PHYSICIAN-FOCUSED PAYMENT MODEL TECHNICAL ADVISORY COMMITTEE (PTAC)

+ + + + +

PUBLIC MEETING

+ + + + +

The Great Hall The Hubert H. Humphrey Building 200 Independence Avenue, S.W. Washington, D.C. 20201

+ + + + +

MONDAY, DECEMBER 10, 2018 12:30 p.m.

PTAC MEMBERS PRESENT

JEFFREY BAILET, MD, Chair GRACE TERRELL, MD, MMM, Vice Chair PAUL N. CASALE, MD, MPH HAROLD D. MILLER LEN M. NICHOLS, PhD ANGELO SINOPOLI, MD* BRUCE STEINWALD, MBA JENNIFER WILER, MD, MBA

STAFF PRESENT

SARAH SELENICH, Designated Federal Officer (DFO), Office of the Assistant Secretary for Planning and Evaluation (ASPE) STEVEN SHEINGOLD, PhD, ASPE JULIA DRIESSEN, PhD, ASPE

*Present via telephone

A-G-E-N-D-A

Opening Remarks - Chair Bailet 3			
Deliberation and Voting on the Making Accountable Sustainable Oncology Networks (MASON) Proposal submitted by Innovative Oncology Business Solutions, Inc. (IOBS)			
PTAC Member Disclosures			
Preliminary Review Team (PRT) Report to PTAC - Vice Chair Terrell			
Clarifying Questions from PTAC to PRT 40			
Submitter's Statement - Barbara McAneny, MD, Kameron Baumgardner, Terrill Jordan, JD 41			
Public Comments			
Voting			
Instructions on Report to the Secretary 112			
General Public Comments			
Adjourn			

	6
1	P-R-O-C-E-E-D-I-N-G-S
2	12:34 p.m.
3	CHAIR BAILET: All right. We're going
4	to go ahead and start. So good afternoon and
5	welcome to this public meeting of the Physician-
6	Focused Payment Model Technical Advisory
7	Committee, known as PTAC. Welcome to the members
8	of the public who are able to attend in person,
9	and also welcome to those on the phone or over
10	the live stream. Again, thank you all for your
11	interest in this meeting.
12	This is PTAC's sixth public meeting
13	that includes deliberations and voting on
14	proposed Medicare Physician-Focused Payment
15	Models submitted by members of the public. This
16	meeting also marks two years of the PTAC being
17	open for business and available to receive models
18	from the public.
19	Over the last two years, including the
20	proposal we will deliberate on today, we have
21	received 28 full proposals. We thank the
22	community of stakeholders who have put in the

time and energy to submit these proposals. Your hard work and dedication to improving our health care system is greatly appreciated.

1

2

3

4

5

6

7

8

9

10

11

I have some updates I would like to share with you before our deliberations get underway. First, you may notice some new faces around the table. Well, we have one new face. That's Dr. Jennifer Wiler who comes from the University of Colorado School of Medicine. She's an emergency medicine physician.

So welcome, Jennifer.

12 We also have on the phone our second new member of the PTAC Committee, and that is 13 Angelo Sinopoli, who's an internist by training 14 and comes to us Prisma Health and the Care 15 Coordination Institute in South Carolina. 16 He unfortunately -- his flight was snowed in, but he 17 is active and fully engaged and participating in 18 19 today's meeting.

These folks have already hit the ground running. Both are already active on Preliminary Review Teams looking at new models

	5
1	that we recently had submitted to the Committee.
2	In addition, I'd like to acknowledge
3	Dr. Grace Terrell, who has recently agreed to
4	serve as the PTAC Vice Chair. Having worked with
5	Grace on the Committee for the past three years,
6	I know the Committee will greatly benefit from
7	her leadership, her expertise and also her
8	creativity in her new role. Emphasize
9	creativity.
10	So the member of PTAC have been hard
11	at work since our last public meeting in
12	September. In addition, the proposals we'll be
13	reviewing today our Preliminary Review Teams are
14	actively reviewing four proposals. You also may
15	remember that earlier this year we issued a
16	request for public comments on processes and
17	requirements. A summary of the public comments
18	and actions the Committee is asking to take as a
19	result can be found on the ASPE PTAC web site.
20	Today we will also be debuting new
21	voting categories for our overall recommendations
22	to the Secretary. We believe that these voting

categories which are more descriptive will be able to better reflect our deliberations and recommendations to the Secretary. After we vote on whether the proposal meets each criterion, we will proceed to vote on our overall recommendation to the Secretary.

1

2

3

4

5

6

7

8

9

10

11

First, we will vote using the following three categories: Not recommended for implementation as a Physician-Focused Payment Model. The second category is recommend, and the third is referred for other attention by HHS.

12 We need to achieve а two-thirds majority of for of these 13 votes one three If a two-thirds majority votes to 14 categories. 15 recommend the proposal, we then vote on a subset of categories to determine the final overall 16 recommendation to the Secretary. 17

The second vote uses the following four subcategories: First, the proposal substantially meets the Secretary's criteria for PFPMS. PTAC recommends implementing the proposal as a payment model.

	7
1	Second, PTAC recommends further
2	developing and implementing the proposal as a
3	payment model as specified by the PTAC comments.
4	Third, PTAC recommends testing the
5	proposal as specified in PTAC comments to inform
6	payment model development.
7	And fourth, PTAC recommends
8	implementing the proposal as part of an existing
9	or planned CMMI model. We need a two-thirds
10	majority for one of these four categories.
11	Today we will deliberate on one
12	proposal before we host a general public comment
13	period To remind the audience, the order of
14	activities for the proposal is as follows:
15	First PTAC members will make disclosures of
16	notential conflicts of interest and announce
17	whether they will not deliberate and vote on the
18	nroposal
10	Second discussion of the proposal
19	will begin with a progentation by the Dreliminary
20	Powiew Team Eallowing the DDTLg presentation
21	Review ream. For rowing the PRT's presentation
22	and some initial questions from PTAC members, the

Committee looks forward to hearing comments from the proposal submitter and the public. The Committee will then deliberate on the proposal. As the deliberation concludes, I will ask the Committee whether they are ready to vote on the proposal.

1

2

3

4

5

6

15

16

17

18

19

7 Ιf the Committee is ready, each Committee member will vote electronically on 8 whether the proposal each of 9 meets the Secretary's 10 criteria. This voting has not 10 11 changed from prior public meetings. The last 12 vote will be on an overall recommendation for the Secretary of Health and Human Services using the 13 new two-part voting system I just described. 14

And finally, I will ask each PTAC member to provide any specific guidance as ASPE staff -- or to ASPE staff on key comments they would like to include in the report to the Secretary.

A few reminders as we begin discussions today. One, PRT reports are reports from three PTAC members to the full PTAC and do

not represent a consensus or position of 1 the These PRT reports are not binding. 2 PTAC. The 3 full PTAC may reach a different conclusion from those contained in the PRT report. And finally, 4 the PRT report is not a final report to the 5 Secretary of Health and Human Services. After 6 7 this meeting PTAC will write a new report that reflects the deliberations and decision of the 8 full PTAC which will then be sent to the 9 Secretary. 10 11 Our job is to provide the best 12 possible recommendations to the Secretary, and I expect that our discussions this afternoon will 13 accomplish this goal. 14 I would like to take this opportunity 15 to thank my PTAC colleagues, all of whom have 16 given countless hours to the careful and expert 17 review of the proposals we receive. Thank you 18 19 again for your work. 20 And thank you to the public for participating in today's meeting in person, via 21 22 live stream or on the phone.

1	So before we get started I would like
2	to follow up to a discussion that we had at the
3	last public meeting which was providing an update
4	on the status of the Secretary's response to our
5	discussion around the models that we've already
6	approved and what CMMI what activities CMMI
7	has been doing to date. We just concluded an
8	administrative call with the Director of CMMI
9	Adam Boehler who we have been speaking to between
10	the last meeting and today.
11	There are models in flight that are
12	based on the submissions from the proposers that
13	are going through the approval process now.
14	We're not certain of the exact timing on when
15	these models will actually be announced, but we
16	anticipate that it will be sometime in the first
17	quarter of 2019, of next year.
18	Some of the categories that are under
19	consideration including a primary care model, a
20	kidney care model, an end of life model and there
21	are others under consideration that we'll hear
22	more about hopefully by the next meeting. Adam

plans to -- Adam Boehler plans to come and address the public at the next meeting.

1

2

There are also other -- there's a 3 letter that is under construction that will be 4 released soon that will include guidance on the 5 areas of focus that CMMI is interested in driving 6 forward relative to alternative payment models, 7 and that criteria will include the kinds of 8 models that they are looking for, the kinds of 9 elements that will be in those models that will 10 11 take particular interest from CMMI. And I also 12 welcome my PTAC colleagues who have been in those discussions with Adam. 13

But we think that this extra guidance 14 will be very helpful as stakeholders figure out 15 who to speak to, whether to come to PTAC, whether 16 to work directly with CMMI. And we think that 17 this letter will include guidance around how to 18 19 navigate that decision making based on the proposal elements that are under consideration, 20 which will help the submitters prior to actually 21 22 creating and going into depth and building a

proposal. With this guidance they'll be able to incorporate some of the anticipated attention that CMMI will be taking futuristically which will help us as a committee, but also help the stakeholder community sharpen their focus on what models make sense going forward.

1

2

3

4

5

6

17

20

21

22

Just before I launch into the review 7 of the model today, do any of my colleagues want 8 to add to my comments summarizing that update? 9 Ι believe Sandy Marks from the AMA will be making 10 11 additional comments, who has been speaking with 12 the stakeholders to get their input as well, the proposers who have been working with CMMI. 13 Ι think we'll hear more about that. But did I miss 14 15 anything relative to the update we wanted to provide as a committee today? 16

(No audible response.)

18 CHAIR BAILET: All right. Hearing
19 none, then let's go ahead and get started.

Deliberation and Voting on the Making Accountable Sustainable Oncology Networks (Mason) Proposal submitted by Innovative

	13
1	Oncology Business Solutions, Inc, (IOBS)
2	The proposal we will discuss today is
3	called Making Accountable Sustainable Oncology
4	Networks, or MASON. It was submitted by the
5	Innovative Oncology Business Solutions,
6	Incorporated. And we're going to go ahead and
7	hear from the PRT.
8	Oh, before we do that we have to have
9	our disclosures, our conflict of interest
10	disclosures. And I'll start with myself and I'll
11	introduce we'll introduce each other as well.
12	Disclosures
13	So Jeff Bailet, Dr. Bailet. I am the
14	Executive Vice President for Health Care Quality
15	and Affordability with Blue Shield of California.
16	On this particular proposal, I have one
17	disclosure to share. I served on the American
18	Medical Association Large Group Advisory Board
19	advising the AMA Board of Directors for four
20	years ending in 2012. Dr. McAneny was on the AMA
21	Board of Directors at the time, so she attended
22	our quarterly meetings for the last year or so.

I also testified before Congress as one of four 1 physicians including Barbara in April of 2016. 2 3 I've indicated these items on the form, but I don't feel that they represent a significant 4 conflict, but wanted the Committee and the folks 5 at ASPE to be aware of that. 6 7 MR. STEINWALD: I'm Bruce Steinwald. I'm a health economist here in Washington, D.C. 8 and I have nothing to disclose. 9 DR. 10 CASALE: Paul Casale, 11 cardiologist, Executive Direct of New York 12 Quality Care, the ACO for New York-Presbyterian, Columbia and Weill Cornell. Ι 13 have no disclosures. 14 Hello, everybody. 15 MR. MILLER: I'm Harold Miller. I'm the President and CEO of the 16 for Health Care Quality and Payment 17 Center I was not involved in this proposal and 18 Reform. 19 it would not have any effect on me, but I have 20 worked with Dr. McAneny over several years on oncology payment issues and I realized when I 21 22 read through the proposal that part of the model

is based on the Patient-Centered Oncology Payment model that I worked with the American Society of Clinical Oncology on several years ago.

1

2

3

4

5

6

7

8

9

I've also visited Dr. McAneny's practice in New Mexico, the Albuquerque version, not the Gallup version of the practice, and I have provided information to her and to Laura Stevens, who's the COO of IOBS on several occasions.

also do consulting work for the 10 I 11 American Medical Association and Dr. McAneny is 12 the current president of the AMA. So while I don't have any financial conflicts, just to avoid 13 any appearance of bias or favoritism, I'm going 14 voting 15 to recuse myself from and from participating deliberation 16 in the on the proposal. 17

I do know a lot about oncology payment in general, and if there are factual questions about the current payment system, I'd be happy to answer them for my colleagues if that would be helpful, but I'm not going to engage in any

deliberation on the proposal itself.

1

2

3

4

5

6

DR. WILER: I'm Jennifer Wiler, Professor of Emergency Medicine at the University of Colorado. I'm also Executive Medical Director of UCHealth's CARE Innovation Center, and I have nothing to disclose.

DR. NICHOLS: I'm Len Nichols. I run 7 the Center for Health Policy Research and Ethics 8 at George Mason University and I'm a health 9 economist. I don't have anything that rises to 10 11 the level of a real conflict, but since we're 12 being so phenomenally open and honest, I'll just say I once had a drink with Barbara in a bar. 13 Ιt was with Ian from -- Ian Morrison from Canada, 14 15 and he paid for the drink because he makes more money than we do. 16

CHAIR TERRELL: I'm VICE Grace 17 Terrell. I'm the CEO of Envision Genomics, a 18 19 practicing general internist at Wake Forest 20 Baptist Health System and on the board of CHESS, which is a population health management company, 21 22 and I have no conflicts to disclose.

	17
1	CHAIR BAILET: Dr. Sinopoli?
2	DR. SINOPOLI: Yes, this is Dr.
3	Sinopoli. I am a pulmonary critical care
4	physician and the Chief Clinical Officer for
5	Prisma Health in South Carolina and also CEO of
6	the Care Coordination Institute which is an
7	enablement services company. I have no conflicts
8	and nothing to disclose.
9	CHAIR BAILET: Thank you.
10	So we're going to turn it over to the
11	physician the Proposal Review Team, and that's
12	led by Dr. Grace Terrell.
13	Grace?
14	Preliminary Review Team (PRT) Report to PTAC -
15	Vice Chair Terrell
16	VICE CHAIR TERRELL: Thank you, Jeff,
17	and thanks everybody.
18	One of the coolest things I think
19	about PTAC and MACRA legislation, if we take
20	advantage of it, is it's, at least the only
21	example I know of where the Federal Government
22	actually asks the stakeholders who actually

practice medicine and run medical businesses to contribute to the ability to think about health care policy in ways that can make a difference for all of us.

1

2

3

4

21

22

And so within that context, I very 5 my colleagues appreciate the MASON 6 much and proposal. It comes from the context of 7 an organization that has participated in the 8 Oncology Care Model that's now one of 9 the standard models that's been one of through COME 10 11 HOME, one of the HCI awards that looked at how to 12 think about models of care that would make a difference with respect to resources and how they 13 might be better used to provide care for patients 14 who have cancer and who from that experience had 15 the ability as well as running a private business 16 non-hospital-based oncology practice, 17 in an understanding what some of the limitations were 18 19 as well as learnings from the types of things that they thought might make it better. 20

And so out of that comes the MASON proposal. And within that context, I think the

proposals of it and just grateful that we have the opportunity to be thinking about things from the field that stakeholders are bringing. This is a perfect example of one that comes from that context.

1

2

3

4

5

21

22

The PRT Review Committee consisted of 6 7 myself as lead, Bruce Steinwald, as well as Bob I don't know unless Bob Berenson, Berenson. 8 he's on the phone listening, is not with us today 9 because he's rotated off the Committee, 10 but 11 certainly has been very much involved in the 12 analysis and much -- most -- actually all of the work with respect to this was done prior to his 13 rotation off. I think maybe the hour before or 14 15 something like that we were still working on it, but got it done. 16

17 So Making Accountable Sustainable 18 Oncology Networks is the name of the proposal. 19 We've just heard about the team that did it, the 20 PRT and who we are.

The proposal overview, for those of you who are familiar with our process, I won't go

through it in great detail because it's become a real standard, but this one was a little bit different because this one, at least from my point of view, was the first I was involved in since the change in legislation that allowed us to give some preliminary feedback.

1

2

3

4

5

6

8

9

10

11

12

13

15

And so in many ways it may have 7 prolonged the review process, which is why was not done in September like we originally thought it was, but is here in December. And Bob had actually already rotated off by that point. But on the other hand we've learned from that process and I believe that as a result of that several of the changes that occurred made this, at least 14 from the PRT's perspective, a stronger proposal.

So typically, what happens is that the 16 PTAC Chair or Vice Chair assigned two to three 17 PTAC members review. Then additional 18 to 19 information is requested. In this case we spoke to, we spoke to CMMI in both cases about the 20 Oncology Care Model that was out there as well as 21 22 the COME HOME award that this same group had been

involved with. We asked in written questions of the proposer. Got those back. Had an interview with them. And then subsequent to that created a sort of early PRT-type report that was allowed to be the initial feedback. So the reason I'm going through this at this time is because that's the new component of it.

1

2

3

4

5

6

7

From that we've got -- we got more 8 iterations, more interviews, more discussions, 9 more answers, and ultimately some changes from 10 11 their original proposal. And subsequent to that 12 we wrote up our recommendations, which you all have all now seen and which I'm going to go over 13 as we go forward with it. 14 But that was the 15 process that we went through. It was quite thorough and we had a significant amount 16 of information that we evaluated both from the 17 proposer themselves written and orally, but also 18 19 from other sources.

20 So this particular model and proposal 21 is based upon COME HOME. So COME HOME was part 22 of a CMMI grant that was done from a group of

oncologists; they were part of a consortium. And with that they created out of some -- out of that grant some processes in place for which they were able to show that care coordination and other types of processes that they developed saved substantial money off the awards once they were evaluated. I believe it was something like 6.3 percent. Overall, some of that was reduction in high-cost services like emergency departments.

1

2

3

4

5

6

7

8

9

And based upon that, which was not 10 11 sustainable since it was part of just a grant and 12 the award, they then did a lot of substantial thinking also by participating in the Oncology 13 Care Model on a payment model that might occur 14 that could improve on that work as well as create 15 the opportunity for something that could 16 be sustainable as part of the PTAC proposal that 17 went to CMMI. So that's what this is. 18

The core elements are that it starts with the first consultation with an oncologist. It's based on the relevant clinical factors that -- and the patient preferences. Many of this is

work that was done related to thinking about the COME HOME care model. They're assigned to a treatment plan at that point that has a target price that is essentially -- reflects all cancer care-related expenses but excludes drugs from the overall OPC, which is a target amount that is established based upon practice pathways as well as some artificial intelligence-related ways of thinking through in great detail the pricing that might be appropriate for that level of care.

1

2

3

4

5

6

7

8

9

10

11 The OPC assignment prompts the 12 creation of a virtual account. The usual types of fees are charged in the usual types of way, 13 whether it's a DRG or whether it's a fee-for-14 15 service physical payments. And all that is kept 16 in a virtual account and then retrospectively, based upon what the expected cost would be, 17 there's a true-up at the end. 18

19 If the patients are managed in a way 20 that reduces their expenditures, below the target 21 amount, then the practices share in those savings 22 provided that the quality benchmarks are

sufficiently met and the quality is measured via pathway compliance patient and family surveys. These pathways are established and developed by this national consortium based on evidence-based guidelines. That is also with contribution from the academic centers as it relates to these guidelines.

1

2

3

4

5

6

7

Because of the nature of oncology 8 practice, which is changing faster than 9 everything else, not only as it relates to drugs, 10 11 but as well as genomics and may of the other 12 aspects of care that's changing in real time, the OPCs are a work that changes over time. 13 And that's one of the real issues in this model that 14 we need to think about because it's something 15 that has to basically set established pricing, 16 but at the same time has to go for best evidence 17 in real time in something that's changing very, 18 19 very rapidly. And so those are the issues that 20 this model tried to resolve and solve and come up with a solution with and one of the most complex 21 22 areas there is in health care today.

So to basically think about this, 1 there is a target price which is called an OPC, 2 and these are basically established based on 3 state, comorbidities, treatment plan 4 disease that's the expected cost of care for patients in 5 a given OPC. It's really important when you see 6 the PRT's evaluations to understand that these 7 have not been developed yet. And that's really 8 one of the keys to some of the analysis that we 9 I don't necessarily personally think that 10 had. 11 that means that it's a negative or adverse 12 recommendation that we give. Ιt just means they're not developed yet. And this is 13 an ongoing field and a lot has to be thought through 14 with respect to how you get from point A to point 15 B in a system that's evolving in real time. 16 So there's a one-time \$750 payment for 17 a new patient consultation. The E&M visits are 18 19 also part of that. Infusion center facility fees are part of that as well as the variation --20 variable radiation and infusion inputs, hospital 21

charges, facility fees, and any other patient

22

care charges, physician care that's related to cancer treatment: imaging and laboratory services, but it excludes non-oncology services. So part of the real aspect of this model is that it's related to cancer care and those things that the oncologist can control.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Quality is based upon a four percent withhold from all E&M payments that's used to form a quality pool. The quality is measured by technical quality in terms of looking at its variation from the treatment pathways that have been established and customer service quality in terms of patient and family surveys. And for both criteria, there is an 80 percent threshold established as defining satisfactory performance.

So to summarize the PRT review, 16 we felt that the scope, which is one of our high-17 priority designations, this absolutely meets 18 19 criteria and deserves priority consideration. Cancer care is highly complex. The entire 20 business is changing. This particular model is 21 22 based on some very deep thinking from people in

1	the field running a business, trying to
2	understand how it might best be modeled in ways
3	from a payment and delivery standpoint that could
4	be sustainable given the changes that are going
5	on.
6	From a quality and cost perspective,
7	it was unanimous that it did not meet. Again,
8	this was mostly related to the fact that these
9	OPCs have not been fully developed and
10	established and operational yet. Likewise, for
11	the payment methodology our does-not-meet is
12	based upon the same ideology of rationale and
13	reasoning on our part.
14	From a value over volume, we felt it
15	meets. Flexibility. Clearly, this is flexible
16	relative to some of the other options that are
17	out there. Ability to be evaluated. We believe
18	it meets. The integration and care coordination
19	we believe it meets, particularly as it relates
20	to the COME HOME things that have already been
21	developed and established. Patient choice,
22	patient safety and health information technology

1

we all believe it meets.

So we identify some key issues. 2 The 3 first one I've already mentioned, which is the OPCs are not currently operational and developing 4 them is going to be a time-intense process that 5 will require frequent and similarly time-6 intensive updating to reflect the ever-evolving 7 developments in both pharmacology, therapeutics, 8 and diagnostic testing, actually, too, with 9 respect to genetics, the ongoing reality of the 10 11 current situation in oncology. 12 There is a granularity of care that OPCs are evaluating that is much 13 the more granular than what we currently see 14 in the Oncology Care Model that's one of the CMMI models 15

the OPCs are evaluating that is much more granular than what we currently see in the Oncology Care Model that's one of the CMMI models or other things that are out there right now, but they are based on utilization patterns that would be from a select group of practices that make up this consortium. And so one of the issues out there was: can this be generalized for the entire population that does oncology in the U.S. or not? So this isn't anything that we necessarily think can't work or won't be done, but it has to be evaluated further since this is just a small group of oncologists, and there are a group of oncologists that are already pretty evolved if you will with respect to looking at alternative payment models and working with some of the changes that are going on out there.

1

2

3

4

5

6

7

We also concerned about were 8 compliance within the pathways and how they were 9 assigned, and whether the deviations that are 10 11 voluntary can be distinguished from unexpected 12 events that trigger clinically necessary protocol So this again is part of the issue of 13 changes. if you don't have this thing entirely baked yet 14 because you have to bake it, we just don't know 15 that we've got that level of detail fixed yet. 16

And then we have some operational concerns about the adjudication of claims and services based upon some of -- the description of it in the report, in the proposal that we got. When we went back and asked in more detail about that, there was some more information that was

provided to us about looking at cluster codes to help us make those determinations. Again, the issue was that -- as opposed to an appeals process, but the issue was this is new machine learning types of approaches and it has not -- as of yet, it's been untested.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

We believe that the clinicians had the opportunity to go and justify being off pathway, but we don't know how they will be really factored into the quality scoring. So you get the sense from what I'm telling you that what we've really found as concerns are the details in many respects that have not yet been developed.

The model's effort to delineate cancer and non-cancer care may dis-incentivize care coordination between core team members of cancer care providers. This is just something that needs to be thought through.

The PRT would like to see more a robust and detailed plan for shared decisionmaking. A lot of the -- of this starts at the treatment plan. That's when the payment starts for the initial consultation that we believe all the way through more development of language around shared decision-making could make this a stronger process. And the process for and implications of patients exiting the model probably need to be more fully described and understood.

1

2

3

4

5

6

7

8 So I am going to go quickly through 9 the criterion so that we can have adequate time 10 to go in greater detail with the proposers 11 themselves and so the Committee members can ask 12 more detailed questions.

So again, we thought that the -- it met the scope. We think it's really important for there to be alternative payment models in oncology that can -- that are above and beyond what's currently out there with the current model.

This proposal acknowledges the granularity, and it is not based on pre-defined time frame, which we like as opposed to the current model out there which starts specifically

with the initiation of chemo and only goes for six months.

1

2

And the proposal has made perfectly 3 clear to us, that's not necessarily the way that 4 cancer works for a patient in the real world. 5 And the type of thoughtfulness they put 6 into alternative payment models around there 7 just really looking at the time of treatment is not 8 time-based we felt was a real positive. 9

There is direct incentivization for 10 11 the care -- to provide care coordination which we 12 thought was a real positive. And the payment model attempts to hold oncologists accountable 13 for cancer-related expenditures, which are the 14 15 things that they have control over as opposed to the total cost of care which the assert that they 16 do not. 17

With respect to Criteria 2, the quality and the cost, as I mentioned before, a lot of this has not been completely baked or developed yet. Nonetheless, using evidence-based treatment pathways and measuring and rewarding

based on clinical quality is a clear strength of 1 the proposal conceptually and one that we believe 2 3 if it goes forward ought to be developed and developed in great detail. 4 We were concerned about how these 5 things that would be done, how these target 6 7 prices would be established since it's not currently operational. They provided us some 8 9 detail with respect to that, but the biggest hang-up we had is it just wasn't operational yet. 10 11 So it was -- a lot of it was them thinking 12 through a process they would like to put in place. 13 There were also concerns about the 14

15 generalizability of this based again on the 16 patterns of current group, and then the compliance with the pathways. Maybe 17 you shouldn't be compliant. This is -- in anything 18 19 that you measure there's always the potential 20 that measurement can lead to adverse outcomes as people's behavior is changed by that. This will 21 22 be true in anything that is established, so the

real issue is not that this means it shouldn't be done, but it needs to be acknowledged and managed.

1

2

3

4

5

6

7

8

9

10

11

From the payment methodology, again the clear strength of the proposal is its attention to care coordination based upon the COME HOME work that was done that had cost of care and high quality associated with it from the previous work at CMMI and the fact that it was based on cancer care rather than the total cost of care.

12 We were supportive of the inclusion of administrative fees related to drug purchasing 13 and administration. Obviously, there's been some 14 15 stuff that's come out from CMS since this proposal came on that may make that less of a 16 Initially there was a 2 percent-plus factor. 17 invoice pricing. That was one of the criticisms 18 19 that -- with initial feedback. When they came 20 back with their proposal, this is what was proposed. We like it, but that actually may be 21 22 moot now given some of the other things that's

happening at CMS thinking about the drug pricing. 1 There was a thought process on their 2 3 part that HCC coding could be used to think about predictors of cancer-related expenditures. Ιt 4 did not -- but because that has not really been 5 developed for 6 or - cancer as а wav of determining -- although it may identify patients 7 at higher risk for not only cancer-related, but 8 non-cancer-related severity index. It's never 9 actually been used in this way, so it's something 10 11 that would have to be thought about differently. 12 And the process of adjudicating with it related to cancer care or not obviously could 13 be the new fight, right, because since it's just 14 going to be for cancer only, then what becomes 15 it 16 cancer care-related as relates to expenditures? So these are just things that have 17

With respect to value over volume, the review of the counts and the process of identifying providers delivering low-value care as related to pathway is compelling and would

to be thought through.

18

likely improve cancer care. The payment model 1 previous criterion 2 addresses the such as 3 practical issues related to isolating cancer care expenditures, but this also will create some 4 complexity in the model relative to just looking 5 at total cost of care like the current model out 6 there does. And again, how you actually handle 7 those deviations from pathway at the practice 8 level as well as at the federal policy level has 9 be really thought through 10 to to create а 11 situation that's flexible, simple and not overly 12 complex, which gets us to flexibility. We like the ability of these evidence-13 based pathways to change in real time, 14 to basically look at the fact that not everything is 15 going to be on a pathway and be able to focus on 16 may be some benefit that could that. There 17 from 18 happen process of а more nuanced 19 accommodating deviations from the quality 20 measurement process in terms of understanding why somebody went off pathway. It's not really clear 21 22 how this would be put into the current model.
We believe this has the ability to be 1 The submitter was very articulate 2 evaluated. with respect to the types of metrics that could 3 be evaluated with respect to quality of care cost 4 and patient satisfaction. Again the as-of-yet 5 undeveloped nature of the OPCs and any lingering 6 concerns we have is really related to that. 7 And then there's concerns about how we would use the 8 OCM patient cohort as a comparator because one of 9 the things that was proposed is, well, let's 10 11 compare this to the ones that are currently in 12 the OCM model, but perhaps that's not the best comparator group. Maybe it needs to be oncology 13 care at large. 14

15 We think that there is significant integration and care coordination strength with 16 We do believe this is respect to cancer care. 17 more inclusive of independent practice physicians 18 19 than perhaps the current models that are out 20 there are. We are somewhat concerned about the model's effort to delineate cancer and non-cancer 21 22 care as it relates to the payments and some of

the complexity related to that and believe that the emphasis on spending and granular detail on spending is going to be a real plus as clinicians are able to see the data, as the public is able to see the data and come up with ways of actually improving on the efforts that they have.

1

2

3

4

5

6

But one of the potential concerns is 7 because they'll have the ability to exclude high-8 cost clinicians that may not necessarily generate 9 a highest quality team or even overall cost 10 11 savings if sometimes -- sometimes high-cost 12 physicians are high cost because most complex patients go to them. So that just has to be 13 thought through. 14

With respect to patient choice, it's 15 explicitly stated that the patient preferences 16 for providers and hospitals will be solicited and 17 accommodated. There were some other descriptions 18 19 of other aspects into it including applications. And there may be again some benefit from a more 20 explicit or detailed shared decision-making plan 21 22 as part of the model. Again, there was some

concern about the cumbersome process of switching OPCs as cancer changed or diagnosis or pathways changed and any type of impact that might have on patients if that occurred.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

And then the processes for exiting the model were not fully described. But then again, we only give them 20 pages. And we've got plenty of other types of information out there that they were thinking through these things.

We think that the evidence-based pathways is clearly a win for patient safety and will likely yield improvements particularly qroups clinicians because it's of working together across the country in consortiums to come up with evidence-based pathways. The data capture will also improve this as learning occurs in real time and the transparency will as well.

Health information technology was all over this proposal, everything from machine learning to looking at clusters as it relates to thinking about deviations from the pathways. So I don't even have to go into 10. It's just sort

	40
1	of a given. We thought that it certainly met all
2	those criteria.
3	That's it. I'm sticking to it.
4	Bruce, do you have anything you want
5	to add?
6	Clarifying Questions from PTAC to PRT
7	MR. STEINWALD: Just one. You've made
8	it clear that our principal reservations had to
9	do with the development of the OPCs, but I note
10	that in their recent response to the PRT report
11	they state, and I quote, "The oncology payment
12	categories are not only possible, but have been
13	produced and can be modified in a timely manner
14	to accommodate changes in care." I'm looking
15	forward to hearing more about that when Dr.
16	McAneny and her team approach the table.
17	VICE CHAIR TERRELL: Yes. So I'm
18	hoping that most of the deliberations this day
19	will be questions that are directed at the
20	applicant rather than me or Bruce or the spirit
21	of Bob, but if we have any direct questions that
22	you all need us to answer right now, we'd be

	41
1	happy to do so.
2	CHAIR BAILET: Len?
3	DR. NICHOLS: I was just going to move
4	we bring up the presenters, because I think
5	you've done a fantastic job. It's all about the
6	OPCs, so let's play the game.
7	CHAIR BAILET: All right. Dr. McAneny
8	and team? So just to level set, it would be
9	great if you could introduce your team and them
10	we're going to have opening comments from you for
11	10 minutes and then open it up to exchange
12	between the Committee and your team. Thank you,
13	Barbara.
14	Submitter's Statement
15	Barbara McAneny, MD, Kameron Baumgardner,
16	Terrill Jordan, JD
17	DR. MCANENY: Thank you very much,
18	members of the Committee. I'm Barbara McAneny.
19	I'm a practicing oncologist in New Mexico. I am
20	AMA president, and I did have the COME HOME
21	Innovation Center Grant. And I'll have Kameron
22	introduce himself and Terrill as well.

	42
1	MR. BAUMGARDNER: Good morning. My
2	name is Kameron Baumgardner. I am the Chief
3	Technology Officer of a data science and analysis
4	consultancy known as RS21.
5	MR. JORDAN: Good morning. My name is
6	Terrill Jordan. I'm the President and CEO of
7	Regional Cancer Care Associates out of
8	Hackensack, New Jersey.
9	DR. MCANENY: Making Accountable
10	Sustainable Oncology Networks, MASON, is the next
11	step in the transformation of oncology services
12	from fee-for-service to an alternative payment
13	model. In November of 2017, CMS requested pilot
14	projects to develop APMs that could be scaled
15	across multiple sites and service. MASON is a
16	pilot using a group of practices willing to open
17	their EMRs to combine with claims data using
18	advanced data science to prove to CMS and to
19	oncologists across the country that we can create
20	an advanced APM for oncology.
21	The transformation began with IOBS'
22	CMMI award COME HOME, which showed that

1	independent practices transformed them to
2	oncology medical homes, could intervene early in
3	the toxicities of cancer and its treatment and
4	avoid hospitalization. COME HOME provided
5	patients with services delivered by their
6	doctor's practice, kept patients healthier and
7	able to spend more time at home, resulting in
8	healthy, very satisfied patients. COME HOME also
9	saved a significant amount of money per patient.
10	However, COME HOME lacked a payment
11	system to support the patient services that
12	constitute an oncology medical home. The
13	savings, which were considerable, came from the
14	avoidance of hospitalization, but the expenses
15	fell to the practices without the reimbursement
16	process.
17	A team of physicians and health
18	economists for the American Society of Clinical
19	Oncology developed a more accurate payment system
20	to pay the medical home costs, known as the

to pay the medical home costs, known as the Patient-Centered Oncology Payment System, and is incorporated into MASON with permission from

21

1	ASCO.
2	CMMI's Oncology Care Model, OCM,
3	implemented the first attempt at a payment system
4	adding MEOS payments, Medical Extended Oncology
5	Service, and a shared savings model. To become
6	an advanced APM, practices were to take two-sided
7	risk where their total costs of care were
8	compared to a target price. Only a third of
9	practices have shown savings, and so far no
10	practices have accepted two-sided risk.
11	MASON is a model built on the
12	foundation laid by the OCM to solve the problems
13	encountered by practices. One, the lack of
14	accuracy of the target price. Two, the inability
15	of practices to manage the entire cost of care.
16	Three, the inability of the OCM model to keep up
17	with the rapid technical advances of care
18	including new drugs and four, the lack of real-
19	time data that allows practices to make mid-
20	course corrections in care.
21	As shown in slides 3 through 5 in your
22	deck, cost of care varies significantly for

factors not put into the OCM model and the R-1 squared correlation between the actual costs of 2 care of COME HOME patients with the Oncology Care 3 Model targets is 0.33. Practices would be 4 irresponsible to accept risk based on these 5 targets because the possible required repayments 6 could exceed the ability of the practice to repay 7 resulting practices leaving the in model, 8 depleting the infrastructure of cancer care by 9 going out of business, or doubling the amount CMS 10 11 pays for care by selling to a hospital.

12 We address excess risk by having NCCA, National Cancer Care Alliance Practices, jointly 13 purchase a captive insurance product as stop-loss 14 The practices remain at risk for the 15 insurance. withhold, 16 quality the cost of practice transformation, the cost of the re-insurance, and 17 for patients whose cost overrun is small enough 18 19 to handle without a claim, but are protected from 20 practice-ending risk.

The entire cost of care was included in OCM because of the inability of the OCM model

21

22

to segregate oncology-related costs from other 1 care, and will 2 costs of we demonstrate а 3 methodology that will leave the oncologists at risk for only those costs related to cancer. 4 MASON removes all drug prices from the 5 model and reimburses the oncology practice for 6 7 the invoice prices of the drugs. This not only

removes the major reason that oncology practices were unable to hit the OCM target, but reassures both patients and CMS that drugs are not selected for a better margin or avoided because the new better biologics would cause the target to be missed.

8

9

10

11

12

13

We want a transparent selection of 14 drugs and we never want to put a physician in the 15 position where doing the right thing for 16 а patient adverse outcome for the 17 causes an It also eliminates the concern of the 18 practice. 19 practice that a patient with a pre-existing condition requiring a biologic agent or with 20 serious expense comorbidities would adversely 21 22 impact the financial performance. We never want

a system that penalizes doctors for caring for complex patients.

1

2

3 Quality of care consists of customer service, delivering the care the patient wants 4 when and where they want it and by whom. And 5 technical quality, delivering the treatment plan 6 7 that optimizes the goals of a patient. The medical home processes have been shown in COME 8 HOME to generate excellent customer service 9 resulting in patient satisfaction scores in the 10 11 hiqh 90s. Technical quality of care consists of 12 the patient being offered all of the options for appropriate while avoiding 13 care that are inappropriate care. 14

The gold standard for quality is the 15 NCCN Guidelines. With the assistance of NCCN, 16 MASON will help transform those guidelines into 17 imbedded practice 18 pathways into the EMRs. Electronically proven 19 compliance with the include 20 pathways will failure to deliver appropriate care as well as the delivery of 21 22 inappropriate care, and actual causes for

deviations can be built into that so that the physician is not penalized when a patient for example elects to refuse recommended care.

1

2

3

21

22

example, if a patient with a 4 For rectal offered pre-operative cancer is not 5 radiation therapy with chemotherapy or is not 6 referred for resection, the oncologist would be 7 off pathway, unless the patient had refused, and 8 would sacrifice their quality withhold. 9 Similarly, if excess imaging or inappropriate 10 11 chemotherapy were delivered, the oncologist would be off pathway and the quality withhold would 12 again be returned to CMS. 13

Part of the technical quality of care is the patient safety components of having an infusion facility certified by the ASCO QOPI processes that meets regulatory standards, a radiation facility that is ACR-accredited and appropriate accreditation of surgical suites and hospitals.

As the drug margin has been used to pay for the infusion fee, we are removing the

	49
1	drug margin. A facility fee will pay for the
2	fixed cost of having the appropriate QOPI-
3	certified infusion facility. And the cost should
4	be the same regardless of site of service.
5	The Oncology Payment Category is
6	created via data science techniques. The target
7	OPC amount is visible to the practice and to CMS
8	as a virtual account. Every non-drug claim that
9	is submitted related to cancer care is subtracted
10	from the virtual account allowing the practices
11	to monitor patients with increased needs or
12	physicians using excess resource use.
13	I'm now going to turn this over to
14	Kameron who will demonstrate the OPC.
15	MR. BAUMGARDNER: Thank you.
16	We have created a proof of concept to
17	demonstrate the feasibility of quickly creating
18	and updating the MASON OPCs. We have used the
19	clinical and demographic data of 2,500 episodes,
20	which were then fed into a density-based
21	clustering algorithm that allowed us to identify
22	individual clusters. We then expanded each

cluster to a more statistically valid sample set of 5,000 episodes through a Monte Carlo simulation and analyzed those claims of those simulated episodes to produce the OPC cost curves.

1

2

3

4

5

For this demonstration, we selected 6 7 three breast clusters for further cancer analysis. These three clusters we chose grouped 8 episodes that were prevalent with ductal T1, 9 ductal T2, and lobular T1 tumors. 10 You can see 11 some of the analysis on these OPCs in slides 8 12 through 13.

The analysis revealed some unexpected results such as a lobular histology of the tumor having a greater impact on cost of care than the size of the tumor itself demonstrating why the MASON model is a more accurate way to set targets for costs of care.

We also used this proof of concept to demonstrate the computational feasibility of quickly creating and updating these OPCs. We were able to cluster these episodes and produce

cost curves in under an hour and have determined methods to scale this performance to millions of episodes.

1

2

3

First, indexing the data fed into the 4 clustering algorithm reduces the computational 5 complexity of the clustering process, meaning 6 that instead of adding 25 additional computations 7 reach additional 5 episodes we are only for 8 creating an additional 11 computations. The more 9 computationally-complex process is actually the 10 11 creation of the cost curves from episode claims. 12 Frankly though, this is a common problem in the field of big data analysis with numerous well-13 supported solutions such as Hadoop, Spark and 14 15 BigQuery that create parallel processes which divide up the work. RS21 has experienced using 16 these kinds of technologies to process 17 many terabytes of data in hundredths of a second. 18

Finally, we have implemented several techniques to determine what are cancer-related costs and what are non-cancer-related costs. The ways in which the Monte Carlo episode simulation

selects claims ensures that non-cancer-related costs will not be common in the simulated data sets. Furthermore, setting baselines of costs with HTC data and other statistical models such as isolation forests can further filter out costs that practices have no control over.

7 We appreciate PTAC's time and 8 attention and look forward to answering 9 questions.

10 CHAIR BAILET: Thank you. So we're 11 going to now open it up to the Committee to ask 12 specific questions of the submitters.

Bruce?

1

2

3

4

5

6

13

22

MR. STEINWALD: So let me get this 14 straight. You have developed the Oncology Payment 15 Categories. Have you developed them for all of 16 the cancers that you propose to include in the 17 model? And if so, or even if not, is the 18 19 methodology and/or the categories themselves proprietary or are they available for use by 20 others outside of your organization? 21

DR. MCANENY: So the first answer is

1	no we haven't gone through the process of doing
2	it for all of the several hundred tumor types
3	that are out there, but I think what our goal was
4	for today was to demonstrate that this is indeed
5	possible. We use the claims data from the COME
6	HOME practices that we had plus their clinical
7	data to generate this and just selected this one
8	as a demonstration to show that we could do it.
9	Equivalently we could take the claims data for
10	colon cancer patients or for prostate cancer
11	patients and create the same process.
12	And as for the proprietary nature,
13	I'll refer that to Kameron.
14	MR. BAUMGARDNER: The analytical
15	methodologies themselves are not proprietary.
16	They're open source and freely available.
17	They're very well documented. The expertise that
18	we've provided is in combining those with big
19	data application and processing services to make
20	the generation of these in a timely manner
21	feasible.
22	DR. NICHOLS: So thank you for that.

П

You mentioned that you had 2,500 I think patients 1 from the COME HOME and you had the clinical data 2 to go with the claims with them. How many 3 patients would it take to do -- not all of the 4 cancers, but some 25 percent of all cancers or 5 something -- to create a critical mass for OPCs 6 for a larger range of cancers? How many --7 because my concern would be Medicaid and Medicare 8 has lots of claims. They don't have EHR data. 9 Where can we get enough EHR data to replicate 10 11 what you've done for COME HOME? 12 DR. McANENY: So I have Terrill Jordan represent the National 13 here to Cancer Care Alliance. 14 15 This is an organization of 16 practices, independent practices coast to coast 16 who are all on the same EMR essentially; I think 17 there's one or two who are not, who have all 18 19 agreed that they're willing to participate. So we see about 75,000 new patients per year, have 20 about 500,000 patients on treatment for various 21 22 tumor types. So we -- with access to claims

1	data, which would have to be supplied by CMS,
2	that we think that that would be sufficient
3	numbers to generate especially for the more
4	common cancers.
5	And do you want to comment on that?
6	MR. JORDAN: Given RCCA's involvement
7	in value-based arrangements we wrestle daily with
8	an avalanche of data necessary to manage cancer
9	care patients and we are intimately acquainted
10	with the need for robust analytics. A deeper
11	integration of analytics into clinical practice
12	is a primary goal of modern health care. Data-
13	driven decisions are fundamental to practicing
14	medicine in an increasingly complex environment
15	and data analytics are essential to modern
16	physician's delivery of high-value patient-
17	centered care.
18	Physicians face the challenge of a
19	landscape exploding with clinical therapies and
20	diagnostic tests. Physicians are finding it

decide the most favorable treatment plans. In

21

22

challenging to make the appropriate diagnosis and

fact, the pace of growth and medical information makes it difficult for physicians to keep up with the latest clinical research. Evidence-based medicine driven by data analytics is the key to physicians making sense of all this medical information.

1

2

3

4

5

6

22

7 Additionally, physicians and their clinical staff must receive relevant information 8 at the point of care to impact clinical decision-9 making most directly. The right information 10 received at 11 the right time is critical to 12 patient-centered care. Physicians desire intelligent decision support with detail that is 13 tailored to address specific patient needs. 14 As such, private practices must integrate clinical 15 data into the entire work flow to reduce the 16 added burden of value-based arrangements on their 17 physicians. 18

19 Physicians able to execute evidence-20 based guidelines using algorithms driven by data analytics will deliver meaningful 21 quality improvements. In addition, the larger pool of

analyzed, patients the more stable the conclusions regarding the guidelines. This will 3 enable physicians to provide more efficient and effective medical decisions, vet private practices are facing extraordinary administrative burdens both governmental and commercial as 7 begin shifting financial risk to payers physicians. 8

1

2

4

5

6

То reduce unnecessary tests 9 and procedures while ensuring the quality of overall 10 11 patient care practices will require technology to 12 meet minimum quality metrics for value-based Hence, to adequately participate in risk-13 care. based arrangements private practices require a 14 suite aggregation, 15 full of data analytic capabilities, and actionable reporting on behalf 16 of physicians. 17

Participation in a project like MASON 18 will allow physicians to work towards centralized 19 20 analytic toward а centralized analytic - database and will enhance performance reporting 21 of all the participating practices. This will 22

significantly further the evidence-based decision support necessary for physicians to successfully navigate MASON or similar value-based programs.

1

2

3

DR. NICHOLS: So clearly thev 4 anticipated the question. But what I really want 5 to get at here -- and that was great. 6 You figured this out. But what I want to know is if 7 I heard the PRT correctly, they're worried about 8 time frame of updating the OPCs, of 9 а reclassifying a patient because of a particular 10 11 pathway of their own disease, and you get the 12 And you just told me you got to keep point. sending the equations out to the hinterlands so 13 the doctors can use the right one. 14 So what's your idea of time frame of adjustments? 15

Thank you for the 16 MR. BAUMGARDNER: So we developed the proof of clarification. 17 concept explicitly to kind of address some of the 18 19 initial questions about the feasibility of quickly updating this data given the changing and 20 cost structures and adding new patients into the 21 clusters. 22

	59
1	Our initial results, as I mentioned,
2	were able to be produced and computed in under an
3	hour. We believe that that's feasible to scale
4	up to larger number of claims.
5	DR. NICHOLS: That was on a patient
6	base of 5,000. So in a patient base of 500,000
7	it can't be that quick.
8	MR. BAUMGARDNER: So this is so
9	there are a few emerging technologies in the big
10	data analysis space. That parallelization
11	process that I mentioned allows us to have
12	hundreds of computers working on this at the same
13	time in parallel rather than having one big
14	machine deal with it. That's the optimization
15	process that we have suggested based on our
16	initial discovery and we believe that we can hold
17	that performance level up to hundreds of
18	thousands or millions of episodes.
19	DR. MCANENY: And to add in
20	DR. SINOPOLI: This is
21	CHAIR BAILET: Angelo, we hear you
22	trying to break in. We're going to let Dr.

McAneny finish and then we'll --1 2 DR. SINOPOLI: Yes. CHAIR BAILET: Okay? 3 DR. MCANENY: One of the other 4 from the PRT report was the concern concerns 5 about switching an OPC. So if the patient were 6 to select, for example, a high-cost provider 7 academic is generally in oncology an which 8 with specific expertise in doing 9 surqeon something or proton therapy or something that is 10 11 not provided within a practice, then that patient 12 would be referred and that would be the end point of that OPC because that patient would then not 13 be being managed by that physician. 14 Similarly, if a patient completes 15 their block of adjuvant therapy, they would end 16 that OPC at the end of that time and go onto to 17 like a maintenance OPC which would be much lower 18 19 cost because they're basically getting a few office visits and maybe a few basis tests. Ιf 20 that patient were to relapse, at the time of 21 22 relapse the restaging process would then assign

them to a different OPC that would be there for metastatic cancer.

1

2

To create these various OPCs need to 3 be an iterative process because any time you fix 4 something in time and space and then medical 5 science continues to advance, pretty soon you 6 have a set of targets that don't reflect the 7 reality of cancer care. And so by working with 8 this group of practices who have agreed to open 9 their EMRs to submit accurate data to us so that 10 11 we -when we discover things like lobular 12 breast cancer is different from ductal breast cancer, which was а surprise to 13 me as an oncologist of 30 years. I didn't think the cost 14 would be different. 15 That means that we can then retool and have that data submitted and then send 16 it to the data feeds in the computer to be able 17 to update that on a continuous basis. 18

19 So part of the time frame of creating 20 the OPCs for the really common cancers, the ones 21 where it's really important to have an exact 22 target: lung, colon, breast, prostate, for

example, there are sufficient numbers of those in 1 the database of the group of practices that those 2 3 could be generated as the initial part out of the chute and then modified as science changes. 4 If you're looking at something that's 5 very rare, a Merkel cell tumor for example, that 6 7 I've seen three in my career, we may never need an OPC for that. They may not be something that 8 9 it's worth the time and effort to compute an average price for something that is exceedingly 10 11 rare. 12 Does that help? DR. NICHOLS: Yes. 13 CHAIR BAILET: So Dr. Sinopoli is 14 on 15 the phone and he can't see the queue, so we're going to go ahead and turn to him. And then I've 16 got Paul, Jen and then I've got a question as 17 well. 18 19 So go ahead, Dr. Sinopoli. DR. SINOPOLI: So thank you. First of 20 all, impressed 21 let I'm with the me say 22 comprehensiveness of your thought process around

	63
1	this, but I've got one question.
-	
2	So are you suggesting that this be a
3	single national database that's driven by a
4	machine learning at that level or are you
5	envisioning this to be multiple databases that
6	pop up across the country driven by multiple
7	cognitive computer partners across the country?
8	Or how are you seeing this scale out to more and
9	more oncology practices?
10	DR. MCANENY: So I'll start with
11	this is Barbara. I'll start with the answer to
12	your question and turn it to Kameron.
13	So we would start with this with the
14	idea of a model that before oncologists across
15	the country will be trusting enough of this that
16	they're willing to accept the two-sided risk that
17	is built into this process we would need to be
18	able to demonstrate its accuracy. And therefore,
19	we would start as a pilot project using the NCCA
20	practices and demonstrate that. So in that sense
21	it's the one data set that we would have in one
22	common database that would get used.

The concerns that the PRT suggested about are we using this one group and therefore the treatments are somehow idiosyncratic to that one group I think is allayed by the question of using the NCCN Guidelines, because that is a national standard of care.

1

2

3

4

5

6

7 Then to scale this it could be scaled with -- like Kameron talked to how the multiple 8 computers and databases work with that. But to 9 scale this, then once we've identified the 10 11 processes that are there and identified the OPCs 12 that are there, it will be a little bit like telling all the hospitals in the country that 13 they have to use DRGs. They figure it out pretty 14 15 quickly.

And so we can help then as well with 16 here's what the COME HOME processes are. This is 17 how you use triage. 18 We've seen that happen 19 through the oncology care model. Multiple 20 oncology practices have really switched over to embracing all of these processes that have shown 21 22 to improve care.

	65
1	So I think once we prove it, then we
2	will be able to encourage oncologists around the
3	country and possibly other entities, other
4	specialties that are managing chronic disease
5	with acute exacerbations into using this kind of
6	a process.
7	So for the computing question, I'll
8	give that to Kameron.
9	MR. BAUMGARDNER: Yes, so we would
10	need to evaluate the population as an entire set.
11	The important thing to note there though is the
12	geospatial location is taken in as an aspect when
13	we're talking about what are the variables that
14	we're looking at when we're determining
15	similarity between clusters.
16	As far as the computational
17	feasibility of sorting data that large, as I
18	mentioned we are experienced in the use of these
19	decentralized storage and computing solutions
20	that prevent us from having a single source of
21	failure either geospatially or technologically.
22	DR. SINOPOLI: Thank you.

	66
1	CHAIR BAILET: Paul?
2	DR. CASALE: Thank you and thanks for
3	bringing this forward.
4	So the first question; I apologize, I
5	might be a little slow, but when Bruce asked
6	about is any of this proprietary, I wasn't sure I
7	heard a yes or a no. So could you just clear
8	I mean, I heard follow some of NCCN, but so is it
9	yes or no? Is some of this proprietary or not,
10	if someone were to participate?
11	MR. BAUMGARDNER: I can't speak to the
12	data, but the analytical models are not
13	proprietary.
14	DR. CASALE: Okay. So no is the
15	answer?
16	MR. BAUMGARDNER: No.
17	DR. CASALE: Okay. Great.
18	And then some of the discussion makes
19	me think back to Hackensack, which came forward
20	with Cota. I don't know who would like to answer
21	this, but I'm just curious how you comport their
22	model or what they brought forward with yours,

	67
1	just if you had any sort of reactions to that.
2	MR. JORDAN: Well, Regional Cancer
3	Care Associates is a separate organization, so
4	we're not actually part of Hackensack and weren't
5	part of that presentation.
6	DR. CASALE: So you're not familiar
7	with the Cota?
8	MR. JORDAN: I am familiar with it,
9	but I'm not
10	DR. CASALE: So I'm not asking you to
11	represent Cota necessarily, but just your
12	thinking again they were sort of using algorithms
13	just sort of being more specific around therapy.
14	MR. JORDAN: I wouldn't want to
15	comment on someone else's model because I might
16	say something out of turn.
17	DR. MCANENY: One of the things that
18	I can say with this one I've read the Cota but
19	I don't really know that model, so we did not
20	incorporate that into this. One of the things we
21	tried really hard to do with this model was to
22	build on constructs that are already in place and

familiar to CMS.

2	CMS would have to continue to pay
3	claims in the usual fashion. They're very good
4	at doing that. They can pay facility fees. The
5	OPC we figured would look akin to a DRG or an
6	APC, so we're trying to use constructs that would
7	be more within the computing normal business work
8	of CMS. And so the Cota project seemed a little
9	different to me from that.
10	CHAIR BAILET: Jennifer?
11	DR. WILER: Thank you very much for
12	your presentation and specifically thank you for
13	creating a model based on digital health
14	innovation, making an improved care delivery
15	systems. I have two questions germane to
16	Criterion 2 around quality and cost.
17	The first question is around who will
18	be paying for access to these pathways? And then
19	also who will be paying for the cost associated
20	with the OPC algorithm updates? And then I'll
21	ask my second question.
22	DR. MCANENY: Thank you. So for the

access to the pathways, one of the concerns that I had had at the beginning is that most of the pathway vendors are proprietary and they do charge significant amounts more than I can afford in my practice to have those.

1

2

3

4

5

So I reached out to NCCN, who is the 6 source of all of these guidelines and who are 7 here today to comment during the public process. 8 NCCN is open source. I think that having the 9 proprietary medical literature 10 become is 11 unfortunate and I think that having an open 12 source process for the best care is the best way to spread that care across the country. So we're 13 very much looking forward to having NCCN work 14 with us on this. 15

For the costs of developing it, all the costs of developing any sort of a payment system have to be filed into the process of the payment system. If we look at for example the quality withhold here or we're looking at the cost now that an ACO uses to create its models, the savings from the models have mostly gone back into creating the IT infrastructure for those particular models, and frankly some of the payments that we would be getting would be able to be funneled into doing this. There would -we have to pay all these data geniuses to do their work and to be able to come up with this. So there is some infrastructure costs to any payment model.

1

2

3

4

5

6

7

8

9 However, having it be electronic and having it be visible through the CMS processes is 10 11 very appealing because that's significantly less 12 than the amount that we pay to submit a claim to any of the commercial payers, etcetera. 13 So I think that it's one of the costs doing 14 of business. 15

Thank you. 16 DR. WILER: And my second question is a piggyback onto a question that 17 asked before, and 18 Bruce had that's when 19 describing this episode of active cancer 20 treatment and then remission, when does that episode end? And a corollary to that is why were 21 22 outcomes not described in the model? And then

thirdly, this OPC algorithm readjustment - obviously that it sounds like - in your previous description there would have to be an active based on adjustment treatment versus remission. So if you could address that. All obviously related to this question and cost question.

1

2

3

4

5

6

7

22

DR. MCANENY: Okay. So one of the 8 frustrations that we had with the --9 as we participate and we still are in the oncology 10 11 payment -- the oncology care model is that all 12 patients get chemo. We have patients, prostate cancer patients, who are most appropriately 13 watchfully waited on and observed to make sure 14 that they don't progress, but they require a fair 15 amount of effort, but they're not in the model. 16 If a patient only requires radiation therapy, an 17 early Hodgkin's patient, for example, 18 the 19 radiation oncologist is not in the model. And in 20 this model, any oncologist could be the initiating consultation that would start that. 21

As you go through the NCCN Guidelines

they're very specific in terms of the options of therapy and the optimal therapy, and we would put into the models -- and we have imbedded into our electronic medical record the pathway, the process of you need to have an echo at every three months for -- if you're giving someone Herceptin, you have to have all of these various 7 testing at various opportunities.

1

2

3

4

5

6

8

But we know for example in the 9 adjuvant setting that it starts with the first 10 11 payment, the first visit to the oncologist and 12 there is a point where adjuvant therapy is And so at that point, that person completed. 13 would be switched to the different oncology 14 payment category. So these episodes, in these 15 episodes that we create, time is just one of the 16 variables and not the defining variable, which I 17 think strengthens it. 18

19 For outcomes, I think producing real 20 outcomes data for the first time will be an interesting byproduct of this in that if we have 21 22 the ability to take a patient who starts out with
1	a given chemotherapy regimen or a given radiation
2	regimen or any initiating event, we will then be
3	able to look over time and see whether or not
4	they activate the triage pathways more frequently
5	than a different regimen would have them
6	activated. So we'll be able to have the initial
7	event, measure the toxicity in a very objective
8	manner and at the end of that episode then we
9	would be able to say what the outcome was.
10	Outcomes in oncology can take years.
11	So we would have the short-term outcomes of have
12	you successfully completed all of the adjuvant
13	therapy and how toxic was it, and therefore what
14	do we have for the total cost of care? And then
15	be able to do outcomes of regimen A versus
16	regimen B, which I think will be incredibly
17	valuable in helping oncologists understand when
18	we're selecting regimens, when we're sitting down
19	with a patient to say if you pick this one, you
20	can expect these toxicities; if you pick this
21	one, you can expect these other toxicities. I
22	think that will be incredibly useful to

	74
1	oncologists moving forward to be able to better
2	help patients select what they wish to have.
3	And your third question was the so
4	we will eventually get to outcomes, but outcomes
5	on oncology can take years to really demonstrate.
6	But as we develop these episodes, they
7	can turn into bundles. And the eventual long-
8	term goal would be to say I have a breast cancer
9	patient who fits in this OPC. Let me have the
10	bundle and go at risk for that. That's past
11	where we are here. That would be the next phase,
12	but I think that would be a valuable way to look
13	at that.
14	As for the OPC algorithms changing,
15	were you talking about the updates or switching
16	from one to the other?
17	DR. WILER: Both.
18	DR. MCANENY: Both? Well, the
19	switching from one to the other is a clinical
20	decision so that when a patient say elects I'm
21	going to leave your practice and go somewhere
22	else, that episode would end. If the patient

relapses, if the patient moves -- completes the planned course of therapy, then they would switch to a maintenance/observation-type of an OPC. So there are real clinical end points that we see in oncology all the time of where we could -- we could demarcate that.

As for constant updating 7 the of things, oncology is very fluid and any payment 8 scheme that does not reflect the ongoing changes 9 that are occurring would give us targets we can't 10 11 hit or would give the adverse incentives of 12 better avoid that patient with psoriasis who has this expensive drug or this patient who has other 13 comorbidities that are going to make them more 14 expensive because I won't hit my target. We need 15 to be able to have this process to say, okay, now 16 we have the OPC and we've learned that diabetics 17 who have this particular problem or people with 18 19 food insecurity who have this particular problem are going to cost at a different level and we'd 20 be able to get increasingly granular using the 21 22 data science processes.

1	Do you want to comment on that?
2	MR. BAUMGARDNER: Yeah, on the
3	frequency of the updating specifically that
4	process would need to be triggered any time
5	there's a significant change in the data that's
6	being introduced, so any shifts in payment
7	structure or costs. It would also need to change
8	when we get a statistically significant number of
9	additional cases, right? And that number will
10	change as our population size gets larger. So
11	adding 10 episodes into our set that we are
12	evaluating is less impactful at 500,000 cases
13	than it is at 500, right? We would be able to
14	evaluate that and trigger it dynamically based on
15	the size of the sets and the data that we're
16	seeing.
17	CHAIR BAILET: Thank you. Thank you
18	for your proposal and all of the work that you've
19	done with the Committee to answer all of our
20	questions.
21	I have one question that could be
22	clarified. In the proposal, you call out under

the quality section that the evaluation process 1 will be done by the Innovative Oncology Business 2 Solutions and select contractors. And so my 3 model reliant question is, is the on 4 the Innovative Oncology Business Solutions or could 5 there be another entity that provides 6 that backstop? I'm just curious. And I don't want to 7 say proprietary, but what's the reliance on that 8 intellect in this model itself? 9 DR. MCANENY: Actually I would prefer 10

11 to have that be evaluated by others. We worked 12 -- when we had the COME HOME grant we worked very hard to make sure that we supplied all of the 13 data to that. So I look at the role of IOBS, 14 which would have to be reconfigured because it 15 currently have all of 16 does not the people necessary to help manage all these 16 practices 17 produce the data. 18

19 So what I would prefer would be to 20 have an external process that evaluates much as 21 happened with COME HOME, and we would be the data 22 suppliers to the external process.

	78
1	CHAIR BAILET: Okay. So what you're
2	suggesting is ideally you'd prefer that there be
3	a different infrastructure set up to provide that
4	input and takes IOBS out of it to a large degree?
5	Is that
6	DR. MCANENY: Yes, I would think so.
7	It's not ideal I think to have the person who's
8	managing the model also evaluate it. I think
9	it's better to have an external evaluation.
10	CHAIR BAILET: That was my question.
11	Thank you.
12	Bruce?
13	MR. STEINWALD: Yes, thank for all
14	this hard work. I've been sitting here looking
15	at these very satisfying slightly skewed to the
16	right normal curves. If, and it's still an if
17	if we accepted that you have indeed demonstrated
18	proof of concept; and I think that's something
19	that is for discussion among the Committee
20	members but if we accepted for the sake of
21	argument, what next steps would need to be
22	accomplished in order to actually have what's

necessary to implement the model?

79

DR. McANENY: So in order to implement 2 3 the model one of the things that would be incredibly useful would be to have access to more 4 claims data from CMS because the more data we 5 have to start the faster we can generate these, 6 and some time to -- you know, not excessive 7 amount of time, as Kameron has said, but to be 8 able to pull the data sets that look at the tumor 9 types and generate this immediate process. 10 Then 11 we have these practices that are willing to work 12 with that so that we will have an internal validation kind of process. 13 MR. STEINWALD: That doesn't sound 14 like a whole lot and it doesn't sound like --15 well, how much time do you think is involved in 16

17 that?

From an analytical 18 MR. BAUMGARDNER: 19 perspective, as I mentioned, we can do this very, 20 very quickly, on orders of magnitude that probably aren't relevant for this discussion. 21 that, 22 The procedural part of of integrating that into the practices and into the model is I think where we would need to spend the time.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

22

CHAIR BAILET: All right. So we're going to open it up. First of all, again, thank you. And you guys are not going away. You're just moving away from the table. You'll be here for the full deliberation and discussion. But we've got a number of people queued up to provide public comments and we want to make sure we hear from those folks.

Public Comments

And I'm going to go ahead as you guys have a seat and just remind folks that in the interest of time we want to make sure everyone's heard, but we also need and ask for people to comply with the three-minute guidelines around the time required.

So we're going to go ahead and start with Sandy Marks from the American Medical Association.

Sandy?

MS. MARKS: Okay. Thank you. 1 disagrees with the 2 The AMA PRT's 3 conclusion that MASON does not meet two priority criteria because of concerns about developing the 4 Oncology Payment Categories or OPCs. 5 OPCs are the same basic concept as 6 7 hospital DRGs based on the diagnosis being treated, comorbidities and whether surgery is 8 needed. OPCs would classify patients based on 9 their type of cancer, the services that are 10 11 needed and patient characteristics that affect 12 treatment costs. New technology costs are excluded from DRGs to avoid discouraging the use 13 of desirable but expensive treatments and OPCs 14 would similarly exclude drug costs for those 15 16 reasons. At one time people questioned the 17 feasibility of DRGs. In his history of this 18 19 system, Brandeis professor Jon Chilingerian said,

quote, "The idea of setting 518 diagnostic payment rates for 4,800 hospitals seemed unimaginably complicated, an ambitious endeavor

20

21

unlikely to succeed. But not only did it succeed; CMS is now using Version 36, so updating should also not be considered too complicated."

1

2

3

The detailed structure of OPCs was 4 viewed as a strength by the PRT under Criterion 5 Here the PRT says MASON, guote, acknowledges 6 1. the very granular and individualized nature of 7 treatment plans for different types of cancer and 8 the payment model reflects this precision by 9 using evidence-based pathways as the basis for 10 11 establishing payment amounts. This is in 12 contrast with the relatively one-size-fits-all approach of OCM, end quote. The AMA believes 13 that this should also be viewed as a strength for 14 the other criteria. 15

16 We also do not think that generalizability of the OPCs should be a concern 17 because the most important quality factor, as has 18 19 been described aqain today, is the NCCN Guidelines which apply to all oncology practices, 20 not just those that are participating in this 21 22 APM. Data from participating practices will

determine the costs that practices incur to implement services, but the guidelines will determine what services should be delivered.

1

2

3

4

5

6

7

8

9

20

Other episode groupers use a combination of clinical judgment and data to decide what's in or out of an episode and that is how MASON would decide what is cancer-related or not. We agree with the PRT that this is preferred over a total cost of care approach.

The AMA thinks PTAC can be confident 10 11 that MASON will save money, improve quality and 12 be sustainable for practices because it's based the actual experiences of the COME 13 on HOME Those practices demonstrated that 14 practices. significant savings can be achieved by delivering 15 better care, not withholding necessary services. 16 MASON is also designed to solve the problems in 17 OCM that have made it difficult for the COME HOME 18 19 practices to sustain their success.

CHAIR BAILET: Thank you, Sandy.

21 Stephen Grubbs from the American 22 Society of Clinical Oncology?

DR. GRUBBS: Yes, I want to thank the PTAC for allowing ASCO to make some comments on this wonderful proposal. ASCO has a special interest in this since as you heard ASCO has published in May of 2015 the Patient-Centered Oncology Payment model that's been some of the backbone for the MASON.

1

2

3

4

5

6

7

We're supportive of the MASON which 8 has been proposed by Dr. McAneny and 9 her colleagues and we believe that deploying and 10 11 testing multiple oncology-based alternative 12 payment model pilots will allow more oncology providers to participate in the APM process and 13 will lead to an optimal oncology APM to serve all 14 practices and patients as we learn the positives 15 and negatives of these different pilots. 16

ASCO supports many of the MASON 17 features consistent with much of the PCOP design 18 19 that also now incorporates new features from what 20 we've learned in the last three years from all different alternative 21 the payment model 22 activities. Specifically, ASCO supports the

1	flexible payment system. This provides
2	reimbursement for services critical to an
3	oncology medical home functioning. It leads to
4	better care and lower cost. The flexible
5	payments that are based on the PCOP analysis were
6	designed by utilizing data from the COME HOME
7	projects, the oncology medical homes, CMS claims,
8	the main All-Payer Claims Database, as well as
9	experience surveys from ASCO volunteer practices.
10	ASCO supports the cost accountability
11	for services and expenses under the control of
12	the oncology team and elimination of the drug
13	costs from the cost calculation. The drug
14	utilization addressed by the pathway utilization
15	will take care of the drug cost. This also, as
16	Barbara mentioned earlier, appears to be a
17	program that potentially serves as an on-ramp to
18	bundled payments, which we all believe we need to
19	get to.
20	Finally, I'd like to go back to the

Finally, I'd like to go back to the pathway. The pathway utilization here is very important and ASCO fully supports it. I want to

make sure it's clear a pathway is an evidencebased treatment protocol based on type, stage and molecular subtype of cancer. It's designed to eliminate unnecessary variation in care and the use of sub-optimal treatments. In the end, it promotes quality, value and cost savings. And one could argue the way that it's being employed here pathways are leading us to precision medicine oncology that can lead to precision cost coverage.

1

2

3

4

5

6

7

8

9

10

11 Features of pathway utilization 12 include standardization of care, flexibility for patients and patient autonomy at the time of 13 informed decision-making, rapid dissemination of 14 new therapies into the practice field, and it 15 simplifies clinical data collection decreasing 16 administrative burden. Also, pathway utilization 17 easily evaluated through electronic 18 be can 19 capturable compliance.

20 So in summary, ASCO supports the MASON 21 alternative payment proposal as an advancement 22 for oncology-centric APM pilots and encourages

	87
1	the PTAC to promote the model. Thank you very
2	much.
3	CHAIR BAILET: Thank you. Robert
4	Carlson from the National Comprehensive Cancer
5	Network. Thank you.
6	DR. CARLSON: Good afternoon. My
7	name is Robert Carlson, and I am the Chief
8	Executive Officer of the National Comprehensive
9	Cancer Network and a practicing medical
10	oncologist.
11	I'd like to thank the Committee and
12	DR. Bailet for the opportunity to speak in
13	support of the MASON proposal before you today.
14	NCCN's mission is to improve and
15	facilitate quality, efficient, effective and
16	accessible cancer care so that patients can live
17	better lives. As such, NCCN is committed to
18	addressing the rising costs of cancer care while
19	advancing and improving the quality of care. The
20	MASON model demonstrates strong potential to
21	achieve these goals.
22	The NCCN Clinical Practice Guidelines

in Oncology are a comprehensive set of guidelines detailing sequential multi-modality management decisions and interventions across the continuum of care and apply to over 97 percent of patients with cancer.

1

2

3

4

5

6

7

8

9

10

NCCN Guidelines and their derivatives help assure access to appropriate care, assist in clinical decision-making across the continuum of care and facilitate quality improvement initiatives.

11 Our quidelines are widely used by 12 health care professionals, patients and payers, including CMS. Recommendations in our guidelines 13 are updated continuously to ensure patient access 14 standard of 15 to the highest care is never disrupted. 16

NCCN supports the movement toward a 17 health care system that rewards quality over 18 19 volume. New physician payment models have the 20 potential to be particularly impactful in oncology, and we believe the MASON proposal poses 21 22 great promise and is aliqned with PTAC's

objectives.

1

2

3

4

5

6

7

The 2016 study, Transforming Prior Authorization to Decision Support, conducted by UnitedHealthcare, eviCore and NCCN demonstrated that mandatory adherence to NCCN guidelines significantly reduced total and episodic costs of care.

8 Drug costs were reduced by 20 percent 9 in the pilot state of Florida as compared to 10 national and regional comparisons. And by adding 11 decision support, retrospective denials of care 12 were reduced from approximately 10 percent to 1 13 percent. The MASON model demonstrates strong 14 potential to achieve these savings as well.

15 If the MASON model is approved, NCCN 16 is committed to supporting its implementation. 17 The MASON Model proposes to include a technical 18 quality metric, requiring at least 80 percent 19 compliance to pathways based upon the NCCN 20 guidelines to ensure quality of care.

21 NCCN is pleased to serve as the 22 guideline resource for this project. We are

90 committed to working with the MASON team 1 to patients 2 ensure have access to quideline 3 concordant care. Thank you. CHAIR BAILET: Thank you. Anne 4 Hubbard from the American Society for Radiation 5 Oncology. Hi, Anne. 6 7 MS. HUBBARD: Good afternoon. Thank you for this opportunity to comment on the MASON 8 model. Again, I'm Anne Hubbard, Director of 9 Health Policy for the American Society 10 for 11 Radiation Oncology. 12 represent nearly all radiation We oncologists well physicists, 13 as as the dosimetrists, radiation therapists and others who 14 provide cancer care as part of their radiation 15 oncology care team. 16 We appreciate that the MASON model 17 seeks to address shortcomings found in 18 the 19 oncology care model. However, we believe that 20 those efforts should be taken one step further by excluding radiation therapy services. 21 22 As you may know, ASTRO has been with

CMMI on a separate and distinct radiation oncology APM that is designed to standalone for those patients who require radiation therapy services but can also nest within a larger model such as OCM or even MASON for those patients who require multidisciplinary care.

1

2

3

4

5

6

7

8

9

10

This allows radiation oncologists the opportunity to actively participate in valuebased care that will ultimately improve patient outcomes and reduce costs.

11 Recently, HHS Secretary Alex Azar 12 announced that CMS will be introducing new APMs in the near future, including a radiation 13 oncology APM. ASTRO is pleased that a radiation 14 oncology APM is getting closer to reality. 15 We have worked for many years to craft a viable 16 would stabilize payments, drive model that 17 to nationally recognized clinical 18 adherence 19 guidelines and improve patient care.

ASTRO believes its proposal will allow rad oncs to participate fully in the transition to value-based care that both improves cancer

	92
1	outcomes and reduces cost. Thank you.
2	CHAIR BAILET: Thank you. Steve
3	D'Amato, New England Cancer Specialist. Is Steve
4	here?
5	DR. D'AMATO: Yes. Good afternoon.
6	My name is Steve D'Amato. I am a CEO of New
7	England Cancer Specialists and a pharmacist by
8	trade.
9	We were one of the seven practices
10	that participated in DR. McAneny's COME HOME
11	project, and we are an oncology care model
12	participant.
13	Drug costs have represented a
14	significantly higher proportion of total costs in
15	OCM performance periods compared to the
16	historical periods. This is a function of many
17	new and more expensive drugs that have come to
18	market that has increased the total cost of care
19	across many cancer types.
20	As a prudent user of novel therapies,
21	our practice is below the national median in
22	utilization and yet we do not get a novel

therapies adjustment in OCM. A practice that's 1 cancer mixed can also affect the ability to hit 2 target prices as many novel therapies can impact 3 a particular disease's target price. 4 We at New England Cancer Specialists 5 have not been able to hit target prices or show 6 savings in OCM due to the high cost of drugs in 7 the types of patients we see based on the DTO of 8 data analytics that we have. 9 We excel in all other components of 10 11 OCM. Currently, we are unable to accept two-12 sided risks, but we do wish to be on an advanced alternative payment model. And if MASON 13 is approved, we would very much want to participate. 14 We believe the drugs need to be comp'd 15 out in a fashion that will allow practices to 16 show the quality and value they are providing. 17 And we believe MASON can also accomplish this. 18 19 Thank you very much for allowing us to 20 comment. Greq Rasp 21 CHAIR BAILET: Thank you. 22 from the Dayton Physicians.

	94
1	DR. RASP: Gregory Rasp, Dayton
2	Physicians. I'm a radiation oncologist, medical
3	director of a large group in Southwest Ohio.
4	We participated in the COME HOME
5	program as well as OCM as part of a
6	multispecialty group. And we found both to be
7	excellent at helping us integrate in a
8	multispecialty fashion.
9	While there were flaws in both
10	systems, having radiation be part of this system
11	rather than a separate carve out seems to be
12	optimal from my perspective. And we would be
13	excited to participate. Thank you very much.
14	CHAIR BAILET: Thank you. Indranil
15	Dey from the Private Health Advisory Group.
16	They're not on. Charles Bane from Dayton
17	Physician Network.
18	DR. BANE: Yes. My name is Charles
19	Bane, and I'm a medical oncologist with Dayton
20	Physicians Network in Ohio. We have been active
21	participants in a variety of different
22	alternative payment models, including the COME

HOME project and the Oncology Care Model.

1

2

3

4

5

6

We strongly support the move toward patient-centered value-based care. We do understand that two-sided risk is a potentially valuable tool that could emphasize and encourage value-based decision-making.

However, unfortunately, the current 7 two-sided risk models that are available are 8 potentially devastating to practices by making 9 oncologists responsible for things outside of 10 11 their control, including the high cost of drugs, 12 particularly with the rapid development of new agents at a very high cost and also responsible 13 for total cost of care, including the treatment 14 of co-morbid conditions outside of our control. 15 two-sided risk 16 Ιt places а model as an flawed thing that would unacceptable or 17 be potentially devastating to the practices. 18

So we are very eager to test models that build on the lessons that have been learned from prior initiatives, models that promote quality in evidence-based care that help to

	96
1	reduce variability and enhance care coordination
2	and to promote meaningful communication with
3	patients and their families and align financial
4	incentives in a rational and sustainable way.
5	So in summary, we strongly support the
6	MASON proposal and express our willingness to
7	participate.
8	CHAIR BAILET: Thank you. Is Indranil
9	Dey on the line? No? So is there anyone else
10	present who I didn't call on who wanted to speak?
11	Is there anyone else on the line who wants to
12	speak? Yes? No?
13	OPERATOR: We have no further public
14	commenters at this time.
15	CHAIR BAILET: Thank you. So we are
16	now at a point where we're ready to begin those
17	deliberations. And I believe we can go ahead by
18	criteria and start to vote unless there are
19	additional comments that the Committee members
20	have based on the public comments or the
21	interactions that we've heard. Len?
22	DR. NICHOLS: I think we should chat

	97
1	a little bit first. I would find it useful. I
2	have a question. So, you know, I like to
3	simplify things.
4	I sort of feel like there's two
5	questions here. One is, is there value-add vis-
6	a-vis the existing OCM? That's obviously EAS, I
7	think.
8	And the second question is, is this
9	thing close enough to being meritorious of CMS'
10	attention to develop it? It clearly cannot be
11	done without combining the various data resources
12	we talked about.
13	It clearly cannot be done without
14	substantial investment and perhaps teaching
15	people some of these new techniques. But more
16	importantly, it cannot be done without CMS' true
17	engagement. And that to me is the question
18	before us.
19	So, I guess, I just wanted to ask are
20	you in a different place than you were when you
21	made your recommendation how you see these?
22	VICE CHAIR TERRELL: So, if you think

	98
1	about where we were before we came up with our
2	new criteria, we had this sort of limited scale
3	testing. Okay?
4	And within that context, this to my
5	mind looked pretty darn perfect because that's
6	where it came from, right? COME HOME was a grant.
7	And they got money and they demonstrated, you
8	know, improvement in costs and quality.
9	And then they've created and thought
10	about an alternative payment model. And then
11	they say, I mean, like almost in the very first
12	portion of their application or their proposal,
13	these things haven't been developed yet. Okay?
14	You know, what we've heard since then
15	is it's going to be okay. We can do it quickly.
16	There's lots and lots of stuff that we can do
17	this. We know it's feasible. We've thought
18	about it. And I believe every word of that.
19	Okay?
20	There's not one thing they've said
21	about clusters or anything else that I don't
22	believe is true. They didn't say winterization

	99
1	today, but it would have sounded so cool if they
2	had said that in the middle of Monte Carlo and
3	blue bottled that. Okay.
4	So within that context, okay, we had
5	criteria, which is where is it right now? Okay.
6	And so in my head where we were was where we were
7	as we were creating the thought process, which
8	is, it's ready to go, right?
9	Now where we are right now in
10	conversations we've had with CMMI, with the
11	experience we've had with others with their
12	disdain of the word limited scale testing is this
13	new nether land with these new criteria for which
14	I think personally this fits in one of those
15	categories quite well.
16	Okay. So I personally believe that,
17	as you go through the criteria, those things are
18	still true in real time with respect to they
19	aren't there yet, but they've got a methodology
20	for getting there.
21	And we've got a process in place that
22	is new for this meeting, which would allow what I

П

believe is the intention, which is here's the 1 payment model that may fix some things as you've 2 said. It's been well thought out. It's looking 3 at a problem that is in the current situation 4 that needs to be improved upon. 5 And there's a group of people willing 6 7 to do it. And if it were successful, it could change the world at a much larger scale. But it 8 needs to be developed in a partnership with CMMI 9 willing to do it. So, I mean, that's where I 10 11 think it is if that makes any sense to you. 12 CHAIR BAILET: Any other comments from the Committee? Then are we ready to go ahead and 13 vote on the criteria? I'm seeing affirmative. 14 15 Voting So we're going to go ahead and start 16 -- while they queue up the mechanics, if we could 17 just get the first slide up here for Criteria 18 19 Number 1. 20 And just to remind folks that we have

a not applicable category. We have a does not meet, meets and meets and deserves priority

21

1	consideration. And we're going to go through the
2	process of all ten.
3	Criterion 1
4	The first one is scope. A high
5	priority item aimed to either directly address an
6	issue in payment policy that broadens and
7	expands the CMS APM portfolio or include APM
8	entities whose opportunities to participate in
9	APMs have been limited. So let's go ahead and
10	vote.
11	Somebody has got to push it one more
12	time with feeling here. Angelo, are you voting?
13	DR. SINOPOLI: Yes. I am. I'm on
14	though.
15	CHAIR BAILET: So one of the controls
16	is not recording it looks like. But does it give
17	you the number in the if it gives you the
18	number in the window then it's probably working.
19	There you go. Okay. It's not you. It's not
20	user error. Okay. Very good. All right. So go
21	ahead, Sarah. Let's get the results.
22	MS. SELENICH: So five members

	102
1	determined that the proposal meets and deserves
2	priority consideration on that basis. Zero
3	members voted five, meets and deserves priority
4	consideration. Two members voted four, meets.
5	And zero members voted three, meets. Zero
6	members voted two, does not meet. And zero
7	members voted one, does not meet. And zero
8	members voted not applicable.
9	A simple majority is needed, which is
10	four votes for the seven voting members. And the
11	majority finding is that the proposal meets and
12	deserves priority consideration.
13	Criterion 2
14	CHAIR BAILET: Thank you, Sarah.
15	Criteria Number 2 is quality and cost, which is a
16	high priority criterion. Anticipated to improve
17	health care quality at no additional cost,
18	maintain health care quality while
19	decreasing cost or both improve health care
20	quality and decrease cost. Please vote.
21	MS. SELENICH: Zero members voted six,
22	meets and deserves priority consideration. One

П

member voted five, meets and deserves priority 1 consideration. Two members voted four, meets. 2 3 Four members voted three, meets. Zero members voted one or two, does not meet. And 4 zero members voted not applicable. 5 We roll down until we reach the 6 7 necessary simple majority. So the finding of the Committee is the proposal meets Criterion 2. 8 Criterion 3 9 you, CHAIR 10 BAILET: Thank Sarah. 11 Criterion Number 3 is payment methodology, a high 12 priority criterion. To pay the alternative payment entities with a payment methodology 13 designed to achieve the goals of 14 the PFPM 15 criteria. Addresses in detail through this methodology how Medicare and other payers, if 16 applicable, pay APM entities, how the payment 17 methodology differs 18 from current payment 19 methodologies and why the Physician-Focused 20 Payment Model cannot be tested under current payment methodologies. Please vote. 21 22 MS. SELENICH: Zero members voted five

	104
1	or six, meets and deserves priority
2	consideration. One member voted four, meets.
3	Four three, meets. Two members voted two, does
4	not meet. Zero members voted one, does not meet.
5	And zero members voted not applicable.
6	The finding of the Committee is the proposal
7	meets this criterion.
8	Criterion 4
9	CHAIR BAILET: Thanks, Sarah.
10	Criterion Number 4 is value over volume, provide
11	incentives to practitioners to deliver high
12	quality health care. Please vote.
13	MS. SELENICH: One member voted six,
14	meets and deserves priority consideration. Zero
15	members voted five, meets and deserves priority
16	consideration. Three members voted four, meets.
17	Three members voted three, meets. Zero members
18	voted one or two, does not meet. And zero
19	members voted not applicable.
20	Therefore, the finding of the
21	Committee is that the proposal meets this
22	criterion.

	105
1	Criterion 5
2	CHAIR BAILET: Thanks, Sarah.
3	Criterion Number 5, flexibility. Provide the
4	flexibility needed for practitioners to deliver
5	high quality health care. Please vote.
6	MS. SELENICH: Zero members voted six,
7	meets and deserves priority consideration. One
8	member voted five, meets and deserves priority
9	consideration. Four members voted four, meets.
10	Two members voted three, meets. Zero members
11	voted one or two, does not meet. And zero
12	members voted not applicable.
13	The finding of the Committee is that
14	the proposal meets this criterion.
15	Criterion 6
16	CHAIR BAILET: Thanks, Sarah.
17	Criterion Number 6, ability to be evaluated.
18	Have evaluable goals for quality of care, cost
19	and other goals of the PFPM. Please vote.
20	MS. SELENICH: One member voted six,
21	meets and deserves priority consideration. One
22	member voted five, meets and deserves priority

	106
1	consideration. Two members voted four, meets.
2	Three members voted three, meets. Zero members
3	voted one or two, does not meet. And zero
4	members voted not applicable.
5	The finding of the Committee is the
6	proposal meets this criterion.
7	Criterion 7
8	CHAIR BAILET: Thank you. Criterion
9	7 is integration and care coordination.
10	Encourage greater integration and care
11	coordination among practitioners and across
12	settings where multiple practitioners or settings
13	are relevant to delivering care to the population
14	treated under the PFPM. Please vote.
15	MS. SELENICH: Zero members voted five
16	or six, meets and deserves priority
17	consideration. Three members voted four, meets.
18	Four members voted three, meets. Zero members
19	voted one or two, does not meet. Zero members
20	voted not applicable.
21	The finding of the Committee is that
22	the proposal meets this criterion.

	107
1	Criterion 8
2	CHAIR BAILET: Thank you, Sarah.
3	Criterion Number 8, patient choice. Encourage
4	greater attention to the health of the population
5	served while also supporting the unique needs and
6	preferences of the individual patients. Please
7	vote.
8	MS. SELENICH: One member voted six,
9	meets and deserves priority consideration. One
10	member voted five, meets and deserves priority
11	consideration. Three members voted four, meets.
12	Two members voted three, meets. Zero members
13	voted one or two, does not meet. And zero
14	members voted not applicable.
15	The finding of the Committee is that
16	the proposal meets this criterion.
17	Criterion 9
18	CHAIR BAILET: Thank you. Criterion
19	Number 9 is patient safety. Aims to maintain or
20	improve standards of patient safety. Please
21	vote.
22	MS. SELENICH: One member voted six,

meets and deserves priority consideration. 1 One member voted five, meets and deserves priority 2 consideration. Four members voted four, meets. 3 One member voted three, meets. Zero members 4 voted one or two, does not meet. Zero members 5 voted not applicable. 6 7 The finding of the Committee is that the proposal meets this criterion. 8 Criterion 10 9 10 CHAIR BAILET: Thank you. And 11 Criterion 10, which is health information technology. Encourage the use of health 12 information technology to inform care. Please 13 14 vote. 15 MS. SELENICH: Three members voted six, meets and deserves priority consideration. 16 member voted five, and deserves One meets 17 priority consideration. Three members voted 18 19 four, meets. Zero members voted three, meets. Zero members voted one or two, does not meet. 20 And zero members voted not applicable. 21 The finding of the Committee is that 22
the proposal meets this criterion and that the proposal deserves priority consideration on this basis.

4

22

Overall Vote

Thank you. So we're CHAIR BAILET: 5 now going to move into the recommendation stage 6 of our process. I remind folks that we have 7 categories, recommended for three not 8 implementation as a PFPM, recommended, which is a 9 two part voting process, which I shared with you 10 11 at the opening, and three referred for other 12 attention by HHS.

So we're going to vote electronically at first. And then we're going to go around the room, probably starting with you, Jen, and declare how we voted and then move into the second part.

Or are we going to hold off on the comments? It depends on the distribution. Okay. So we're going to go ahead and vote on the first section at this point. Wow, Sarah.

MS. SELENICH: Zero members vote to

	110
1	refer the proposal for other attention by HHS.
2	Seven members vote to recommend the proposal.
3	And zero members vote to not recommend the
4	proposal.
5	CHAIR BAILET: All right. Thank you.
6	So let's get the second part up, which is a
7	little more complicated, but again, there are
8	four subcategories. Substantially meets the
9	Secretary's criteria for PFPMs and we are
10	recommending implementing the payment model as
11	proposed.
12	PTAC recommends further developing and
13	implementing the proposal as a payment model as
14	specified in the PTAC comments.
15	Third, PTAC recommends testing the
16	proposal as specified in PTAC comments to inform
17	payment model development.
18	And the last category is PTAC
19	recommends implementing the proposal as part of
20	an existing or planned CMMI model.
21	So we're going to go ahead and vote.
22	MS. SELENICH: So a two-thirds

	111
1	majority is needed to come to the final
2	recommendation. That's the five in the case of
3	these seven voting members. So currently, zero
4	members recommend to implement the proposal as
5	part of a CMMI model. Two members recommend to
6	test the proposal per PTAC comments. Four
7	members recommend to develop and implement the
8	proposal for PTAC comments. And one member
9	recommends to implement the proposal as a payment
10	model. So we need to vote again.
11	CHAIR BAILET: Well, but I made a
12	mistake. I'm the one that voted 1 and I meant to
13	push 2. So that's an I know. I'm a surgeon,
14	okay? Come on, guys. Come on.
15	Yes, I know. I just cut the wrong leg
16	off on that. Hey, come on. After three years,
17	you've got to give me one. Give me one. Okay.
18	I've got to look at the size of that thumb. My
19	goodness. I come from a family of butchers. Oh
20	my God.
21	So I think just for completeness and
22	Sarah's going to look over my shoulder. I'm

П

1	going to actually try and push it. Let's re-
2	vote, please. Can we do that? God, you guys are
3	ruthless. I know, right? There we go. Okay.
4	Goodness. I'll never live that down. All right.
5	MS. SELENICH: Okay. So zero members
6	vote to implement the proposal as part of the
7	CMMI model. One member votes to test the
8	proposal per PTAC comments. Six members vote to
9	develop and implement the proposal for PTAC
10	comments. And zero members vote to implement the
11	proposal as a payment model. So the finding of
12	the Committee is to develop and implement the
10	proposal for PTAC comments
т 2	proposar for fixe commences.
14	Instructions on Report to the Secretary
14 15	Instructions on Report to the Secretary CHAIR BAILET: Okay. So as part of
14 15 16	CHAIR BAILET: Okay. So as part of our process, and thank you, Sarah, for your
14 15 16 17	The commences. Instructions on Report to the Secretary CHAIR BAILET: Okay. So as part of our process, and thank you, Sarah, for your guidance there. Part of our process now is to
14 15 16 17 18	Instructions on Report to the Secretary CHAIR BAILET: Okay. So as part of our process, and thank you, Sarah, for your guidance there. Part of our process now is to make sure because we're recommending based on our
14 15 16 17 18 19	Instructions on Report to the Secretary CHAIR BAILET: Okay. So as part of our process, and thank you, Sarah, for your guidance there. Part of our process now is to make sure because we're recommending based on our comments is to make sure that our comments,
14 15 16 17 18 19 20	Instructions on Report to the Secretary CHAIR BAILET: Okay. So as part of our process, and thank you, Sarah, for your guidance there. Part of our process now is to make sure because we're recommending based on our comments is to make sure that our comments, beside the deliberative comments that we've
14 15 16 17 18 19 20 21	Instructions on Report to the Secretary CHAIR BAILET: Okay. So as part of our process, and thank you, Sarah, for your guidance there. Part of our process now is to make sure because we're recommending based on our comments is to make sure that our comments, beside the deliberative comments that we've already made, make sure that if there's specific
14 15 16 17 18 19 20 21 22	Instructions on Report to the Secretary CHAIR BAILET: Okay. So as part of our process, and thank you, Sarah, for your guidance there. Part of our process now is to make sure because we're recommending based on our comments is to make sure that our comments, beside the deliberative comments that we've already made, make sure that if there's specific comments we want included, we need to bring those

1 forward now in public.

2

3

4

5

22

So why don't we start with you, Jen,
and just you can declare how you voted and then
any specific comments you want to be recorded and
make sure they get into the Secretary's letter.

6 DR. WILER: I voted Number 2 in 7 support. The comments I'd like to make are 8 testing has shown successful implementation of a 9 pilot funded by CMMI that does show improved 10 quality and decreased cost.

The use of digital health solutions 11 12 are novel, innovative. And it is my personal hope that the partnerships that have 13 been previously described by the other specialty 14 societies allow competitiveness 15 in the marketplace so that these are not proprietary and 16 are accessible to improve precision care 17 to 18 cancer patients.

19CHAIR BAILET: Thank you. Len? Oh,20Angelo, you're on the line. Why don't we let you21go ahead?

DR. SINOPOLI: Okay. So I just wanted

to comment that I think this is a tremendously aspirational task and very much congratulate the people that worked so hard to put this together.

1

2

3

16

17

18

19

20

my view is it is And the 4 most comprehensive program I've seen around oncology 5 and really support moving forward. I would echo 6 some of the previous comments in terms of making 7 sure that given all the support for it that this 8 would not be proprietary and that the methodology 9 and ability for others to generate similar models 10 11 across the country be supported and that CMMI 12 supports the efforts around looking at the data and modeling for this. 13

14CHAIR BAILET:Thank you, Angelo.15Len?

DR. NICHOLS: So I voted to recommend for further development. And I would say ever since we started discussing oncology in general we've been hearing about the problems with the OCM.

It was a good first step. I love the idea of thinking of this as sort of OCM 2.0. And

	115
1	what I really like is the continuous learning
2	that's baked into this.
3	I think the potential for updating
4	over time which allows both reclassification of
5	patients and a resetting of the targeting is
6	exactly what we need in a field this dynamic.
7	I'm reasonably certain this is a very
8	unfamiliar methodology to certain people inside
9	CMS. They're just not used to this. So it's
10	going to be a, shall we say, collaborative
11	process.
12	But I think it's one that has
13	potential to give great value. And therefore, we
14	should be encouraging CMS to devote their
15	resources to develop and test this on a large
16	scale as soon as possible.
17	CHAIR BAILET: Grace?
18	VICE CHAIR TERRELL: I was the one
19	that didn't switch her vote and kept it at
20	testing. And I say that within the context of
21	how important this is to get it right because I
22	do think that this is potentially a

П

1 transformative model.

2	And I hope that within the context of
3	the way that we, the PRT, presented our report,
4	both written and verbally, got that across, which
5	is that this is people that have thought a lot
6	about this have thought about details that are
7	not present in the current models and if it's
8	done right could be a real game changer, but they
9	are evangelicals.
10	And there are people out there that
11	are not evangelicals. Within the context of
12	change management, the top 5 percent or the top
13	20 percent of those that embrace change have to
14	get above and beyond that to the tipping point.
15	And to get to that tipping point, it needs to be
16	a bit broader and needs to involve those that are
17	not evangelicals.
18	And so within my thought process,
19	that's what testing, I believe, is about in this

19 that's what testing, I believe, is about in this 20 context. So some of you have talked about non-21 proprietary. I'm thinking of it as being how do 22 we make this more broadly applicable among those

that are just so bought into the world that is 1 with all its misery, that they can't see to do 2 3 this and are going to need some much more handholding to do so. 4 So it's probably splitting hairs. I 5 do think that the timing of our new categories 6 7 was perfect for this because a lot of the PRT thought process was in the context of the old 8 categories of limited scale testing. 9 And what we've done with this, 10 Ι 11 believe, is a proof in process that our new way 12 that we're thinking through things may be more effective. 13 So that may be good for public comment 14 15 later on, not today. But as others who have been through the process both pre and now this and 16 then post if they can reflect upon this 17 But we just got to get this one 18 experience. 19 right. 20 CHAIR BAILET: Thank you, Grace. And I voted in the second category. I really did. 21 22 And so, look, a couple of additional comments.

First of all, this is a very elegant 1 model that is in a field that, I think, probably 2 3 everyone either knows someone or has a family member that's experienced cancer care. And 4 despite a lot of efforts to date, it still 5 remains highly variable. Shared decision-making, 6 which is part of this model, is critically 7 important. And I think that that's a huge gap 8 that I believe this model will help fill. 9 It was interesting to see the level of 10 11 support from the societies that actually are in 12 the trenches to support the clinicians that are actually taking care of the lion's share of these 13

patients. I'm not surprised by that. But the outpouring of support was noted and certainly helped me in my decision-making process.

14

15

16

The pricing for drugs, the way drugs are addressed in this model, it sort of tackles, J believe, maybe not completely, but it certainly makes a significant move in factoring out that question of how are you making decisions about the actual therapeutics that are in queue and,

1	you know, is there a pricing component that is
2	going to benefit the practice. And this model
3	neutralizes that to a large degree, which I think
4	is incredibly important.
5	So I look forward to seeing this in
6	effect. The rapid cycle of continuous learning,
7	leveraging machine learning in that process, I
8	think, is incredibly valuable. And this model
9	offers that opportunity to explore that and see
10	that in action.
11	I don't want to underestimate the
12	complexity of implementing this model. You've
13	got budgets and people who are at risk and things
14	are in flight. And then with expensive therapies
15	that may come to light, just CAR T therapy is
16	just a small example of that. It's going to
17	require some diligence and some flexibility in
18	how the model is built and implemented and an
19	understanding, as Grace has said, from the
20	provider community on how to go ahead and
21	actually incorporate this into their practice
22	style.

П

	120
1	So that's all I had. Thank you.
2	Bruce?
3	MR. STEINWALD: I'm like Grace. I did
4	move from three to two based on the presentation
5	today and the materials that we got to look at
6	because I think the development that we are
7	concerned about has already begun.
8	However, I wouldn't mind if someone
9	with a little bit more methodological expertise
10	took a peek at these tables, either the CMS
11	actuaries or our own consultant just to validate
12	what I think we all believe, that the proof of
13	concept has been demonstrated. But it would give
14	me some comfort if someone with the appropriate
15	expertise could weigh in on that as well.
16	CHAIR BAILET: Thank you, Bruce.
17	Paul?
18	DR. CASALE: Yes. I also voted two.
19	And a lot of great comments. So not much more to
20	add. Just adding on to Bruce's, and I know this
21	part of the process is we do get this information
22	late. And I'm not criticizing the submitters,

you know, this PowerPoint. But, you know, 1 we realistically didn't have a chance to understand 2 it. So I certainly support Bruce's comment if we 3 could get some further feedback either from our 4 own -- or others, I think that would be helpful. 5 And I think that's part of why I voted 6 7 towards the development because I'm still a bit uncomfortable. I'm thinking -- I certainly think 8 that they are able to develop these, but I have 9 more confidence with a little bit more time and 10

And then to Grace's point around getting the physicians on board and being sure that this model has, you know, the flexibility, which, you know, part of the quality measures was 80 percent compliance with the pathway.

11

12

13

14

15

16

evaluation.

know, physicians And, vou often 17 bristle around all of that, you know, cookbook 18 19 medicine and all of that. So ensuring that there's a flexibility for the appropriate patient 20 that, you know, they would go off of that 21 22 pathway. And, again, I think that's part of the 1

2

3

4

5

6

7

8

22

CHAIR BAILET: Thank you, Paul. I appreciate the Committee's engagement and helping provide that input which will be incorporated in -- I think, Julia, if you could take a second maybe and just reflect back. I know I maybe caught you by surprise. But that's part of our process.

9 It would be great if you could just 10 reflect back what you heard and make sure that 11 there is nothing else that we don't need to 12 include.

Sure. So the general 13 DR. DRIESSEN: sort of tone of the response will indicate pretty 14 unequivocal support for the premise of the model 15 and conceptually how to build on OCM. 16 And despite some acknowledgment of the complexity, 17 that there was sufficient sort of assurance in 18 19 the feasibility of implementing and updating it 20 based on the new information that was presented today from the submitters. 21

The sort of primary places I'd like to

clarify are the departures in voting on the two criteria that are high priority from the PRT report. So primarily thinking about the notion of quality and cost and payment methodology.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

So at this point, sort of the primary update is that while there were concerns that were identified in the PRT about the feasibility of the OPCs that really what I mentioned before that the demonstration and additional information is sort of sufficient at this point to satisfy those criteria for the Committee.

CHAIR BAILET: Thank you, Julia. Were there any other elements that we wanted to add to her summary?

MR. STEINWALD: Let me just respond to -- because I switched my vote to meet on quality and cost, in large part because of the emphasis on the use of nationally tested guidelines embedded into the OPCs.

Also, there's a little bit of a tactical thing there on because I stayed at a two on payment because of the need for further

124 development and therefore didn't feel the need to 1 stay on a two on quality of cost. 2 CHAIR BAILET: Angelo, you're on the 3 phone. I just wanted to make sure if there was 4 anything you wanted to add. 5 DR. SINOPOLI: I think all of that was 6 7 well covered. CHAIR BAILET: Thank you. So that 8 concludes our consideration of your proposal. 9 Barbara, again, my compliments to you and your 10 11 team for bearing with our process. 12 What I'd like to do is take literally a five minute break real quick and then come back 13 at five minutes to the hour. Thank you. 14 15 (Whereupon, the above-entitled matter went off the record at 2:46 p.m. and resumed at 16 2:54 p.m.) 17 General Public Comments 18 19 CHAIR BAILET: So this is the part of 20 the public meeting where general comments are Committee, sent 21 made. We, as а out some information about providing feedback. 22 We also

	125
1	wanted to get input on how CMMI is working with
2	the stakeholder community, particularly those
3	that have submitted proposals that we
4	recommended.
5	We have four people teed up to speak.
6	I want to make sure we have time to hear them.
7	So if you could refrain or keep your remarks
8	within three minutes that would be great.
9	Sandy Marks from the American Medical
10	Association is going to lead it off for us.
11	Thanks, Sandy.
12	MS. MARKS: Thank you. I have
13	actually more than three minutes but I'll try to
14	quit when I think I've reached three minutes.
15	How about that?
16	CHAIR BAILET: We'll let you know.
17	MS. MARKS: Okay. You let me know.
18	CHAIR BAILET: Okay. All right.
19	MS. MARKS: And I'm also, I'm not a
20	doctor. My father was a doctor. But I'm not one
21	so. I like doctors though.
22	So the AMA strongly supported the

PTAC's creation and has worked with a number of medical societies to help them design APMS. We are among several organizations that regularly attend the PTAC meetings, often comment on proposals and respond to requests for input on the process.

1

2

3

4

5

6

7 Α generally different of set organizations has submitted most of the proposals 8 to PTAC and gone through the PTAC review process. 9 The report that PTAC issued last month 10 11 on the September public comment session indicated 12 that PTAC received some feedback from the AMA and others in the former group but did not hear from 13 most of the stakeholders whose models PTAC had 14 recommended to HHS. 15

After discussion with 16 some PTAC decided members, the AMA to the 17 contact submitting organizations ourselves to find out 18 19 how the PTAC process has worked from their perspective, what follow-up has occurred with CMS 20 since PTAC recommended their models, what kinds 21 22 of data or technical assistance would have been helpful and whether there were or are ways the AMA could help.

1

2

11

12

13

14

15

We contacted people at 14 3 organizations whose models PTAC has recommended 4 to HHS and heard back from 10 of them. We told 5 them we would keep their responses confidential, 6 so I'm summarizing them for you but will not 7 identify the organizations. Also, we did not get 8 10 answers to every question we asked so the 9 numbers don't always add up to 10. 10

Four submitters had discussions with CMMI about their model before they developed the proposal to PTAC and three of the four proceeded with their PTAC proposal because they were encouraged to do so in those discussions.

Five submitters were contacted by CMMI after PTAC had recommended their proposal to HHS, including one of the four who had met with CMMI ahead of time.

20 Several submitters have had multiple 21 meetings with CMS. Two submitters described their 22 post-PTAC interaction with CMMI as involving some

	128
1	limited collaboration. Another two characterized
2	the discussions as CMMI asking them for
3	information.
4	Three of the five submitters who met
5	with CMMI after their proposals were recommended
6	by PTAC had meetings recently or had meetings
7	planned. The other two last met with CMMI over
8	the summer.
9	It is our impression that there has
10	been significantly more outreach by CMMI to the
11	submitters since Adam Boehler became the CMMI
12	director.
13	Based on these interactions, one
14	submitter thinks that CMMI is almost certain to
15	implement the model that it proposed or something
16	close to it within the next year but said that
17	CMMI has suggested a different payment model for
18	the changing care delivery that was proposed in
19	the APM.
20	Two submitters think it is possible
21	that CMMI will either implement a model close to
22	what they proposed or a different model that

1	covers the same patients.
2	Three said CMMI is not likely to
3	implement their model. And two said they do not
4	know CMMI's plans. One said they believe CMMI
5	wants to do something.
6	All but three submitters felt they had
7	been able to obtain the data they needed to
8	develop their proposal and go through the PTAC
9	review process although some noted that the data
10	analyses had been expensive to obtain.
11	The others said they would have been
12	better able to respond to questions from the PTAC
13	if they had been able to access CMS claims data
14	with utilization spending and risk score data on
15	their patient population.
16	The technical assistance that some
17	submitters said would have been helpful is
18	expertise in modeling the impacts of the proposed
19	APM and having a better understanding of what the
20	barriers are to the PTAC recommended proposals
21	being pilot tested or implemented for Medicare
22	patients and how to get over them.

Barriers include the approaches proposed for financial risk, proposed quality measures and operational and legal challenges to implementation.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

Several submitters already have implemented their models with health care innovation awards or private payers and achieved cost savings and quality improvements and do not understand why CMMI has not supported the proposals recommended by PTAC so that Medicare patients can benefit from them.

Most submitters want the AMA's help to overcome these barriers so the models can move forward. And several indicated our outreach to seek their feedback was itself a great start. So we're glad we started that dialogue.

Over the years, the physician 17 community has worked collaboratively with CMS on 18 systems. 19 many aspects of its payment Many 20 proposal developers believe that the creation of the PTAC would foster this type of collaboration 21 22 on APMs for Medicare patients and are

	131
1	disappointed in the lack of progress so far.
2	We know that Adam Boehler is working
3	to get some of the PTAC recommended models
4	implemented and the AMA strongly supports these
5	efforts.
6	Going forward, we hope that a more
7	interactive and collaborative process can be
8	developed with a clear roadmap for submitters
9	that can further advance our shared goals of
10	having more physician focused APMs that will
11	improve outcomes and lower costs for Medicare
12	patients. Thanks.
13	CHAIR BAILET: Thank you, Sandy.
14	Harold?
15	MR. MILLER: Thanks, Jeff. I just
16	wanted to say and thank you, Sandy, for the
17	report. I think we've all been concerned about
18	the lack of progress on the recommendations that
19	we had made. And it sounds like there is now at
20	least some progress being made with some models
21	in process.
22	I did want to comment, though, based

on Sandy's report, that I think that the process that is used to get to those models is also very important and that if simply a model comes out that is the CMS version of something rather than having been developed in conjunction with the physician community and the physicians that developed it I think it is inconsistent with what really the vision for PTAC was.

1

2

3

4

5

6

7

8

9

And I think that the success of these models is going to be not just the payment model 10 11 themselves, but the active engagement of the 12 physicians who are involved in implementing it. And I don't see that that is going to be nearly 13 as enthusiastic and committed if it is not the 14 model that they developed but something that CMMI 15 might think is better. 16

And I think up until now in general 17 both in Medicare and in the private market, we 18 19 have seen mostly payer developed models that have 20 not worked very well. And I do think that it's time that we see some more focus on models 21 22 developed by physicians and other health care

	133
1	providers.
2	So I hope that CMMI will, as it does
3	take action on PTAC recommendations that it does
4	it in collaboration with the applicants. And I
5	just wanted to communicate how strongly I feel
6	that that's going to be important to success.
7	CHAIR BAILET: Thank you, Harold.
8	Len?
9	DR. NICHOLS: So I'd like to see
10	Harold's point and raise him one more and that is
11	I want to thank Sandy for the presentation. That
12	was very helpful. And thank you for doing the
13	survey. I know that's not easy to do.
14	But what to me was the most compelling
15	line out of Sandy's presentation was submitters
16	need a clear roadmap of what the criteria are or
17	what the barriers are, all that stuff. And I
18	hope we can work to a place.
19	I certainly share Sandy's judgment
20	that I think we're making progress. I think what
21	Adam has been doing lately is an improvement over
22	where we were before, but we still are batting

	134
1	zero.
2	And we hope to do better than that
3	between now and March. But if we don't get a
4	roadmap out of this, we will have failed. And
5	that's really what we need to continue to strive
6	for.
7	CHAIR BAILET: Thank you, Len. We
8	have Robert Carlson from the National
9	Comprehensive Cancer Network signed up. No? Like
10	I said, we don't.
11	So that actually concludes the
12	additional folks who signed up for generalized
13	comments. And, again, Sandy, I want to thank you
14	and the AMA for working with the stakeholder
15	community specifically to provide that important
16	feedback because, as a committee, it's not always
17	possible for us to know the conversations that
18	are happening behind the scenes. So thank you
19	for those insights.
20	Adjourn
21	I need a motion from the Committee to
22	adjourn. Is there such a motion?

	135
1	MR. STEINWALD: So moved.
2	DR. CASALE: Second.
3	CHAIR BAILET: I'm hearing that. I'm
4	feeling it. All in favor?
5	(Chorus of ayes.)
6	CHAIR BAILET: Thank you. Thank you,
7	everybody.
8	(Whereupon, the above-entitled matter
9	went off the record at 3:04 p.m.)
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	

A	accurate 43:19	Additionally 56:7	ago 15:3	80:20 83:21 90:5
A-G-E-N-D-A 2:1	50:17 61:10	address 11:2 45:12	agree 83:8	90:10 125:9
a-vis 97:6	achieve 6:12 87:21	56:14 58:18 71:5	agreed 5:3 54:19	amount 21:16 23:6
ability 18:2,16	89:14 103:14	90:18 101:5	61:9	23:21 43:9 45:10
27:17 36:13 37:1	achieved 83:15	addressed 85:14	ahead 3:4 12:19	49:770:1271:16
38:8 45:7 72:22	130:7	118:18	13:6 62:16,19	79:8
93:2 105:17	acknowledge 5:2	addresses 36:2	80:13,19 96:17	amounts 69:4
114:10	acknowledged 34:2	103:15	100:13,16 101:9	82:11
able 3:8 6:2 12:1	acknowledges	addressing 87:18	101:21 109:20	analyses 129:10
22:4 36:16 38:4,4	31:19 82:0	adequate 31:9	110:21 113:21	analysis 19:12 25:9
43:7 50:22 56:19	acknowledgment	adequatery 57:15	119:20 127:19	42:3 50:8,11,13
59:2 61:17 63:18	122:17 ACO 14:12 (0:21	adnerence 89:5	aimed 101:5	51:13 59:10 85:5
65:2 70:3,6 73:3,6	ACU 14:12 09:21	91:10 adjourn 2:22	All 107.19	analytic 57:15,20
73:9,15 74:1	ACD accordited	124.20.22	Albuquorquo 15.5	57.20 analytical 52.14
75:16,21 76:13		154.20,22 adjudicating 25.12	Albuquerque 15:5	66.12 70.18
79:9 93:6 121:9	40.10	adjudicating 55.12	Alex 91.11	00.12 /9.10 analytics 55:10 11
129:7,12,13	122.2	adjustment 71.4	51.5 68.20 71.1	55.15 56.4 21
above-entitled	133.3 actionable 57.16		31.3 00.20 /1.1	02.0
124:15 135:8	actions 5.18	93.1 adjustments 58.15	67.12 74.14	93.9 analyzed 50.3 57.1
absolutely 26:18	activate 73.10	adjuvent 60.16	o7.12 74.14	analyzeu 50.5 57.1 and/or 52.10
academic 24:6 60:8	activated 73.6	72.10 12 73.12	aligned 88.22	Angelo 1.14 4.14
accept 45:5 63:16	active 4.18 21	administration	All-Paver 85.8	59.21 101.12
93:11	70.19 71.4 94.20	34.14	allaved 64.4	113.20 114.14
accepted 44:10	132:11	administrative	Alliance 45.13	124.3
/8:1/,20	actively 5:14 91:8	10:8 34:13 57:5	54:14	Anne 90.4 6.9
access 34:22 08:18	activities 7:14 10:6	86:17	allow 57:19 84:12	announce 7:16
09.1 79.4 00.7,14 00.2 120.12	84:22	advance 61:6 131:9	91:20 93:16 99:22	announced 10:15
90.2 129.13	actual 45:2 47:22	advanced 42:18.20	113:15	91:12
113.17	83:13 118:22	44:6 93:12	allowed 20:5 21:4	answer 15:21 40:22
accommodate	actuaries 120:11	advancement	49:21	52:22 63:11 66:15
	acute 65:5	86:21	allowing 49:10	66:20 76:19
accommodated	Adam 10:9,22 11:1	advances 44:17	84:2 93:19	answering 52:8
38.18	11:13 128:11	advancing 87:19	allows 44:19 59:11	answers 21:10
accommodating	131:2 133:21	advantage 17:20	91:7 115:4	127:9
36:19	add 12:9 40:5	adverse 25:11	alternative 11:7	anticipate 10:16
accomplish 9:14	59:19 120:20	33:20 46:17 75:11	29:5 31:15 32:7	anticipated 12:2
93:18	123:13 124:5	adversely 46:21	42:12 84:11,21	58:5 102:16
accomplished	127:10	advising 13:19	86:21 93:13 94:22	APC 68:6
78:22	added 56:17	Advisory 1:1 3:6	98:10 103:12	APM 42:20 44:6
account 23:12,16	adding 44:4 51:7	13:18 94:15	AMA 12:10 13:19	82:22 84:13,14
49:8,10	58:21 76:11 89:10	affect 81:11 93:2	13:20 15:12 41:20	86:22 91:2,14,15
accountability	120:20	affirmative 100:14	81:2 82:13 83:10	101:7,7 103:17
85:10	addition 5:2,12	afford 69:4	125:22 126:12,17	128:19 129:19
accountable 2:3	56:22	Affordability 13:15	127:2 131:4	APMs 42:14 91:12
12:21 13:3 19:17	additional 12:11	afternoon 3:4 9:13	134:14	101:9 126:2
32:13 42:9	20:18 51:7,8,9	87:6 90:7 92:5	AMA's 130:12	130:22 131:10
accreditation 48:19	76:9 96:19 102:17	agent 46:20	ambitious 81:22	apologize 66:4
accuracy 44:14	117:22 123:9	agents 95:13	American 13:17	appealing 70:11
63:18	134:12	aggregation 57:15	15:2,11 43:18	appeals 30:3

15.14		14.0	00.01 00.7 17	D
appearance 15:14	aspect 20:4 00:12	aware 14:0	22:21 25:7,17	Berenson 19:8,8
appears 85:16	aspects 24:12 38:19	ayes 135:5	24:4 25:3 26:7,22	Dest 9:11 24:17
applicable 100:21	130:19	Azar 91:11	27:12 28:17 29:19	27:2 37:12 69:12
102:8 103:5,17	aspirational 114:2	B	31:20 33:1,15	09:12 h - 44
104:5,19 105:12	assert 32:16	$\frac{\mathbf{D}}{\mathbf{R} 25.1673.16}$	34:0,10 30:14	Detter 6:2 18:14,20
100:4,20 107:14	assign 00:22	back 21.2 20.21	45:5 50:20 57:14	40:11,12 /4:1
108:0,21 110:22	assigned 20:17	34.20 66.10 60.22	59:15 68:15 /1:4	/5:12 /8:9 83:10
applicant 40:20	23:2 29:10	85·20 122·6 10	/6:14 81:7,9	85:4 87:17 129:12
applicants 133:4	assignment 23:11	124.13 127.5	83:12 85:5 86:2,2	129:19 132:16
application 53:19	assist 88:7	124.15 127.5 backbong 84.7	89:19 91:9 93:8	134:2
98:12	assistance 47:16	backbolle 04.7	96:20 112:18	beyond 31:16
applications 38:19	120:22 129:10	Bailot 1.12 2.2 3.3	120:4 122:20	110:14
apply 82:20 88:4	Assistant 1:18	12.18 12.12 13	128:13 131:22	DIAS 15:14
appreciate 18:6	associated 54:8	17.1 0 /1.2 7	baselines 52:5	DIG 51:13 55:18
52:7 90:17 122:3	08:19	52.10 59.21 60.3	Dasic $\delta 1:0$	59:9,15
appreciated 4:5	Associates 42:7	62.10 57.21 00.5	Dasically 24:10	Diggest 55:9
approacn 40:10	0/3	76.17 78.1 10	25:1,5 50:15	bigQuery 31:13
82:13 83:9	Association 15:18	80.4 83.20 87.3	00.19	binding 9:2
approaches 30:5	15:11 80:21	87.12 90.4 92.2	Dasis 60:20 61:18	biologic 46:20
150:1	125:10	93.21 94.14 96.8	82:10 102:2 109:3	biologics 40:12
<i>appropriate</i> 23:10	assurance 122:18	96.15 100.12	Datting 155:22 Boumgondnon 2:0	DIU 20:2 04:12 97:1 $116.16 120.0$
47:15,21 48:19		$101.15\ 100.12$	Baumgaruner 2:9	110:10 120:9
49:2 55:21 88:7	ASIRO 90:22	101.15 102.14	41:15 42:1,2	121:7,10 125:20
120:14 121:20	91:14,20	105.2 16 106.8	49:15 55:14 58:10	DIOCK 00:10
	attempt 44:5	107.2,18 108.10	59:8 05:9 00:11 66:16 76:2 70:19	blue 15:15 99:5
/1:15	attempts 52:15	109.5 110.5	00:10 / 0:2 / 9:18	Doard 15:18,19,21
approval 10:15	attend 5:8 120:4	111.11 112.15	bearing 124:11	$10:20\ 121:15$ D = b 10:7 8 20:10
approved 10:0	attended 15:21	113.10 114.14	began 42:21	BOD 19:7,8 20:10
89:15 95:14	attention 0:11 12:2	115.17 117.20	beginning 09:2	40:21 Deablar 10:0 11:1
	34:0 32:8 97:10	120.16 122.2	begun 120:7	Duellier 10.9 11.1
89:12 Amril 14:2	107:4 109:12	120.10 122.2	behavior 22,21	128:11 151:2 hattlad 00:2
April 14.2 $(11.6 \ 24.2)$	110.1 audible 12.17	125.16 18 131.13	beliavior 55.21	bought 117.1
areas 11.0 24.22	audioneo 7:12	133.7 134.7 135.3	20.12 22.7 27.17	Dought 117.1 Drandois 91.10
argument 78.21	Authorization 80.2	135.6	20.13 22.7 27.17	brook 50.22 124.12
argument 70.21	Authorization 69.5	hake 29.15	27.19 20.1 30.7	broost 50.7 61.12
56.17 57.14	autonomy 60.15	haked 29.14 32.20	31.1 33.2 37.1,17 29.1 50.2 16	61.12 22 74.9
30.1/ 3/.14	52.20 52.16 05.9	115·2	50.1 59.5,10 04.10 05.10 00.01	01.12,2274.0
artificial 22.9	32.20 33.10 93.8	Bane 94.16 18 19	04.10 03.10 00.21	bringing 10.2 66.2
ar unicial 25.6	Avanua 1:6	Bantist 16.20	90.19 95.15,10	bright 121.18
ASCO 44.1 49.16	Avenue 1.0	baptist 10.20	90.17 90.10,22	broadens 101.6
ASCO 44.1 40.10 84.2 2 4 17 22	average 02.10	Barhara 2.9 14.2	99.10 100.1	broader 116:16
84:2,3,4,17,22	avolu 15:15 45:4 75:12 91:12	16.13 41.13 15 18	110:19 11/:11	broadly 116.22
03.7,10,22 00:20 asked 21.1 20.21	13.12 01:13	63.11 85.16	110.9,19 120.12	brought 66.22
66.5 70.18 127.0	avoidad 16.11	124:10	127.4 130.20 holiovos 82.12	Bruco 1.15 14.7
ocking 5.18 67.10	avoiding 17.12	barriers 129.20	01.20	10.7 10.4 20
азкиц J.10 07.10 128.2	avoiung 47.13 award 20.02 22.12	130:1.13 133.17	71.20 hanchmarks 22.22	17.1 40.4,20 57.13 66.5 70.10
120.2 asks 17.77	ANALU 20.22 22.12	base 59.6 6	bonofit 5.6 26.17	78.12 100.2 10.10
ASDE 1.122	42.22 awards 18.11 22.6	based 10:12 11.19	38.20 110.2	70.12 120.2,10 Bruco's 120.20
5.10 8.16 17 1 /.6	120.7	15:1 21:21 22:10	130.20 117.2	121.2
3.17 0.10,1/ 14:0	130.7	10,1 21,21 22,10	130.11	121.3

	l		I	l
budgets 119:13	captive 45:14	16:17 17:1,9,15	chemotherapy 48:6	CMMI 7:9 10:6,6,8
build 67:22 95:20	capturable 86:19	17:16 20:17,17	48:11 73:1	11:6,11,17 12:3
122:16	capture 39:16	40:17 41:2,7	CHESS 16:20	12:13 20:20 21:22
building 1:6 11:22	CAR 119:15	52:10 59:21 60:3	Chief 17:4 42:2	22:18 28:15 34:9
built 44:11 48:1	cardiologist 14:11	62:14 66:1 68:10	87:7	42:22 91:1 99:10
63:17 119:18	care-related 23:5	76:17 78:1,10	Chilingerian 81:19	100:9 110:20
bundle 74:10	35:16	80:4 83:20 87:3	choice 27:21 38:15	111:5 112:7 113:9
bundled 85:18	career 62:7	90:4 92:2 93:21	107:3	114:11 125:1
bundles 74:7	careful 9:17	94:14 96:8,15	Chorus 135:5	127:12,16,18,22
burden 56:17	caring 47:1	97:22 100:12	chose 50:8	128:2,5,7,10,11
86:17	Carlo 50:2 51:22	101:15 102:14	chronic 65:4	128:14,17,21
burdens 57:6	99:2	103:10 104:9	chute 62:4	129:2,4 130:9
business 2:4 3:17	Carlson 87:4,6,7	105:2,16 106:8	claim 45:19 49:8	132:15 133:2
13:1,5 18:16	134:8	107:2,18 108:10	70:12	CMMI's 44:2
26:21 27:1 45:10	Carolina 4:16 17:5	109:5 110:5	claims 29:18 42:17	129:4
68:7 70:15 77:2,5	carve 94:11	111:11 112:15	50:3 51:11 52:1	CMS 34:15 35:1
businesses 18:1	Casale 1:13 14:10	113:19 114:14	53:5,9 54:3,9,22	42:13,18 45:10
butchers 111:19	14:10 66:2,14,17	115:17,18 117:20	59:4 68:3 79:5	46:10 48:13 49:7
byproduct 72:21	67:6,10 120:18	120:16 122:2	85:7,8 129:13	55:1 68:1,2,8
	135:2	123:12 124:3,8,19	clarification 58:17	70:10 79:5 82:2
C	case 20:19 111:2	125:16,18 131:13	clarified 76:22	85:7 88:13 91:12
calculation 85:13	cases 20:20 76:9,12	133:7 134:7 135:3	clarify 123:1	101:7 115:9,14
California 13:15	categories 5:21 6:1	135:6	Clarifying 2:8 40:6	120:10 126:20
call 10:8 76:22	6:8,14,16 7:10	challenge 55:18	classify 81:9	127:21 129:13
96:10	10:18 40:12 52:16	challenges 130:3	clear 32:4 33:1	130:18 132:4
called 13:3 25:2	52:19 81:5 99:15	challenging 55:21	34:5 36:21 40:8	CMS' 97:9,16
Canada 16:14	109:8 117:6,9	chance 121:2	66:7 86:1 131:8	co-morbid 95:15
cancer 18:15 23:4	category 6:10 49:5	change 20:5 36:14	133:16	coast 54:16,16
26:2,5,20 30:14	72:15 100:21	76:5,7,10 100:8	clearly 27:15 39:11	codes 30:1
30:16 32:5 34:10	110:18 117:21	116:12,13	58:4 97:10,13	coding 35:3
35:6,13,15,16	caught 122:7	changed 8:11 33:21	clinical 15:3 17:4	cognitive 63:7
36:1,3 37:17,21	cause 46:12	39:2,3	22:21 33:1 43:18	cohort 37:9
39:2 42:7 43:3	causes 46:17 47:22	changer 116:8	49:19 53:6 54:2	collaboration
45:9,13 46:4 48:5	cell 62:6	changes 20:14	55:11,19 56:3,8,9	128:1 130:21
49:9 50:7 53:10	center 14:17 16:5,8	21:10 24:13 27:4	56:15 74:19 75:4	133:4
53:10 54:13 55:8	25:19 41:21	29:7,13 40:14	83:5,22 86:16	collaborative
61:2,8,12,13 67:2	centered 55:17	62:4 75:9	87:22 88:8 91:18	115:10 131:7
70:19 71:13 74:8	centers 24:6	changing 24:9,12	clinically 29:12	collaboratively
81:10 82:8 86:3	centralized 57:19	24:18 26:21 58:20	clinicians 30:7 38:3	130:18
87:4,9,16,18 88:5	57:20	74:14 128:18	38:9 39:13 118:12	colleagues 9:16
90:15 91:22 92:3	CEO 14:16 16:18	characteristics	close 97:9 128:16	11:12 12:8 15:21
92:7,19 93:2,5	17:5 42:6 92:6	81:11	128:21	18:6 84:10
113:18 118:4	certain 10:14 115:7	characterized	closer 91:15	collection 86:16
134:9	115:8 128:14	128:1	cluster 30:1 50:1	colon 53:10 61:22
cancer-related	certainly 19:11	charge 69:4	50:22	Colorado 4:9 16:4
32:14 35:4,8	40:1 118:15,19	charged 23:13	clustering 49:21	Columbia 14:13
51:20 83:7	121:3,8 133:19	charges 25:22 26:1	51:5,6	combination 83:5
cancers 52:17 54:5	certified 48:16 49:3	Charles 94:16.18	clusters 39:20	combine 42:17
54:5,7 55:4 61:20	Chair 1:12,12 2:2.7	chat 96:22	49:22 50:7,8	combining 53:18
capabilities 57:16	3:3 5:4 12:18	chemo 32:1 71:12	58:22 65:15 98:21	97:11
_				

come 11:1,16 18:10	134:16,21	124:10	confidence 121:10	continuously 88:14
20:22 21:21,21	Committee's 122:3	comply 80:17	confident 83:10	continuum 88:3,8
23:2 24:20 27:20	common 51:12	component 21:7	confidential 127:6	contractors 77:3
34:7,15 38:5	52:2 55:4 61:20	119:1	conflict 13:9 14:5	contrast 82:12
39:15 41:20 42:22	63:22	components 48:15	16:11	contribute 18:2
43:4,8,10 45:3	communicate	93:10	conflicts 7:16 15:13	contribution 24:5
47:8 53:5 54:2,11	133:5	comport 66:21	16:22 17:7	control 26:6 32:15
64:17 70:6 77:12	communication	comprehensive	congratulate 114:2	52:6 85:11 95:11
77:21 83:13,18	96:2	87:4,8 88:1 114:5	Congress 14:1	95:15
85:6 92:10,17	community 3:22	134:9	conjunction 132:5	controls 101:15
94:4,22 98:6	12:5 119:20 125:2	comprehensiven	consensus 9:1	conversations
111:1,14,14,16,19	130:18 132:6	62:22	considerable 43:13	99:10 134:17
119:15 124:13	134:15	computational	consideration	COO 15:8
comes 4:8,15 18:7	comorbidities 25:4	50:20 51:5 65:16	10:19,21 11:20	cookbook 121:18
18:21 19:4 132:3	46:21 75:14 81:8	computationally	26:19 101:1 102:2	cool 99:1
comfort 120:14	comp'd 93:15	51:10	102:4,12,22 103:2	coolest 17:18
comment 7:12 55:5	company 16:21	computations 51:7	104:2,14,16 105:7	coordination 4:16
67:15 69:8 76:1	17:7	51:9	105:9,21 106:1,17	17:6 22:4 27:18
90:8 93:20 114:1	comparator 37:9	compute 62:9	107:9,11 108:1,3	30:16 32:11 34:6
117:14 121:3	37:13	computed 59:2	108:16.18 109:2	37:16 96:1 106:9
126:4.11 131:22	compare 37:11	computer 61:17	124:9	106:11
commenters 96:14	compared 44:8	63:7	considered 82:3	core 22:19 30:16
comments 2:11.20	89:9 92:15	computers 59:12	consisted 19:6	Cornell 14:13
5:16.17 7:3.5 8:1	comparisons 89:10	64:9	consistent 84:18	corollary 70:21
8:17 12:9.11	compelling 35:22	computing 65:7.19	consists 47:3.11	corrections 44:20
$41.10\ 80.10\ 12$	133·14	68·7	consortium 22.1	correctly 58.8
84.2.96.19.20	competitiveness	concent 49.16	24.4 28.19	correlation 45.2
100.12 109.19	113·15	50.19 58.18 78.18	consortiums 39.14	cost 23.17 25.5
110.12 107.17	completed 72.13	81.6 120.13	constant 75.7	27.6 32.16 19
112.8 10 13 19 19	73.12	concentually 33.2	constitute 43.12	34.7 10 36.6 37.4
112.0,10,13,13,17,17	completely 32.20	122.16	construction 11.4	38.9 10 12 44.15
112.20,22 113.4,7	118.10	22.10	constructs 67.22	<i>AA</i> ·22 <i>A</i> 5·16 17 18
120.10 124.18 20	completeness	5/1.8 60.5 82.17	68.6	45.21 AQ.2 3 50.4
120.17 124.10,20		concorned 20.8	consultance 12.1	50.15 51.1 11
134.13	completes 60.15	33.5 37.20 120.7	consultant 120.11	58·21 60·10 61·14
70.13	75.1	131.17	consultation 22.20	68.16 10 60.21
70.13 committed 87.17	73.1 complex 24.21	131.17	25.18 21.1 71.21	71.6 72.14 75.20
80.16 00.1 120.14	26.20 26.12 29.12	20.12 22.14 27.7	23.10 31.1 /1.21	83.0 85.14 10.12
$09.10\ 90.1\ 132.14$	20.20 30.12 30.12	27.0 20.7 60.5	consulting 13.10	05.9 05.4,10,15
A:12 5:1 5 6 19	47.2 JJ.14	57.0 50.7 00.5	contact 120.17	02.12 02.7 05.11
4.15 5.1,5,0,10	29.1 51.6 110.12	04.1 09.1 01.4	contacted $127.5,10$	92.10 95.7 95.11
0.1, 3, 3, 7, 0 12.4	30.1 31.0 119.12 122.17	123.0	contained 9.4	95.15,14 102.15
12:10 14:5 19:0	122:17	concluded 10.7	context $18.3, 7, 22$	102.17,19,20
19:10 51:11 41:12	20:0 22:17 47:10	concludes 8:4	19:5 98:4 99:4	105:18 115:10
41:18 52:11 /0:19	29:9 33:1/4/:19	124:9 134:11	115:20 110:2,11	125:4,1/124:2
/8:19 8/:11 90:19	80:19 89:19 101-16	conclusion 9:3 81:3	110:20 11/:8	13U.8
100:13 103:8	121:10	conclusions 57:2	continue 68:2	costs 43:20 44:7
104:0,21 105:13	compliant 55:18	concordant 90:3	134:5	45:2 40:1,2,4
106:5,21 107:15	complicated 81:22	condition 46:20	continues 61:6	50:18 51:21,21
108:7,22 112:12	82:3 110:7	conditions 95:15	continuous 61:18	52:2,3,5 69:16,17
123:11 124:21	compliments	conducted 89:3	115:1119:6	/0:/,14 /6:/
	_	-		

91,10,10,15,92,1	107.16.17.19	detek (2.5	104.11.105.4	100.2
81:12,12,15 85:1	10/:10,1/,18	databases 63:5	104:11 105:4	109:2
85:15 87:18 89:0	$108:8,9,11\ 109:1$	04:9 doto 10:7 119.5	delivered 45:5	design 84:18 120:2
02.14 02.0 121.11	Critical 17:5 54:0	day 40:19	40:11 00:0 dolivoring 25:01	designations 26:19
92.14 90.0 151.11 Coto 66:20 67:7 11	30.11 03.2 oritically 118.7	Uay 40.10 Devitor 02.22 04.1	A7.4 6 82.15	designed 82.17
Cota 00.20 07.7,11	criticiany 110.7	Dayton 95.22 94.1	47.4,0 05.15	uesigneu 05.17 95.6 96.2 01.2
0/.1000.0	criticizing 120.22	94.10,19 dopl 50:14	100.15 dolivoru 27.3 17.21	03.0 00.3 91.2 102.14
$\frac{\text{country } 30.17}{30.14}$	criticizing 120.22	debuting 5.20	55.16 68.11	105.14 docirable 81.14
<i>country</i> 59.14 <i>A</i> 2.10 62.6 7 15	cumpersone 59.1	December 1:0	JJ.10 00.14 128.18	desirable 01.14
42.19 03.0,7,13 64.13 65.3 60.13	current 15:12 20	20.10	120.10 domarcato 75:6	desnite 118.5
11/11	28.11 31.17 22	20.10 decentralized	demographic /0.10	122.17
counts 35.20	20.11 51.17,22	65.10	demonstrate /6.2	datail 20.1 23.0
counts 55.20	37.10 95.7 100.4	decide 55.22 83.67	10.14 17 50.20	20.16 21 31.10
course 117.22	103.18 20 116.7	decided 126.17	49.14,17 J0.20 53·4 63·18 20	29.10,21 51.10
coverage 86.10	currently 28.4 14	decision 9.8 11.19	74·5	103.15
covered 124.7	31.17 33.8 37.11	56.13 58.1 74.20	demonstrated	detailed 30.20
covers 129.1	77.16 93.11 111.3	80.3 11	78.17 83.14 89.4	31.12 38.21 82.4
craft 91.16	$77.10 \ 95.11 \ 111.5$	decision- 30.20	98·7 120·13	detailing 88.7
create 22:15 36:4	78.16	56·9	demonstrates	details 30.12 116.6
36.10 42.19 51.15	customer 26.12	decision-making	87.20 89.13	determinations
53.11 54.6 61.3	47·3 9	31.3 38.21 86.14	demonstrating	30.2
69.21 72.16	eut 111.15	88.8 95.6 118.6	50.16	determine 6.16
created 21:3 22:2	cvcle 119.6	118.16	demonstration	51.20 83.1 3
49.6 16 98.9		decisions 55.13	50.6 53.8 123.9	determined 51.1
creating 11.22	D	57·4 88·3 118·21	denials 89.11	102.1
creating 11.22	D 1 10	57.4 00.5 110.21		102.1
49.17 50.21 51.9	D 1:13	deck 44·22	density-based	determining 35.7
49:17 50:21 51:9	D 1:13 D'Amato 92:3,5,6	deck 44:22 declare 109:16	density-based	determining 35:7
49:17 50:21 51:9 61:19 68:13 70:1 99:7	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8	deck 44:22 declare 109:16 113:3	density-based 49:20 departments 22:9	determining 35:7 65:14 devastating 95:9
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7	deck 44:22 declare 109:16 113:3 decrease 102:20	density-based 49:20 departments 22:9 departures 123:1	determining 35:7 65:14 devastating 95:9 95:18
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10	density-based 49:20 departments 22:9 departures 123:1 depends 109:19	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8.9	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14.19	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deen 26:22	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8.13 27:9
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2 99:5,13,17 100:14	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15 56:4,16,20 57:15	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15 72:17	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22 82:19 113:14	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21 33:3,4 35:6 43:19
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2 99:5,13,17 100:14 100:18 102:15	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15 56:4,16,20 57:15 58:20 59:10 61:10	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15 72:17 degree 78:4 119:3	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22 82:19 113:14 127:21	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21 33:3,4 35:6 43:19 52:15.16 58:17
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2 99:5,13,17 100:14 100:18 102:15 103:15 110:9	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15 56:4,16,20 57:15 58:20 59:10 61:10 61:16,17 63:21	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15 72:17 degree 78:4 119:3 deliberate 3:20	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22 82:19 113:14 127:21 describing 70:19	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21 33:3,4 35:6 43:19 52:15,16 58:17 98:13 100:9
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2 99:5,13,17 100:14 100:18 102:15 103:15 110:9 123:2,11 133:16	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15 56:4,16,20 57:15 58:20 59:10 61:10 61:16,17 63:21 65:17 66:12 70:5	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15 72:17 degree 78:4 119:3 deliberate 3:20 7:11.17 8:3	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22 82:19 113:14 127:21 describing 70:19 description 29:19	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21 33:3,4 35:6 43:19 52:15,16 58:17 98:13 100:9 127:12 131:8
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2 99:5,13,17 100:14 100:18 102:15 103:15 110:9 123:2,11 133:16 criterion 2:12,13	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15 56:4,16,20 57:15 58:20 59:10 61:10 61:16,17 63:21 65:17 66:12 70:5 72:20 75:22 76:5	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15 72:17 degree 78:4 119:3 deliberate 3:20 7:11,17 8:3 deliberation 2:3	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22 82:19 113:14 127:21 describing 70:19 description 29:19 71:3	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21 33:3,4 35:6 43:19 52:15,16 58:17 98:13 100:9 127:12 131:8 132:5,7,15,19,22
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2 99:5,13,17 100:14 100:18 102:15 103:15 110:9 123:2,11 133:16 criterion 2:12,13 2:13,14,14,15,15	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15 56:4,16,20 57:15 58:20 59:10 61:10 61:16,17 63:21 65:17 66:12 70:5 72:20 75:22 76:5 76:15 77:14,18,21	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15 72:17 degree 78:4 119:3 deliberate 3:20 7:11,17 8:3 deliberation 2:3 8:4 12:20 15:16	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22 82:19 113:14 127:21 describing 70:19 description 29:19 71:3 descriptions 38:18	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21 33:3,4 35:6 43:19 52:15,16 58:17 98:13 100:9 127:12 131:8 132:5,7,15,19,22 developers 130:20
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2 99:5,13,17 100:14 100:18 102:15 103:15 110:9 123:2,11 133:16 criterion 2:12,13 2:13,14,14,15,15 2:16,16,17 6:4	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15 56:4,16,20 57:15 58:20 59:10 61:10 61:16,17 63:21 65:17 66:12 70:5 72:20 75:22 76:5 76:15 77:14,18,21 79:5,5,9 82:22	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15 72:17 degree 78:4 119:3 deliberate 3:20 7:11,17 8:3 deliberation 2:3 8:4 12:20 15:16 16:1 80:8	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22 82:19 113:14 127:21 describing 70:19 description 29:19 71:3 descriptions 38:18 descriptive 6:1	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21 33:3,4 35:6 43:19 52:15,16 58:17 98:13 100:9 127:12 131:8 132:5,7,15,19,22 developers 130:20 developing 7:2
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2 99:5,13,17 100:14 100:18 102:15 103:15 110:9 123:2,11 133:16 criterion 2:12,13 2:13,14,14,15,15 2:16,16,17 6:4 31:9 36:2 68:16	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15 56:4,16,20 57:15 58:20 59:10 61:10 61:16,17 63:21 65:17 66:12 70:5 72:20 75:22 76:5 76:15 77:14,18,21 79:5,5,9 82:22 83:5 85:6 86:16	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15 72:17 degree 78:4 119:3 deliberate 3:20 7:11,17 8:3 deliberation 2:3 8:4 12:20 15:16 16:1 80:8 deliberations 3:13	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22 82:19 113:14 127:21 describing 70:19 description 29:19 71:3 descriptions 38:18 descriptive 6:1 deserves 26:19	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21 33:3,4 35:6 43:19 52:15,16 58:17 98:13 100:9 127:12 131:8 132:5,7,15,19,22 developers 130:20 developing 7:2 28:4 69:16.17
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2 99:5,13,17 100:14 100:18 102:15 103:15 110:9 123:2,11 133:16 criterion 2:12,13 2:13,14,14,15,15 2:16,16,17 6:4 31:9 36:2 68:16 82:5 101:3 102:13	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15 56:4,16,20 57:15 58:20 59:10 61:10 61:16,17 63:21 65:17 66:12 70:5 72:20 75:22 76:5 76:15 77:14,18,21 79:5,5,9 82:22 83:5 85:6 86:16 93:9 97:11 114:12	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15 72:17 degree 78:4 119:3 deliberate 3:20 7:11,17 8:3 deliberation 2:3 8:4 12:20 15:16 16:1 80:8 deliberations 3:13 4:5 6:2 9:8 40:18	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22 82:19 113:14 127:21 describing 70:19 description 29:19 71:3 descriptions 38:18 descriptive 6:1 deserves 26:19 100:22 102:1.3.12	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21 33:3,4 35:6 43:19 52:15,16 58:17 98:13 100:9 127:12 131:8 132:5,7,15,19,22 developers 130:20 developing 7:2 28:4 69:16,17 81:4 110:12
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2 99:5,13,17 100:14 100:18 102:15 103:15 110:9 123:2,11 133:16 criterion 2:12,13 2:13,14,14,15,15 2:16,16,17 6:4 31:9 36:2 68:16 82:5 101:3 102:13 102:16 103:8.9.11	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15 56:4,16,20 57:15 58:20 59:10 61:10 61:16,17 63:21 65:17 66:12 70:5 72:20 75:22 76:5 76:15 77:14,18,21 79:5,5,9 82:22 83:5 85:6 86:16 93:9 97:11 114:12 126:22 129:7,9,13	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15 72:17 degree 78:4 119:3 deliberate 3:20 7:11,17 8:3 deliberation 2:3 8:4 12:20 15:16 16:1 80:8 deliberations 3:13 4:5 6:2 9:8 40:18 96:17	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22 82:19 113:14 127:21 describing 70:19 description 29:19 71:3 descriptions 38:18 descriptive 6:1 deserves 26:19 100:22 102:1,3,12 102:22 103:1	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21 33:3,4 35:6 43:19 52:15,16 58:17 98:13 100:9 127:12 131:8 132:5,7,15,19,22 developers 130:20 developing 7:2 28:4 69:16,17 81:4 110:12 development 7:6
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2 99:5,13,17 100:14 100:18 102:15 103:15 110:9 123:2,11 133:16 criterion 2:12,13 2:13,14,14,15,15 2:16,16,17 6:4 31:9 36:2 68:16 82:5 101:3 102:13 102:16 103:8,9,11 103:12 104:7.8.10	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15 56:4,16,20 57:15 58:20 59:10 61:10 61:16,17 63:21 65:17 66:12 70:5 72:20 75:22 76:5 76:15 77:14,18,21 79:5,5,9 82:22 83:5 85:6 86:16 93:9 97:11 114:12 126:22 129:7,9,13 129:14	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15 72:17 degree 78:4 119:3 deliberate 3:20 7:11,17 8:3 deliberation 2:3 8:4 12:20 15:16 16:1 80:8 deliberations 3:13 4:5 6:2 9:8 40:18 96:17 deliberative 112:20	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22 82:19 113:14 127:21 describing 70:19 description 29:19 71:3 descriptions 38:18 descriptive 6:1 deserves 26:19 100:22 102:1,3,12 102:22 103:1 104:1,14,15 105:7	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21 33:3,4 35:6 43:19 52:15,16 58:17 98:13 100:9 127:12 131:8 132:5,7,15,19,22 developers 130:20 developing 7:2 28:4 69:16,17 81:4 110:12 development 7:6 31:2 40:9 95:12
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2 99:5,13,17 100:14 100:18 102:15 103:15 110:9 123:2,11 133:16 criterion 2:12,13 2:13,14,14,15,15 2:16,16,17 6:4 31:9 36:2 68:16 82:5 101:3 102:13 102:16 103:8,9,11 103:12 104:7,8,10 104:22 105:1,3.14	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15 56:4,16,20 57:15 58:20 59:10 61:10 61:16,17 63:21 65:17 66:12 70:5 72:20 75:22 76:5 76:15 77:14,18,21 79:5,5,9 82:22 83:5 85:6 86:16 93:9 97:11 114:12 126:22 129:7,9,13 129:14 Data- 55:12	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15 72:17 degree 78:4 119:3 deliberate 3:20 7:11,17 8:3 deliberation 2:3 8:4 12:20 15:16 16:1 80:8 deliberations 3:13 4:5 6:2 9:8 40:18 96:17 deliberative 112:20 delineate 30:14	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22 82:19 113:14 127:21 describing 70:19 description 29:19 71:3 descriptions 38:18 descriptive 6:1 deserves 26:19 100:22 102:1,3,12 102:22 103:1 104:1,14,15 105:7 105:8,21,22	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21 33:3,4 35:6 43:19 52:15,16 58:17 98:13 100:9 127:12 131:8 132:5,7,15,19,22 developers 130:20 developing 7:2 28:4 69:16,17 81:4 110:12 development 7:6 31:2 40:9 95:12 110:17 114:17
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2 99:5,13,17 100:14 100:18 102:15 103:15 110:9 123:2,11 133:16 criterion 2:12,13 2:13,14,14,15,15 2:16,16,17 6:4 31:9 36:2 68:16 82:5 101:3 102:13 102:16 103:8,9,11 103:12 104:7,8,10 104:22 105:1,3,14 105:15,17 106:6,7	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15 56:4,16,20 57:15 58:20 59:10 61:10 61:16,17 63:21 65:17 66:12 70:5 72:20 75:22 76:5 76:15 77:14,18,21 79:5,5,9 82:22 83:5 85:6 86:16 93:9 97:11 114:12 126:22 129:7,9,13 129:14 Data- 55:12 database 57:21	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15 72:17 degree 78:4 119:3 deliberate 3:20 7:11,17 8:3 deliberation 2:3 8:4 12:20 15:16 16:1 80:8 deliberations 3:13 4:5 6:2 9:8 40:18 96:17 deliberative 112:20 delineate 30:14 37:21	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22 82:19 113:14 127:21 describing 70:19 description 29:19 71:3 descriptive 6:1 descriptive 6:1 deserves 26:19 100:22 102:1,3,12 102:22 103:1 104:1,14,15 105:7 105:8,21,22 106:16 107:9.10	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21 33:3,4 35:6 43:19 52:15,16 58:17 98:13 100:9 127:12 131:8 132:5,7,15,19,22 developers 130:20 developing 7:2 28:4 69:16,17 81:4 110:12 development 7:6 31:2 40:9 95:12 110:17 114:17 120:6 121:7 122:1
49:17 50:21 51:9 61:19 68:13 70:1 99:7 creation 23:12 51:11 126:1 130:20 creativity 5:8,9 criteria 6:20 8:10 11:8 26:14,19 32:18 40:2 81:4 82:15 96:18 98:2 99:5,13,17 100:14 100:18 102:15 103:15 110:9 123:2,11 133:16 criterion 2:12,13 2:13,14,14,15,15 2:16,16,17 6:4 31:9 36:2 68:16 82:5 101:3 102:13 102:16 103:8,9,11 103:12 104:7,8,10 104:22 105:1,3,14 105:15,17 106:6,7 106:8,22 107:1,3	D 1:13 D'Amato 92:3,5,6 D.C 1:7 14:8 daily 55:7 darn 98:5 data 38:4,5 39:15 42:3,17,18 44:19 49:6,19 51:4,13 51:18 52:2,4 53:5 53:7,9,19 54:2,9 54:10 55:1,8,15 56:4,16,20 57:15 58:20 59:10 61:10 61:16,17 63:21 65:17 66:12 70:5 72:20 75:22 76:5 76:15 77:14,18,21 79:5,5,9 82:22 83:5 85:6 86:16 93:9 97:11 114:12 126:22 129:7,9,13 129:14 Data- 55:12 database 57:21 62:2 63:3,22 85:8	deck 44:22 declare 109:16 113:3 decrease 102:20 decreased 113:10 decreasing 86:16 102:19 dedication 4:2 deep 26:22 deeper 55:10 defining 26:15 72:17 degree 78:4 119:3 deliberate 3:20 7:11,17 8:3 deliberation 2:3 8:4 12:20 15:16 16:1 80:8 deliberations 3:13 4:5 6:2 9:8 40:18 96:17 deliberative 112:20 delineate 30:14 37:21 deliver 47:20 56:21	density-based 49:20 departments 22:9 departures 123:1 depends 109:19 depleting 45:9 deploying 84:10 depth 11:22 derivatives 88:6 described 8:14 31:6 39:6 70:22 82:19 113:14 127:21 describing 70:19 description 29:19 71:3 descriptions 38:18 descriptive 6:1 deserves 26:19 100:22 102:1,3,12 102:22 103:1 104:1,14,15 105:7 105:8,21,22 106:16 107:9,10 108:1.2.16.17	determining 35:7 65:14 devastating 95:9 95:18 develop 42:14 74:6 97:10 111:7 112:9 112:12 115:15 121:9 129:8 developed 22:5 24:3 25:8,13 27:9 27:21 30:13 32:21 33:3,4 35:6 43:19 52:15,16 58:17 98:13 100:9 127:12 131:8 132:5,7,15,19,22 developers 130:20 developing 7:2 28:4 69:16,17 81:4 110:12 development 7:6 31:2 40:9 95:12 110:17 114:17 120:6 121:7 122:1 124:1

Г

darralammanta 20.0	10.2566.19	DDC 02.14 69.5	119.2 120.10	121.10
deviations 20:10	10:2,3 00:18	DRG 25:14 08:5	118.5 120.10	121.19
26.8 10 20.21	10.19 19.21 00.0	DKGS 04.14 01.7	121.4 120.21	entino 26:20 28:20
J0.0,19 J9.21 48.1	discussions 8.21	01.13,10 DDIESSEN 1.10	72.4 86.18	AA:15 A5:21 56:16
40.1 dovoto 115.1/	$0.13 \ 11.13 \ 21.0$	122.12	olactronically 8.8	44.13 43.21 30.10 65.10
Dev 0/1.15 06.0	9.13 11.13 21.9	drink 16.13 15	A7.10 100.13	ontiroly 20.11
DEV 94.13 90.9	disdain 00.17	drive 01.17	47.19 109.13	entities 65.3 101.8
diabetics 75.17	disease 25.4 58.11	driven 55.13 56.4	elegant 118.1	103.13 17
diagnosis 39.7	65.4	56.20 63.3 6	elements 11.10.20	entity 77.6
55.21 81.7	disease's 93·4	driving 11.6	22.19 123.13	environment 55.14
diagnostic 28.9	disrupted 88.16	drug 34·13 35·1	eliminate 86.4	Envision 16.18
55:20 81:20	dissemination	46:5 48:21 49:1	eliminates 46:18	envisioning 63:5
dialogue 130:16	86:14	75:13 81:15 85:12	elimination 85:12	episode 51:11.22
difference 18:3.13	distinct 91:1	85:13.15 89:8	else's 67:15	70:19.21 73:8
different 9:3 20:3	distinguished	92:13	embedded 123:19	74:22 83:4.6
61:1.12.15 68:9	29:11	drugs 23:5 24:10	embrace 116:13	episodes 49:19 50:2
72:14 73:5 75:20	distribution 109:19	44:18 46:7.10.15	embracing 64:21	50:4.9.22 51:3.8
78:3 82:8 84:16	divide 51:16	92:17 93:7.15	emergency 4:10	59:18 72:15.16
84:21 94:21 97:20	doctor 125:20.20	95:11 118:17.17	16:3 22:9	74:6 76:11
126:7 128:17,22	doctor's 43:6	DTO 93:8	emerging 59:9	episodic 89:6
differently 35:11	doctors 47:1 58:14	ductal 50:9,10	emphasis 38:2	equations 58:13
differs 103:18	125:21	61:12	123:17	Equivalently 53:9
difficult 56:2 83:18	documented 53:17	due 93:7	emphasize 5:8 95:5	error 101:20
digital 68:13	does-not-meet	dynamic 115:6	employed 86:7	especially 55:3
113:11	27:11	dynamically 76:14	EMR 54:17	essential 55:15
diligence 119:17	doing 10:7 46:16		EMRs 42:17 47:18	essentially 23:4
direct 14:11 32:10	53:1 60:9 68:4	E	61:10	54:17
40.21				0
40.21	70:4,14 133:12,21	E&M 25:18 26:8	enable 57:3	established 23:7
directed 40:19	70:4,14 133:12,21 dosimetrists 90:14	E&M 25:18 26:8 eager 95:19	enable 57:3 enablement 17:7	established 23:7 24:3,16 25:3
directly 11:17	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16	enable 57:3 enablement 17:7 encountered 44:13	established 23:7 24:3,16 25:3 26:12,15 27:10,21
directed 40:19 directly 11:17 56:10 101:5	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13
directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encourages 86:22	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize 30:15	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22 54:12 58:4 59:5	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13 echo 72:5 114:6	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encourages 86:22 encouraging	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18 evaluate 65:10
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize 30:15 disagrees 81:2	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22 54:12 58:4 59:5 59:19,20,22 60:2	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13 echo 72:5 114:6 economist 14:8	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encourages 86:22 encouraging 115:14	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18 evaluate 65:10 76:14 78:8
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize 30:15 disagrees 81:2 disappointed 131:1	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22 54:12 58:4 59:5 59:19,20,22 60:2 60:4 62:13,14,19	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13 echo 72:5 114:6 economist 14:8 16:10	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encourages 86:22 encouraging 115:14 endeavor 81:22	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18 evaluate 65:10 76:14 78:8 evaluated 21:17
directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize 30:15 disagrees 81:2 disappointed 131:1 disclose 14:9 16:6	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22 54:12 58:4 59:5 59:19,20,22 60:2 60:4 62:13,14,19 62:20 63:10 65:22	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13 echo 72:5 114:6 economist 14:8 16:10 economists 43:18	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encourages 86:22 encouraging 115:14 endeavor 81:22 energy 4:1	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18 evaluate 65:10 76:14 78:8 evaluated 21:17 22:7 27:17 29:2
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize 30:15 disagrees 81:2 disappointed 131:1 disclose 14:9 16:6 16:22 17:8	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22 54:12 58:4 59:5 59:19,20,22 60:2 60:4 62:13,14,19 62:20 63:10 65:22 66:2,14,17 67:6	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13 echo 72:5 114:6 economist 14:8 16:10 economists 43:18 effect 14:19 119:6	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encourages 86:22 encouraging 115:14 endeavor 81:22 energy 4:1 engage 15:22	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18 evaluable 105:18 evaluate 65:10 76:14 78:8 evaluated 21:17 22:7 27:17 29:2 37:2,4 77:11
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize 30:15 disagrees 81:2 disappointed 131:1 disclose 14:9 16:6 16:22 17:8 disclosure 13:17	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22 54:12 58:4 59:5 59:19,20,22 60:2 60:4 62:13,14,19 62:20 63:10 65:22 66:2,14,17 67:6 67:10,17 68:11,22	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13 echo 72:5 114:6 economist 14:8 16:10 economists 43:18 effect 14:19 119:6 effective 57:4 87:15	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encourages 86:22 encouraging 115:14 endeavor 81:22 energy 4:1 engage 15:22 engaged 4:18	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18 evaluate 65:10 76:14 78:8 evaluated 21:17 22:7 27:17 29:2 37:2,4 77:11 86:18 105:17
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize 30:15 disagrees 81:2 disappointed 131:1 disclose 14:9 16:6 16:22 17:8 disclosure 13:17 disclosures 2:5	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22 54:12 58:4 59:5 59:19,20,22 60:2 60:4 62:13,14,19 62:20 63:10 65:22 66:2,14,17 67:6 67:10,17 68:11,22 70:16 71:8 74:17	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13 echo 72:5 114:6 economist 14:8 16:10 economists 43:18 effect 14:19 119:6 effective 57:4 87:15 117:13	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encourages 86:22 encouraging 115:14 endeavor 81:22 energy 4:1 engage 15:22 engaged 4:18 engagement 97:17	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18 evaluate 65:10 76:14 78:8 evaluated 21:17 22:7 27:17 29:2 37:2,4 77:11 86:18 105:17 evaluates 77:20
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize 30:15 disagrees 81:2 disappointed 131:1 disclose 14:9 16:6 16:22 17:8 disclosure 13:17 disclosures 2:5 7:15 13:9,10,12	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22 54:12 58:4 59:5 59:19,20,22 60:2 60:4 62:13,14,19 62:20 63:10 65:22 66:2,14,17 67:6 67:10,17 68:11,22 70:16 71:8 74:17 74:18 77:10 78:6	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13 echo 72:5 114:6 economist 14:8 16:10 economists 43:18 effect 14:19 119:6 effective 57:4 87:15 117:13 efficient 57:3 87:15 efficient 20:14 27:21	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encourages 86:22 encouraging 115:14 endeavor 81:22 energy 4:1 engage 15:22 engaged 4:18 engagement 97:17 122:3 132:11	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18 evaluate 65:10 76:14 78:8 evaluated 21:17 22:7 27:17 29:2 37:2,4 77:11 86:18 105:17 evaluates 77:20 evaluating 28:13
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize 30:15 disagrees 81:2 disappointed 131:1 disclose 14:9 16:6 16:22 17:8 disclosure 13:17 disclosures 2:5 7:15 13:9,10,12 14:14	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22 54:12 58:4 59:5 59:19,20,22 60:2 60:4 62:13,14,19 62:20 63:10 65:22 66:2,14,17 67:6 67:10,17 68:11,22 70:16 71:8 74:17 74:18 77:10 78:6 79:2 84:1,9 87:6	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13 echo 72:5 114:6 economist 14:8 16:10 economists 43:18 effect 14:19 119:6 effective 57:4 87:15 117:13 efficient 57:3 87:15 effort 30:14 37:21 62:0 71:16	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encourages 86:22 encouraging 115:14 endeavor 81:22 energy 4:1 engage 15:22 engaged 4:18 engagement 97:17 122:3 132:11 England 92:3,7	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18 evaluate 65:10 76:14 78:8 evaluated 21:17 22:7 27:17 29:2 37:2,4 77:11 86:18 105:17 evaluates 77:20 evaluating 28:13 76:12
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize 30:15 disagrees 81:2 disappointed 131:1 disclose 14:9 16:6 16:22 17:8 disclosure 13:17 disclosures 2:5 7:15 13:9,10,12 14:14 discouraging 81:13	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22 54:12 58:4 59:5 59:19,20,22 60:2 60:4 62:13,14,19 62:20 63:10 65:22 66:2,14,17 67:6 67:10,17 68:11,22 70:16 71:8 74:17 74:18 77:10 78:6 79:2 84:1,9 87:6 87:12 92:5,10	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13 echo 72:5 114:6 economist 14:8 16:10 economists 43:18 effect 14:19 119:6 effective 57:4 87:15 117:13 efficient 57:3 87:15 effort 30:14 37:21 62:9 71:16 efforts 38:6 90:20	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encourages 86:22 encouraging 115:14 endeavor 81:22 energy 4:1 engage 15:22 engaged 4:18 engagement 97:17 122:3 132:11 England 92:3,7 93:5	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18 evaluate 65:10 76:14 78:8 evaluated 21:17 22:7 27:17 29:2 37:2,4 77:11 86:18 105:17 evaluates 77:20 evaluating 28:13 76:12 evaluation 1:18 77:1 79.0 121.11
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize 30:15 disagrees 81:2 disappointed 131:1 disclose 14:9 16:6 16:22 17:8 disclosure 13:17 disclosures 2:5 7:15 13:9,10,12 14:14 discouraging 81:13 discover 61:11 discover 50:16	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22 54:12 58:4 59:5 59:19,20,22 60:2 60:4 62:13,14,19 62:20 63:10 65:22 66:2,14,17 67:6 67:10,17 68:11,22 70:16 71:8 74:17 74:18 77:10 78:6 79:2 84:1,9 87:6 87:12 92:5,10 94:1,18 96:22	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13 echo 72:5 114:6 economist 14:8 16:10 economists 43:18 effect 14:19 119:6 effective 57:4 87:15 117:13 efficient 57:3 87:15 effort 30:14 37:21 62:9 71:16 efforts 38:6 90:20 114:12 118:5	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encouraged 127:15 encourages 86:22 encouraging 115:14 endeavor 81:22 energy 4:1 engage 15:22 engaged 4:18 engagement 97:17 122:3 132:11 England 92:3,7 93:5 enhance 57:21 96:1	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18 evaluate 65:10 76:14 78:8 evaluated 21:17 22:7 27:17 29:2 37:2,4 77:11 86:18 105:17 evaluates 77:20 evaluating 28:13 76:12 evaluation 1:18 77:1 78:9 121:11 evaluations 25:7
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize 30:15 disagrees 81:2 disappointed 131:1 disclose 14:9 16:6 16:22 17:8 disclosure 13:17 disclosures 2:5 7:15 13:9,10,12 14:14 discouraging 81:13 discover 61:11 discovery 59:16 discover 12:2	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22 54:12 58:4 59:5 59:19,20,22 60:2 60:4 62:13,14,19 62:20 63:10 65:22 66:2,14,17 67:6 67:10,17 68:11,22 70:16 71:8 74:17 74:18 77:10 78:6 79:2 84:1,9 87:6 87:12 92:5,10 94:1,18 96:22 101:13 113:6,22	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13 echo 72:5 114:6 economist 14:8 16:10 economists 43:18 effect 14:19 119:6 effective 57:4 87:15 117:13 efficient 57:3 87:15 effort 30:14 37:21 62:9 71:16 efforts 38:6 90:20 114:12 118:5 131:5	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encouraged 127:15 encourages 86:22 encouraging 115:14 endeavor 81:22 energy 4:1 engage 15:22 engaged 4:18 engagement 97:17 122:3 132:11 England 92:3,7 93:5 enhance 57:21 96:1 ensure 88:14 89:20	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18 evaluate 65:10 76:14 78:8 evaluated 21:17 22:7 27:17 29:2 37:2,4 77:11 86:18 105:17 evaluates 77:20 evaluating 28:13 76:12 evaluation 1:18 77:1 78:9 121:11 evaluations 25:7 evangelige 11 (10)
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize 30:15 disagrees 81:2 disappointed 131:1 disclose 14:9 16:6 16:22 17:8 disclosure 13:17 disclosures 2:5 7:15 13:9,10,12 14:14 discouraging 81:13 discover 61:11 discovery 59:16 discuss 13:2 discuss 114:18	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22 54:12 58:4 59:5 59:19,20,22 60:2 60:4 62:13,14,19 62:20 63:10 65:22 66:2,14,17 67:6 67:10,17 68:11,22 70:16 71:8 74:17 74:18 77:10 78:6 79:2 84:1,9 87:6 87:12 92:5,10 94:1,18 96:22 101:13 113:6,22 114:16 120:18 122:12 124:6	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13 echo 72:5 114:6 economist 14:8 16:10 economists 43:18 effect 14:19 119:6 effective 57:4 87:15 117:13 efficient 57:3 87:15 effort 30:14 37:21 62:9 71:16 efforts 38:6 90:20 114:12 118:5 131:5 EHR 54:9 10	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encourages 86:22 encouraging 115:14 endeavor 81:22 energy 4:1 engage 15:22 engaged 4:18 engagement 97:17 122:3 132:11 England 92:3,7 93:5 enhance 57:21 96:1 ensure 88:14 89:20 90:2 ensures 52:1	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18 evaluate 65:10 76:14 78:8 evaluated 21:17 22:7 27:17 29:2 37:2,4 77:11 86:18 105:17 evaluates 77:20 evaluating 28:13 76:12 evaluation 1:18 77:1 78:9 121:11 evaluations 25:7 evangelicals 116:9
directed 40:19 directly 11:17 56:10 101:5 director 10:8 16:4 90:9 94:3 128:12 Directors 13:19,21 dis-incentivize 30:15 disagrees 81:2 disappointed 131:1 disclose 14:9 16:6 16:22 17:8 disclosure 13:17 disclosures 2:5 7:15 13:9,10,12 14:14 discouraging 81:13 discover 61:11 discovery 59:16 discuss 13:2 discussing 114:18 discussing 7:10	70:4,14 133:12,21 dosimetrists 90:14 doubling 45:10 Dr 4:8 5:3 13:13,20 14:10,20 15:4,11 16:2,7 17:1,2,2,12 40:15 41:3,7,17 42:9 52:22 53:22 54:12 58:4 59:5 59:19,20,22 60:2 60:4 62:13,14,19 62:20 63:10 65:22 66:2,14,17 67:6 67:10,17 68:11,22 70:16 71:8 74:17 74:18 77:10 78:6 79:2 84:1,9 87:6 87:12 92:5,10 94:1,18 96:22 101:13 113:6,22 114:16 120:18 122:13 124:6 133:0 125:2	E&M 25:18 26:8 eager 95:19 earlier 5:15 85:16 early 21:4 43:2 71:18 EAS 97:6 easily 86:18 easy 133:13 echo 72:5 114:6 economist 14:8 16:10 economists 43:18 effect 14:19 119:6 effective 57:4 87:15 117:13 efficient 57:3 87:15 effort 30:14 37:21 62:9 71:16 efforts 38:6 90:20 114:12 118:5 131:5 EHR 54:9,10 either 65:21 101:5	enable 57:3 enablement 17:7 encountered 44:13 encourage 65:2 95:5 106:10 107:3 108:12 encouraged 127:15 encouraged 127:15 encourages 86:22 encouraging 115:14 endeavor 81:22 energy 4:1 engage 15:22 engaged 4:18 engagement 97:17 122:3 132:11 England 92:3,7 93:5 enhance 57:21 96:1 ensure 88:14 89:20 90:2 ensures 52:1 ensures 57:10	established 23:7 24:3,16 25:3 26:12,15 27:10,21 33:7,22 establishing 82:11 etcetera 70:13 Ethics 16:8 evaluable 105:18 evaluate 65:10 76:14 78:8 evaluated 21:17 22:7 27:17 29:2 37:2,4 77:11 86:18 105:17 evaluates 77:20 evaluating 28:13 76:12 evaluation 1:18 77:1 78:9 121:11 evaluations 25:7 evangelicals 116:9 116:11,17 evant 72:2 7

avonta 20,12	22.14 25.4 17	familiar 06.2	filton 50.5	100.7 124.12
events 29:12	52:14 55:4,17 26:4	family 24/2 26/12	final 6:16 0:5 111 1	109:/134:12
	30:4 armanaa 46:21	111.10 119.2	final 0:10 9:5 111:1	10110W 10:2 66:8
eventually /4:4	expense 46:21	111:19 118:3	finally 8:15 9:4	follow-up 126:20
ever-evolving 28:7	expenses 23:5	Tantastic 41:5	51:19 85:20	Iollowing 6:8,18
everybody 14:15	43:14 85:11	121.1	Inancial 15:13	/:21 6-117-14
1/:1/135:/	expensive /5:13,15	131:1 fh; (0,2,02,1(40:22 57:7 90:3	IOHOWS /:14
everyone's 80:15	81:14 92:17	Iashion 68:3 93:16	130:2 6	1000 /5:19
eviCore 89:4	119:14 129:10	94:8 6	find 9/:1 126:18	Forest 16:19
evidence 24:17	experience 18:15	faster 24:9 79:0	102.11.102.7	IORESUS 52:5
evidence- 36:13	85:9 99:11 11/:18	father 125:20	102:11 103:7	form 14:3 26:9
56:19 86:1	experienced 51:16	Iavor 135:4	104:6,20 105:13	former 126:13
evidence-based	65:18 118:4	favorable 55:22	106:5,21 107:15	forward 8:1 11:7
24:4 32:21 39:10	experiences 83:13	favoritism 15:14	108:7,22 112:11	12:6 21:14 33:3
39:15 56:3 58:1	expert 9:17	Ieasibility 49:17	finish 60:1	40:15 52:8 66:3
82:10 95:22	expertise 5: / 53:1 /	50:20 58:19 65:17	HITSU 4:6 6:7,19 7:15	66:19,22 69:14
evolved 29:4	60:9 120:9,15	81:18 122:19	10:16 20:4 22:20	/4:1 113:1 114:6
evolving 25:16	129:18	123:7 for a sile for 52:01 50:2	28:3 44:3 51:4	119:5 130:14
exacerbations 65:5		Ieasible 53:21 59:3	52:22 62:20 66:4	131:0 6
exact 10:14 61:21	explicitly 38:16	98:17	68:17 72:10,11,20 80:5 07:1 08:11	Ioster 130:21
exactly 115:6	58:18	Ieatures 84:18,19	80:5 97:1 98:11	100nd 5:19 30:12
example 17:21 19:4	exploaing 55:19	80:11 f - d 40:20 51:4	100:18 101:4	90:18 94:0
48:3,4 00:7 02:1,0	explore 119:9	1ed 49:20 51:4	109:14,20 114:21	Ioundation 44:12
69:19 /1:18 /2:9	express 96:6	Iederal 1:1/1/:21	118:1 6 4 - 74:0.00:14	10ur 5:14 6:19 7:10
119:16	Extended 44:4	30:9 6 49 22 40 1	fits /4:9 99:14	13:19 14:1 26:7
exceed 45:7	external 77:20,22	Iee 48:22 49:1	nve 101:22 102:3	44:18 102:4,10
exceedingly 62:10	/8:9	Iee-Ior- 23:14	103:1,22 104:15	103:2,3 104:2,3
excel 95:10	extra 11:14	iee-ior-service	105:8,22 100:15	104:16 105:9,9
excellent 47:9 94:7	extraordinary 57:5	42:12 for the set 20x6 21x5	107:10 108:2,17	100:1,17,18
excess 45:12 48:10	F	Ieedback 20:6 21:5	111:2 124:13,14	10/:11 108:5,5,19
49:12	face 1.7 55.18	34:19 121:4	12/:10 128:4	110:8 111:0 125:5
excessive /9:/	faces 1.6	124:22 120:12	IIX 01:4 100:2	12/:11,13,18
exchange 41:11	facilitate 87.15	130:15 134:10 for dr (1,17	fixed 29:16 49:2	IOURUN /:/
excited 94:13	88.0	Ieeas 01:17 f = 1 1 4 4 07 4 10 4 1	flawed 95:17	Frame 51:21 58:9
exclude 38:8 81:15	facility 25.10 22	Ieel 14:4 97:4 124:1	Haws 94:9	58:15 61:19 from labor 51:12 70:2
excluded 81:13	18.16 18 /0.1 3	133:3 f H 101-12	Hexidinity 27:15	Irankiy 51:12 /0:2
excludes $23:5\ 26:3$	40.10,10 4 <i>7</i> .1,5	125.4	30:12 80:12 105:3	Ireely 53:16
excluding 90:21	00.4 facing 57.5	135:4	105:4 119:17	frequency 76:3
execute 56:19	fact 27.8 3/1.9	Iees 23:13 25:19,22	121:14,20	frequent 28:6
Executive 13:14	26.15 56.1	34:13 68:4	Hexible 27:15	frequently /3:4
14:11 16:4 8/:8	50.15 50.1 factor 34.17 82.18	Iell 43:15	30:11 85:1,4	Irustrations /1:9
existing /:8 9/:6	factor 34.17 82.18	Telt 26:17 27:14	110 14	Tull 3:21 8:22 9:3,9
110:20	factoring 118.20	32:9 129:6	119:14	5/:15 80:8
exiting 31:5 39:5	factors 22:21 45:1	Tield 19:3 25:14	Fiorida 89:9	Tully 4:18 27:9 31:6
expanded 49:22	factual 15.10	27:1 51:13 86:15	IIOW 56:16	39:6 85:22 91:21
expands 101:7	failed 131.19	115:6 118:2	Huid /5:8	function 92:16
expect 9:13 /3:20	failure 17.70 65.71	figure 11:15 (4.14	10CUS 11:0 12:5	functioning 85:3
/ 3:21	fair 71.15	figure 11:15 64:14	50:10 152:21	fundamental 55:13
expected 23:1/	familiar 10.77 67.6	figured 38:7 68:3	10cused 5:0 151:10	fumaed 113:9
20:0	67.8 68.1	11100 09:18	101KS 4:20 14:5	1000000000000000000000000000000000000
expenditures 23:20	07.0 00.1	1111 118:9	80:11,14 100:20	1urtner <i>1</i> :1 29:2

L

50:7 52:5 58:1	glad 130:16	57:2 64:5 69:7	66:7,8 80:16 84:4	27:20 34:7 41:20
90:20 96:13	goal 9:14 53:3	71:22 80:17 82:20	96:21 98:14	42:22 43:4,7,8,10
110:12 114:17	55:12 74:8	83:2 87:22 88:1,6	122:10 127:5	43:12,20 45:3
121:4 123:22	goals 47:7 87:21	88:11,13 89:5,20	hearing 8:1 12:18	47:8,9 53:6 54:2
131:9	103:14 105:18,19	91:19 123:18	40:15 114:19	54:11 64:17 77:12
Furthermore 52:3	131:9		135:3	77:21 83:13,18
future 91:13	God 111:20 112:2	<u> </u>	Hello 14:15	85:3,6 92:10 94:4
futuristically 12:3	gold 47:15	H 1:6	help 11:21 12:4,4	95:1 98:6
	goodness 111:19	Hackensack 42:8	30:2 47:17 62:12	homes 43:2 85:7
G	112:4	66:19 67:4	64:16 74:2 77:17	honest 16:12
Gallup 15:6	Government 17:21	Hadoop 51:14	88:7 95:22 118:9	hope 113:13 116:2
game 41:6 116:8	governmental 57:6	hairs 117:5	126:2 127:2	131:6 133:2.18
gap 118:8	Grace 1:12 5:3.5	Hall 1:5	130:12	134:2
general 2:20 7:12	16:17 17:12.13	hand 20:12	helped 118:16	hopefully 10:22
15:19 16:19	115:17 117:20	hand- 117:3	helpful 11:15 15:22	hoping 40:18
114:18 122:13	119.19 120.3	handle 36:7 45:19	121.5 127.1	hospital 25.21
124:18,20 132:17	Grace's 121.12	hang-up 33:10	129.17 133.12	45.11 81.7
generalizability	grant 21.22 22.3 11	happen 36:18	helping 73.17 94.7	hospitalization
33:15 82:17	41.21 77.12 98.6	64:18 122:1	122.3	
generalized 28:20	granular 28.14	happened 77:21	Hercentin 72.7	hosnitals 38.17
134:12	38.2 75.21 82.7	happening 35:1	Hev 111.16	48.20 64.13 81.21
generally 60:8	oranularity 28.12	134:18	HHS 6.11 91.11	host 7.12
126:7	31.20	happens 20:16	109.12 110.1	hour 19.14 51.1
generate 38:9 47:9	arətəful 10.1	happy 15:20 41:1	126.15 127.5 17	50.3 12/.1/
53:7 55:3 79:6.10	graatar 31.10	hard 4:2 5:10 67:21	Hi 90.6	bours 0.17
114.10	50.15 106.10	77.13 78.14 114.3	high 24.8 28.12	HTC 52.4
generated 62.3	107.4	Harold 1.13 14.16	ingii 34.0 30.12 47.11 02.7 05.11	HIC $J2.4$ Hubbard 00.5 7 0
generation 53.20	107.4	131.14 133.7	47.11 95.7 95.11	Hubbaru 90.3,7,9
genetics 28.10	greatly 4:5 5:0	Harold's 133.10	95:15 101:4	nubert 1:0
genetics 20.10	Greg 95:21	HCC 35.3	102:10 105:11	nuge 118:8
gennuses 70.5	Gregory 94:1	HCU 18:11	104:11 105:5	Human 8:13 9:6
24.11	ground 4:21	hood 00.6	125:2	Humphrey 1:6
24.11	group 13:18 20:22	health 1.2 15 8.12	nign- 26:17 38:8	nundred 53:2
George 10.9	21:22 28:18 29:3	0.6 12.14 14.2	high-cost 22:9	hundreds 59:12,17
geospatial 05.12	29:3 33:16 37:13	9.0 15.14 14.0,17	38:11 60:7	hundredths 51:18
geospatially 05.21	42:16 61:9 62:2	10.0,9,20,21 17.5	high-value 55:16	
germane 08.13	64:2,4 94:3,6,15	18:2 24:22 27:22	higher 35:8 92:14	$\frac{\mathbf{I}}{\mathbf{I}_{\text{op}} 1_{\text{O}} 1_{\text{O}} 1_{\text{O}} 1_{\text{O}} 1_{\text{O}}}$
getting 00:19 /0:5	100:6 126:13	59:18 45:17 55:12 69:12 99:12 19	highest 38:10 88:15	121 10:14,14
91:15 99:20	grouped 50:8	08:13 88:12,18	highly 26:20 118:6	1dea 58:15 63:14
121:13	groupers 83:4	90:10 94:15	hinterlands 58:13	81:20 114:22
give 20:6 25:12	groups 39:13	102:17,18,19	histology 50:14	ideal /8:/
39:7 65:8 75:10	growth 56:1	104:12 105:5	historical 92:16	ideally 78:2
75:11 101:16	Grubbs 83:21 84:1	107:4 108:11,12	history 81:18	identified 64:10,11
111:17,17 115:13	guess 97:19	113:11 130:6	hit 4:20 46:9 75:11	123:7
120:13	guidance 8:16 11:5	132:22	75:15 93:2,6	identify 28:2 35:7
given 9:17 25:6	11:14,18 12:1	healthier 43:6	Hodgkin's 71:18	49:21 127:8
27:4 34:22 40:1	112:17	healthy 43:8	hold 32:13 59:16	identifying 35:21
55:6 58:20 73:1,1	guideline 89:22	hear 10:21 12:14	109:18	ideology 27:12
114:8	90:2	13:7 59:21 80:10	holding 117:4	idiosyncratic 64:3
gives 101:17	guidelines 24:5,7	125:6 126:13	home 18:11 20:22	imaging 26:2 48:10
giving 72:6	47:16,17 56:20	heard 19:19 58:8	21:21,21 23:2	imbedded 47:18
		1		1

Г

77.2	incontinuos 75.11	122.20 122.0	interested 11.6	$i_{0}h_{0}$ 0.11 /1.5
immediate 70.10	06·1 101·11	122.20 123.9	interesting 72.21	job 9.11 41.3
impact 39.3 46.22	incentivization	informed 86.1/	118·10	Jointy 45.15
50.15 56.9 93.3	32.10	infrastructure 15.9	internal 79.12	Jordan 2.10 /11.16
imnactful 76.12	include 8.18 11.5 8	70.1 7 78.3	internist 4.14	42.5 6 54.12 55.6
88·20	11.18 47.20 52.17	infusion 25.19 21	16·19	67.2 8 14
imnacts 129.18	86.12 89.17 101.7	48.16 22 49.3	intervene 43.7	iudgment 83.5
implement 79.1 2	122.12.130.1	initial 7.22 21.5	interventions 88.3	133·19
83:2 111:4 7.9	included 45:21	31:1 34:19 58:19	interview 21:2	Julia 1:19 122:5
112:6.9.10.12	112:22	59:1.16 62:3 73:6	interviews 21:9	123:12
128:15.21 129:3	includes 3:13	Initially 34:17	intimately 55:9	iustify 30:8
implementation	including 3:19	initiating 71:21	introduce 13:11.11	
6:9 89:16 109:9	10:19 14:2 38:19	73:2	41:9.22	K
113:8 130:4	44:18 88:13 91:13	initiation 32:1	introduced 76:6	Kameron 2:9 41:15
implemented 44:3	94:22 95:11.14	initiatives 88:10	introducing 91:12	41:21 42:2 49:14
51:19 119:18	127:18	95:21	investment 97:14	53:13 63:12 64:8
129:21 130:6	inclusion 34:12	innovation 16:5	invoice 34:18 46:7	65:8 79:8
131:4	inclusive 37:18	41:21 68:14 130:7	involve 116:16	keep 44:16 56:2
implementing 6:21	inconsistent 132:7	innovative 2:4	involved 14:18	58:12 125:7 127:6
7:2,8 110:10,13	incorporate 12:2	12:22 13:5 77:2,5	19:11 20:4 21:1	kept 23:15 43:6
110:19 119:12	67:20 119:21	113:12	79:16 132:12	115:19
122:19 132:12	incorporated 13:6	input 12:12 78:4	involvement 55:6	key 8:17 28:2 56:4
implications 31:5	43:22 122:4	122:4 125:1 126:5	involving 127:22	keys 25:9
important 25:6	incorporates 84:19	inputs 25:21	IOBS 2:4 13:1 15:8	kidney 10:20
31:14 61:21 65:11	increased 49:11	insecurity 75:19	77:14 78:4	kinds 11:8,9 51:17
82:18 85:22	92:18	inside 115:8	IOBS' 42:21	126:21
115:21 118:8	increasingly 55:14	insights 134:19	irresponsible 45:5	known 3:7 42:4
119:4 132:3 133:6	75:21	Institute 4:16 17:6	isolating 36:3	43:20
134:15	incredibly 73:16,22	Instructions 2:18	isolation 52:5	knows 118:3
importantly 97:16	79:4 119:4,8	112:14	issue 29:13 30:3,4	
impressed 62:21	incur 83:1	insurance 45:14,15	34:1 101:6	$\frac{\mathbf{L}}{\mathbf{L}}$
impression 128:9	Independence 1:6	integrate 56:15	issued 5:15 126:10	laboratory 26:2
improve 22:15 36:1	independent 37:18	94:7	issues 14:21 24:14	121.19
39:16 64:22 83:11	43:1 54:16	integrating 80:1	24:19 28:2,19	131:18 Jackson 42:10
87:14 91:9,19	index 35:9	integration 27:18	36:3	lackeu 45:10
102:16,19 107:20	indexing 51:4	37:16 55:11 106:9	item 101:5	100444.12
113:17 131:11	indicate 122:14	106:10	items 14:3	landsoono 55.10
improved 68:14	indicated 14:3	intellect 77:9	iterations 21:9	language 31.2
100:5 113:9	126:11 130:14	intelligence-relat	iterative 61:4	language 31.2
improvement 88:9	individual 49:22	23:8	т	65.17 78.4 04.3
98:8 133:21	107:6	intelligent 56:13	$\frac{\mathbf{J}}{\mathbf{ID} 2.10 41.10}$	115.15 110.3
improvements	individualized 82:7	intensive 28:7	JD 2:10 41:10 J-ff 12:12 17:16	123.17
39:12 56:22 130:8	Indranil 94:14 96:8	intention 100:1	Jen 13:13 17:10	123.17 Jarger 5/1.7 56.22
improves 91:22	inform 7:5 108:13	interaction 127:22	151:15 IEEEDEV 1.12	59.4 76.10 91.4
improving 4:2 38:6	110:16	interactions 96:21	JEFFKEY 1:12 Jen 62:17 100:15	100.8
8/:19	information 15:7	128:13	Jen 02:17 109:13	late 120.22
inability 44:14,16	20:19 21:17 27:22	interactive 131:7	113.2 Ionnifor 1.15 4.0	lately 133.21
45:22	29:22 39:8,18	interest 5:11 7:16		latest 56:3
inappropriate	50:1,0,8,10 109,11,12,100,01	11:11 13:9 80:15	+.11 10.2 00.10 Jersey 17.8	launch 12:7
47:14,22 48:10	108:11,13 120:21	ð4:4	JUISCY 72.0	
			•	•
	101 10 100 00			
--------------------------	---	---------------------	-------------------------	-------------------
Laura 15:7	121:10 123:20	making 2:3 11:19	68:22 71:8 74:18	9:7,21 10:3,10,22
lead 19:7 33:20	live 3:10 9:22 87:16	12:10,20 13:3	77:1078:679:2	11:2 99:22 124:20
84:14 86:9 125:10	112:4	19:17 30:21 42:9	84:9	meetings 8:11
leadership 5:7	lives 87:17	56:5,10 68:14	McAneny's 15:4	13:22 126:4
leading 86:8	lobular 50:10,14	95:9114:7118:21	92:10	127:21 128:6,6
leads 85:3	61:11	133:20	MD 1:12,12,13,14	meets 6:4,20 8:9
learn 84:15	location 65:12	manage 44:15 55:8	1:15 2:9 41:15	26:18 27:15,18,19
learned 20:12	long- /4:/	//:1/	mean 66:8 98:11	28:1 48:17 100:22
75:17 84:20 95:20	look 36:15 52:8	managed 23:19	100:10	100:22 102:1,3,4
learning 30:5 39:16	68:5 69:19 / 3:3	34:3 60:14	meaning 51:6	102:5,11,22 103:1
39:20 63:4 115:1	/4:12 //:14 /9:9	management 16:21	meaningful 56:21	103:2,3,8 104:1,2
119:6,7	111:18,22 117:22	88:2116:12	96:2	104:3,7,14,15,16
learnings 18:19	119:5 120:5	managing 65:4	means 25:11,12	104:17,21 105:7,8
leave 46:3 74:21	looked 18:11 98:5	78:8	34:1 61:15	105:9,10,14,21,22
leaving 45:8	looking 4:22 11:9	mandatory 89:5	meant 111:12	106:1,2,6,16,17
led 17:12	26:10 29:5 30:1	manner 40:13	measure 33:19	106:18,22 107:9
leg 111:15	32:8 36:5 39:20	53:20 73:8	73:7	107:10,11,12,16
legal 130:3	40:14 62:5 65:14	March 134:3	measured 24:1	108:1,2,3,4,8,16
legislation 17:19	69:14,20 /8:14	margin 46:11	26:9	108:17,19,19
20:5	100:3 114:12	48:21 49:1	measurement	109:1110:8
Len 1:14 16:7 41:2	looks 8:1 101:16	market 92:18	33:20 36:20	member 2:5 4:13
96:21 113:19	lot 15:18 22:12	132:18	measures 121:15	5:10 8:8,16 103:1
114:15 133:8	25:14 30:21 32:20	marketplace	130:3	104:2,13 105:8,20
134:7	33:11 79:15 116:5	113:16	measuring 32:22	105:22 107:8,10
lessons 95:20	117:7 118:5	marks 3:16 12:10	mechanics 100:17	107:22 108:2,4,17
let's 12:19 37:10	120:19	80:20 81:1 125:9	median 92:21	111:8 112:7 118:4
41:6 101:9,21	lots 54:9 98:16,16	125:12,17,19	Medicaid 54:8	members 1:11 3:7
110:6 112:1	love 114:21	Mason 2:3 12:22	medical 13:18	3:15 7:15,22 8:22
letter 11:4,18 113:5	low-value 35:21	13:4 16:9 18:6,21	15:11 16:4 18:1	20:18 30:16 31:11
level 16:11 23:10	lower 60:18 85:4	42:10,15 43:22	43:2,12,20 44:4	41:18 78:20 96:19
29:16 36:9,9 41:8	131:11	44:11 46:5 47:17	4/:8 56:1,5 5/:4	101:22 102:3,4,5
59:17 63:4 75:20	lung 61:22	49:18 50:17 57:18	61:5 69:10 72:4	102:6,7,8,10,21
	M	58:3 81:3 82:6	80:20 85:3,7 87:9	103:2,3,3,5,22
leveraging 119:7		83:7,11,17 84:7,8	94:2,19 125:9	104:3,4,5,15,16
life 10:20	WI 1.14 machina 20:4	84:17 86:20 87:13	126:2	104:17,17,19
light 119:15	20.10 5 0.14 6 2.4	87:20 88:21 89:13	Medicare 3:14 54:8	105:6,9,10,10,12
Likewise 27:10	59:19 59:14 05:4 110:7	89:15,17 90:1,8	103:16 129:21	106:1,2,2,4,15,17
limitations 18:18	119:7 MACDA 17:10	90:17 91:5 93:13	130:10,22 131:11	106:18,18,19
limited 98:2 99:12	MACKA 17:19	93:18 96:6	132:18	107:11,12,12,14
101:9 117:9 128:1	magnitude 79:20	mass 54:6	medicine 4:9,10	108:3,4,5,15,18
line 96:9,11 113:20	IIIaIII 05:0 maintain 102:19	materials 120:5	16:3 18:1 55:14	108:19,20,21
133:15	107.10	matter 124:15	56:4 86:9 121:19	109:22 110:2,3
lingering 37:6	107:19	135:8	meet 27:7 57:12	111:3,4,5,7 112:5
lion's 118:13	maintenance 00:18	MBA 1:15,15	81:3 100:22 102:6	112:8,10 126:17
listening 19:9		McAneny 2:9	102:7 103:4 104:4	mentioned 28:3
Interally 124:12	13.3 major 16.9	13:20 14:20 15:11	104:4,18 105:11	32:19 54:1 59:1
literature 69:10	$\begin{array}{c} \mathbf{major} 40.8 \\ \mathbf{majority} 6.12 \ 14 \end{array}$	40:16 41:7,15,17	106:3,19 107:13	59:11 65:18 79:19
Inttle 20:2 64:12	majority 0:15,14	41:18 42:9 52:22	108:5,20 123:16	85:16 123:8
66:5 68:8 97:1	/:10/102:9,11	54:12 59:19 60:1	meeting 1:3 3:5,11	MEOS 44:4
110:7 120:9	105:7 111:1	60:4 63:10 67:17	3:12,16 4:19 5:11	meritorious 97:9
	-		-	

Г

Martal ().(107.4 120.6 12	52.10 90.7	marry 4.6 7 12 00 5.9	25.12 71.2 6 07.6
WIEFKEI 02:0	127:4 150:0,15	33.12.82.7	Hew 4:0,7,15,22 5:8	55:15 /1:2,0 9/:0
10.1 127.10 120.4	131.3,20 132.2,10	50.2	J.20 0.14 9.7 14.11 12 15.5	occasions 15.9
40.1 127.10 120.4	152.19,21 modern 55.12.15	JO.J NCCA 45.12 62.10	14.11,1213.3 21.725.1820.4	occur 22.14
120.7	modified 40:12	NCCN 45.12 05.19	21.7 23.10 30.4	20:4 126:20
metastatic 01.2	62.4	64.5 66.8 60.6 0	55.14 41.19 42.0	59.4120.20
	02.4 molecular 86.2	60.14 71.22 82.10	44.10 40.11 34.20	occurring 75.10
120.9 mothodologios	MONDAV 1.0	09.14 /1.22 02.19 87.17 22 88.6 17	30.21 01.12 04.19 86.15 88.10 01.12	$\mathbf{OCM} 37.0 12 11.2$
53.15 103.10 21	monov 16.16 22.6	80.4 5 15 10 21	02.261703.5	AA-12 16 A5-1 22
33.13 103.19,21 mothodology 27.11	13.0 83.11 08.7	09.4,5,15,19,21 NCCN's 87.14	92.3,0,17 93.3	44.12,10 45.1,22
24.4 46.2 52.10	45.9 05.11 90.7	100010307.14	95.12 97.15 96.2	43.22 40.9 82.13
00·10 103·11 13	Monto 50.2 51.22	$\frac{116a1}{noarly} 91.13$	99.13,13,22 117.0 117.11 122.20	03.10 91.3 92.13
99.19 103.11,13 102.16 18 114.0	00.2	122.12	Nichols 1:1/ 16:7 7	95.1,7,11 94.5
105.10,10 114.9	99.2 month 126.10	132.13 nocossarily 25.10	A1.3 53.22 58.A	97.0114.20,22
mothods 51.7	months 32.2 72.6	28.22 22.10	50.5 62.13 06.22	offored 17.12 18.5
metric 80:18	$\frac{11011118}{22.2} 52.2 72.0$	20.22 32.4 30.9	11/16 122.0	offors 110.0
metrics 27.2 57.12	morning 12:1 5	07.11	114.10133.9	office 1:18 60:20
Movico 15.5 41.10	Morrison 16:14	55.8 58.0 77.17	non concor 20:15	Officer 1.17 17.4
mid 44.10	motion 134:21 22	70.1 82.16 102.7	27.21	12.2 97.9
middle 00.2	1100001134.21,22 move $41.305.2$	79.1 03.10 103.7	J7.21	42.3 07.0
Millor 1.13 14.15	100.6 16 118.20	31.6 A0.22 55.10	35.0 51.21 52.1	old 117.8
14.15	109.0,10 118.20	51.0 40.22 55.10 61.3 62.7 63.17	33.9 31.21 32.1	on_romn 85.17
millions 51.7 50.18	120.4 130.13 moved 135.1	65.10 72.5 75.15	non-hospital-has	onco 16:13 22:6
mind 0.00000000000000000000000000000000000	movement 99.17	05.10 72.5 75.15	1011-1105pitai-Das	64.10.65.1
minimum 57.12	moved 75:1	70.4,770.2100.2	10.17	04.10 03.1
minute 124:12	moving 74.1 20.7	00.10 05.10 95.15	normal 69.7 79.16	26.6 A1.10 A9.7
minute 124.15	111/16	111.10 112.22	not o 40:0 65:11	20.0 41.19 40.7
124.14 125.8 12	114.0 MDH 1.12	113.0 117.3	Hote $40.905.11$ noted $118.15120.0$	40.11 01.14 /1.19
124.14 125.0,15	multi modelity	122.11 123.22	notice 116.15 129.9	04.2 10
123.14 misory 117.2		124.1 155.10	notion 123.3	94.2,19 oncologists 22.1
missod 16.13	00.2 multidisciplingry	noodod 81.0 11	novol 02.20 22 03.3	20.3 A 22.1
mission $87.1/$		102.0 105.4 111.1	113.12	42.10 46.3 63.14
mistoko 111.17	multinle /2.15 63.5	102.7 103.4 111.1	November / 2.13	65·2 73·17 7 <i>A</i> ·1
mixed 03.7	63.6 64.8 10	needs 30.18 34.2	nuanced 36.18	00.13 01.7 05.10
MMM 1.12	84.11 106.12	37.13 AQ.11 56.1A	number 50.10	oncology 2.3 /
model's 30.1/	127.20	100.5 0 107.5	76.0 80.0 100.10	12.21 13.1 3 5
37.21	nultispecialty 9/1.6	116.15 16 122.1	101.17 18 102.15	14.21 15.1,3,5
modeled 27.2		negative 25.11	103.11 104.10	18.0 17 10.18
modeling 11/1.13	74.0	negatives 8/1.16	105.3 17 107.3 10	20.21 22.13 24.8
120.18	N	negatives 04.10	113.6 126.1	20.21 22.13 24.0
models 3.15 17	N 1:13	nother 99.13	numbers 55.3 62.1	20.11,15,21 51.10
A·22 10·5 11 15	name 19:18 42:2.5	Network 87.5 9	127.10	<i>A</i> 2·11 20 <i>A</i> 3·2 12
11.7 9 10 12.6	87:7 92:6 94:18	94.17 20 134.9	numerous 51.13	42.11,20 43.2,12 43.19 21 AA.2 A
18.10 12 28.15	national 24:4 45:13	Networks 2.3		45.3 46.6 8 49.5
29.6 31.15 32.7	54:13 63:3 64:6	12.21 13.4 10.18	0	52.15 60.8 63.9
37.19 52.7	87:4.8 89:10	42.2113.717.10	objective 73:7	64.19 20 71.10 11
69·21 22 70·2	92:21 134:8	neutralizes 110.2	objectives 89:1	72.14 73.10 74.5
72.3 88.10 04.22	nationally 91:18	never 35.9 /6.15	observed 71:14	75.5 8 77.7 5 81.5
95.8 19 21 11/.10	123:18	46.72 62.7 88.15	obtain 129:7.10	82.20 82.22 84.6
116.7 126.14 21	nature 24:8 37:6	112.4	obviously 34:14	84.12 14 85.2 7
110.7 120.17,21		112.7		07.12,17 03.3,1

Г

85:12 86:9 88:1	optimal 72:2 84:14	59:10	89:19	payment 1:1 3:6,14
88:21 90:6,11,16	94:12	part 7:8 14:22	patient 22:22 24:2	6:9,22 7:3,6 11:7
90:19 91:2,14,15	optimization 59:14	21:21 22:1,11,17	25:18,22 26:13	14:17,21 15:1,18
92:11 95:1 114:5	optimizes 47:7	25:19,20 26:4	27:21,22 32:5	15:20 22:14 25:17
114:18	options 27:16	27:13 29:13 35:3	37:5,9 38:15,16	27:3,11 29:6
oncology-based	47:12 72:1	38:22 48:14 61:19	39:11 43:9,11	30:22 31:15 32:7
84:11	orally 21:18	62:3 67:4,5 79:22	46:17,19 47:4,7	32:12 34:4 36:1
oncology-centric	order 7:13 78:22	90:15 94:5,10	47:10,12 48:2,4,8	40:11 42:12 43:10
86:22	79:2	109:10,17 110:6	48:15 56:14 57:11	43:19,21 44:3
oncology-related	orders 79:20	110:19 111:5	58:10 59:5,6 60:6	49:5 52:15 69:17
46:1	organization 18:8	112:6,15,17 118:7	60:11,13,15,21	69:19 70:8 71:11
oncs 91:21	52:21 54:15 67:3	120:21 121:6,15	71:17,18 72:22	72:11,15 75:8
one-size-fits-all	organizations	121:22 122:7	73:19 74:9,20,22	76:6 81:5,21 82:9
82:12	126:3,8,18 127:4	123:17 124:19	75:1,12,13 81:11	82:11 84:6,12,21
one-time 25:17	127:8	participant 92:12	86:13 88:14 91:9	85:1 86:21 88:19
ones 37:11 61:20	original 21:11	participants 94:21	91:19 107:3,19,20	93:13 94:22 98:10
ongoing 25:14	originally 20:9	participate 54:19	121:20 129:15	100:2 101:6
28:10 75:9	ought 33:3	57:13 66:10 71:10	patient- 55:16	103:11,13,13,17
OPC 23:6,11 25:2	outcome 46:17	84:13 91:8,21	patient-centered	103:18,20,21
25:6 49:7,14 50:4	73:9	93:14 94:13 96:7	15:1 43:21 56:12	110:10,13,17
60:6,13,17,18	outcomes 33:20	101:8	84:5 95:3	111:9 112:11
61:1 62:8 68:5,20	70:22 72:19,20	participated 18:8	patients 18:14	123:4,22 128:17
71:1 74:9,14 75:3	73:10,11,15 74:4	92:10 94:4	23:19 25:5 31:5	130:19 132:10
75:17	74:4 91:10 92:1	participating 4:18	35:7 38:13 39:4	payments 23:15
OPCs 24:13 27:9	131:11	9:21 15:16 22:13	43:5,6,8 45:3,18	26:8 37:22 44:4
28:4,13 37:6 39:2	outpouring 118:15	57:22 82:21,22	46:10 47:2 49:11	70:3 85:5,18
40:9 41:6 49:18	outreach 128:10	Participation 57:18	53:10,11 54:1,4	91:17
50:11,21 54:6	130:14	particular 11:11	54:20,21 55:9	pays 45:11
58:9 61:3,20	outside 52:21 95:10	13:16 21:20 26:21	57:1 58:21 71:12	PCOP 84:18 85:5
64:11 81:5,6,9,14	95:15	58:10 70:2 75:18	71:12,13 74:2	peek 120:10
82:4,17 123:8,19	overall 2:17 5:21	75:19 93:4	81:9 84:15 86:13	penalized 48:2
open 3:17 16:12	6:5,16 8:12 22:8	particularly 27:19	87:16 88:4,12	penalizes 47:1
41:11 42:16 52:11	23:6 38:10 57:10	39:12 88:20 95:12	90:2 91:3,5 93:8	people 26:22 75:18
53:16 61:9 69:9	109:4	125:2	96:3 107:6 113:18	77:16 80:9,16
69:11 80:5	overcome 130:13	partners 63:7	115:5 118:14	81:17 97:15 100:6
opening 2:2 41:10	overly 36:11	partnership 100:9	129:1,22 130:11	114:3 115:8 116:5
109:11	overrun 45:18	partnerships	130:22 131:12	116:10 119:13
operational 27:10	overview 19:21	113:13	patterns 28:17	125:5 127:3
28:4 29:17 33:8		pathway 24:2 30:8	33:16	people's 33:21
33:10 130:3	P	35:22 36:8,16,21	Paul 1:13 14:10	percent 22:8 26:7
OPERATOR	P-R-O-C-E-E-D	48:8,12 58:11	62:17 66:1 120:17	26:14 54:5 88:4
96:13	3:1	69:3 72:4 85:14	122:2	89:8,12,13,18
opportunities 72:8	p.m 1:9 3:2 124:16	85:21,21 86:1,11	pay 43:20 48:22	116:12,13 121:16
101:8	124:17 135:9	86:17 121:16,22	49:1 68:2,4 70:5	percent-plus 34:17
opportunity 9:15	pace 56:1	pathways 23:7 24:3	70:12 103:12,17	perfect 19:4 98:5
19:2 22:16 30:8	pages 39:7	26:11 29:9 32:22	payer 132:19	117:7
87:12 90:8 91:8	paid 16:15	33:17 36:14 39:2	payers 57:7 70:13	perfectly 32:3
119:9	parallel 51:15	39:11,15,21 47:18	88:12 103:16	performance 26:15
opposed 30:3 31:21	59:13	47:20 68:18 69:1	130:7	46:22 51:2 57:21
32:15	parallelization	73:4 82:10 86:8	paying 68:18,19	59:17 92:15

ſ

period 7:13	86:22	post 117:17	38:16 107:6	57:4.14 94:15
periods 92:15.16	place 22:3 33:13	post-PTAC 127:22	preferred 83:9	130:7 132:18
permission 43:22	67:22 97:20 99:21	potential 7:16	preliminary 2:6	probably 31:6
person 3:8 9:21	133:18	33:19 38:7 87:20	4:22 5:13 7:20	79:21 101:18
72:13 78:7	places 95:16	88:20 89:14 115:3	17:14 20:6	109:15 117:5
personal 113:12	122:22	115:13	premise 122:15	118:2
personally 25:10	plan 23:3 25:4	potentially 85:17	present 1:11,16,22	problem 51:12
99:14,16	30:20,22 38:21	95:4,9,18 115:22	96:10 116:7	75:18,19 100:4
perspective 20:15	47:6	PowerPoint 121:1	presentation 7:20	problems 44:12
27:6 79:19 94:12	planned 7:9 75:2	practical 36:3	7:21 67:5 68:12	83:17 114:19
126:20	110:20 128:7	practice 15:5,6	120:4 133:11,15	procedural 79:22
PFPM 103:14	Planning 1:18	18:1,17 23:7 24:9	presented 116:3	procedures 57:10
105:19 106:14	plans 11:1,1 55:22	36:8 37:18 43:6	122:20	proceed 6:5
109:9	82:8 129:4	45:7,16 46:6,18	presenters 41:4	proceeded 127:13
PFPMs 6:21 110:9	play 41:6	46:19 47:18 49:7	president 13:14	process 10:13
pharmacist 92:7	please 102:20	55:11 60:11 69:5	14:16 15:12 41:20	19:22 20:8,12
pharmacology 28:8	103:21 104:12	74:21 86:15 87:22	42:6	21:15 28:5 30:4
phase 74:11	105:5,19 106:14	92:21 93:1 119:2	pretty 29:4 61:6	31:4,4 33:12 35:2
PhD 1:14,19,19	107:6,20 108:13	119:21	64:14 98:5 122:14	35:12,20 36:18,20
phenomenally	112:2	practice-ending	prevalent 50:9	39:1 43:16 51:6
16:12	pleased 89:21	45:20	prevent 65:20	51:10,17 53:1,11
phone 3:9 4:12	91:14	practices 23:21	previous 34:9 36:2	59:11,15 60:22
9:22 19:9 62:15	plenty 39:7	28:18 42:16 43:1	71:3 114:7	61:4 62:22 63:17
124:4	plus 38:3 53:6	43:15 44:6,9,10	previously 113:14	65:6 69:8,12,18
physical 23:15	point 20:4,11 23:3	44:13,15,19 45:4	price 23:4 25:2	72:5 75:16 76:4
physician 4:10 17:4	25:15,15 56:9	45:8,13,15 46:8	44:8,14 62:10	77:1,20,22 79:10
1/:11 20:1 40:15	58:12 60:12 /2:12	49:10 52:6 53:6	93:4	/9:13 84:13 99:7
48:2 00:14 88:19	100.21 116.14 15	54:10,10 50:15 57:5 11 14 22	prices $55.740.5,7$	99:21 101:2 109:7
94.17 150.17	109.21 110.14,15	57.5,11,14,22	95.5,0 pricing 22:0 24:16	109.10 112.10,17
131.10 132.0 nhysician's 55.16	121.12 125.5,10	64.20 77.17 70.11	24.10 34.18 35.1 118.17	117.8 11 16
Physician 3 55.10	155.10 noints 75.1	80.1 82.20 22	110.1	117.0,11,10
Physician-5.5	policy 16:8 18:3	83.1 12 14 14 19	nrimarily 123.3	120.21 122.1 8
1.1 3.14 6.9	36.9 90.10 101.6	84.15 85.9 92.9	primary 10.19	120.21 122.1,0
103.19	nool 26:9 56:22	93.16 95.9 18	55.12 122.22	129.9 131.7 21
nhysicians 14.2	pon 63.6	practicing 16:19	123:5	132:1
37:18 38:12 43:17	population 16:21	41:19 55:13 87:9	principal 40:8	processes 5:16 22:3
49:12 55:18.20	28:21 65:10 76:10	practitioners	prior 8:11 11:21	22:5 39:5 47:8
56:2.5.7.12.18.19	106:13 107:4	104:11 105:4	19:13 89:2 95:21	48:17 51:15 64:11
57:3,8,17,19 58:2	129:15	106:11,12	priority 26:18,19	64:17,21 70:10
93:22 94:2,20	portfolio 101:7	pre 117:16	81:3 100:22 101:5	75:22
121:13,17 132:6	portion 98:12	pre-defined 31:20	102:2,3,12,16,22	processing 53:19
132:12,22	poses 88:21	pre-existing 46:19	103:1,12 104:1,14	produce 50:4,22
physicists 90:13	position 9:1 46:16	pre-operative 48:5	104:15 105:7,8,21	77:18
pick 73:19,20	positive 32:9,12	precision 82:9 86:8	105:22 106:16	produced 40:13
piggyback 70:17	positives 84:15	86:9 113:17	107:9,10 108:1,2	59:2
pilot 42:13,16	possible 9:12 40:12	predictors 35:4	108:16,18 109:2	producing 72:19
63:19 89:9 113:9	45:6 53:5 115:16	prefer 77:10,19	123:2	product 45:14
129:21	128:20 134:17	78:2	Prisma 4:15 17:5	professionals 88:12
pilots 84:12,16	possibly 65:3	preferences 22:22	private 18:16 56:15	professor 16:3

81:19	130:10	prudent 92:20	47:3,6,11,15 48:9	raise 133:10
program 85:17	propose 52:17	psoriasis 75:12	48:12,14 56:21	range 54:7
94:5 114:5	proposed 3:14	PTAC 1:1,11 2:5,6	57:10,12 68:16	rapid 44:17 86:14
programs 58:3	34:21 37:10 84:9	2:8 3:7,16 4:13	69:20 77:1 82:18	95:12 119:6
progress 71:15	110:11 128:15,18	5:4,10,19 6:21 7:1	83:11 86:6 87:15	rapidly 24:19
131:1,18,20	128:22 129:18	7:3,4,5,7,15,22	87:19 88:9,18	rare 62:6,11
133:20	130:2,2	8:15,22,22 9:2,3,7	89:18,20 93:17	Rasp 93:21 94:1,1
project 57:18 63:19	proposer 21:2,18	9:9,16 11:12,16	95:22 98:8 102:15	rates 81:21
68:8 89:22 92:11	proposers 10:12	17:14,19 20:17,18	102:17,18,20	rational 96:4
95:1	12:13 31:10	22:17 40:6 83:10	104:12 105:5,18	rationale 27:12
projects 42:14 85:7	proposes 89:17	84:2 87:1 110:12	113:10 121:15	RCCA's 55:6
prolonged 20:8	proprietary 52:20	110:14,15,16,18	123:4,16 124:2	re- 112:1
promise 88:22	53:12,15 66:6,9	111:6,8 112:8,9	130:2,8	re-insurance 45:17
promote 87:1	66:13 69:3,10	112:13 126:4,9,9	quarter 10:17	reach 9:3 51:8
95:21 96:2	77:8 113:16 114:9	126:10,12,14,16	quarterly 13:22	103:6
promotes 86:6	116:21	126:19,21 127:4	question 58:5	reached 69:6
prompts 23:11	prostate 53:10	127:13,14,17	62:17 63:1,12	125:14
proof 49:16 50:19	61:22 71:12	128:6 129:8,12,20	64:4 65:7 66:4	reactions 67:1
58:17 78:18	protected 45:19	130:10,21 131:3	68:17,21 70:17,17	read 14:22 67:18
117:11 120:12	protocol 29:12 86:2	132:8 133:3	71:6,7 74:3 76:21	readjustment 71:1
proportion 92:14	proton 60:10	PTAC's 3:12 52:7	77:4 78:10 97:2,8	ready 8:5,7 96:16
proposal 2:3 3:20	prove 42:18 65:1	88:22 126:1	97:17 118:21	99:8 100:13
6:4,15,19,21 7:2,5	proven 47:19	public 1:3 2:11,20	127:9	real 16:11 20:2
7:8,12,14,18,19	provide 8:16 9:11	3:5,8,12,15,18	questioned 81:17	24:12,14,18 25:16
8:2,3,6,9 11:20	12:16 18:14 32:11	5:11,16,17 7:12	questions 2:8 7:22	26:4 32:5,9,12
12:1,22 13:2,16	57:3 78:3 80:9	8:2,11 9:20 10:3	15:19 21:1 31:12	34:1 36:14 38:3
14:18,22 15:17	90:15 104:10	11:2 38:4 69:8	40:6,19,21 52:9	39:17 72:19 75:4
16:1 17:11 18:7	105:3 122:4	80:10,12 96:13,20	52:12 58:19 68:15	99:18 116:8
18:22 19:18,21	134:15	113:1 117:14	76:20 97:5 129:12	124:13
20:15 21:11,20	provided 15:7	124:18,20 126:11	queue 62:15 100:17	real- 44:18
22:17 29:20 31:19	23:22 30:1 33:8	published 84:5	118:22	realistically 121:2
32:3 33:2 34:5.16	43:4 53:18 60:11	pull 79:9	aueued 80:9	reality 28:10 61:8
34:20 39:19 76:18	provider 60:7	pulmonary 17:3	quick 59:7 124:13	91:15
76:22 84:3 86:21	119:20	purchase 45:14	quickly 31:8 49:17	realized 14:21
87:13 88:21 91:20	providers 30:17	purchasing 34:13	50:21 58:20 64:15	reason 21:5 46:8
96:6 98:12 102:1	35:21 38:17 84:13	push 101:11 111:13	79:20 98:15	reasonably 115:7
102:11 103:8	133:1	112:1	auit 125:14	reasoning 27:13
104:6.21 105:14	provides 77:6 85:1	nut 3:22 32:6 33:12	quite 21:15 99:15	reasons 81:16
106:6.22.107:16	providing 10:3	36:22.45:1.46:15	quote 40:11 81:20	reassures 46:9
108:8 109:1.2	93:17 124:22	72:2 114:3	82:6.13	receive 3:17 9:18
110:1.2.4.13.16	PRT 2:6.8 8:21 9:2			56:8
110.19 111.4 6 8	9.4 5 13.7 17.14	Q	R	received 3.21 56.11
111.9 112.6 8 9	19.6 20 26.16	QOPI 48:16	R- 45:1	126.12
112:11 13 124:9	30.19 40.6 10	OOPI- 49:2	rad 91:21	reclassification
127:13.14.17	58:8 60:5 64.1	quality 13:14 14:12	radiation 25:21	115:4
129:8 130:20	82:5.6 83.8 116.3	14:17 23:22 24:1	48:6,18 71:17,19	reclassifving 58.10
proposals 3.21 4.1	117:7 123.2 7	26:7,9,9,10,12	73:1 90:5,11,12	recognized 91.18
5:12.14 9.18 19.1	PRT's 7:21 20:15	27:6 30:10 32:19	90:14,15,21 91:1	recommend 6.10
125:3 126:5 8	25:7 81:2	33:1 34:8 36:19	91:3,7,13,14 94:2	6.15 110.2 3
128:5 129:20	PRT-type 21.4	37:4 38:10 45:16	94:10	111:4.5.7 114.16
120.0 127.20	"JP" 21. 1			

recommendation	regularly 126:3	42:13	19:6 20:8,18	112:16
6:6,17 8:12 25:12	regulatory 48:17	requests 126:5	26:16 35:20 126:9	Sarah's 111:22
97:21 109:6 111:2	reimbursement	require 28:6 57:11	129:9	satisfaction 37:5
recommendations	43:15 85:2	57:14 71:15 91:3	reviewing 5:13,14	47:10
5:21 6:3 9:12	reimburses 46:6	91:6 119:17	rewarding 32:22	satisfactory 26:15
21:12 88:13	relapse 60:21,22	required 45:6	rewards 88:18	satisfied 43:8
131:18 133:3	relapses 75:1	80:18	rises 16:10	satisfy 123:10
recommended 6:8	related 23:1 26:1,5	requirements 5:17	rising 87:18	satisfying 78:15
48:3 109:8,9	27:8 34:13 35:13	requires 71:17	risk 35:8 44:7,10	save 83:11
125:4 126:15,21	35:22 36:3 37:7	requiring 46:20	45:5,12,15,20	saved 22:5 43:9
127:4,17 128:5	38:1 46:4 49:9	89:18	46:4 57:7 63:16	savings 23:21
129:20 130:10	71:6	research 16:8 56:3	74:10 95:4,8,16	38:11 43:13 44:5
131:3	relates 24:6,10	resection 48:7	119:13 129:14	44:9 69:22 83:15
recommending	27:19 35:16 37:22	reservations 40:8	130:2	86:6 89:14 93:7
110:10 112:18	39:20	resetting 115:5	risk- 57:13	130:8
recommends 6:21	relative 11:7 12:15	resolve 24:20	risks 93:12	says 82:6
7:1,4,7 110:12,15	27:16 36:5	resource 49:12	roadmap 131:8	scale 51:2 59:3 63:8
110:19 111:9	relatively 82:12	89:22	133:16 134:4	64:7,10 98:2
reconfigured 77:15	released 11:5	resources 18:13	Robert 87:3,7	99:12 100:8
record 72:4 124:16	relevant 22:21 56:8	97:11 115:15	134:8	115:16 117:9
135:9	79:21 106:13	respect 18:13 19:13	robust 30:20 55:10	scaled 42:14 64:7
recorded 113:4	reliance 77:8	25:15 28:10 29:5	role 5:8 77:14	scenes 134:18
recording 101:16	reliant 77:4	32:18 33:9 35:19	roll 103:6	scheme 75:9
rectal 48:5	remain 45:15	37:3,4,17 38:15	room 109:15	School 4:9
recuse 15:15	remains 118:6	99:18	rotated 19:10	science 42:3,18
reduce 56:16 57:9	remarks 2:2 125:7	respects 30:13	20:11	49:6 61:6 62:4
91:10 96:1	remember 5:15	respond 123:15	rotation 19:14	75:22
reduced 89:6,8,12	remind 7:13 80:14	126:5 129:12	RS21 42:4 51:16	scope 26:17 31:14
reduces 23:20 51:5	100:20 109:7	response 10:4	run 16:7 18:1	101:4
92:1	reminders 8:20	12:17 40:10	running 4:21 18:16	score 129:14
reduction 22:8	remission 70:20	122:14	27:1	scores 47:10
refer 53:13 110:1	71:5	responses 127:6	ruthless 112:3	scoring 30:10
referred 6:11 48:7	removes 46:5,8	responsible 95:10		seat 80:14
60:12 109:11	removing 48:22	95:13	<u> </u>	second 4:12 6:10
reflect 6:2 28:7	repay 45:7	restaging 60:22	S.W 1:6	6:18 7:1,19 51:18
61:7 75:9 117:17	repayments 45:6	result 5:19 20:13	sacrifice 48:9	68:21 70:16 97:8
122:6,10	replicate 54:10	resulting 43:7 45:8	safety 27:22 39:11	109:17 110:6
reflects 9:8 23:4	report 2:6,18 8:18	47:10	48:15 107:19,20	117:21 122:5
82:9	9:4,5,5,7 17:14	results 50:14 59:1	sake 78:20	135:2
Reform 14:18	21:4 29:20 40:10	101:21	sample 50:1	Secretary 1:18
refrain 125:7	60:5 112:14 116:3	resumed 124:16	Sandy 12:10 80:20	2:18 5:22 6:3,6,17
refuse 48:3	123:3 126:10	retool 61:16	80:22 83:20 125:9	8:13,19 9:6,10,12
refused 48:8	131:17 132:1	retrospective 89:11	125:11 131:13,16	91:11 112:14
regarding 57:2	reporting 57:16,21	retrospectively	133:11 134:13	Secretary's 6:20
regardless 49:4	reports 8:21,21 9:2	23:16	Sandy's 132:1	8:10 10:4 110:9
regimen 73:1,2,5	represent 9:1 14:4	returned 48:13	133:15,19	113:5
73:15,16	54:13 67:11 90:12	revealed 50:13	Sarah 1:17 101:21	section 77:1 109:21
regimens 73:18	represented 92:13	review 2:6 4:22	102:14 103:10	seeing 63:8 76:16
regional 42:7 67:2	request 5:16	5:13 7:21 9:18	104:9 105:2,16	100:14 119:5
89:10	requested 20:19	12:7 17:11,14	107:2 109:21	seek 130:15

acal-a 00.19	aa ttin a 50.2 70.10	17.1 2 2 50.20	60.7.0.12	107.20
Seeks 90:18	setting 52:5 72:10	17.1,2,5,59.20	09:7,9,12	107.20 standnaint 27.2
Seeii 21:15 02:7	$\delta 1.20$	60.2 02.14,19,20	Sources 21:19	stanupoint 27.5
04:18 114:5	settings 100:12,12	03:22 101:15	South 4:10 17:5	start 5:4 15:10
152:19	Seven 92:9 102:10	115:22 124:0	Southwest 94:5	05.10, 11, 15, 19 71.21, 70.6, 80.10
segregate 40:1	110:2 111:5	site 5:19 49:4	Space 59:10 01:5	/1:21 /9:0 80:19
Select 28:18 00:7	severily 55:9	sites 42:15	Spark 51:14	90:18 100:10
74:277:5	Share 4:5 15:17	situation 29.11	Speak 11:10 00:11 97.12 06.10 12	115:2 150:15 started 10:1 12:10
Selected 40:10 30:0	25:21 116:15	Situation 26:11	87:12 90:10,12	started 10:1 12:19
33.7 colocting 72.19	155.19 shared 20.20 21.2	$50.11\ 100.4$	123.3 gnooking 10:0	114.10 150.10 starting 100:15
selecting / 5.18	Shareu 50:20 51:5 29:21 44:5 100:10	SIX 52:2 102:21	speaking 10:9	starting 109:15
selection 40.14	50.21 44.5 109.10 119.6 121.0	104.1,15 105.0,20	12.11 magial 94.2	Starts 22.19 50.21 20.22 21.22 72.10
SELENICH 1.17	110:0 131:9 shownon 12:5	100:10 107:8,22	Special 64:5	30:22 51:22 72:10
SELENICH 1:17 101.22 102.21	SHAFPEN 12:5	100:10 112:0	Specialist 92:5	12:22 state 25:4 40:11
101.22 102.21	SHEINGULD 1.19 Shield 12:15	SIXUI 5.12 size 50:16 76:10 15	opecialists 92.7	state 25.4 40.11
105.22 104.15	shifting 57.7	SIZE 30.10 70.10,13	95.J	09.9 stated 29:16
103.0,20 100.13	shifta 76.6	111.10 alzowod 79.15	speciality 112.14	Statement 2:0
107.8,22 108.13	short torm 72.11	skeweu 70.15 slide 100.19	specially 115.14	
109.22 110.22	shortcomings	slides 14.21 50.11	Specific 8.10 52.12	41.14 statistical 52.4
112.3 colling 45.11		slightly 78.15	72.1 112.21 112.4	statistical J2.4
sennig 43.11	90.10 shouldor 111.22	slow 66.5	72.1 112.21 113.4	76.8
sending 58.12	show 22:4 53:8	siow 00.5 small 20.2 45.18	68.12 76.2 84.22	70.0 status 10:4
senuing 30.13	SHOW 22.4 33.8	110.16	12/15	status 10.4
56:5 63:20 100:11	95.0,17 115.9 showed 42.22	119.10 snowed 4.17	134.13 specified 7.2 5	stay 124.2 stayod 122.21
$50.5\ 05.20\ 100.11$	showed 42.22 shown 44.0 21 47.8	snoweu 4.17	110.14 16	Stayeu 125.21 Stoinwold 1.15
Sellt 9.9 124.21	SHOWH 44.9,21 47.0	118.11 126.2	110.14,10 spond 12:7 80:2	14.7 7 10.7 40.7
04.11	04.21 113.0 sided 02.12	110.11 120.2 Society 15.2 42.18	spending 38.2.3	14./,/ 19./ 40./ 52.1/ 78.12 70.1/
94.11 Sontombor 5.12	signed 134.0 12	82.22 00.5 10	120.14	32.14 /0.13 /9.14
20:0 126:11	significant 14.9,12	05.22 90.5,10	129.14 spirit 40.20	120.3 125.13
20.9 120.11 sequential 88.2	21.16 27.15 <i>1</i> 2.0	solution 24.21	splitting 117.5	133.1 stop /2.11 00.20
serious 16.21	60.4 76.5 8 83.15	solutions 2.4 13.1 5	spitting 117.5	11/1·21
Serve 5.4 84.14	118.20	51.1/ 65.10 77.3	spoke 20.19,20	Stonhon 83.21
SCI VE 5.4 04.14 80.21	significantly 11.20	77.5 113.11	squared 15.2	steps 78.21
served 13.17 107.5	58.1 70.11 89.6	solve 24.20 44.12	squarcu 43.2 stabilize 91.17	Steve 92.23 6
serves 85.17	92.14 128.10	83.17	stabilize 71.17	STEVE 72.2,5,0
service 23.15 26.12	similar 58.3 114.10	somebody 36.21	staff 1.16 8.17 17	Stevens 15.8
A2.15 AA.5 A7.4 9	similar $50.5 \cdot 114.10$	101·11	56.8	sticking 40.3
42.15 ++.5 +7.+,5	similarly 28.6	somewhat 37.20	stage 86.2 109.6	ston-loss 45.14
services 8.13 9.6	48.10 60.15 81.15	soon 11.5 61.6	stakeholder 12.5	storage 65.19
17.7 22.9 26.3 3	simple 36.11 102.9	115.16	125.2 134.14	straight 52.15
29.19.42.11.43.5	103.7	sort 21.4 39.22	stakeholders 3.22	stream 3.10 9.22
43.11 53.19 81.10	simplifies 86.16	67.1 12 13 69.17	11.15 12.12 17.22	strength 33.1 34.5
83.2 3 16 85.2 11	simplify 97.3	97.4 98.2 114.22	19.3 126.14	37.16 82.5 14
90:21 91:4	simply 132:3	118:18 122.14 18	standalone 91.2	strengthens 72.18
session 126.11	simply 192.9	122:22 123:5 10	standard 18.10	strive 134.5
set 24:16 41:8 50:1	52:2	sorting 65:17	20:2 47:15 64:6	strong 87:20 89:13
50:17 61:7 63:21	simulation 50:3	sound 79:14.15	88:15	stronger 20:15
65:10 76:11 78:3	51:22	sounded 99:1	standardization	31:4
88:1 126:7	single 63:3 65:20	sounds 71:2 131:19	86:12	strongly 95:2 96:5
sets 52:3 76:15 79:9	Sinopoli 1:14 4:14	source 53:16 65:20	standards 48:17	125:22 131:4

133:5 78:2 15:20 16:20 25:16 technology 27:22 134:13,1 structure 76:7 82:4 suite 57:15 43:11.19.21 44:3 39:18 42:3 57:11 thanks 17	18 135:6,6
structure 76:7 82:4 suite 57:15 43:11.19.21 44:3 39:18 42:3 57:11 thanks 17	
	:17 66:2
structures 58:21 suites 48:19 47:1 69:18,19 81:12 108:12,13 104:9 10)5:2,16
study 89:2 summarize 26:16 81:19 85:1 88:18 teed 125:5 125:11	131:12,15
stuff 34:15 98:16 summarizing 12:9 94:10 telephone 1:22 therapeut	t ics 28:8
133:17 127:7 systems 68:15 telling 30:11 64:13 118:22	
style 119:22 summary 5:17 94:10 130:19 ten 101:2 therapies	55:19
sub-optimal 86:5 86:20 96:5 123:14 terabytes 51:18 86:15 92	2:20 93:1
subcategories 6:19 summer 128:8 $\frac{1}{1210.15}$ term 74:8 93:3 119	9:14
110:8 supplied 55:1 T119:15 terms 26:10,13 therapists	s 90:14
submissions 10:12 77:13 T1 50:9,10 36:20 72:1 114:7 therapy 4	8:6 60:10
submit 4:1 61:10 suppliers 77:22 12 50:10 Terrell 1:12 2:7 5:3 60:16 67	7:13 71:17
70:12 support 43:11 table 4:7 40:16 16:17,18 17:12,15 72:2,2,1	2 73:13
submitted 2:4 3:15 56:13 58:2 87:13 80:7 17:16 40:17 97:22 75:2 90:	21 91:3
5:1 12:22 13:4 89:3,11 95:2 96:5 tables 120:10 115:18 119:15	
49:9 61:16 125:3 113:7 114:6,8 tackles 118:18 Terrill 2:10 41:16 things 17:	18 18:19
126:8 118:11,12,15 tactical 123:21 41:22 42:6 54:12 19:2 26:	5 27:20
submitter 8:2 37:2 121:3 122:15 tailored 56:14 test 95:19 111:6 28:16 32	2:15 33:6
128:14 supported 51:14 taken 65:12 90:20 112:7 115:15 34:22 35	5:17 37:10
Submitter's 2:9 114:11 125:22 takes 78:4 tested 103:20 39:9 61:	11 67:17
41:14 130:9 talked 64:8 97:12 123:18 129:21 67:20 75	5:8 79:3
submitters 11:21 supporting 89:16 116:20 testified 14:1 95:10 97	7:3 98:13
52:12 120:22 107:5 talking 65:13 74:15 testing 7:4 28:9 99:17 10	00:2
122:21 127:11,16 supportive 34:12 target 23:3,6,20 72:8 84:11 98:3 117:12	119:13
127:20,21 128:4 84:8 25:2 33:6 44:8,14 99:12 110:15 thinks 83:	:10
128:11,20 129:6 supports 84:17,22 46:9,12 49:6 113:8 115:20 128:14	
129:17 130:5,12 85:10,22 86:20 61:22 /5:15 93:3 116:19 117:9 third 6:11	7:4 44:8
131:8 133:15 88:17 114:12 93:4,0 tests 55:20 57:9 74:3 110):15
submitting 126:18 131:4 targeting 115:5 60:20 thirdly 71	:1
subsequent 21:3,11 surgeon 60:9 targets 43:4,0 thank 3:10,21 9:16 thorough	21:16
subset 6:15 111:13 50:17 61:775:10 9:18,20 17:9,16 thought 1	8:20 20:9
substantial 22:6,12 surgery 81:8 task 114.2 41:12,17 49:15 25:14 30):18 31:13
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	5:2,11,18
substantially 6:20 surprise 61:13 team 2.07.21 62:20 65:22 66:2 36:10 38	3:14 40:1
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	8:9,17
subtracted 49:9 surprised 118:14 50.10 58.10 40.10 /6:1/,1/ /8:11,13 99:/100):3 116:5
subtype 86:3 survey 133:13 41.0,9,12 43.17 80:5 81:1 83:20 116:6,18	8 11 /:8
succeed 82:1,2 surveys 24:2 26:13 83.12 90.1,10 84:1 87:1,3,5,11 thoughth	liness
Success 83:19 132:9 85:9 124:11 90:3,4,792:1,2 32:0	50 10
133:6 Sustain 83:19 1 calls 4.22 5.15 93:19,21 94:13,14 thousand tochnical 1:1 3:6 93: 19,21 94:13,14 thousand	S 5 9 : 18
successiul 100:7 sustainable 2:3 reclinical 1.1 5.0 96:8,15 102:14 three 5:5	6:8,13
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1/44:16
Successiuly 58:2 22:11,17 27:4 47:11 46:14 65:17 107:2,18 108:10 50:7,8 6	2:7 72:6
/3:12 42:10 83:12 96:4 120.22 129:10 109:5 110:5 84:20 10)2:5 103:3
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	0,1/,1/
122:10 Switched 04:20 51:20 114:14 11/:20 105:10 aveficiently 24:1 72:14 122:16 technologically 120:14 120:2 106:19	100:2,2,1/
Sufficiency 24:1 72:14 125:10 (comologicany 120:1,10 122:2 106:18) suggested 50:15 (switching 20:1 60:6 65:21 122:12 124:9 14 109:4.14	107:11,12
Suggested 37.15 Switching 57.1 00.0 (5.21) 125.12 124:8,14 108:4,15 64.1 120.17 74.15 10 technologies 51.17 125.12 121.12 16 100.0 17),10,19 111.1 <i>c</i>
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1 111.10)5.0 12 1 <i>4</i>
Suggesting 05.2 System 4.5 0.14 Constant 155.7,11,12 154.7 120.4 12	20.0,10,14

107.12.100.4	01.10.00.0.07.0		(4, 14, 10, 67, 10)	
12/:13 128:4	81:12 82:8 86:2	U	64:14,18 65:18	view 20:4 114:4
129:2,6	95:14	U.S 28:21	68:681:1383:4	viewed 82:5,14
three-minute 80:17	treatments 64:3	UCHealth's 16:5	86:5 108:12	virtual 23:12,16
threshold 26:14	81:14 86:5	ultimately 21:10	113:11 123:18	49:8,10
thumb 111:18		91:9	userul / 5:22 / 9:4	vis- 9/:5
time-28:0	114:1	unable 46:9 93:11	97:1 	visible 49:7 70:10
time intense 28.5	trenches 118.12	unacceptable 95:17	user 92:20 101:20	VISIOII 152.8
timely 40:12 52:20	triage 04:18 75:4	unanimous 27:7	uses 0.18 09.21	visited 15:4
timing 10:14 117:6	trigger 20:12 76:14	uncomfortable	usual 25.12,15 00.5	visite 25.18 60.20
tinning 10.14 117.0	trigger 29.12 /0.14	121:8	utilization 20.17 85.14 14 21 86.11	visits 25.16 00.20
today 3:20 5:13 20	truo 22.22 07.16	underestimate	85.14,14,21 80.11	25.10 88.10
7.11 8.21 10.10	08.77 00.18	119:11	120.17 92.22	33.19 00.19 104.10
12.8 16 13.2 10.0	90.22 99.10 true_up 23.18	understand 25:7	127.14 utilizing 85.6	104.10 voluntary 20.11
12.0,10 13.2 19.9 24.22 53.4 60.8	trusting 63.15	27:273:1795:4	utilizing 65.0	voluntary 29.11
24.22 33.4 09.8	try 112.1 125.13	121:2 130:9	V	voto 2:17 6:3 5 7 15
117.15 120.5	trying 27.1 50.22	understanding	valid 50:1	6.18 7.17 8.5 8 12
17.13 120.3	68.6	18:18 36:20	validate 120:11	0.10 7.17 0.5,0,12
today's 1.19 9.21	tumor 50.14 16	119:19 129:19	validation 79:13	101.10 102.20
told 58.12 127.5	53.2 54.22 62.6	understood 31:7	valuable 73:17	101.10 102.20
tone $122 \cdot 14$	70·0	underway 4:6	74:12 95:5 119:8	105.5 19 106.14
tool 95.5	tumors 50.10	undeveloped 37:6	value 27:14 35:19	107.7 21 108.14
ton 116.12 12	turn 17.10 49.13		86:6 93:17 104:10	107.7,21 100.14
total 32:16 34:10	62.16.63.12.67.16	122:15	115:13	109.1,13,20,22 110.2,3,21,111.10
36.6 44.7 73.14	74·7	50:12	value- 91:8	112.2,6,8,10
83:9 89:6 92:14	two 3:16,19,20:17	30:13	value-add 97:5	115:19 123:16
92.18 95.14	44.14 54.18 68.15	uniamiliar 115:8	value-based 55:7	voted 102:3 4 5 6 7
toxic 73:13	81:3 97:4 102:4.6	unfortunate 09.11	56:17 57:12 58:3	102:8.21 103:1.2
toxicities 43:3	103:2.4 104:3.3	05.7	91:22 95:3,6	103:3.4.5.22
73:20.21	104:18 105:10.11	95.7 unimaginahly	variability 96:1	104:2.3.4.5.13.15
toxicity 73:7	106:1,3,19 107:12		variable 25:21	104:16,17,18,19
trade 92:8	107:13 108:5,20	01.22 unique 107:5	72:17 118:6	105:6,8,9,10,11
training 4:14	109:10 111:5	UnitedHealthcare	variables 65:13	105:12,20,22
transform 47:17	120:4,18 123:1,21		72:17	106:1,2,3,4,15,17
transformation	124:2 127:21	University 4.9 16.3	variation 25:20	106:18,19,20
42:11,21 45:17	128:1,7,20 129:3	16.9	26:11 86:4	107:8,10,11,12,13
transformative	two- 93:11	unnecessary 57.9	varies 44:22	107:14,22 108:2,3
116:1	two-part 8:14	86·4	variety 94:21	108:4,5,6,15,17
transformed 43:1	two-sided 44:6,10	untested 30:6	various 54:21 61:3	108:18,19,20,21
Transforming 89:2	63:16 95:4,8,16	update 10:3 12:9	72:7,8 97:11	109:16 111:12
transition 91:21	two-thirds 6:12,14	12:15 61:18 123:6	vendors 69:3	113:3,6 114:16
transparency	7:9 110:22	updated 88:14	verbally 116:4	117:21 120:18
39:17	type 32:6 39:3	updates 4:4 68:20	version 15:5,6 82:2	121:6
transparent 46:14	81:10 86:2 130:21	74:15	132:4	votes 6:13,14
treated 81:8 106:14	types 18:19 22:5	updating 28:7	versus 71:4 73:15	102:10 112:7
treatment 23:3	23:12,13 30:5	49:18 50:21 58:9	viable 91:16	voting 2:3,12 3:13
25:4 26:2,11	37:3 39:8 53:2	58:20 75:7 76:3	Vice 1:12 2:7 5:4	5:21,22 8:10,14
30:22 32:8,22	54:22 79:10 82:8	82:2 115:3 122:19	13:14 16:17 17:15	12:20 15:15
43:3 47:6 54:21	92:19 93:8	use 37:8 49:12	1/:10/20:1/ 40:17	100:15 101:12
55:22 70:20 71:4	typically 20:16	52:20 53:5 58:14	97:22 115:18	102:10 109:10

111:3 123:1	withholding 83:16	14:12	2:46 124:16	
	wonderful 84:3		2:54 124:17	$\frac{1}{92.16107.1710}$
W	word 98:18 99:12	Z	20 39:7 89:8 116:13	9 2.10107.17,19 9 0s 47.11
waited 71:14	work 4:2 5:11 9:19	zero 102:2,5,5,6,7	200 1:6	97 88.1
Wake 16:19	11:17 15:10 19:13	102:21 103:3,4,22	2012 13:20	J7 00.4
wanted 12:15 14:5	22:15 23:1 24:13	104:4,5,14,17,18	2015 84:5	
96:10 97:19	29:1 34:7.9 51:16	105:6,10,11 106:2	2016 14:2 89:2	
113:22 123:13	56:16 57:19 64:9	106:3,15,18,19	2017 42:13	
124:4,5 125:1	68:7 69:14 70:6	107:12,13 108:4,5	2018 1:9	
131:16 133:5	76:18 78:14 79:11	108:19,20,21	2019 10:17	
wants 47:4 96:11	133.18	109:22 110:3	20201 1:7	
129:5	worked 5.4 14.20	111:3 112:5,10	25 51:7 54:5	
Washington 1:7	15:2 77:11.12	134:1	28 3·21	
14:8	91.16 114.3 126.1			
wasn't 33:10 66:6	126.19 130.18	0	3	
watchfully 71:14	132.20	0.33 45:4	3 2:2.13 44:21	
way 23:13.19 31:2	working 12.13		103:9.11	
32:4 35:6.10	19.15 29.6 20.12	1	3:04 135:9	
50:17 69:12 74:12	50.12 61.8 00.1	10 1:9 2:17 8:10	30 61:14	
86:7 96:4 116:3	101.18 125.1	39:22 41:11 76:11	36 82:2	
117:11 118:17	131.2 134.14	89:12 108:9,11		
ways 18:3 20:7	works 32.5	127:5,9,10	4	
23.8 27.2 38.5	world 32.5 100.8	100 2:12	4 2:14 104:8,10	
51.22.127.1	117.1	101 2:12	4,800 81:21	
web 5.19	11/.1 wornigd 59.9	102 2:13	40 2:8	
weigh 120.15	worth 62.0	103 2:13	41 2:10	
Weill 14.13	WOFUI 02:9	104 2:14		
welcome 3.5 7 9	120.9	105 2:14,15	5	
	120:8 Warr 100-21	106 2:15	5 2:14 44:21 51:8	
-7.11 11.12 woll- 51.13	WOW 109:21	107 2:16,16	105:1,3 116:12	
wont 21.15 22.18		108 2:17	5,000 50:2 59:6	
20.21 36.21	write 9:7	109 2:17	500 76:13	
124.16 135.0	written 21:1,18	11 51:9	500,000 54:21 59:6	
124.10 133.9	116:4	112 2:18	76:12	
widoly 99.11	wrong 111:15	12:30 1:9	518 81:20	
Wiler 1.15 1.8 16.2	wrote 21:12	12:34 3:2		
16.2 69.11 70.16		124 2:20	6	
10.2 00.11 70.10 74.17 112.6		13 2:5 50:12	6 2:15 105:15,17	
74.17113.0 willing $42.1654.10$	Y	134 2:22	6.3 22:7	
62.16 70.11 100.6	vear 5.15 10.17	14 127:3		
05.10 /9.11 100.0	13.22 54.20	16 54:15 77:17	7	
100:10	128.16	17 2:7	7 2:15 106:7,9	
winnigness 90:0	vears 3.16 19 5.5		75,000 54:20	
WIII 59:11	13.20 14.20 15.3	2	750 25:17	
window 101:18	61.14 73.10 74.5	2 2:13 32:18 34:17		
winterization	8/1.20 01.16	68:16 102:13,15	<u> </u>	
98:22	111.16 120.17	103:8 111:13	8 2:16 50:11 107:1	
wisn /4:2 93:12	viold 30.17	113:6	107:3	
withhold 20:8	Vork $1/11$	2,500 49:19 54:1	80 2:11 26:14 89:18	
45:10 48:9,12	Vork-Prosbytorion	2.0 114:22	121:16	
69:20	101K-11CSDyter1all			
	I	I	I	I

Г

CERTIFICATE

This is to certify that the foregoing transcript

In the matter of: Public Meeting

Before: PTAC

Date: 12-10-18

Place: Washington, DC

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

near Rans &

Court Reporter

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 155

(202) 234-4433