, and even exceeds what we saw during the financial crisis, you know, with the infrastructure of quote unquote shovel-ready projects, which don't really exist.

Speaker 1 (00:01:07):

Um, and the changing labor market drastically changing and the advent of, uh, technology use in healthcare, which is still in its infancy, but really, you know, moving along, uh, pretty carefully. So today I want to focus really on three sectors. There are others that I've, I've got some interest in. We just don't quite have the data and information around those yet, um, to help us analyze them. So want to stick today with services and facilities, um, the big services providers, HCA tenant, um, et cetera, and then, uh, managed care, which is of course always the other side of the services coin, and then finally the implications for the life sciences sector. And I'm defining that pretty broadly to include, uh, diagnostic development, uh, device manufacturing and et cetera. So, uh, so moving right along the first drivers of change, uh, for services and, uh, and facilities, you know, first of all, the federal stimulus and relief the, uh, money, which is just an unprecedented sum of money in a short period of time being injected into the healthcare system.

Speaker 1 (00:02:20):

Uh, although we are bemoaning here at hedge, I, the printing press down at the treasury, um, that money was designed and is designed to preserve capacity. Uh, what you don't want in the middle of a pandemic, um, is for your hospitals to be unable, to operate, be able to pay their workforce, um, and buy the things they need to buy, to protect their workforce and their patients. Um, the second driver of change of course, is deregulation, which was underway before COVID. Um, but now accelerated with some, uh, new, some, uh, emergency rules, which kind of hard to believe are going to simply go away. Uh, when people start taking a vaccine and then the third driver of change is of course the demands on labor, uh, was shuttered schools. People getting burned out because you've been working the same set of people for, you know, 11 months now.

Speaker 1 (00:03:15):

Um, and the cost is going up, um, and the, uh, and productivity, which is never been something healthcare is known for, um, uh, has, uh, has, has certainly, uh, suffered. So let's go on and just talk about, we talked about this last week, if you weren't with us, um, the federal capital infusion into healthcare, uh, this is, these are the areas primary buckets of which, uh, it, it went into the two biggest buckets for services, uh, and facilities, of course, the provider fund phonics about 143 billion, and then the Medicare accelerated advanced payment program, which is another a hundred billion on the next slide. You can see that's, that's how it's rolled out over the last few. Um, last few months, uh, beginning in March when, um, in order to keep everybody liquid, um, or every healthcare provider liquid CMS

immediately started sending checks, uh, from the Medicare bucket, uh, out to providers to make sure that they had money in their bank accounts and, and could continue to operate.

Speaker 1 (00:04:20):

And there would be no, no disruption, uh, in, in service. And you'll see in a minute, there's, there's been a lot of disruption. Um, the provider relief, uh, money, which came next, that was a congressional action. Um, this is important and interesting, um, to know exactly what it can be spent on. Um, it can be spent on the treatment care and treatment diagnosis care and treatment of COVID patients and potential COVID patients. And CMS says we are broadly upright applying that criteria. That means that things like labor expense, which ordinarily would be, have to be born by a health system that actually can be underwritten by the provider relief fund monies that are coming to a hospital, a hospital, or a health system. Um, the, uh, the provider relief money should not need to be paid. They simply treated as income as the, as the health system moves, um, meets the criteria, which is applied.

Speaker 1 (00:05:28):

And it's stuck in the, the income statement says as grant income, which is funny because most, um, most for-profit providers don't have a lot of experience with grant income. That's something that you typically see, uh, over on the, uh, we're on the, not a not-for-profit, uh, side, um, the second, a big chunk of money, Medicare advanced payments. This does need to be paid back next, starting next spring, and everybody's treating it as an obligation, but it can be forgiven. It might be forgiven. We'll have to see this actually represents the biggest chunk of money, um, that the providers are getting. And as a result of that slide, 11, they're all sitting on a lot of cash. Um, this slide represents, uh, the, the cash end of period cash and cash equivalents for all of the providers in the X S uh, ETF, uh, which is everybody, you know, HCA tenant, um, uh, encompass, um, uh, Medicis, you know, it runs the gamut of, of the services, uh, providers, uh, and again, most of it is accounted for by the Medicare advanced, uh, payment, uh, monies, but it is still, it's just an enormous sum of money that, uh, that is well in excess of what you typically see sitting in their, uh, in their bank account and can be used in ways, uh, certainly was provided relief fund NGOs that are fairly expansive.

Speaker 1 (00:07:04):

Um, I think we have, in our minds, we use it for treating COVID patients. Um, but there's so many things that go into that. As I mentioned, labor purchasing PPE testing your employees, you know, those are the, uh, uh, sanitisation, uh, buying equipment for advanced sanity. All these things are potentially considered, uh, appropriate uses of funds, uh, under the provider, uh, relief fund. I know also that a lot of companies, um, DaVita made a big show, this, uh, so did HCA, uh, that they were returning their provider relief monies. And I don't really, and given how little we knew about the crisis, um, back it, you know, third quarter, I'm not really sure why they did that, but if you look at slide 12, I backed out those, uh, providers who returned

Speaker 2 (00:07:56):

Their reported returning their cash.

Speaker 1 (00:07:59):

Um, but it's still, you know, you're still talking about a pretty big, uh, big sums of money in, uh, of these providers. And this doesn't even count, you know, all the providers out there that are not-for-profits, uh, that are also sitting on, you know, big chunks of money to buffer them, uh, keep their operations up and

running in some cases, saving their bacon because, uh, they were already, you know, in, in pretty deep financial trouble as a result of just, uh, macro trends, uh, in healthcare. So, you know, what, what do, what are they going to do with, what are they going to do with all this money? Obviously the Medicare money needs to be paid back. Um, but you know, when it's paid back and we'll talk about this in the context of managed care, it's going to be taught. It's going to be paid back in a very different environment, which is you're going to have patients, your Medicare patients are accruing acuity right now because they're not being treated.

Speaker 1 (00:08:58):

So they're going to be coded and processed through the system at a much higher level than the, than the Medicare advanced payment had had accounted for. In other words, you'll receive certain Medicare dollars for the treatment of patients in 2021 deducted against that. And paid back to the federal government will be a Medicare payment that assumes a, a lower acuity. So, uh, so the, the, the, the Delta between those two things will, will be, will exist. Um, and, uh, it still obviously needs to be, uh, managed properly. And I think most management sir, are acutely aware of that. There's also the possibility that it gets, uh, it gets forgiven, but if we go to the next slide, slide 13, a tenant, um, who knows a good thing when they, uh, they see it, uh, to then announce the acquisition of the portfolio, uh, for, uh, ambulatory surgery portfolio, it's pretty substantial.

Speaker 1 (00:09:56):

And exactly what I thought or am thinking is going to have to continue to happen here and continue to happen, which is you're going to have to, the services providers are going to need as many channels and many outlets to work through the backlog to work through the acuity that is accumulating here. Um, I know everyone heard on conference calls and, you know, for third quarter, Oh, well, um, gosh, you know, the, um, they're almost back to a hundred percent. They don't need to be back to a hundred percent or 90%. They need to be back to 120% in order to work through the backlog. The only way to do that is to have a good variety of channels in which to process patients. Tenant obviously understands that, um, I thought it was pretty hilarious when they, when they made a point of saying that, that we didn't use care's money.

Speaker 1 (00:10:51):

Yeah. Uh, you know, it as if money wasn't a fungible, but, but it matters not there. I think if ever called on it, you know, they're going to say, and they can say, you know, we need this for the treatment of, of, we need this to address the COVID crisis, which is in fact, um, absolutely, uh, absolutely true, you know, addressing the, uh, COVID crisis doesn't, is it limited to just what each provider can, uh, each provider is going to do with money in the bank? Um, they're also going to take advantage of certain deregulation. Uh, that's been going on in here. I'm putting up the quote again from, uh, Fred Smith, um, the CEO, my fellow Tennessee, and the CEO of FedEx who pointed out on a call a few weeks ago, he has regulations. It's what it doesn't happen because of it that's so important.

Speaker 1 (00:11:43):

And a lot has not happened in healthcare until, until both COVID and the deregulate re deregulation agenda of the, uh, the, the Trump administration. And, uh, and I'm sure that the tenant's decision to, to buy this, uh, this, these assets was in part based on, uh, the Trump administration's just opening up ambulatory surgery centers for more and more procedures and outpatient departments and letting the docs essentially decide where, uh, where they're going to, uh, perform those, those operations

accelerated a course by tenants, by tenants, understanding that, you know, ambulatory surgery centers can pick up Slack out of hospitals for people who are, uh, who aren't particularly, uh, don't have the high level of comorbidities. And honestly might be, you know, find that, uh, preferable and to review major deregulation, uh, in 19 and 20. Um, these are the things that the Trump administration, uh, put in place.

Speaker 1 (00:12:46):

Um, and I think the, one of the more important things of those is making sure the sites of service are a lot more flexible and doing that by limiting the rules on who supervises, who, uh, and where they are, um, whether they're, you know, participating telephonically or they're participating in person, and then allowing the sites, the site to be determined, uh, by the, the doctor is, you know, another huge, um, a huge, uh, uh, change. And so tenant can take advantage of, of those changes, you know, plus meet the demands of their system a little bit better with a better, uh, ambulatory surgery center portfolio, of course, supported by a pretty substantial health system, you know, which using technology and some other things, you know, can, can really leverage, uh, leverage that on the next slide. You can see these, the top musculoskeletal procedures, um, on the IP.

Speaker 1 (00:13:45):

These are moving, uh, out of the inpatient only list into the, um, into the outpatient list. And then there's another, which don't fit on a slide, uh, ambulatory surgery center procedures that are moving out, uh, moving into the ambulatory surgery center from the, uh, outpatient, uh, outpatient list as well. So another thing that occurred that has occurred in addition to this deregulation is the public health emergencies that public health emergency rules that have been put in place have really allowed a lot more flexibility within the system that we have not, if Eric, if you could put up the next slide, um, that we have not ever seen before you have inpatient rehabilitation facilities and encompass did pretty good job of, of heralding their ability to treat, uh, patients, uh, who are, are pretty sick and on their last call, um, inpatient only, uh, inpatient rehabilitation facilities have this, you know, three hour rule, three hours of, of rehab, you know, uh, per day, you know, during the week for a total of 15 hours of, of rehabilitation, you know, that is a rule established by regulation.

Speaker 1 (00:15:01):

And, you know, it keeps the system from being flexible. So you could have a big COVID using the current emergency. You could have a big COVID emergency in Houston, Texas, and you could have inpatient rehabilitation facilities, half empty while your hospitals are overflowing. That doesn't make any sense in the public health emergency waivers, you know, uh, decided, well, we're just gonna let the, uh, inpatient rehab facilities take as much overflow. And of course, you know, they, they embrace that and have made a point to, you know, they can, they can take care of, uh, older. They can take care of sicker patients, skilled nursing facilities to we, they waived the three-day hospitalization requirement, um, and allow patients to get into skilled nursing facilities, you know, a lot more quickly. And then in the case of home health, they waived the, um, or they, I should say broadened the definition of home bound, which is another, you know, that is a regulatory construct, um, created by lawyers in Washington and not by people who practice healthcare.

Speaker 1 (00:16:08):

So, so these public health waivers, you know, open right up and made the system a lot more flexible, you know, to respond to an influx of patients, not flexible enough to address acuity, not trips, flexible enough to get the throughput increase, at least not yet, which is why I think that we're going to see

these public health waivers stick around for a long time or longer than I think people are really contemplating right now. And, um, we'll be part will de facto create post-acute reform. Um, this is something that, that Congress, you know, asked for back in 2015, probably mostly for CBO scoring purposes, but nonetheless, you know, they, what we were aiming for in 2015, uh, with Congress's direction was all right, let's stop this whole, you know, inpatient rehabilitation stiffly, but the patient go where the skill level is appropriate for, for their care.

Speaker 1 (00:17:14):

And that's exactly what the public health emergency waiver did. So it looks public health, emergency waiver looks an awful lot like, uh, like post-acute reform. Um, and the longer, you know, IRFs have a waiver. The longer the stiffs have a waiver, the longer home health gets to treat anybody a doc thinks, you know, should be treated in the home the longer, you know, the more likely it is to become a permanent. And if you go to the next slide, this is just some of the pack reform is mid-pack put that, um, did this report way back in, in 2016, um, you know, hasn't really made any progress. I think the prognosis is, Oh, well, you know, there's there, it's, COVID ruined it. I disagree. COVID actually probably accelerated it. I think it's allowed us to look at this system. And the most famous example of tele-health is tele-health and everybody understands that, but to look at this system and go, Oh, you know, if it's more flexible, if you don't have all these silly rules and you just let the people on the ground decide, you know, what should happen to the patient, you get a pretty, pretty decent result.

Speaker 1 (00:18:25):

And, um, and I think that, you know, you, the, although the us healthcare system is definitely under a lot of strain. I think we can say with it, the strain was nothing like it's been in amongst smaller systems and much more, uh, regulated systems in the, uh, in Europe and in Asia. So another factor that's going in that is going to contribute to the change in services and facility, um, is the, the demand for labor. And with that, the pressure to increase productivity. Um, CMS has been, uh, actually the CDC through HHS was nice enough to release all of the fussy silk facility level data being reported on ICU, uh, staffing and hospital staffing and critical house, critical staffing, uh, levels. Um, and what we did on the next slide, we isolated the, um, uh, w we isolated the HCA, uh, staff, HCA facilities, the ones that we could find, and here you can see, this is their ICU.

Speaker 1 (00:19:36):

The, uh, the, the gray line is the, uh, all it's all adult beds. And those, all those adult beds that include inpatient, obviously, but also anybody who's in there for observation, uh, or, um, uh, or, you know, overflow the idea being how many people do you need, you know, in order to monitor all those people. And then the blue line is the, um, staffed ICU, and you could see it's moved it about, and this is going to be an interesting comparison in a second to tenant, but you could see, um, you know, it's, it's moved about with ICU demand, really, um, running up pretty much here in the fall, pretty dramatically. Um, and then, um, you know, and stayed up there a while demand for, for regular beds has, has fallen off, um, as staff gets moved from one place to another, to the extent that that they're trained to do that here, tenant is a much more interesting, uh, charts, much smoother pattern, um, tenant made a big deal in their call.

Speaker 1 (00:20:41):

Three, I think it was third quarter might be second quarter where they're talking about how we've gotten down to where we understand exactly how much, uh, how, how we need staffing when we need

staffing, when we're using contract staffing, when we're using our own staff. And I think this demonstrates that here in the, um, in their chart is that we w because it is, it is so smooth, it could of course be geography as well, but, um, but it, it appears that they, they they've got it, you know, higher demand for ICU, uh, and ICU staff, um, lower for other beds. And, and the smoothness of it suggests that they they're, they've been, um, managing it quite well. Um, maybe they've put in place some technology advances, which I'll talk about here in a sec. Um, maybe they have, you know, some other tricks up their sleeve that HCA does it, and I'm not down on HCA.

Speaker 1 (00:21:38):

It's the hometown team here in Nashville. Um, but there's clearly a very different, uh, different pattern, uh, going on there when it comes to managing, uh, the staffing of the, of the beds throughout their, their system. Um, this data set, uh, also provides us with, uh, States reporting, critical staffing shortages. Um, and as you can see, the situation has gotten worse since, uh, since September the first, um, that gray line down at the bottom is elevated a bit above the, um, uh, above where it was back in September, um, with some States, you know, get getting worse, a few, uh, getting better, uh, but, you know, demonstrating that, you know, the crisis is far from, um, from easily, uh, dealt with an address. But, um, uh, and probably we're going to see, I would think more of that, you know, people are just, you know, running out of bodies, running out of people to treat because of the extraordinary demands, um, on the, on the healthcare system that don't just come from the fact that, you know, there's a lot of people moving through the hospitals, but is sometimes true.

Speaker 1 (00:22:51):

Um, but it, we have a number of other contributing factors that are going to continue to put pressure on services and facilities to be more productive, to be smarter about how they use, uh, their labor. And that is, that is a big change, you know, that that is not something that healthcare has had to deal with, um, ever before, uh, labor that we, we talk about nurse shortages or physician shortages. Those are very long-term things we've never had the kind of labor shocks in healthcare that, that you, that you see today and here look at the jolts, uh, data, uh, which Tom talks about all the time. But, um, but you can see that, you know, the job openings are up pretty substantially here, uh, in the last, uh, in the last few, um, a few reports, uh, back really above, uh, the March peak that's likely to endure throughout, uh, throughout the fall and probably into, uh, into the winter.

Speaker 1 (00:23:45):

And the reason that the labor pressure is so acute is for one, if you look at the next slide, every body wants a healthcare worker, um, and whether that is a, um, Eric, if you go to the next slide, um, whether that is somebody putting, you know, uh, putting, uh, injecting vaccines during trials and now injecting vaccines, uh, now that they're being distributed, or that is a healthcare worker, uh, with some technical experience, you know, supporting a medical lab, uh, operations, everybody wants healthcare workers. And when you have, you know, half a trillion dollars sloshing around in the system, uh, that the federal government is picking up the tab, they can hire an and they are, and here you see that the demand, uh, the, the, um, the, the green line is all healthcare, uh, all healthcare employment, uh, and then the other bars are broken out by some of these alternative sites that, that have seen a good bit of pressure, uh, or demand like R and D uh, like manufacturing of pharmaceutical prep and, and medicines and so forth.

Speaker 1 (00:24:58):

Um, and, uh, R and D being of course, uh, uh, a really a really big one. Um, the pur labor forces, you know, faced some challenges to course, um, women in healthcare have been very slow to return, um, by my count, just using the lower, the lower operating level for, uh, for, uh, the healthcare system we're in right now, which is, was 90% at the end of Q3, probably now more like 80, 85%. And you're missing that 85,000 women, um, who have departed the workforce and, and may, and may not return. Um, and that, that is, it creates a very different dynamic, uh, for healthcare that we've ever seen. Healthcare is delivered by people, uh, human bigs. And the question becomes, you know, how is that, how's that gonna change? Uh, next slide, one of the things driving women in the workforce, of course, um, is the school closures.

Speaker 1 (00:25:56):

Um, you know, you have a lot of people, women in particular caregiving taking care of their kids during the day through a homeschool environment. Um, and, um, uh, and that is, uh, that's definitely created some, um, some real challenges, um, the, uh, less skilled, lower wage, um, the next slide, uh, those are the ones that are, um, certainly suffering the most. And then, um, finally to make that, make that point again, the, the, the, the, uh, CVS is advertising for people to provide, um, uh, provide vaccines. And here you can see, you know, they're, they're taking, uh, they're taking who will apply because they've got to do, uh, vaccinations all over the longterm care facilities, which is not a lot of a lot of stuff that needs to go on there. Um, if you go onto the next slide and show CVS air, um, and yeah, there, thank you.

Speaker 1 (00:27:04):

Um, so what, so staying on this labor theme, you know, where we are here is we have a, you know, a lot of money in the system, you know, that allows the healthcare providers and facilities to pay for this additional labor. Unfortunately, this additional labor has got other things to do, whether it's homeschooling their children or working in an environment, doesn't require as much pressure like a lab, for example, you know, vaccine trials or whatever, you know, uh, working for CVS, you know, they're able, they're able to do that. So, so we're in, we're going to be in a position and we are in this position where productivity, the workers that are in place working right now in the healthcare system are going to have to become more productive. Um, and if you look, here's the next slide, slide 28, um, I just find this fascinating that, you know, we're 10 months into COVID, uh, hospitals are still pretty, uh, pretty inefficient.

Speaker 1 (00:28:02):

This is employment, you know, versus, uh, inpatient days, you know, you would think that those two would have something to do with each other and, and they really don't, they don't quite, and, and then on the next slide, um, this is your, uh, you're on the left discharges versus employment. And then finally on the, uh, healthcare facilities issue, um, you know what what's gonna, you know, what's going to solve this productivity problem. And, uh, and, and, you know, we've got a lot of money so we can pay for it. We've got to address productivity problem. And I'm going to talk about that, why that is like urgent, you know, we were kind of hurdling towards, uh, a public health crisis, uh, right now, um, the answer is it's going to have to be, they're going to have to be productivity solutions. We've seen olive, which raised 400 million in what a year, um, and has all kinds of, you know, big names, uh, in their, in their rounds.

Speaker 1 (00:29:00):

Uh, and then little old, uh, patient forecaster, which is, uh, one of the, the, the, uh, venture funds that we do a lot of work with jumpstart here in Nashville. You know, they're, they've, uh, just recently, uh,

announced investment in this AI powered labor management, uh, platform, um, labor management, most hospitals. And I think tenant, if I look under the hood, I might find out exactly what they're doing, but, but most hospitals, they have shifts. They have traditional staffing models. They use those staffing models, you know, based on what they've always done and what they expect to do, except now what they've always done is going to work. Um, you know, the labor picture is different. They have money to spend to solve, uh, the problem, uh, and they have a very deregulate, a much more deregulated environment in which to operate. Um, so that is, uh, that is, that's a big change for healthcare and it's going to continue to evolve.

Speaker 1 (00:30:00):

Um, so moving on to, uh, manage care. The other side of that coin, um, if facilities are spending a bunch of money taking care of patients, uh, labor is going up, PPE is going up, you know, that generally is, you know, a bad thing, but in this case, they've got the federal government to help them out. They've got, you know, big chunks of cash they're supporting, you know, what they're doing managed care. On the other hand, it's not been the beneficiary of such largest, um, the provider relief fund, as I told you, it could be used very expensively. Um, and that, so the providers are buffered from the incremental, um, costs, but anything that a provider can bill to a third party, like an insurer, Medicare, Medicaid, they should, and they have to, so you're not allowed to apply the costs associated with treating patients.

Speaker 1 (00:31:03):

If that patient is reimbursable, um, from, uh, uh, a CV, an Aetna or a, um, uh, UNH. Um, so the, so as we have, uh, as we've been moving through this crisis, uh, and talked about this mortar sec, acuity has continued to build because we're just not operating at a hundred percent and really need to be operating at more like 150%. Um, and it's, uh, it's going to continue to put pressure on the managed care, the MLR restrictions that were put in place under the affordable care act kind of limit flexibility. So if you have, and I think UNH is projecting a 79.3% MLR, you know, they have all kinds of levers to pull, but they're saying 79%, you know, let's say their Medicare advantage or their Medicaid plans, uh, to the extent they have them are 79%. They've got a rebate, you know, that back in, or a portion of that back.

Speaker 1 (00:32:01):

Um, and that is not on a average over several years, that's on a year to year basis. So you may rebate back at, for 2020 that doesn't help you out in 2021, where all of the care that you didn't have to deliver, suddenly you have to deliver, uh, plus some. So it, it, it's, it's a, it's a law, it's a set of regulations that really limit the flexibility of, uh, of managed care in the face of some pretty crazy, uh, acuity building and backlogs, uh, uh, bearing down on them. And quite honestly, I think it's probably, and I've heard from a number of, um, actuaries, it's really hard to model. Um, and if you look at the next slide, this is treasury gross receipts, char Charlie, 12 months per beneficiary. Um, this is for part a and part B, and you can look at how that chart yeah.

Speaker 1 (00:32:54):

Right. Until, you know, the spring early 2020 kind of look the same separating because of the cost differentials, but, and the shifts in care, but obviously having a relationship with one another, um, and here just gets blown up, blown up by COVID and suddenly you have, you know, a lot more a spike in part I care kind of flat in, in part B care. Now they're both, you know, falling, uh, falling there in the last, uh, last few weeks. And on the next slide, if you look at part a and you compare what the treasury spends every single month, and compare that against a three-year average, all of the seasonal patterns are, are

flipped. So where you would expect less care to be given. You're getting more. And it's because of these delays, you know, people can't go to the doctor, we can't schedule care when we're supposed to be scheduling care.

Speaker 1 (00:33:47):

And, and, and then you have, okay, we need to get this person in. You have these, you know, sort of, you know, triaged type, uh, arrangements that you have to have to deal with. And on the next slide, the same is true, uh, of, uh, of part, a part B as well, although we're so, you know, a little bit more extreme, but operating much differently than, than it has historically, which, you know, is it puts you as a, as an actuary in a, in a bit of a pickle because you don't know, is, is it 2021 going to look more like 20, 20 years are gonna look more like, uh, 2019 in most cases, the surveillance of the premiums in the commercial and in the government, like Medicare advantage is pretty, pretty much status quo, uh, from 2020, uh, because nobody really knew what to do and the picture isn't particularly cleared out.

Speaker 1 (00:34:43):

Um, and so you could end up, uh, I think was some, uh, some real challenges with, um, uh, with the benefit costs, uh, that are just becoming more and more unpredictable. And to that point, McKinsey, uh, released a study back in April, you know, where they're estimating the, you know, how long it would take to clear the surgical backlog that's been built just in the spring, you know, just in the spring. We're not even talking about what's being built right now. And, you know, they determined that in order to clear it pretty fresh, the system would have to operate, you know, at, at well in excess of what it's currently operating at, which is, uh, pointed out on services facility. Can't do, um, with the productivity tools that that healthcare needs for, for scheduling, for labor management, you know, and all the demands on labor, you just simply, don't a, you don't have the ability to operate at that level.

Speaker 1 (00:35:40):

And the more, every single day that goes by where you're not operating, uh, the health systems aren't operating at above a hundred percent, um, or even at a hundred percent is D is more and more acuity, uh, that gets built. That's more backlog that gets built, you know, and that's more cost to insurers that is going to be, it's going to take some time to, to work up and for what it's worth. We saw something pretty similar when the affordable care act was passed. We saw a delay in care, you know, passed in 2010 people really couldn't get covered until early 2014. They all rushed into the system, you know, at the same time. And they were in there for two years, you know, through, through really the middle of, uh, of 20, 26 to eight, um, for the next slide, um, the, the data on Medicare kind of holds up and here, you can see it is not anywhere close to a hundred percent.

Speaker 1 (00:36:36):

You know, it's, it's running in about, you know, 90, this is personal care expenditures through, through October. This is running around 91%. Um, and although the providers will say, Oh, yeah, we're almost back to normal. You don't need to be back to normal. You need to be above normal, and you need to be above normal for a while in order to clear the backlog and deal with, uh, deal with the enormous amount of, of delayed care. That, that is, that is continues to be, um, a problem. And here in the next slide, and this is why I titled this, this is nowhere near clearing the backlog. If you look at the, um, if you look at the right hand side, those straight lines are three-year averages, uh, for discharges, um, and for, uh, inpatient, um, inpatient days. And you can see the number, the average inpatient day per discharge, just Scott, just hockey stick there, you know, with the crisis, it's come down a little bit.

Speaker 1 (00:37:35):

Um, but you know, still well above, uh, it's average of, you know, high five, five days ish, it's now, you know, uh, hovering around around six it'll probably come down again and key four, and then it, and she, uh, and she back up Q3 rather than she back up. So, um, so we're the cuties mounting. The backlog is building. And the question is how, how is managed care going to deal with it right now? It's status quo. We're looking at it. Um, we're not changing our premiums, you know, that doesn't seem like a reasonable, uh, position to me. Uh, they do have a lot of levers to pull, especially UNH. Um, but I don't know that that is, I don't know how they're going to address the extraordinary amount of care that that needs to be, uh, dealt with. They have been leaning pretty hard on tele-health.

Speaker 1 (00:38:33):

Um, and they're quick to say that, um, but it has its limits. Uh, and I think we're seeing some of those limits, you know, as the, the dollar per patient, you know, the dollar value of each discharge continues to go up. Um, it, you know, it's 31,000 in, in the, the, uh, census Bureau's survey. It's kind of been the average, you know, it's up around 36, almost 40. Um, probably gonna continue to climb until tele-health is, is turns out it's great for behavioral. Um, but it isn't a substitute for every kind of, uh, every kind of care there is because at the end of the day, you need people, um, to actually deliver care and that's how docs, uh, are trained. So, um, again, if you have any questions QA at, uh, at [inaudible] dot com, so let's go on to the third, uh, part of, uh, of this look at the sub-sectors.

Speaker 1 (00:39:31):

And that is the very exciting and interesting area of, of life sciences. Um, as I said, uh, last, last week, you know, we're, uh, COVID was probably this generation's Pearl Harbor, um, and, uh, and the work that's going to go on and is going on with respect to vaccines, diagnostics testing, and manufacturing is going to be this generation's, uh, Manhattan project. Um, and, uh, and, and some of it is, is just mind boggling, you know, uh, cell level energy projects, for example, it's just, just unbelievable, uh, stuff that, that, that it's, that the scientists, uh, in this country are capable of doing, uh, but the three drivers of change in life sciences money and an awful lot of it. Um, number two, national security, we don't really think of healthcare, national security. Um, you know, we've been trained with the, you know, the hoot with the world health organization.

Speaker 1 (00:40:32):

Um, certainly our national posture until recently has been, um, to help solve health problems around the world. Um, the Gates foundation has done a lot of work there. Um, uh, my Senator, uh, former Senator bill Frist has done a ton of great work there as well. Um, but the national security issues that have emerged, um, are number one, the fragility of the, of the supply chain, um, is isn't is something that needs to be reckoned with. Um, the fact is, is that there, the economic disruptions occur that occurred less than I think most people thought in this country, but those things that did occur were significant, and those threats need to be, uh, mitigated in the same way that a threat, uh, a traditional security threat, um, would be, uh, mitigated as well. Um, it has been a national security priority since 2005 when George Bush recognized it as such.

Speaker 1 (00:41:32):

Um, but now going to continue, you're, you're going to continue to see that, uh, in, in, in spades, um, the technology, um, uh, is of course, another driver of change the MRN, a platform that is a first, it can be applied elsewhere. Uh, pharmacopoeia pneumonia, uh, being one that's on a lot of people's minds.

Um, and you could even stretch that further into, you know, vaccinations for, uh, different kinds of cancers and so forth, which is, you know, just a thrilling and exciting, uh, development, um, the need for advanced manufacturing capabilities that are onshore nearshore, um, is another, uh, technology is driving that. Um, and we're, we're going to see that, especially in the development of, uh, testing solutions, uh, diagnostic solutions, uh, and so forth, um, the federal government, as a result of this, uh, episode now has, uh, just basically has a shopping list of things that they need to do.

Speaker 1 (00:42:34):

And if you want to review the 2017 pandemic preparedness and response plan, I'm, uh, just email me and I'll, I'll send it to you and you could see exactly what they need to do. You know, that plan was, uh, update was produced in 2017, which means it was mostly written prior to the election. Um, and, you know, you kind of demonstrates that it was probably pandemic response was a huge priority of, of George bushes, president bushes, but probably not so much for, um, for president Obama, because when you compare the Oh six plan, uh, and the 2017 plan, you know, a lot of progress wasn't made that needed to be made. And we, we suffered, uh, you know, the, the country suffered as a, as a result of that, but on their shopping list, uh, diagnostics, um, faster, cheaper, and you saw today, the FDA approved its first ad home, you know, just almost like a, uh, lateral flow, uh, pregnancy, almost like a pregnancy test, um, for, uh, for COVID.

Speaker 1 (00:43:36):

And, uh, and that is, that is in their mind to be paired with a telehealth solution, to keep get people, to test themselves in their home and then reach out telephonically to, uh, a physician, you know, with those results rather than, you know, getting themselves into a car and, and, and mixing with people in a, in a healthcare setting. Um, they need to secure the supply chain, uh, for reagents and other needs. You know, we had shortages of swabs, we had reagents went bad. That's gonna, that, that needs to be fixed. Uh, the stockpile, uh, it, while the federal stockpile was okay, uh, in the spring, it was not okay at the state levels. Um, and that really showed, uh, and even at the federal level, you had a lot of stuff that was, uh, stale dated. Um, it diagnostics also improved, uh, and readily available animal models.

Speaker 1 (00:44:32):

This is something that, uh, that they, you shows up in the NIH grant, uh, data as well. Um, another therapeutic, uh, on their list, um, broad spectrum, monoclonal antibodies, hosts, targeted therapeutics, uh, small molecule antibody, any virals with novel mechanisms of action are all on their list of things, um, to do long haul and extreme response therapies are definitely another, um, another priority and then securing the supply chain, uh, and stockpile as with diagnostics vaccine goal, uh, in the 2017 plan. And the 2005 plan was 17, 12 weeks. Um, we I'll call it 10 months, um, nine, 10 months. Um, here, it was just, you know, well, off of the goal established the idea is you're be able to get that vaccine turned around within 12 weeks of a pandemic. Um, that means a ton more research needs to be done, um, testing and approving vaccines for other populations.

Speaker 1 (00:45:41):

That's still on the to-do list, um, limit those side effects that might cause people to be hesitant and again, secure the supply chain and stockpile. Um, and then finally, uh, the national defense priorities, um, you know, securing all iterations and generations of these vaccine platforms is, is going to be a priority, you know, improving the data and communication, uh, protecting IP and protecting this on budget. Um, so how are we, how is the government going about doing this is just a monstrous task, but

one I promise you is, is, is going to be undertaken, uh, unlike George Bush, um, uh, president like Biden has, um, has an actual crisis that he will have to address and show that he's, he's there for the long haul himself. Um, these are the obligated contracts for all COVID-19. Um, the majority of it is going to the department of energy.

Speaker 1 (00:46:40):

Um, as I mentioned, last week, department of energy is where the Manhattan project was housed, uh, back during world war II. Um, and it will, uh, it, you, you get, it's, it's a big black box, so we're not going to know everything that's going to go on. And like, uh, what we know about NIH and the money that is flowing into, um, through contracts, um, and other obligations is going, is likely to grow over time. So in the next slide here, you can see how, um, we have, uh, we have, you know, obligated contracts versus potential contracts. This is, this is kind of how they classify the obligated amounts of about 143 45 billion committed, um, meaning, you know, that that contract signs we're going to pay you and then options on those contracts could take it up to 243 billion, um, over the next several years.

Speaker 1 (00:47:33):

But if you look at the next slide, not that many years, um, this is, uh, the long tail of these contracts are going to have a continued influence, um, on, uh, research and development, you know, through the department of energy. And I'll talk a minute about why NIH isn't getting thrown overboard, but, but they definitely, you know, who've got some problems when it comes to national security. Um, and I just add on the next slide Illumina, uh, the federal government appears to be an Illumina shop and bought anything recently, and they not a lot of anything, but, um, but you can tell they, they, they do, uh, they, they do pay attention, um, or they do have a few, um, a few limited boxes and some, uh, supplies floating around. And that's something we'll keep an eye on, but if you look at the next slide, this is the contract language, um, from, uh, from, from, uh, Lee, uh, one of the big, uh, department of energy and this, I mean, this is basically high.

Speaker 1 (00:48:35):

We have a contract to run a lab, um, and that's it. That's all we're going to tell you. And it's true. That is all they're going to tell you. Um, and you'll just see some magical things, you know, show up, uh, eventually get commercialized. But, uh, and the reason for that is an NIH on the next side, they do have an important role. Um, you know, they've always been the place where we're science has really developed in this country. Um, but there are some national security concerns. Um, and that's going to control some of the priorities, you know, Francis Collins undertook a probe in 20 beginning in 20 1854 scientists are fired or resigned, um, because they didn't disclose, you know, foreign contacts and, and the, the threat, the threat posed by application of Mr. And a, uh, had breakfast yesterday with a friend who said, yeah, you could probably create prion disease, you know, with some of this technology, which is not exactly a comforting thought.

Speaker 1 (00:49:39):

Um, I guess the good news is prion diseases. Don't, don't fly around in the air, but, um, but you're gonna see, I think a well not diminished role, the bulk of the hundreds of billions of dollars that are going to flow through life science, biotech engineering is not going to flow through, uh, through NIH. Um, it, this national security priorities just really don't allow it. Um, and it's not just NIH is it's where they send their grants. Um, you know, the, the research universities around the country where they send their grants have not demonstrate a particularly strong commitment to, uh, to security. And in fairness to them, you

know, didn't, I don't think realize, you know, what the, what the risks were, um, and here on the next slide, this is where some of the money, uh, has gone from the supplemental COVID, um, appropriations and the Fred Hutch, uh, out on the West coast, uh, getting a big, uh, a big chunk of it and our good old Vanderbilt university, uh, being well-represented, uh, as well, uh, domestic for-profits, uh, RO uh, in, uh, Raleigh or Winston-Salem.

Speaker 1 (00:50:48):

I can't remember which, um, they they've got their CRO and they've gotten a pretty substantial, uh, contact contract then on the next slide, um, manufacturing is another, uh, I mentioned the supply chain. Um, this is a huge, it's going to be a huge priority and energy. The department of energy is then, um, committed to developing advanced manufacturing processes. You know, a lot of things got to offshore because of cost concerns, of course. Um, but also, you know, regulatory concerns being able to produce, you know, certain things that, you know, quite honestly make a mess. Um, and, you know, being able to do that without, you know, because of compliant, regulatory compliance, um, can sometimes be difficult. And, you know, we did a lot of off shoring to, um, countries that proved unable to meet demands when you have a pandemic. And so that is absolutely a priority, not, not just for, you know, things like vaccines, antigen swabs, et cetera, PPE, but also, um, for pharmaceuticals, you know, uh, API APIs and pharmaceuticals for devices, you know, making sure that, and one of the pandemic plans is to develop and, and, and really expand on what we've learned with ECMO, uh, and with respirators during this crisis, which has implications for, you know, treatment of respiratory diseases throughout, um, throughout, uh, not just, not just a COVID, so, so expect more research to be focused instead of, I think the model, which is all right, let me come up with this great thing and we'll have it made in Southeast Asia, India expect, Oh, I'm coming up with this great idea.

Speaker 1 (00:52:35):

It's great, you know, new respirator or this new, uh, device expect that it to be, well, you know, how are you going to manufacture it nearshore or onshore? And you saw this in the, the quarterly earnings calls with, you know, premier and others talking about their supply chains and you know, how they're already working for near shoring. I think there's going to be a strong push from Congress that those, those things should not be that they should be in the United States. Um, and, and I think that's, that is going to open up probably some, uh, manufacturing, uh, interest in manufacturing, again, advanced manufacturing that we haven't, we have not really, uh, invested the time and money into, and you'll see that as well. And then on the next slide, before I kind of, uh, wrap it up, um, testing, I think one of the, the folks, as I've already mentioned, there is a focus on constantly evolving testing.

Speaker 1 (00:53:35):

Um, so it's fast, easy, so we're ready for the next pandemic. So we can be adapted for, you know, a different detection of a different virus. Um, it could be done at home, all those that is going to continue and almost indefinitely, um, w while this crisis is used, um, for the development of, of, you know, better testing, that was the, you know, huge learning moment is that we just weren't prepared, you know, for, uh, for the testing that needed to be done. Uh, didn't have the materials and the supplies that that needed to be done. So you're seeing, uh, uh, a pretty strong interest priorities to continue the testing. You're going to have to do it for surveillance. Uh, we have to know the vaccines working, um, the, uh, you've got to, um, we've got to know, you know, how it can be adapted and changed.

Speaker 1 (00:54:30):

There's employers are still gonna want to do it. Unions are going to still demand it. And I think you're going to see a considerable amount of resources continue to be, um, directed that way probably for, um, you know, at least a year or more, um, as faxing rollout and iterations of that vaccine. As I mentioned earlier, you're not, you're not just talking about vaccine one and done, you know, it's, it's, it's generations upon generations, uh, that constantly need to be tested and make sure that they're working. Um, and that, you know, people who come into an ER, don't have COVID, they have, they have something else. Um, and that's gonna, that's going to take, that's going to take us a while to figure out that the, you know, how, how the backseat has worked, how people have responded to it, you know, how good they are about getting it, you know, and, and those things like that.

Speaker 1 (00:55:21):

So, all right. That's, uh, five minutes left. If you've got questions Q a at, uh, dot com, um, uh, before I take those, I want to just mention, um, on the 30th, so take Christmas week off, um, Tom Tobin and I are going to be talking about what falls out of this funnel. We've created, you know, these macro, uh, pieces, and then the sector level changes are very specific, you know, what falls out and what, and apply his micro quad methodology to it, um, to see what we can, uh, you know, actually like pick some, some good names out of them. I've got, I've got a few of, a few of my own favorites. Um, but, uh, but I definitely want to, um, want to see what, what he has to say. And then of course, if anything, good comes to that, you know, we'll have, uh, we'll take a look at, um, at, uh, Keith's, uh, key signals to, and, and see how that, um, how that we'll will, will fall out. So, Oh, okay. [inaudible]

Speaker 1 (00:56:29):

all right. Questions on labor and productivity. So what does this mean for, uh, labor labor models and using labor models to predict inpatient admissions? I think we're, I think we're in for having to revisit all our models really, and I don't think it's just managed care. I think, you know, we all have to look at this very different landscape that we have and say, all right, this doesn't mean what it used to meet. Um, and I, I would, you know, what, however, whatever inputs you're using and wherever you're getting them from, um, you know, think about, think about what, I mean, seasonal variation, for example, I mean, that's something we've been able to take to the bank when it comes to, you know, patient mix Medicare versus everybody else, you know, for years and years, and now suddenly it's, it's gonna be, it's gonna be quite different.

Speaker 1 (00:57:22):

So I think you have to, uh, think about thinking about the, the data as it's coming in and what needs to be, uh, modified, uh, Medicaid, um, implications for Medicaid, Medicaid, you know, half of Medicaid is children now. Um, and, uh, which I don't think will last, I thought enrollment would take off a little bit faster than it has. Um, there is some, uh, verification redeterminations that aren't happening, um, that, uh, are, are gathering, you know, we're, we're gathering more enrollees, although it is not the reverify. I noticed that everybody made that excuse or at least offered that as an explanation in Q3. Uh, you know, most of the time, you know, growth in Medicaid enrollment due to, uh, no redeterminations is pretty steady and slow like that because each month people aren't getting, um, take taken off, but you're adding people and we've seen a much steeper, uh, rises than, than we saw now that we saw back in 2016, 16, 16, when no redeterminations were going on.

Speaker 1 (00:58:37):

So, um, so I think that that is, um, I think that you've got a few things in there. I think you've got children, uh, enrollment growing, um, because people are shifting their children, um, onto whatever plans say they can because they one person's lost their job. I think you definitely have a redetermination. How does it affect, how does the acuity models affect this? That is yet to be SU I've got to see more data. And one of the big, big problems for the healthcare system is going to be that children are not getting vaccinated and children are not getting the early care that they typically get. Um, vaccinations are down about 22%. Um, these are that's in the Medicaid data. Uh, we need to see a little bit more, um, because that, that means measles outbreaks. Um, God forbid, um, you know, potentially other, uh, other viral outbreaks, um, as well. So, um, so we're probably not going to see that acuity tick up, like we are with Medicare because you've got a much, you've got typically a younger, a younger population. Um, but I think you should expect to see something

Speaker 3 (00:59:46):

Along that line. And Eric, I think that is

Speaker 1 (00:59:50):

So I want to thank you all for joining us and, um, we'll look forward to seeing you on the 30th and we'll, we'll talk, uh, all about, um, the micro quads and, and policy and a few other great things. Have a great day.