FTS-CDC-OTPER

Moderator: Lisa Hines
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12:00 pm CT

Coordinator: Welcome and thank you for standing by.

All participants will be on listen-only until the question and answer session of the call.

I'd also like to remind participants that the conference is being recorded. If you have any objections, you may disconnect at this time.

I would now like to turn the call over to your speaker, Ms. Lisa Hines.

Ma'am, you may begin.

Lisa Hines: Thank you very much.

I wanted to start off this by thanking everyone for joining us this afternoon. This is the second real-time, real-talk call that we've hosted. The first one was in August of last year and we're planning to do them on a quarterly basis. So this is our first for 2007.

If you missed the first call, the transcript is available on the BioSense website, which is www.cdc.gov/biosense.

And this afternoon we're going to have an update from our Division Director, Lynn Steele, as well as an update from our Associate Director for Science, Dr. Jerry Tokars.

So with that short introduction, I will turn it over to you, Lynn.

Lynn Steele: Thank you. Thanks everyone for being on the call.

I think Lisa sent out an agenda for this. So I'll just follow along the agenda. These are the things that we think are the most ─ things that you most want to hear about.

The first is where we are in the progress with the implementation of BioSense in our recruitment effort. We had set goals for the end of 2006 calendar year and we did meet those goals. We currently have 356 hospitals submitting data in real-time to BioSense. We had talked about a lot of the different data types.

And just to get everyone up to where we are, we began implementing the system of systems approach and linking existing state or local public health systems. So, we aren't getting the full complement of data from many of those systems that were described as the data types in BioSense.

We're getting chief complaints and other ADT message types from 351 hospitals. We're receiving some emergency department clinical data. We're begining to better understand how to utilize that data from 11 hospitals.

We're receiving lab orders and lab results from 23 hospitals and again coming up with a management plan for how to use that data, the best way. We're, receiving radiology orders and results data from 28 hospitals and pharmacy data from 12 hospitals.

I think you know we'll be closely following the recommendations of the AHIC and assessing the data that we are receiving in BioSense against the recommended minimum data set, helping to evaluate those recommendations as directed by HHS and the Office of the Secretary.

We have about just short of 1,200 hospitals that have made commitments to BioSense, either from individual healthcare systems or from state or local public health systems that want to be connected. So we're on track, in fact to continue to develop this national view on real-time data from health systems.

We also talked last year about national data sources that would be both useful to receive data, from and once at CDC, distribute through the BioSense systems for state and local public health use.

We're progressing in our discussions with both the VA and Department of Defense, in fact, we will be meeting with the leads of the VA again, right now to do two things: to begin to receive more real-time data from those facilities, including hospital data; again, to form a national picture as they implement their own data warehousing capability so that the data are real-time.

While we're waiting for their timeline to get more of their data in real-time, we are also continuing to receive very useful data in regards to diagnosis from all the outpatient facilities in the DoD and VA that come two to four days

after patients were seen. That has been demonstrated to be very useful for things such has influenza surveillance.

We will be migrating that VA and DoD data that is currently in the BioSense application under a separate analysis platform. What we call the left side of the application will be migrating to the right side of the application. So, that as public health users, you'll be able to log in and look at your jurisdictional data for the VA and DoD data sources in alignment with the hospital and other healthcare data sources that have been part of the new application since last spring.

We've been working with the American Association of Poison Control Centers for some of that data, but I don't anticipate we'll actually display that in the application until later in the spring of this year.
We also are beginning to receive data in the form of microbiology lab results from the largest commercial clinical laboratory, LabCorp, and they have an implementation timeline with us for the end of this month, January.

We'll be working to develop the best way to display and distribute those data as well. We also are in discussions with three of the other large commercial laboratories and we anticipate those will be online this year as well.

We mentioned last year some pilots with the the University of Pittsburgh and RODS for the National Retail Data Mart. We're still in discussions with them about the best way to receive and make available the over-the-counter drug sale data through BioSense. But those discussions still continue.

We're also working to make decisions on getting some pharmacy data, pharmaceutical claims which would reflect prescriptions filled specifically for antimicrobials. Again, as a pilot, that would be available to state and local

public health through the BioSense application. Then all of this is to try to provide a comprehensive picture or way to look at community status or health status in real-time.

So I'll be happy to take questions, when we're done, about further implementation plans and progress.

Some of the other issues are in regard to those existing networks, and where we are with our collaborations with existing state and local systems.

Currently, onboard within the BioSense system is data from Missouri, the State of Ohio, Indiana, Cook County's Public Health in Illinois, and Tarrant County Public Health in Texas.

We are also in discussions and moving forward with collaborations with North Carolina and the NC_DETECT Systems, with Michigan, we've had a number of discussions with the state of Pennsylvania, and Seattle, and hope to come up with the best model to share data and become a value add for those state and local systems as well.

Also, we've had a lot of questions and are very much exploring and developing our strategy on how to make sure we stay in alignment with the President's Health IT agenda, specifically the work that's going on through the Office of the National Coordinator of Health IT, and the public and private partnership that represents the American Health Information Community, or AHIC.

We know that this exchange of clinical data is not just for, of course, public health and biosurveillance purposes, but it's going on in RHIOs around the country, or Health Information Exchanges, as a way to improve the quality of

clinical care practice in those communities, and that public health has a role in that, and in all of these discussions to make sure that we are implementing and moving forward in the right framework for BioSense in meeting those biosurveillance needs for sharing clinical data.

Barry Rhodes and I just spent the last two days at the third Nationwide Health Information Network Forum or the NHIN, which looked at the prototypes, for helping to develop regional health information exchanges. The prototypes from the four contractors were really reviewed and discussed and business models for how we might move forward in developing a nationwide health information network.

This is of great interest to us to make sure that we're developing a capability that fills the needs for public health, but also is in alignment with the developing principles of a nationwide health information network.

So we will be coming up with additional ideas and are seeking input for how CDC and our programs can help with RHIOs and making sure public health is at the table in discussion with RHIOs, how a business plan might go forward for a public health contribution in those regards. And I think we're all learning as we go. So, again, we'll take questions on that.

The last bullet that is on my list to talk about is the evaluation plan for us to evaluate BioSense programs. We definitely want to share with you all of the activities that are going on in the form of evaluation.

When we talk about evaluation, it's not just the system, but many parameters related to this BioSense program, from validity of data, to reliability, to system usefulness, to timeliness of the analysis, utility of the application, and then, ultimately, to health outcome. Really, how a system such as this is able

to have impact on public health practice, both in the form of rapid decision-making or rapid implementation of interventions via public health, because of the availability of these kinds of data.

We have been working since December on putting together a document that describes all of the evaluation activities that are going on internally for CDC's programs as part of the evaluation cooperative agreement that we funded and implemented in the early fall, as well as all the work that's going on in the Center of Excellence in Public Health Informatics and the RO1 grant program that is funded as part of this activity.

There's also a lot of work going on through the division on state and local readiness through what used to be called the billion-dollar grant program, or the cooperative agreement to public health, in their attempt to implement all of the then recommendations, of which surveillance is part, or early event detection is a part.

So we're putting together what we think is the framework that will show the work that is currently ongoing and will help us identify where there are gaps, and will be hearing from all of our public health partners, hopefully, by the middle or end of February.

So again, I'll entertain more questions on that.

So with that, Lisa, I think I'll turn it back over to you.

Lisa Hines: Okay. Great. Thank you.

As Lynn said, we're going to hold all of our questions until the end of our update time. And next, we have Dr. Jerry Tokars, our Associate Director for Science. He's going to provide a short update as well.

Jerry Tokars: Thank you, Lisa.

I have four bullets to talk about. The first two are user groups, the monitoring response user groups, and then application user group. Also, then I'll talk about a series of additional user input meetings that we are starting to mount.

And then, finally, I want to sneak in one other bullet which is to talk about influenza surveillance, a project that we've developed internally called the Influenza Data Summary.

So, starting off with the first user group, the monitoring response user group. The purpose here was to review the methods that our BioSense analysts are using to look at the data, and when they would go outside CDC and contact state or local health departments or hospitals.

We've had two meetings, I think, in about the past six months. One factor is that the data analysis methods that we used to identify data anomalies changed, probably in the middle of the year. It became substantially more specific, so they do not flag a lot of anomalies. And I don't think we have too much of a problem in BioSense currently with a lot of spurious data anomalies.

We also, as part of the conference call meetings, discussed various factors that these data anomalies should have before we would become concerned about them. And our analysts are applying those things, such as it would last more than one day, or it would be a particularly severe disease process.

And so I think we are at a stage where we have a fairly good draft method for doing the monitoring and response, and we'll continue to sort of hone that, over the next few months and years, as we get new data types and new hospitals, then obviously, the situation will change.

Next I'll move to the application working group.

I think that group has also had two conference calls. They have dealt with one of the modules that's been requested quite a bit over the years, which would be a custom event creator. This would allow the user to link, for example, respiratory disease with some other type of indicators using an AND or an OR type of logic.

The group has looked at a sample interface that was created by our partners at Johns Hopkins Applied Physics Lab, and I actually was not on the last conference call, Colleen Martin led that, but that seemed to go very well and we seem to have a draft plan to create this custom event creator.

So, some other things on the BioSense applications, we are planning to have a new release of the application in April. One of the biggest changes that will occur would be that VA and DoD data will be migrated from, as Lynn said, the left side of the application, which is the older screen, to the right side, the newer screen.

There'll be a couple of other things that we hope to get in to start looking at some of the laboratory data and the patient detail area. And we're also going to try to put in a stratified time series chart which is similar to the health indicators page in the VA and DoD view, where you can view multiple time series graphs on one page.

So my next bullet would be that we want to have a series of conference calls with our users. We will, instead of having these dealing with the specific topic, this will be specific to a given geographic area.

For example, we would try to include the state health department. And if there was a major hospital chain or hospital group that was contributing in that state, we would try to have a conference call at the same time. And this will allow us to look at real data, data that all of the participants would have the jurisdiction to look at, and get more detailed input on the data and the utility of the analysis.

So my last topic will be then influenza.

I mentioned that we are working on a software product called Influenza Data Summary, and it's built in SAS. Currently, it is external to the main BioSense application. It incorporates six types of data, three that are from BioSense, and three from standard influenza surveillance. It is very user friendly, with click down capabilities. And we hope to be showing that to our users in various formats, and getting opinions on that.

With that, I will turn it back over to Lisa.

Lisa Hines: All right. Thank you.

(Marcia)?

Coordinator: Thank you.

At this time, we will begin the question and answer session. If you'd like to ask a question, please press star 1 in your touchtone phone. To withdraw your question, please press star 2.

Once again, to ask a question, please press star 1.

One moment please.

Our first question comes from (Ray Auer) of the Los Angeles Public Health.

You may ask your question.

(Ray Auer): Yeah. I actually have a question for Lynn and a question for Jerry.

My question for Lynn is ─ and maybe you mentioned it in your presentation and I just missed it ─ and my apologies if I did, but that is that the transfer of data directly to local health departments with the ability to analyze that data in their own systems, how is that coming?

I know our effort here, we're trying to get server configured. I'm wondering if anyone else had yet acted with that.

And the question for…

Lynn Steele: I wish Barry were on the phone, because he's really separating that from the architecture perspective.

I know we're doing it in Ohio. I know it is working in Ohio. And we're absolutely committed to making that happen, to put the data feed and sending

it to state and local public health. But I'm just not up to date on where we are on the actual implementation.

(Ray Auer): Okay. So you said Jerry will address that.

Lynn Steele: Barry. Barry is not here.

(Ray Auer): Oh, I'm sorry. Barry. Okay.

Lynn Steele: We will make sure. I know Lisa wants to post some of the topics from this discussion, and we'll post answers to questions.

(Ray Auer): Okay. And that's Ohio State?

Lynn Steele: The State of Ohio, I believe.

(Ray Auer): Okay. Great. That was wonderful.

The question for Jerry is: you mentioned the anomaly flagging has become more specific. And we at the moment are reasonably happy using the CUSUM algorithm in terms of not seeing too many anomalies, but the SMART score continues to give us a lot of stuff that we don't know what to do with. So we've frankly tended to use CUSUM and not so much SMART.

I'm wondering if that is expected to continue long term or what the plan is there.

Jerry Tokars: Yeah. We're planning to discontinue the use of the SMART score when we migrate VA and DoD data over to our new architecture. That will be then out of the picture.

We use an algorithm that's similar to the CUSUM method, it's an off-shoot of that, and we think there's a few small theoretical advantages, but essentially it's very similar.

(Ray Auer): Thank you.

Coordinator: Our next question comes from (Denise Robin) of NAHDO.

You may ask your question.

(Denise Robin): Hello? Can you hear me?

Lynn Steele: Yes.

(Denise Robin): This is Denise Robin and thank you for inviting me to participate in the call. I represent states who collect hospital data, emergency department data, ambulatory data from all payers and all providers in that ─ their respective ─ states.

And so my question is: what are your plans if any, to roll existing data feeds or data systems into BioSense? And could these states, or under a public health facility, or their hospital reporting log, be an aggregator for some of these data? Because I'm not sure what authority or regional data aggregation function could occur under. And I think some of the RHIOs are just so disparate right now, I don't know if they're the legitimate, you know, authority for some of the data aggregation.

Lynn Steele: Right. You make all the good points. And in a place like Indiana, it's the RHIO that is submitting data to the state, because it's so mature.

(Denise Robin): Right. And it comes from various places to the state, but the state as one of the hubs.

Lynn Steele: Sure. I mean I think there are many different models that exist. Perhaps, I wasn't very clear. We are working with the states that have existing relationships and are receiving data. Those were the states that I mentioned.

We're also in many cases enabling this exchange of data for public health purposes where there is not an existing system, or where a healthcare system wasn't enabled to transfer date to the state.

Good model may be the state of Ohio where there was a large health system who didn't have the capability or the IT resources to become even part of the state system. So by the BioSense program helping them to implement that, they were able not only to contribute data as part of this national program, but contribute to the state system. And then, we're also working with the state system to receive the limited data set that they currently receive.

So we really are trying to capitalize and develop a network of networks. Again, whatever way we can support public health having access to data, we are definitely open to the opportunity and the possibility.

(Denise Robin): Well, and can I follow that for just another idea because I really do appreciate all that you're doing, and I'm excited about how NAHDO and its members can help you with your efforts.

But Ohio is one example where the health department and some legislators for many years have been supportive of collecting even more data, all patient, all

payer, emergency department, and other, to the state health department, data that they don't have in the public system now.

But maybe, just with a little bit of infrastructure building or funding, you know, we can promulgate more broad law in Ohio, in states like Ohio, you know, to get more access to broader types of data for both public health and for BioSense. So that's just my plug there.

Lynn Steele: But I don't want to speak for the state of Ohio. Maybe we'll hear from them on this call.

(Denise Robin): Yeah, yeah.

Lynn Steele: Thank you.

Coordinator: The next question comes from Dan Drociuk of South Carolina Department of Health and Environment.

You may ask your question.

Dan Drociuk: Thank you.

Lynn and Jerry, hi. This is Dan.

Question: Lynn, in your presentation you had mentioned about the National Data Source, I think it was the second bullet point, regarding microlab data from LabCorp, is that going to be denominator data or offset test results?

Lynn Steele: I'll let Jerry answer that.

Dan Drociuk: Thank you.

Jerry Tokars: Oh, no, yeah, it's test result.

Dan Drociuk: Okay. So test ordered and results of test.

Jerry Tokars: Barry actually can answer this a little bit better. But I think in the first iteration is going to be more results and then we will maybe shortly thereafter start getting the test order.

Dan Drociuk: Okay.

I guess going back to Lynn's presentation about the current 356 hospitals that are participating, 23 of which are currently transmitting lab orders and lab results, correct?

Lynn Steele: That's correct.

Dan Drociuk: Okay. So that would be totaled test order and results of each.

Jerry Tokars: Yes. Right.

Dan Drociuk: Okay.

Lynn Steele: That's correct.

Dan Drociuk: Thank you.

Coordinator: Our next question comes from Teresa Hamby.
[We did not receive the actual question with the transcript]

Christina Tan: Hi, this is Tina Tan from the New Jersey Department of Health. Actually, this is a follow-up to the last question about the commercial laboratory testing.

Just out of curiosity, I know a lot of state health departments and these various national electronic laboratory reporting conference calls have to a certain degree had struggles and challenges as far as getting commercial, laboratory, direct electronic data feeds for their (NEDSS) purposes for the notifiable diseases reporting.

And, you know, we're just curious whether this BioSense, the work on this, could be translatable to for the (NEDSS) purposes for the notifiable diseases.

I mean, we currently do receive direct line feeds from LabCorp as far as individual results are concerned, but we certainly are encountering a lot of challenges with some of the other commercial labs and it certainly has a lot of ─ would have direct impact on ─ our just pure recordable disease database itself.

Lynn Steele: Thank you for you question.

I think when we started BioSense, the purpose was to exchange real-time health data that existed in health IT systems for the purposes of real-time surveillance. I was one of the people out there recruiting hospitals and data sources.

And, of course, it only makes sense that this creates a platform or an infrastructure to do other work around notifiable disease reporting, which has

different requirements such as (additional) data fields and not anonymized data, but real name data.

CDC is finally coming together to really recognize that the infrastructure that is made capable because of BioSense really does take us a lot further forward, and how to use that infrastructure for other surveillance purposes.
But increasingly, we're working to develop, and there will be some pilot projects that do absolutely what you've just said, and that is to use the infrastructure developed for BioSense to advance electronic lab reporting for notifiable diseases, especially. So you'll be hearing more about those.

Again, it feels like Barry is in the middle of everything, but he's kind of taking the lead for a lot of those discussions.

And in our discussions with LabCorp and some of the other national commercial laboratories, that's definitely the win for them, that we're helping to develop some infrastructure for the ease of that kind of state-by-state recording for notifiable diseases.

So, again, we're balancing two different sorts of purposes for the use of the data. And various funding streams that we will bring together. I feel that CDC has made the commitment to do that.

Christina Tan: Thank you. That would be extremely helpful because it ─ from kind of fragmented approach that a lot of the states have been having,─ doesn't seem to make sense.

Lynn Steele: I agree.

Coordinator: Our next question comes from Gulzar Shah of National Association of Health.

You may ask your question.

Gulzar Shah: Yes. Hi. I have two quick questions. One is about the national data sources that you mentioned. Specifically, what data sources are you thinking of?

And as the people are beginning to talk about availability of electronic health records, would you be expanding your databases? For instance, I think that Medicaid Pharmacy data sets are also, you know, useful databases.

Lynn Steele: Yeah. I mentioned all the national data sources that are on our plans right now and they are the VA and Department Defense healthcare data.

Gulzar Shah: Okay. My question was…

Lynn Steele: We're talking about real-time data for the purposes of this activity.

Gulzar Shah: That's right.

My second question was about the data that you've got from hospitals. Is it the identified or is it record level with all the identifiers in it?

Lynn Steele: I encourage you to go to our web site, which is www.cdc.gov/biosense to get more clarity around a lot of the data and the program. It is not considered the identified data in that it contains patient zip code and other things that would help us perform population analyses on the data.

It is anonymized data, and it's received at CDC, and it's displayed to state and local public health, meaning, we can track that it's the same person, but we don't have that person's name or other obvious personalized identifiers.

For public health purposes, local public health can contact the healthcare facility as they would for any public health investigation for requirements, for investigation, and receive that identified link, the actual patient name.

Gulzar Shah: All right. Thank you and that answered my question.

Coordinator: The next question comes from Mr. (David Flay), Chicago Department of Health.

You may ask your question.

(David Flay): Hi. My question is about the influenza data summary. I was wondering if you can just describe or list six data courses that are going into that, and I'm also wondering what the timeline is.

Thanks.

Jerry Tokars: The current six data sources are the three from the routine surveillance, or the sentinel providers data, the laboratories, the WHO/NRVSS laboratory. And then the third is the state and territorial epidemiologist's qualitative judgment of whether activity is widespread.

From BioSense, the three are the VA and DoD, final diagnosis from outpatients, from the hospital data, the diagnosis, and from the hospital data, the chief complaints.

And we are looking at possibly adding a few other sources as well, but this is what we've got so far.

The timeline is that we want to have this available to public health people outside CDC by the fall of this year. And so, we are going to be sort of gradually improving this tool, showing it around and coming up with the plans, so it can be accessed by outside people.

(David Flay): Great. Thank you.

Coordinator: Once again, to ask a question, you may press star-1.

One moment please.

I currently have no questions.

Lisa Hines: All right, this is Lisa Hines again.

We want to thank everyone for participating in the call this afternoon, and we hope that the updates we provided were helpful, and the opportunity to ask questions was helpful for us, and I'm sure for you as well.

So thank you again for your participation, and we'll bid you all a good afternoon.

Lynn Steele: Thank you.

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