

**HIT Policy Committee
Certification/Adoption Workgroup
Workforce Subgroup
Transcript
August 10, 2013**

Presentation

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Good afternoon everyone. This is Michelle Consolazio with the Office of the National Coordinator. This is a meeting of the Health IT Policy Certification/Adoption Workgroup, Workforce Subgroup. This is a public call and there will be time for public comment at the end of the call. As a reminder, the meeting is being transcribed and recorded, so please state your name before speaking. I will now take roll. Larry Wolf?

Larry Wolf – Health IT Strategist – Kindred Healthcare

Present.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Norma Morganti?

Norma Morganti – Executive Director, Health Information Technology Learning Resource Expansion Grant – Cuyahoga Community College

Here.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Bill Hersh? Don Gull? Joe Heyman? Michelle Dougherty?

Michelle L. Dougherty, MA, RHIA, CHP – Director of Research and Development – AHIMA Foundation

Here.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Patricia Dombrowski? Samantha Burch? Steve Waldren?

Steven E. Waldren, MD, MS – Healthcare IT Strategist & Physician Informaticist – American Academy of Family Physicians

Here.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Elizabeth Royal?

Elizabeth Royal – Senior Policy Coordinator – SEIU

Here.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

JoAnn Klinedinst? Ed Salsberg? Nancy Brooks? Stuart Werner? Are there any ONC staff members on the line?

Chitra Mohla, MS – Director, Workforce Programs Office of Provider Adoption Support (OPAS) – Office of the National Coordinator

This is Chitra Mohla.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Hey Chitra.

Matthew Swain, MPH – Office of Economic Analysis, Evaluation and Modeling - Office of the National Coordinator

Hi, this is Matt Swain.

Michelle Consolazio – Federal Advisory Committee Act Program Lead – Office of the National Coordinator

Hi Matt. And with that, I will turn it back to you Larry.

Larry Wolf – Health IT Strategist – Kindred Healthcare

I wanted to welcome everybody; we've got some new folks on. We've got some old business that we're looking to move forward on, so it should be a pretty good call. Also, maybe we should begin actually with introducing our not new to the workgroup, but new as co-chair. So, Norma Morganti will be serving with me as co-chair for this workgroup. I thought I'd give her a chance to say a quick hello, then we'll get on with the rest of our agenda.

Norma Morganti – Executive Director, Health Information Technology Learning Resource Expansion Grant – Cuyahoga Community College

Well thank you Larry. It's an honor to work alongside with Larry to continue the phenomenal work that has been done already on the workgroup and just our continued movement towards our deliverables. Happy to provide the additional hands on deck and really appreciate Larry's continued leadership in all of this. So thank you.

Larry Wolf – Health IT Strategist – Kindred Healthcare

You're welcome and I'm looking forward to having a co-chair back, it's been a while since Scott was with us and it's always good to have a pair of folks working together to keep this moving forward. We also have a couple of new members who joined the workgroup. I didn't catch if they were actually here for the roll call, so, Elizabeth Royal, are you on?

Elizabeth Royal – Senior Policy Coordinator – SEIU

I am here, thank you. Did you – sorry.

Larry Wolf – Health IT Strategist – Kindred Healthcare

Yeah, so go ahead and say a few words of introduction.

Elizabeth Royal – Senior Policy Coordinator – SEIU

Sure. I'm Elizabeth Royal, I am a workforce development policy analyst for the Service Employees International Union and I have a fairly deep background with direct care workers and workforce development. And I'm very excited to participate in this workgroup and I have the great Debbie King as sort of my mentor, so, I'm very excited to begin work.

Larry Wolf – Health IT Strategist – Kindred Healthcare

That's great. We're looking forward to having you on our group here. And JoAnn Klinedinst, are you on as well? I'm guessing she hasn't been able to join us yet. I'll put in a very quick summary of her. So she's part of the HIMSS management team, she's been with them for several years now and sort of brings a perspective of another large member organization that is very active with many aspects of Health IT, strong vendor representation as well as provider representation among their members. I'm looking forward to having that point of view in a lot of the discussions we have.

Okay. Maybe we should dive into what we've got to cover today. So we've got two primary topics for today. We've got a review of some of the workforce training programs that ONC has already funded. And then we're going to have some planning discussion time for the standard occupational code work. It's sort of funny to be in timeframes where the planning horizon says we're looking at 2018, and that's still five years away, but actually, we've got work to do before the end of this year. So, good reminder that something that's five years away needs activity in the present to make it happen. So I'm looking forward to the NORC, I think we've got a lot of good things we're going to hear from them in their reporting. And a reminder though that we need to sort of pay attention to the time going with that, so, we're off to a good start, we're actually ahead of schedule, but let's not get too lost in the past, because we need to also have some time to go forward into the future. So with that, why don't we get the NORC slides up and turn it over to Matt and Kristina.

Chitra Mohla, MS – Director, Workforce Programs Office of Provider Adoption Support (OPAS) – Office of the National Coordinator

Larry, JoAnn Klinedinst is on the call as well. Actually, can you bring her in as a speaker?

Caitlin Collins – Project Coordinator, Altarum Institute

We have the operator looking for her now.

Chitra Mohla, MS – Director, Workforce Programs Office of Provider Adoption Support (OPAS) – Office of the National Coordinator

Thank you. I am –

W

She is connected.

Larry Wolf – Health IT Strategist – Kindred Healthcare

JoAnn, are you on?

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

I am.

Larry Wolf – Health IT Strategist – Kindred Healthcare

Okay.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Oh, my goodness, I'm in the virtual land over here and I heard your introduction of me, I couldn't speak, I was speechless. I apologize, but I'm very pleased to be part of this group and looking forward to contributing in any way that my skill sets and abilities will allow me to with over 25 years of healthcare IT experience in both the ambulatory as well as the acute care setting. So thank you.

Larry Wolf – Health IT Strategist – Kindred Healthcare

So – and JoAnn, as you've already discovered, the hardest part of being on this workgroup is navigating which phone number you're supposed to be calling in.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Exactly. Oh, goodness. But thank you for being patient with me.

Larry Wolf – Health IT Strategist – Kindred Healthcare

Okay, so we'll work with that before the next call, I think you're going to be fine. So thanks for getting on with us, this is great.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Certainly.

Larry Wolf – Health IT Strategist – Kindred Healthcare

Okay, so now let's get the NORC stuff up.

Matthew Swain, MPH – Office of Economic Analysis, Evaluation and Modeling – Office of the National Coordinator for Health Information Technology

Great. Well thank you for having us today. My name is Matt Swain, I'm with ONC Office of Economic Analysis, Evaluation and Modeling, and with me today, well hopefully, I think she's experiencing some technical difficulties right now, is Kristina Lowell, who is the principal investigator from NORC at the University of Chicago. So today we're going to walk through a couple of different items.

First, I'm going to provide a brief overview of progress made to date, both by the Community College Training Program and the University-based Training Program. It's just going to be a quick snapshot on the progress the programs have made as far as enrolling and graduating students. I'll keep it short because Kristina Lowell has a lot of good information from findings from the program evaluation and she'll help be able to contextualize some of the information that I present some information that goes beyond what the quantitative numbers show as far as program completes. And then finally, we'd like to have some time for discussion. We hope to answer any questions that you may have, as well as we would like for you to help answer some questions that we have. So, with that I'm ready to jump in. Next slide please.

So before discussing the progress that the programs have made, I thought this slide would be useful to show that the demand for health IT professionals has been steadily increasing since the passage of the HITECH Act. This is analysis that my team and I conducted using an algorithm of machine learning for online job postings. The graphic towards the left shows that the number of online job postings has tripled since HITECH has passed. The graphic on the right shows that the number of companies with online job postings has also doubled. And this compliments recent research I've been seeing out there, conducted by organizations like HIMSS and CHIME, where they found the number of employers hiring health IT staff have increased, that shortages have also increased during this time period, because they cannot find as quickly as they would like, the health IT professionals to fill their needs. And one of the things that we're doing with the evaluation is trying to assess whether or not the students are finding jobs and if they're not, is there any additional information that could help understand why students that have gone through these programs are not finding the jobs that are out there. Let's go to the next slide please.

So this graphic shows a cumulative number of students that have trained in the program, as well as the cumulative number of students that have completed the program. And as you can see, close to 20,000 students have completed the community college program to date. This is quite impressive, but there also has been some attrition, and one of the things that we're doing with the program evaluation, which Kristina can provide additional detail, is trying to understand why students have dropped out. And some of the key reasons that have been popping out have been the program has been too rigorous, too much of a time commitment and some students have actually left the program early due to finding employment in Health IT. And as you can see, these trend lines are starting to flatten out, as these programs funds at I believe two or three of the Community College Consortia have already finished training students. Next slide please.

So this graphic here shows the breakout of students trained, enrolled and either withdrew or failed across the five regions funded by ONC. There is some discrep – there are some variation in the completion rate among the five regions. Bellevue, which represents the Northwest has the best completion rate among the five consortia. Next slide please. And this slide here shows the distribution of community college students trained in the program across the United States. I think it's pretty impressive that around 18 or 19 states have trained 400+ students. It also is quite impressive that the program has touched every single state across the country, including states that don't have community colleges participating in our program. Each of the points on the map represents where there is a community college. Next slide please.

So jumping into the University-based Training Program, their goal is to train over 1600 students. To date they've enrolled students past that goal. I want to caveat this graphic by, and I have it in the left corner, that the reporting period for this data is of May of this past year, so I'm guess that with the most recent cohort graduating, that the enrollment and graduating numbers will have increased since this graphic was created a couple months back. But as you see, we're well on our way to reaching our goal for completing students. Next slide please. And this graphic breaks it out by the nine participating universities in our program. To date, almost all the universities have reached their enrollment training goals and Columbia University has so far surpassed their overall graduating goal. Next slide please.

And this graphic here breaks out the training by the various roles offered. As you can see, the clinician and public health leader and health information management and exchange have been the two most popular roles, both exceeding the enrollment targets. Some of the other – or all the other roles have not reached their enrollment target as of yet. Next slide please. Great, so now that I've provided you with the overall snapshot of the current progress made by the University-based Training Program and the Community College Consortia Training Program, I'm going to pass it over to Kristina Lowell.

Kristina is the principal investigator for NORC, who won competitive contract to conduct a multi-year program evaluation. To date they've just actually finished their final primary data collection activity. In sum they've conducted 13 surveys of students and faculty and conducted well over a dozen site visits. I think there are some pretty interesting findings as far as student satisfaction, employment in health IT types of positions that students have gained. We're still in the process of going through and conducting more complicated analyses, all this we hope to include in a Summative Evaluation Report, which will be released sometime this December, on HealthIT.gov currently. And we can share with you after the meeting, there are links of various reports that NORC has already completed, which today's presentation synthesizes some of the important points. So with that, I'm going to turn it over to Kristina.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Thank you Matt and I apologize, I was having some technical snafus. I'm actually participating only by phone, so I'm going a little bit blind in terms of the slides, so I'll trust you to keep the slides moving along. So, I assume we're on the transition slide, overview of the evaluation, so we can move on to the background slide, slide 11. As Matt mentioned, we received the –

Larry Wolf – Health IT Strategist – Kindred Healthcare

We have a slide numbering problem, the overview slide is actually – the background slide is actually slide 10.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Okay, but the next one, if you could go on to 11 or the one with Background at the top, are we there?

Larry Wolf – Health IT Strategist – Kindred Healthcare

The one with background at the top is slide number 10.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Okay, so slide 10 please. From now on I'll just say next slide, but we'll start with slide 10, background. NORC has been working for the past three years now on the independent evaluation of the workforce program and we were tasked with evaluating all four components of the program, the Community College Consortia, the Curriculum Development Center's effort to develop the training materials for those community colleges, the University-based Training and then finally the competency exam component. So our period of performance ends this December, so we're wrapping up, as Matt mentioned, we've pretty much finished our data collection and we're now in the process of synthesizing what we've learned. I should also emphasize that at the start of our contract, we were kind of getting underway as the programs themselves were. So, our role with respect to the program has shifted over time. Early on the data we were collecting was kind of being fed back to the awardees in as close to real-time as possible to help them improve their implementation processes and I can speak a bit to that as well.

Moving on to the next slide. Research questions and data collection, this just gives a brief overview of the very high level research questions that we are pursuing. The first being what processes the grantees use to implement the programs and meet the basic goals of the program? Second, the extent to which the grantees met their requirements, and Matt addressed some of that with respect to the numeric targets, but we've been thinking through creatively, along with ONC, over the past several years as to what other requirements and what other goals the programs are seeking to achieve. And we've been trying to get a handle on how they're coming on those fronts as well. And then lastly, and perhaps most important, the extent to which the students who enrolled in and graduated from these programs actually ended up getting jobs in the field of Health IT. So you could argue that's the overarching purpose of the program.

So on the right-hand side of the slide you see the various data collection efforts that we've embarked upon. First are the surveys. As Matt said, we've done 13 surveys and in a couple of slides I'll get into kind of how those were structured, but we did a number of student surveys on both the community college side and the university-based side and then we did a single faculty survey of the instructors in the community colleges. This quantitative work was supplemented with a pretty significant qualitative effort. We did a number of site visits to the schools, which were tremendously informative and helpful. We put together a pretty rich agenda for those visits that was – that included focus groups with students, with faculty, with employers, a number of semi-structured interviews with the leadership of the programs. And we kind of supplemented what we were learning from the survey data with some of the anecdotal information, but also some of the administrative data that the schools were providing to ONC. They were kind enough to share that with us as well. So in sum, this is a mixed methods effort and I'll talk a bit about how we used our various data collection efforts to inform one another.

Next slide please. This is the transition to a discussion of the community college evaluation. So I'm going to talk through our findings component by component and just kind of thinking through what we've learned in the course of our various data collection efforts. So moving on to the methodology slide, this just gives an overview of the various surveys that we conducted on the community college side. We did three cohorts, we surveyed three cohorts of students over time and each cohort received both a baseline and a follow up survey. Baseline is a bit of a misnomer, but we've been calling it the baseline since the beginning. The baseline survey was conducted as the cohort of students was estimated to be emerging from the program. So we tried to capture them, that first row there the matriculation date reflects when the students were enrolled in the program, but we were trying to capture them as they proceeded through the program on time, when they would be expected to be graduating and then the follow up survey was conducted six months later. So the last row in the table includes the field periods.

The number of respondents, you can see we had a significant number of students in all cohorts and then we were really pleased with the response rates. This was an online survey, so we were pretty persistent in our follow up, and our efforts to prompt those who had yet to respond to the survey to do so. But this really allowed us to get a pretty broad set of perspectives from students across the lifespan of the program. Before moving on I should emphasize that these surveys were conducted among samples of students, so we sampled schools from the Community College Consortia and then within those schools, a sample of students. And each cohort captured a different sample of schools as well. So, moving on to the next slide there.

We asked students as part of the survey, what their basic or primary reasons for entering the program were and the various shades of blue here reflect the three cohorts. And as you can see, in cohorts one and two, the overwhelming reason for entering the program tended to be helping the students obtain a new job, they were entering the program because they wanted to either get a new job, a better job or, in many cases, kind of switch fields altogether. To tell the story in a simple way, the population that went through this program tended to be from either the healthcare field or the IT field, the idea being that this program would provide kind of the other side of the equation for students and help them move into the health IT field.

An interesting finding in this slide is in that second cluster of bars there, you can see that there is a shift in cohort 3 with improving skills for one's current job, all of a sudden it's sending a much more important role. And I think this is a reflection of both the population of students in cohort 3, there were more incumbent workers, those who were actually working while they were in the program and/or perhaps kind of the realities of the job market and the perceived impact of a brief training program like this. But it was interesting to see how our discussions with students in the course of our site visits kind of reflected these basic data points as well.

But I think more abstractly, this slide also raises the important question that we've been wrestling with, that I think ONC has been wrestling with, of what the appropriate metrics for evaluating the success of this program really are, is it new jobs? Is it new folks moving into Health IT? Is it promotion or a salary increase in one's current job? Is it the individual sense that they are improving their current skill set? So we really structured our – both our surveys and our qualitative discussions with an eye toward getting at these multiple angles.

So moving on to the next slide, employment prior to program enrollment and this kind of supports what I just said. In that you can see there that while the majority of students in each cohort were employed full time actually before entering the program, the share was much larger in cohort 3, where you saw more than two-thirds of the cohort 3 respondents employed full time prior to entering the program. So this supports the idea that many folks who are working in a healthcare setting, they were either in hospitals or physician practices, were looking to assume more of a health IT role or health IT related responsibilities in their current job setting. The next slide, pre and post-program employment, tells a nice story in terms of increases in employment following the program. So to the extent that one major objective of this program was to increase employment that seems to have been fulfilled, especially in the first cohorts where the baseline number was a bit lower.

The next slide gets into what these people were actually doing. So this focuses on the sub-sample of those who were currently employed and currently employed in health IT and you can see that about a third described their job as a health IT job, but we quickly learned that it all depends on how you ask the question. And if you followed that up with whether you have health IT responsibilities, you see these bars get a lot larger. So moving on to the next slide, slide 18, we added this follow up question in the third cohort and you can see that almost doubled the share working either explicitly in health IT or who described their job as health IT related. So, unfortunately we only have that data point for the third cohort, but I think it's a telling story right there.

The next slide, student's employment at follow up gets a bit more into the weeds in terms of the job titles that people have or the roles that they have in their current job. So here, unfortunately we're dealing with relatively small numbers, but you can see there's a nice spread of job titles and roles that match pretty closely to the roles for which the program trained its students. So, a small share of folks were providers, again, there's an increase there in the third cohort, but then kind of the technical roles and support roles that a lot of the curriculum materials were geared toward are represented in the current job titles of the graduates.

The next slide also tells a very positive story about the program. This – it's kind of a busy table here, but it gets at the perceived impact of the program on one's kind of job and professional trajectory. So the top half of the table focuses on those working for the same employer as they were before the program and the bottom gets at those who actually switched employers. In both cases you see a nice share of respondents basically saying that they feel the program helped them, in terms of either receiving a salary increase, receiving a promotion, being able to switch their roles or get a new title. And then in the bottom half of the table you see almost or in some cases a little more than two-thirds of folks really feeling they had the program to thank for obtaining their current job or the title or position that they managed to land. So that, I think, is a nice, clean measure of the – kind of the marginal impact of this program and the training experience on these students' career experiences.

The next slide, student employment cohort 3 follow up, which I guess is 21, health IT settings. So this is of those – just focusing on cohort 3 just to tell a clean story here, it shows a real diversity of job settings. Those who had a health IT job were working in settings as diverse as hospitals, government agencies, physician offices, IT consulting firms, vendors. So, they were kind of all over the place and we really saw this and got a nice mix of perspectives in our qualitative work as well, as I'll talk about in a little bit. A lot of it seemed to vary regionally in terms of what the local healthcare system looked like, but a lot of it was just a function of the schools and the programs relationships with local employers and who those employers happened to be I think, too.

The next slide reflects data we got in response to a survey item on what people were actually doing in these jobs, what their responsibilities were, more than half reported that they were actually using an electronic health record. A substantial number had training responsibilities, designing clinical intervention, so, I think this speaks to kind of the variety of roles and skills that this program was helping people prepare for. It also reflects, I think, what we heard firsthand from a number of students about really the importance of hands-on experience. I think one of the challenges that many students faced with this program, both in terms of being able to digest the training material, but also when it came time to interview for a new job, that there just simply wasn't enough time and in many cases the resources weren't there to give students an opportunity to actually touch the technology that they were hoping to use as part of their jobs.

The next slide is a nice pictorial of the high levels of satisfaction across all cohorts, especially cohort 3 at the bottom there. The left side is just a basic satisfaction question, but you can see that pretty large majorities in three cohorts reported being either very or somewhat satisfied with the program. On the right hand side there you see a corresponding willingness to recommend the program to others, so I think that's a good hallmark of the success of the program as well.

The next slide focuses on the site visits for a moment. We did conduct a number of these trips, we did 11 in-person visits and 5 virtual site visits. And the virtual visits were conducted with schools that did a lot of their teaching online, so it just simply didn't make sense to go to schools in-person when the students were, in many cases, kind of scattered all over the country. So – but we had kind of equally rich discussions with folks either in a webinar format or over the phone and we selected the schools on the basis of their location. We tried to get a nice range in terms of where schools were both geographically and also in terms of whether they were located in urban or rural settings, the roles that they offered so schools did have the choice of offering specific roles, so we tried to get some diversity there. The size of the schools, whether they had struggled with attrition, learning format, which refers to whether the school did their teaching in-person or online or some hybrid thereof. And then we looked at state employment rates just to get some kind of admittedly crude snapshot of the employment situation in the state.

And the agendas that we followed covered everything from the – in the case of the Consortium lead schools, the directors of the Consortia, the individual – the directors of the individual school programs and their administrative and support teams. Where applicable, individuals who had responsibility for job training – I'm sorry, job placement, faculty members, students and then local employers, just to get a sense of their awareness of the program and their perceptions of the extent to which it was preparing people appropriately for the type of jobs they were seeking to fill themselves as employers.

The next slide discusses some of the key findings, and there are so many. And as Matt said, a number of our reports are already on the ONC website, so if you're interested in hearing more, you can go there or follow up with us directly or we can answer any questions at the end of the presentation, if we have time. I think one of the leading concerns among a number of constituencies is just that the program wasn't long enough to really give people significant experience and training. And that even though a tremendously large and rich volume of material was included in the training, that just the perception of a for the most part not for credit program from perspective employers points of view might have been that they weren't prepared for the rigors of the health IT job.

We also saw very starkly as we went around the country that regional labor market conditions played a huge role in how people were faring as they emerged from the program. It also really shaped the populations enrolled. So in some cases we saw, as I mentioned, a number of incumbent workers who were coming from large hospitals or healthcare systems. In other areas, students seemed to be dominated by folks who had come from an IT background, so really minimal to no healthcare experience, had heard about the program through word of mouth, had maybe been laid off from a previous job. Those students really tended to struggle more with the job search experience.

In terms of recommended improvements for the program, as I mentioned earlier, we – everyone seemed to be clamoring for more hands on experience both because they felt it would have helped them absorb the course material. So whether it be internship opportunities or lab exercises as part of the program itself, there was really pretty much a universal demand for more hands on experience. The second bullet at the bottom there really speaks to this need for a better mechanism for connecting employers with students. I mean, we've seen in many surveys that have been done unconnected to this program and in kind of the common literature, there's obviously a great demand among employers for people with these skills and yet many of the students coming out of this program were at somewhat of a loss on how to find those employers. So the idea of kind of a repository was suggested by many people, students and administrators alike, to connect students and employers. And we did speak to some schools about their relationships with other ONC funded programs, so especially the Regional Extension Centers, the relationship between the RECs and the workforce grantees really varied tremendously. Some had strong collaborative partnerships, others felt like they were pretty much being ignored by the RECs, so that was an interesting source of variation as we went around the country as well.

The next slide focuses on two other themes that we've pursued, one on just the implementation experience. I think by and large the schools really appreciated the flexibility that they had in terms of designing and launching their programs, whether it be the particular role to focus on, how to use the curriculum materials. A lot of schools spent a tremendous amount of I won't say time, because they didn't have much time, but resources early on really tweaking the curriculum materials, the roles, figuring out how to best match up instructors with the material they were teaching. Based on the school's previous experience with health IT training, based on the faculty that they had available, and I think they all felt that those efforts served them well, in terms of attracting the right mix of students and retaining them over time.

There was really a nice degree of collaboration across the schools both within region and across regions. They definitely appreciated the opportunities that ONC provided in terms of opportunities to share lessons learned, whether in regular conference calls or meetings that they really learned a lot from one another over time, and it seems like those relationships will be sustained beyond the life of the program. And they also had really taken advantage of the local expertise and resources within their communities. And I think the typical faculty member in these programs was not a career academic, they were generally people serving in an adjunct capacity, who were working in many cases, a very senior capacity in a health IT setting themselves. So, students spoke very positively about how that enhanced the material that they were learning, so whether just real world examples or the connections that those faculty were able to provide them to future perspective employers, that that approach was very well received.

In terms of perceptions of the students, I think schools varied a lot in how rigorously they vetted applicants. Some felt that students were kind of unprepared for the rigor of the program. I think part of this varied as a function of the student profile at individual schools, but I think in many cases the average student age was a lot older than your average community college student, I think the mean age was in the early 40s. A lot of students spoke pretty compellingly about the challenge of hitting the books, so to speak, after twenty years being out of college and struggling with their responsibilities, so that was a challenge. But I think there is also an interesting story in terms of whether students were coming from healthcare backgrounds or IT backgrounds and how that prepared them for the nature of the curriculum material.

So moving on to the next slide, this is just transitioning to the university-based side of the story. The universities funded through this program, there were nine universities. They're very different from the community colleges for obvious reasons, but it was interesting kind of going back and forth between the colleges and the universities in so far as their experiences were similar in some ways and very different in others. So the next slide, the UBT survey methodology is just analogous slide to the one I presented at the beginning of the community college presentation. We took a very similar approach in conducting a survey with three cohorts of students, a baseline and a follow up timed in the same way. We had even better response rates, one key difference is because there are simply fewer of them, and we did feel the survey among all UBT students, so it was not a sample in this case.

So, we'll move on to the next one. This shows employment status at baseline. So as you can see, as with the community college students, the majority were currently working and stated that they were not seeking another job. And the other key difference with these students relative to the community college students is they were perhaps not surprisingly, much more seasoned in terms of both graduate school experience and the nature of their jobs. So I think by and large, these were folks who were looking to kind of beef up their skills in their current job setting as opposed to make a career transitional together.

The next slide focuses on the two kind of subgroups of students this is slide 30. At the top there you see we're focusing on students who either had a job or had one lined up, so those who are not really seeking a job, this is more than half of whom had a job in health IT. And again you see a very positive reflection of the program. So majority of the students at the top there feel the skills they learned in the program really helped them with their current health IT job or in their current job. The bottom of the table focuses on those seeking a job, and again you see pretty optimistic perspectives on the impact that the program will ultimately have in helping them land the type of health IT job they were hoping to get.

Moving on to the next slide, the pie chart on the right, this focuses on of those employed full time or part time, so that's 92% of the sample, about two-thirds were employed in health IT. So, that is an interesting piece of context in terms of the impact that this program might have in terms of shifting people into another field altogether, this is at follow up. So some of those people might not have characterized themselves as working in health IT before, but they were apparently largely safely ensconced in a health IT setting at follow up, so again, six months following their completion of the program.

The next slide, employment status and preparation again focuses on those employed in health IT at the top and at the bottom, working in health IT with the same employer as before the program. We've merged cohorts 1 and 2 here, as you may recall from the table at the beginning, cohort 2 was much smaller just by virtue of kind of the patterns of enrollment in the program, so for sample size reasons, we merged them. Of those who were employed in health IT, almost half are with a new employer, almost two-thirds described themselves as having managerial responsibilities. So I mentioned, this is generally a more senior population and more than half had a training role as well. And then focusing on those who are with the same employer as before, more than a third had received a salary increase since completing the program, about a fifth had received a promotion and about a third had received a new title. So, the extent to which the program seemed to have provided some mobility, even within the same employer is certainly a piece of the story.

Moving on to the next slide, this is again switching to the site visits on the university side. We did visit all nine grantees and their partners. Several of the universities had partnered with other schools so for instance in New York, Columbia was the grantee, but they had kind of a joint program with NYU. And the nature of these partnerships varied a lot, so in some cases it was a partnership, but the application process was totally separate, the nature of the program was separate. But we did visit the partners because one of the kind of neat things that these grantees seemed to have gotten out of this experience is having formed some pretty close and productive professional relationships with other schools. The visits were structured very similarly in terms of giving us a chance to speak to program directors and their administrative teams, faculty students, career counselors and local employers. So, they were – the visits were structured in a way that really resembled the community college visits.

The next slide just presents the student's views of the program. And this is obviously a very high level and greatly boiled down synopsis of what we learned from the students, but by and large they were very positive about the extent to which the program had provided them a really solid foundation in health IT. They echoed the community college students in terms of emphasizing the importance of hands on experience. Many of them were already working in a clinical setting, so – but technically had no formal health IT role or training beforehand. And schools varied a lot in terms of the opportunities that they did provide students, I mean they were generally more well developed internship and practicum opportunities, so those were tremendously successful in terms of just increasing student's satisfaction with the program. And in many cases students ended up employed with the sponsor of their practicum.

The schools were also extremely creative in structuring the assignments on the university side, so in terms of group assignments, even in universities that did a lot of online training, in Colorado for instance, there was a lot of creativity exercise in terms of how to use different online strategies for collaboration. But they said that these experiences both helped them master the subject matter, but also gave them good kind of thought skills, learning how to work with a diverse group. I think the schools made great efforts that were – that paid off in terms of putting together diverse teams of students with very different backgrounds to kind of make the real world experience of being thrown together with a diverse group of colleagues to wrestle with a problem.

The next slide, which I'm having a hard time getting on my screen, so bear with me, is the employers perspective, so what employers are seeking in employees. So these are the discussions we had with employers in the area. They echoed what the students had said, that they really looked to look for students with hands on experience, having touched the various EHRs that they would be using in their setting. And they spoke to willingness to sponsor interns and work with schools looking to develop internship programs. And not surprisingly, the schools that had distance-based learning had a much greater challenge setting up these programs, just because the students were scattered everywhere. In many cases, there were a number of actually international students, but the employers spoke very compellingly of the importance of these experiences, in terms of expanding both – not just the technical backgrounds of the students, but kind of immersing them in the clinical culture and helping them apply what they were learning in the classroom in that setting.

So that said, and this is – it's important to emphasize that a lot of the employers we spoke with were – we were connected to them by the schools themselves. That said, many were not familiar with kind of the details of what the ONC funded program was teaching the students. But when we described the roles and described how the program was set up, they said it really resonated with their employment needs. Some expressed some confusion about the roles, but by and large they were willing to be put in touch with students and consider such students for roles in their settings.

So one kind of overarching challenge, I think, that everyone wrestled with, so we heard this from students, we heard this from faculty, we heard it from the directors of the program, that the time in which this program was implemented was obviously a time and is a time of kind of rapid change in the health IT environment. So – and I know the curriculum developers wrestled with this in the subsequent iterations of the curriculum materials on the community college side, that really needing to update the curricula in real time, just to reflect what was going on in the industry and in the policy environment. So that is something that schools tried to kind of facilitate by having again the faculty who are really immersed in the space themselves. But that's something that everybody recognized as a challenge with this program.

So I think in the interest of time, and I – and at ONC's request, I think we'll pause here. We had a few slides on the curriculum development effort and the competency exams, but I just want to be sure that we have a little bit of time for discussion. As I mentioned earlier, we're kind of in the process of synthesizing all that we've learned. We're running the survey data in a few different ways to address some of the interesting questions that have come up in the course of different presentations, so we're definitely eager to hear from you as to how the reporting on this evaluation can be made most useful to the policy community. We're also trying to superimpose what we've learned on what we know about meaningful use and kind of adoption more broadly in the areas in which these training programs have evolved. So that, I think, will add a new layer of interest to our reporting, but I'll stop here and take any questions and suggestions from all of you. So thank you so much.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Kristina, this is JoAnn Klinedinst with HIMSS.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Hi there, how are you?

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

I'm fine. Thank you so much for a very, very informative presentation. On slide 21, you discussed the – in cohort number 3, the various health IT settings where cohorts had gained employment. I'm interested to know the breakdown of positions within each of those settings.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Um hmm.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Now – yes, go ahead.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Yeah, so that's something, I mean I guess I would caution you, you can see at the top of those columns there that the numbers are pretty small, so once you drill down beneath those percentages, you're going to get into single digits. But we certainly have the ability to cross-tabulate those data, so we can look, and it would frankly be kind of qualitative. But, we can look at the cross-tab between these responses and the responses that we got on more detailed title – the title question.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Yeah, and I'm not so interested in the numbers, but I'm very curious about the responsibilities.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Yup – that.

Larry Wolf – Health IT Strategist – Kindred Healthcare

This is Larry Wolf. I guess what struck me is we spent a lot of time in the past talking about the community college program and I feel like the university program in many ways is very different from the college program – the community college program. Both in terms of who attended, how long the program was for and a sense of really what they learned. Maybe it's my prejudice in just hearing this stuff quickly today, but it seems like the university program was in general much more successful, the students felt like they were actually – they already had jobs, they got jobs, and they were promoted. The community college folks who might – this was more, and recognizing cohort 1 and 2 were when the job markets were tighter than they might be now, seeking to get new jobs, maybe that was a bit of a stretch. And it makes me wonder about other programs that both the community colleges and the universities run, are we doing better or worse than other programs in general with respect to student perceptions and job placements?

Joseph M. Heyman, MD – Whittier IPA

Also Larry, while you're asking that question – this is Joe. I just wanted to ask whether the program – the courses in both the university setting and the community college setting were significantly different or were they the same?

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Yeah, so that's – so I'll take the second question from you Joe first. The major structural difference here was that the community college training materials were developed by five curriculum development centers that were themselves universities. So that's a whole other story that could generate a couple of papers right there, but there were some really interesting interactions between those curriculum developers and the colleges and that was just an awkward relationship for some, especially given the tremendous time constraints under which all of these grantees were operating.

The universities, by contrast, developed their own materials. By and large they had pre-existing health IT training programs. They drew on multiple schools within the universities, so Colorado, for example, at the virtual site visit we did with them, we were struck by the tremendous diversity of the folks who were running the program. So we had people from the Pharmacy School, from the Nursing School, from the Business School all on the line, all collaborating on this. And I think by and large, the universities seemed to benefit tremendously from those interdisciplinary relationships that this program kind of forced into being.

In terms of the – your point Larry about the basic question of whether the UBT training program could be considered more successful, and I think it's just a more – they're really two different animals. I think, for reasons due to the structural differences that I just quickly described, just the simple selection effect of who the students were and their previous training. A number of the students in the university programs were on the line, they had five graduate degrees under their belts prior to entering this program. I think the programs were set up to serve two very different purposes, but I do think what you said about the community college, one take away from the community college story is that it was just six months is not a lot of time. And these are, for the most part, kind of mid-career, middle-aged people trying to either switch gears entirely or immerse themselves in a totally new culture or totally new language, in many cases, and that six months just is not a lot of time to do that.

Larry Wolf – Health IT Strategist – Kindred Healthcare

– any other questions from the workgroup?

Joseph M. Heyman, MD – Whittier IPA

Was there a significant difference in the ages for the university people versus the community college people, did I miss that somewhere?

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

I don't think there was, I think the big difference was in the prior kind of educational background and employment history.

Joseph M. Heyman, MD – Whittier IPA

I see.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

So on the UBT side, even though officially people are not supposed to have any health IT experience or training prior to entering the UBT program, we had a number of nurses, we had a number of people who were kind of tangentially working around the edges of health IT and spoke the language already. But in terms of just the basic demographics, I don't think age was a big point of contrast between the two populations.

Patricia Dombrowski, MA – Director of the Life Science Informatics Center - Bellevue College

This is Patricia Dombrowski at Bellevue College. We were among the five Consortia and our average age across the country I believe, Chitra, please keep me honest on this, was in the 40s. So if the question went to the idea of: Were community colleges seeing, for instance, 17 year olds looking for a career pathway? That was not the case at all. And in fact, our programs typically had already degreed and sometimes many degreed participants.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Yup. And the schools spoke – I mean the community colleges were, as I mentioned, some of them are struck by the students just not being prepared for the workload, but I think relative to other community college programs at these schools, they felt these students were arriving much more prepared to buckle down, attrition was much less of a problem. They were viewed as kind of the success stories within the colleges.

Michelle L. Dougherty, RHIA – Director of Research and Development – AHIMA Foundation

This is Michelle Dougherty, I have a couple of quick questions and relates to some degree into our discussion that we'll have shortly. How did the Workforce Program and NORC in evaluation define health IT jobs? I was trying to see if I could get a sense from the various slides and I – at different times saw kind of a broad application. I was curious if your project defined it?

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

For the most part we pivoted off the predetermined roles, so the training roles that the program itself dictated to the school. So, and I actually don't think that those roles are enumerated in these slides, but they match up pretty closely, Michelle, with the roles in slide – I guess it's slide 21 or 19, sorry, I forget which direction I'm off by one, the students employment at follow up slide. So –

W

Slide 19.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

– based on implementation, they – some had a training component to them, and I should emphasize that a number of schools kind of played with these roles a bit, so they merged them in some cases. In others where students wanted to pursue several roles, some allowed students to pursue multiple roles simultaneously; others used one role as a prerequisite for another. But one – a kind of corollary to that is, from the employer's perspective, one of the challenges for many employers was that these roles, as defined, did not match up precisely with the job openings that they had or that they could see themselves having. But there was just a need to kind of constrain the particular track of curriculum materials that a given student would go through in the program. I don't know, Chitra and Matt if you want to provide more background on the development of the roles that was before our time.

Chitra Mohla, MS – Director, Workforce Programs Office of Provider Adoption Support (OPAS) – Office of the National Coordinator

Yes, the roles were defined in 2009, when we were writing the Program announcement. So, at that time we thought we would need these people, sort of the boots on the ground, and as health IT has evolved those roles seem to be changing. Matt? Norma?

Matthew Swain, MPH – Office of Economic Analysis, Evaluation and Modeling – Office of the National Coordinator for Health Information Technology

I just want to add one thing and then as far as the survey is concerned. When we asked the students if they're employed in health IT, as you saw in the community college survey, we didn't define that the first two cohorts and we kept the question the same in the third cohort and you saw a 40%, 30%, 30%. When we asked more about details, do you have responsibilities related to health IT, we did provide more of a definition, this could include working with electronic health record. And we added this because we recognize that a lot of these students were incumbent workers, they could be nurses, they could be other clinicians and they may not consider themselves working in health IT. But when we asked about the health IT related responsibilities, then we saw that in total 60% of these students in that third cohort had a job that involved health IT.

Larry Wolf – Health IT Strategist – Kindred Healthcare

I guess to expand on Michelle's question a little bit, sort of lead into our next topic, I guess we're looking for input and guidance as we look to understand what are the jobs in health IT, if you will, and how should they be classified? So either because of open-ended things you asked the students or where they were responding, or from comments from the employers or anything in your work you've already done, maybe not in this slide deck, that would help us better understand how to look at job categories.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Um hmm.

Matthew Swain, MPH – Office of Economic Analysis, Evaluation and Modeling – Office of the National Coordinator for Health Information Technology

Um hmm. Yeah, and as Kristina mentioned, from the surveys we did ask what is your job title and we did ask their employer. And I think we plan on analyzing this information and we can definitely share it at a future meeting with all of you to at least provide a qualitative sense of what types of roles these students found employment in.

Larry Wolf – Health IT Strategist – Kindred Healthcare

Great.

Michelle L. Dougherty, RHIA – Director of Research and Development – AHIMA Foundation

I had one other quick follow up question and that was regarding the training for the incumbent workforce, is interesting how that trended or tracked differently based on your cohorts and knowing that there is a large workforce that may want – will need additional skills. Did you draw any conclusions on the adequacy of a six-month program for incumbent workers across the different roles, to gain the skill sets they need to either perform better or more efficiently at their job, not necessarily just for promotion purposes, but just to have a skill set with a more IT enabled work environment.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Um hmm. Yeah, that's a great question and I think it's most conducive to some of the qualitative findings we have, so we're actually busily drafting up our summative report, which is drawing heavily on our site visit discussions. Because a number of students – a number of incumbent workers who were students feel quite compellingly about that, but I think it's a – it's a point that I think is best illustrated with concrete examples. So, one of ONC's suggestions actually was that we include some vignettes in our report, so we're in the process of putting those together.

Michelle L. Dougherty, MA, RHIA, CHP – Director of Research and Development – AHIMA Foundation

I know I'm curious if six-months the right timing, did students feel like it was too long, given the pressures of a full time job, other commitments outside of work and education and that they could have succeeded on either a different educational platform or a different time frame.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Yeah, I think nobody – I can honestly say I don't think anybody said that the program was too long, I think they would have preferred more time with maybe the same amount of material and more time if it allowed building in a significant internship or practicum component for those who are not working. For the incumbent workers, I think the best success stories were stories where the employer was actually invested in the employee going through the program. And we actually spoke to a number of employers who had sent, not funded, but kind of worked with their employees to go through the program, and then others who had hired students they had taken on as interns. So I think that tight relationship between the students, the programs and the employers is really one of the biggest predictors of individual student success, whether in landing a new job or really being able to apply what they had learned in their current work environment.

Larry Wolf – Health IT Strategist – Kindred Healthcare

So, we're running a little bit over, but I want to ask you a quick question about the experience with the competency exam.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Um hmm.

Larry Wolf – Health IT Strategist – Kindred Healthcare

So slide 42, which is titled students experience with HITPro Exam at survey follow up.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Um hmm.

Larry Wolf – Health IT Strategist – Kindred Healthcare

Looks like only – less than a quarter of the students took the exam.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Right.

Larry Wolf – Health IT Strategist – Kindred Healthcare

And of those, less than two-thirds – roughly two-thirds thought the courses helped them.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Right.

Larry Wolf – Health IT Strategist – Kindred Healthcare

Do you have any further insights into the exam and how it was perceived and why we have such low numbers?

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Yeah, so I mean one important thing that you can probably infer from these numbers is that the exam was not a mandatory component of the program, so it was launched very separately from the Community College Programs, it was actually available to people who didn't even go through the program. But there's a lot of variation across schools in terms of both their basic awareness of the exam, the role that the exam played and preparation for the exam played in the training experience. In a very few cases, schools required it and therefore the curriculum was more tightly geared to that – to the lead-up to the exam itself.

I think the basic take-away was that students did not – they were a) anxious about what was going to be kind of the match between what they had learned and what was going to be on the exam. B) they were wary of whether the exam mattered, given that it didn't put any letters after their name, passing the exam didn't provide any kind of signal to employers who in most cases were unaware of the exam. So I think there was a sense that kind of why bother, and I think that explains the low take up. In some cases schools sent faculty to take – to sit for the exam itself so that they were then able to teach to the exam a bit. But I think by and large, and again, Matt and Chitra, I don't know if you want to speak to this, but the numbers were much lower than anticipated in terms of people sitting for the exam.

Larry Wolf – Health IT Strategist – Kindred Healthcare

And maybe this is a question for the ONC folks – this looked at only at the exam among people who were in the Community College Program, has there been a study of the exam itself more generally?

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Well there are numbers on how many people have taken the exam regardless of whether they went through the program, but to my knowledge, Matt and Chitra – I don't know, if there have been any independent studies or assessments of the exam. My sense is no.

Matthew Swain, MPH – Office of Economic Analysis, Evaluation and Modeling – Office of the National Coordinator for Health Information Technology

Yeah. We only have information on the number of folks that have taken it and we have some demographic information on who these folks were. But you did – I don't know if we mentioned this, but you did conduct virtual focus groups with folks that sat for the exam that were not enrolled in the Community College Program, and I think information from that effort also provided some unique perspectives.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Yeah, but very small numbers of people, I mean –

Matthew Swain, MPH – Office of Economic Analysis, Evaluation and Modeling – Office of the National Coordinator for Health Information Technology

Yeah, it wasn't a quantitative study or anything, it just I think qualitatively provided some useful information. But yeah –

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

And those are summarized on the follow – on I guess two slides following the table.

Larry Wolf – Health IT Strategist – Kindred Healthcare

So, I hate to cut this short, but we are running long –

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Yes, I apologize.

Larry Wolf – Health IT Strategist – Kindred Healthcare

– get onto our other topics.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Okay, well I'll hop off and if anybody –

Larry Wolf – Health IT Strategist – Kindred Healthcare

Thanks a lot for giving us this summary.

Kristina Hanson Lowell, PhD – Associate Director, Healthcare Research – National Opinion Research Center (NORC) at the University of Chicago

Great, thank you all. Bye.

Norma Morganti – Executive Director, Health Information Technology Learning Resource Expansion Grant – Cuyahoga Community College

Thank you.

Larry Wolf – Health IT Strategist – Kindred Healthcare

Okay, let's get on to SOC planning.

Michelle L. Dougherty, MA, RHIA, CHP – Director of Research and Development – AHIMA Foundation

Sounds good, thank you. And thank you Chitra, she had sent me a note I think after our last meeting and we were talking about the SOC process and what our role might be, and what were some of the infrastructure issues and a potential way that we could approach this. And so she asked that I just put together a few slides as basically a sounding board, a way to talk about a possible approach if this group feels that there are – kind of leadership areas that we could advance as a sub-workgroup. So I put these slides together and really there are four key steps in a possible approach. And so if you want to move to the next slide.

The first step, in my mind as I thought about and investigated and we've had conversations both on this workgroup, I've had it as well in my role with the AHIMA Foundation as we evaluate this opportunity that doesn't come along very often. But one of the underlying things that I am challenged by, in terms of how to proceed with potential recommendations for new Health IT SOC's is, how do we define the Health IT workforce? And I think our conversation in the last agenda item kind of reiterated maybe some of our challenges. Are we advancing one role? Is it just a computer-related IS system developer type of a role? Is it something larger? And we've done some early work and had some discussions over the past year around who do we think is part of the umbrella of a Health IT workforce, and we even have some diagrams. We have some great 3-D diagrams, just to bring us back to some fantastic work of our members. But in general, when we tried to simplify it, we had three pillars in the clinical, that kind of information or informatics grouping and then in that more technical information system technical management leadership. And so in the first step, I would suggest that we need to figure out ourselves that – how it is that we're going to define the Health IT workforce so that we can know what to advance or what's in and what's out. And then that builds the next step for how we might proceed.

The next slide just talks about a step 2. And I just want – without going back to the previous slide, but I think that's step 1, we – the workforce presentation that we just had, the information that ONC has, that NORC has, I think could be highly valuable, or at least informative as we put some structure around that. I see the next step being if – once we agree on a definition and a structure, let's say we do flesh out that there are three pillars to a Health IT workforce, I'm just saying that hypothetically. Then starting to identify the occupations that fit under those pillars would be a useful next step. And I think one of the areas that's still fuzzy in my mind is what's the definition of an occupation versus a job or a role? When I looked at the SOC, I see different levels of granularity, from pretty broad occupations to pretty specific occupations. And so it's hard to get a sense of, and I know the SOC's are based on domains of expertise of domains of function that a person performs, but I think there could – having some advice or input on how to tell the difference between an occupation versus something that might be too granular would be very useful. And then starting to identify what those key occupations are that fall under those pillars.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Michelle, this is JoAnn Klinedinst with HIMSS, could you give an example of the granularity of occupations that you're thinking about?

Michelle L. Dougherty, MA, RHIA, CHP – Director of Research and Development – AHIMA Foundation

Sure – well, when – there are – if you actually scroll down two slides, I think there – I should have a slide that shows major groupings, so there are 23 major groupings in the SOC. And then there are occupations under each and the computer and mathematical occupation, and I don't have a drill down slide, but it gets – it breaks down what you might call kind of IT-related roles into computer and information research scientist, into computer and information analyst, software developers and programmers, database administrators, different support specialists. And so there's some granularity there, and you see some granularity as well in the healthcare practitioners, but kind of logically around the type of health professions that we have.

So I was intrigued when I was looking at the breakdown in the computer and mathematical occupations, and the math ones relate to things like actuarial science and research analysis and statistics, just if you're curious about that. So as you get into some of those analyst roles, for example, is – I'm curious about how they started to breakdown what might be the roles in the IT process, or how they decided say information sciences or analytics fall into that category. And the other thing that I think created the question in my mind, we heard from O*NET at our last meeting, and so they start to watch trends in jobs. They have accepted into the O*NET classification system, which has relationships to the SOC, at the BLS, that they have identified a nurse Informaticist role under the computer and math classification. So – and that's a specific occupation as well. So I think understanding, so that we don't too granular or too broad, could be very advantageous.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Thank you Michelle.

Michelle L. Dougherty, MA, RHIA, CHP – Director of Research and Development – AHIMA Foundation

Yup. If you want to scroll back up to the slide that – okay. So then step 3. Once we've i – kind of come to a common ground on what our – what we think the Health IT workforce entails. And have kind of understood occupations versus maybe specific jobs and identify key occupations under our structure of Health IT workforce I think next it's taking a look at the SOC classification and identifying these key occupations we may have identified as important HIT occupations. Do they already fall under the classification in the current structure? Which is – so for example, the computer classif – computer and mathematical classifications are supposed to not necessarily be specific to a domain like healthcare, so it's supposed to cross different types of settings, not necessarily focus on one.

Can we – is that adequate for healthcare? Can we justify or how do we justify if it has to be something specific to healthcare, does it still fall under the computer mathematical area? Does it fall under something in the healthcare domain? Or is it something completely different that the current classification isn't recognizing these types of roles, we'll say? And I don't know that that's the case, this, I think, questions that we may have to ask ourselves. So – and that includes, I think, my second bullet, do we think Health IT occupations could fit under this current structure and we see a logical place for it to be – or them to be, if there's more than one, or is there something that we need to do? And then finally, are there occupations that are missing, and we believe that there are occupations that are missing, so completing that gap analysis and identifying how we'd fit in informatics, for example, seems to be one of those areas. Do we agree or disagree with how it's been placed?

And then the last slide is based on what we've learned and analyzed in the first three steps. We would identify the gaps in Health IT occupations that we think need to be advanced, identifying whether there are current or emerging occupations I think will be very beneficial. Based on the fact I think O*NET is the place where emerging occupations, and I'm not an expert in O*NET and SOC so I don't want to speak for them. I think we'd want to get that information, but based on what we've heard, O*NET appears to be the entity that is monitoring emerging roles and professions, and so there likely is a strategy, in terms of what may be advanced in both areas. If we identify a number of occupations, do we select a handful to be advanced, and we may not necessarily be the group to do it, but then perhaps there's an outreach process that we could identify groups, associations, organizations that might assist in that proposal development process.

And then finally, there may be recommendations, I don't think it's clear to know right now, but are there recommendations that should come from the HIT Policy Committee to the SOC Policy Committee related to HIT workforce classifications that are either broad and overreaching, that may be beneficial in paving a way. So for example, if we think that the computer classification works, but we can justify a Health IT specialty which kind of flies in the face of how they've currently classified occupations, that may be best coming from a policy group, one policy committee to another policy committee. Just as an example, I'm not saying that we would go that way. So those are the kind of four possible steps or process that we could use to move into the SOC proposal development around HIT.

Larry Wolf – Health IT Strategist – Kindred Healthcare

And Michelle, am I right that we're expecting to see some information coming from Department of Labor in terms of the new SOC, where they're going to be looking for input at the end of the year?

Michelle L. Dougherty, MA, RHIA, CHP – Director of Research and Development – AHIMA Foundation

That – yes, and well that's on their website, that's what we've heard as well, that the Federal Register notice will come out towards the end of 2013 with proposals to be submitted in 2014. And then there are some other timelines that the SOC Policy Committee then follows that are outlined on their – the BLS website.

Larry Wolf – Health IT Strategist – Kindred Healthcare

So I sort of feel like this is sort of focusing some of the things we've done earlier, because we've heard a little bit from Labor and from O*NET about some of the work that they've done. And at the very beginning, we did a fair amount of brainstorming around how do we want to think about workforce. Your three pillars notion, I think, accurately sums up the high level piece of that –

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Larry, this is JoAnne Klinedinst with HIMSS.

Larry Wolf – Health IT Strategist – Kindred Healthcare

Sure.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Are you considering feedback, because I would have a recommenda – an alternative recommendation for the three pillars.

Larry Wolf – Health IT Strategist – Kindred Healthcare

Sure. So, yeah, this is all open for discussion, everything –

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Oh, okay, so now's the time or should I wait?

Larry Wolf – Health IT Strategist – Kindred Healthcare

No, I think we should jump in, we've got all of five official minutes and we're going to need public comment as well.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

I believe – I think the three pillars is excellent. That's what I'm focusing on first here, and I, in my role with professional development with HIMSS have always advocated that in order to achieve as well as sustain the meaningful use of Health IT. You have a health information management component, you have a health information technology component, those two working together with the clinical component will achieve as well as sustain meaningful use. So I would like to see just a slight revision here, instead of clinical, I'd recommend clinical informatics, instead of informatics analyst/IM, I would recommend an HIM and instead of IS, I would recommend HIT; so you have the clinical informatics component, health information management component and the health information technology component. These three working together to achieve a totally paperless and electronic environment.

Larry Wolf – Health IT Strategist – Kindred Healthcare

So I guess – so let me take what you've said and add. In some of our earlier discussion was that there are a lot of jobs that really are pretty much pure IT jobs within healthcare organizations that are key infrastructure jobs to make everything work.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Um hmm.

Larry Wolf – Health IT Strategist – Kindred Healthcare

And that those are not necessarily tagged as Health IT jobs. So I think some of our notion of the three things coming together recognized that as a separate area.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Well, and it's the plumbing that – my experience it's the network infrastructure, it's the keeping –

Larry Wolf – Health IT Strategist – Kindred Healthcare

Right.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

– the servers running, it's all the infrastructure, the telecommunications, all these things that are needed to ensure that Health IT can function, as well as the other two pillars –

Larry Wolf – Health IT Strategist – Kindred Healthcare

Yeah.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

– as well. So –

Michelle L. Dougherty, MA, RHIA, CHP – Director of Research and Development – AHIMA Foundation

And I think this is an important first step, it probably needs more than five minutes then we should flesh back out the different perspectives and the diagramming and also bring back in the workforce – some of the workforce training. Because it is interesting to look at different definitions and whether – and I don't necessarily disagree, so – but I think there's some good healthy debate and environmental scanning that's needed for us to really rally around a single approach.

Larry Wolf – Health IT Strategist – Kindred Healthcare

And actually I think that's a very key concept Michelle, that environmental scanning. I think that would really inform where we need to go, probably somewhere – maybe that's what you mean by step 2, part of brainstorming the key occupations, maybe even step 1.

Michelle L. Dougherty, MA, RHIA, CHP – Director of Research and Development – AHIMA Foundation

Yup.

Larry Wolf – Health IT Strategist – Kindred Healthcare

So JoAnn, is this something that HIMSS has some current materials on that would help us with how you guys see workforce or how your members see workforce?

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Um, yes, we have some previous – research that was just released in July that looks at the workforce job perspective, very, very compelling research, and it was in support of what we've heard earlier today. We also have a vast amount of resources in our Career Services area with various job descriptions and things that we post for any organization to review and look at. And there are other documents that we have as well that could certainly form the basis to begin the conversation, so, yes we do.

Larry Wolf – Health IT Strategist – Kindred Healthcare

Because I guess what I'm thinking in terms of some of our next steps is that the framework that Michelle has put out there to begin to sort of frame up what we know and look broadly at it and get educated more about SOC and then look to see if we can put together some recommendations. That those steps are both pretty generic, but also pretty focused and maybe as a workgroup we should actually look to do that over the next few months. Any comments from the others?

Norma Morganti – Executive Director, Health Information Technology Learning Resource Expansion Grant – Cuyahoga Community College

Larry, this is Norma and Michelle, I really appreciate you taking the effort to develop the presentation. And I thought it was very compelling and gives us a lot to think about and Larry I would concur that at least then starting with some of the suggestions that had been recommended on the call today would be a great place to start. And pretty much starting to pull together all of the discussions we've had over the last couple of months.

Larry Wolf – Health IT Strategist – Kindred Healthcare

It would be good to see some of those materials that were just described from HIMSS.

JoAnn W. Klinedinst, CPHIMS, DES, PMP, FHIMSS – Vice President, Professional Development – Health Information Management and Systems Society

Sure, I'm more than happy to pull those together.

Public Comment

Larry Wolf – Health IT Strategist – Kindred Healthcare

Any other comments from the workgroup before we go to public comment? Okay, so I'll get some public comment.

Ashley Griffin – Management Assistant – Altarum Institute

If you are on the phone and would like to make a public comment, please press *1 at this time. If you are listening via your computer speakers, you may dial 1-877-705-2976 and press *1 to be placed in the comment queue. We have no public comments at this time.

Larry Wolf – Health IT Strategist – Kindred Healthcare

Okay. Well, let me thank Matt and Kristina for their report from NORC and Michelle for the framing of the work that we're going to be taking on over the next few months. And JoAnn, welcome, it sounds like the timing's perfect getting you involved with our efforts now. And Chitra, we've got a call scheduled for October some time, is that right?

Chitra Mohla, MS – Director, Workforce Programs Office of Provider Adoption Support (OPAS) – Office of the National Coordinator

Yes we do.

Larry Wolf – Health IT Strategist – Kindred Healthcare

Okay, so, we'll get a reminder out for that and we'll get some materials organized around what we're actually looking to cover.

Chitra Mohla, MS – Director, Workforce Programs Office of Provider Adoption Support (OPAS) – Office of the National Coordinator

The call is on October 17th at 2 p.m.

Larry Wolf – Health IT Strategist – Kindred Healthcare

Okay. So in advance of that, we'll do some more work around the SOC stuff.

W

Sounds great. Thank you.

Larry Wolf – Health IT Strategist – Kindred Healthcare

I think that wraps it up.