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Eric Paternoster

Good morning my name is Eric Paternoster. I am a senior Vice President and head of the insurance, health care, life sciences business unit in Infosys. Thanks a lot for braving the elements today and coming out for seeing us in Jaipur. I have been asked to present our point of view and the activity that we are seeing in the outlook going forward in the health care economy.

We feel like the healthcare area is one that applies across multiple industries. It is not just a vertical in Infosys and I will explain that as we go into this. But that is why; it is an area for tremendous opportunities for us in all geographies and across multiple business units in Infosys. This is the safe harbor from our sponsor Bala and let me go in to some of the backdrop for this.

This is summarizes our point of view and we will carry this through during the presentation. We feel like the participation in the health care economy by both individuals and companies is centered around a few key themes. Some of this data that we will talk about is going to be mostly related to the US here in the first part and that because 50% of the world healthcare spent today, and that is about \$4.7 Trillion is spent in the US right now; and by US multi nationals and their global operations but mostly in the US itself. We have huge per capita spending that is continues to increase. There are huge issues such as the higher re-admission cost that you see which you mentioned which is a global phenomenon where when you have a healthcare issue it is not dealt with successfully the first time and you have to treat it over and over again which multiplies the cost even further; a huge drain on all companies not just companies in US but across the whole world. Whole industries were put at risk in Africa for example when AIDS was at its height in Africa. So this is a global phenomenon about the impact that health care cause, health issues and particularly not being able to prevent or successfully deal with the health event successfully the first time are causing a huge burden on the world economy.

In the US because of affordability issues and Government and private healthcare has dropped significantly partly because of unemployment which is more recent but partly because it has been a trend that has been going on for a long time and companies have been squeezing benefit plans going back well before 2008 when the downturn started. The US corporation and also European governments and corporations have become less competitive than the global market because of the increasing burden that healthcare costs are putting on them both competing against other countries and against other companies.

Now this point about the excess growth in healthcare costs having adverse affect on employment that is mentioned here, this is a key point about the fact that this is not just something that my business unit needs to worry about because we focus on serving so called healthcare companies, heath insurers and healthcare providers, and life sciences companies. Its estimated in US that for every 10% increase in healthcare cost that occurs there are 120,000 fewer jobs that exist in the US because that is how the healthcare cost is being handled by the companies. If they have to pay for the health insurance, they are reducing employment. The number of people employed is going down and the number of lost opportunities for companies, as a result of having to divert investment money to healthcare spending; is estimated at \$28 bn hit and lost revenues across all industries in US. So this is something that is a ubiquitous phenomenon across every industries that we operate in not just our healthcare companies that I serve but the companies that BG serves in manufacturing or Sandeep serves in Retail and Consumer Products, every one of our companies is seeing a loss in business opportunities because of what they are having to worry about in terms of their healthcare cost and how they have to handle that.

Now there are also some opportunities that come with that, and I'll cover that a little bit further. The IT spend on healthcare, already extremely high is going to go up even further, thanks to US healthcare reforms and some of ripple effect that is going to happen in other developing economies, as multinationals equalize benefits and things like that. There is also increasing private insurance trends that we are participating in, in Europe as more and more consumers who can



afford it opt for supplemental coverage so they can cut the cues and get the quality of healthcare that they desire without having to wait for the government-provided healthcare to do it on the government's term. So this convergence that's happening in terms of the healthcare economy, the form that it is taking, if you look across all the countries where we operate we can see the fact that in China which probably has the worst system in terms of the potential exposure to an individual for catastrophic illness, to the US where it's the most privatized and puts the heaviest burden on both the employer and the individual, there is a convergence that is occurring to where the European model is adding a private component, the US model is very heavily adding a government component and the world is sort of approaching more similarities across the different country models for delivering healthcare. Multi nationals are driving us somewhat but it is also the strong presence of the consumer voice in healthcare that is also driving us.

Now, there are certain drivers that are occurring to varying degrees across the whole world. Now, these are US data points here, but there is an ageing population at varying rate that is happening globally and if you look at our US market where we derive the majority of our healthcare revenue, you can see that 15% of the population over 64 they are driving 75% of the total healthcare costs in US. So any government approach to health care reforms in the US has to strongly address the fact of the ageing population. And in Europe and in Japan that issue is even greater. They have much slower population growth and that percentage is getting skewed even higher toward having to worry about ageing population and the burden that it is placing on a smaller and smaller working population in terms of even if it is a 100% government, the tax burden on the work population to pay for that is getting worse and worse outside of the US.

The other major factor that drives the cost significantly in all countries is this issue of chronic disease. I am talking about things like diabetes, cardiac diseases and high blood pressure being the three most prevalent. And it is a phenomenon across all regions of the world differing degrees in different countries in terms of which might be worse but all of them in every country put a tremendous burden on the healthcare system and eat up a significant portion of the healthcare costs. In the US it's 70%, it's probably not so high in developing countries but their percentage is steadily increasing as developing countries are able to move beyond a simple prevention and dealing with chronic conditions only at the very late stages to be able to move up much earlier and deal with it just like the US has been trying to do. And the gap is closing very rapidly in terms of what is possible in a developing country to deal with a chronic disease versus what somewhere like the US or UK does the chronic disease management.

Obesity is a global phenomenon in any developing economy this is getting more and more oppressive as a potential chronic condition globally to be added to the other three that I mentioned. Particularly worrying in the young, data is still being developed and analyzed but we are not sure but it appears that childhood obesity is an accelerator to adding to the type of prospering that would happen later on. Historically in US and elsewhere obesity is something that usually comes on at the onset of maturity, young adults are where you first started tracking it and worrying about it. Now there is a whole sub-industry built around childhood obesity in the US and it is a big worry in places like India and China with the growth of the middle class happening so rapidly that it is going to add a burden on the healthcare system. That really was not expected; everybody expected that it would just be something that as you age more things would happen to you, while we find that childhood obesity is actually an accelerator to that.

The wild card of epidemics, we all familiar with what that can do to the healthcare system when something like SARS or swine flu hits without warning and with the globalization today it can become a local phenomenon and move to being very rapidly a global phenomenon overnight. So these drivers are impacting the ecosystem in a way to create these three major trends that we see and this is what we feel every company globally should be worrying about with respect to healthcare. Not just healthcare companies because it's a regulatory requirement or market



opportunities for them but it can be both of those and a cross burden on every company in any industry.

Post prevention – Prevention is being integrated into all of healthcare. It's proven just like in so many other things that addressing something early on will make it much easier to solve later on and it will drive that sort of cost down significantly. So early detection of a chronic condition as well as maintaining general overall health will drive the whole cost with healthcare system in a country down. Much more than whatever innovation you bring to like the later stages of treatment, if you can effectively invest in prevention you will have the greatest benefit. And if you look at a lot of our clients and see what they are doing internally they have all kinds of innovations going on. They have incentive programs for smoking cessation, they have weight loss clubs. All these things are investments that they are making and they can see tangible benefits almost from year one in reducing what their healthcare burden is. That will be particularly important when the Obama healthcare reforms are rolled out in US. This is an opportunity in the rest of the world that is just starting to be picked up and I think that all players should be playing a role in this to a greater degree that they are today.

So the products and services innovation is the next area that I would like to talk about. The emerging market has become a center for trying out new technologies. They have problems that are unique; they have population growth that is providing a huge incentive to deal with this. They have a better mix in terms of the demographic for being able to design new healthcare systems. They don't have to be subsidized to deal with the ageing population that I've mentioned. So we see the emerging markets as an area of increasing investment for us and where our clients across multiple industries are trying out some of these new technologies that they want to see if that, they can extend into the healthcare area, get to some of those other industries than what they are doing a little bit later. But we see the intersection of various technologies that used to be a part and also the last point under the products and services innovation is something that I know all of you have heard about which is this healthcare market of one, or personalized healthcare which blends into the bottom area but there is tremendous innovation around things like next generation, gene sequencing so that you can actually tailor treatments instead of the huge population segments of the tens and thousands down to the much smaller population segments ultimately tailoring it even at the individual level over time. And then as again this part of the consumer centricity, it's not just what I just mentioned which is the technology aspect and what is happening with the science but there are also behavioral things that are occurring where the consumer is much more literate than ever before. The consumer does their own research on the internet about what they have, what treatments are available and ask very tough questions instead of deferring to the care provider as in the past, deferring to whoever is the providing the insurance benefit, whether it is the government or their employer, they are not accepting the answers that they used to accept in the past. They want to have a stake in the management on their own condition. They want to be able to trade off how much they invest in insurance and how much they self-insure as individuals versus putting it in paying more out of their pockets along the way. And this could be whether it is indirect through taxation or direct in the US tax system.

Then we have telemedicine happening over the world. It will be the solution to the world healthcare problem in India and China. It has got increasing popularity in the US. We can't get physicians in US to go out into rural areas any more than it is possible in India and China to get physicians to go to rural areas. So this is something that is being innovated in every geography except probably in Europe, it's not really doing so much in it but Asia, US and Canada are spending huge amount of time in telemedicine, how to basically take the top notch knowledge that we have about critical condition and apply it out to an individual who has that condition no matter where they are located.

This is what I want to talk about where this isn't just something that we worry about in my business unit. This gives you a view of what other companies that we work with see as the opportunity across non-traditional market segments for them. They see the ability to generate growth when



some of the other areas they have operated in are being shut down. I mean if you look at the first one Google, has their personal health record that they let you access and store your own personal health data. Microsoft has a couple of initiatives around health data management, the Amalga and HealthVault. Amazon with their Elastic Compute Cloud has mentioned that they want to and have a sales effort underway with healthcare providers in developed countries currently but they have expanded beyond that eventually to store their health information which is getting to be a heavier and heavier cost on the system for each healthcare provider to maintain these gigantic databases of the complete clinical history for anybody that has come in and utilized their services. When you go to listen to Subu later and hear about the new commerce and what we are doing in terms of cloud computing, this is where the healthcare economy trends that we are seeing and the new commerce come together in the cloud and something about Kris was talking about some of the huge opportunities that we see on the cloud. Because all these things I've mentioned for them are Cloud offerings and we are working with two of them currently and in discussion with the third around what their healthcare initiatives are.

We have a strong strategic partnership with Microsoft and their healthcare vertical. We have system of customizing tele presence for telemedicine and for medical education. We are working closely with Nvidia to design customized chips for biotech and for medical monitoring and we are working with them to take it to market currently. So our product engineering group is working with high-tech manufacturers, so this is an example of an initiative that is not being driven by my business unit, it's another business unit. The company in that has either seen the opportunity or we are suggesting the opportunity to them based on what we are seeing in the healthcare economy.

In financial services I'm sure a lot of you are aware of this, in health insurance we have a number of companies in Europe that are banks or even retailers seeing the huge opportunity that was for the supplemental insurance because the people buying it are the consumers, the holy grail consumer that everybody is going after. The middle class and above consumer that has disposable income and for their convenience factor, for being able to get to a certain provider that they want to see instead of the government mandated provider. They are willing to pay a private insurer who has a network as provider and actually pay twice, pay it to the government which everybody is required to do to support the government healthcare system. But then pay again for the ability to do non-emergency services at a time and place of your choosing instead of what the government chooses for you. So virtually in all economies, health insurers are struggling to keep up with the innovation that is happening from financial services companies, consumer product companies, telecom companies who have excellent knowledge about their consumer that they are planning to offer a health insurance offering to them. And they have data about their consumers that they can leverage for marketing and to do market entry much faster than say a traditional health insurer trying to do the traditional expansion into a new global market. So, all of our USbased health insurers that we work with are seeing a major concern not with each other going into a new geography but with non-traditional companies that they are competing against in this geography.

Second one we have a long-term fine relationship with one of the leading providers for providing credits scores in a credit card and mortgage industries and they are seeing a tremendous opportunity to provide scores both for hospitals to look at, for decision-making on care based on cranking through all the healthcare information that the hospital has about their member population and then supplying back to them some of the same kind of insights that they applied in traditionally financial services about what would be the most effective care and predicting what will happen. And I was just trying to get at that point I mentioned at the beginning of having to do the readmission problem. How do you deal with the problems successfully the first time? This credit scoring company is actually making more progress than a lot of other companies that have been in the healthcare industry for years. And we also are working with some of these non-traditional entrants to give them the actual aerial data that has been lacking in traditional healthcare



insurance. There are really some of these predictable modeling algorithms for that credit score company. And again that's a company that has been in service for many years with our banking units. It's not any company that anybody would ever consider to be a healthcare company, but there is a strong possibility that they could become one of the leaders in health information because of they are applying their analytical capability to the healthcare economy.

In publishing and services some of the big names there have built new business units just around serving the need for healthcare and life sciences for storing, processing, providing their best-inclass, indexing and search capabilities back to academia, to the legal community, and to people that are new entrants in the market. Basically they have superior ability to process content bringing it up to the healthcare and life sciences industry because where else is there so much content that has been built up. And there is a huge regulatory burden that's added to every year that they see a great opportunity for being able to deal with. We are working with one of them with our LPO unit so basically take it from the medical litigation standpoint and create a sub library to their traditional legal document service that they have. To tie it to healthcare, legal opinions, healthcare decisions and build out a whole new sub-business for them that is expected to grow faster than some of their long running businesses that they have that they have been doing over 20 years. And then in publishing services in the wellness area a lot of companies that have been either just in health insurance or smaller companies that are focused in disease management have been acquiring and developing wellness capabilities targeting the ageing population and some of these are turning to either partnerships or trying to develop it on their own, to publish the type of content that this educated consumer that is ageing, wants to access to improve their health.

In the retail consumer products areas there is a lot of convergence that is happening between our traditional strong consumer products companies that we have been working with and healthcare companies that you never would have thought that would be considering them competition but our traditional healthcare client is actually viewing this segment as the source of some of their greatest potential competition. P&G has acquired a concierge network of providers that are currently used for some of their high content products that have some health content to be able to provide expert advice related to those products. It could be expanded significantly beyond that. CVS Caremark has got minute clinics put into the majority of its stores now. We have Kroger's the grocery chain that has firstly put a pharmacy in. About 10 to 15 years ago they went after CVS Caremark and built pharmacies into their stores, now they put clinics into their stores to strive more business for their pharmacies and to be able to try to make all these superstores, they are trying to handle everything, now they have added a healthcare component.

In the communications area we are seeing all kinds of opportunities for telemedicine, for people to actually use the state-of-the-art technology that exists on the mobile and bring health information down to the lowest common denominator. So just like in financial services which is developing countries are a source of a great innovation and taking financial services transactions down to the hand held, they also would probably be the source of the greatest innovation for transmitting health information and actually conducting telemedicine doing monitoring another activities. We are working with a medical device manufacturer and creating a patch that would service remote transmitter for your personal health data, monitoring your heart beat and other blood pressure, other factors that can be handled through a patch technology and transmitting them via a mobile technology to a provider. So this is example of the kind of innovation that is possible today and why we see this opportunity not being one confined to the traditional healthcare segment. So again to summarize, the drivers we see here are listed on the left and the focus areas for the innovation that's happening, the three key trends that we are trying to work on across multiple industries are affordability, prevention, and patients centricity.

As Shibu touched on some of these a little bit but I wanted to talk for a few minutes about some of the early investments in this space that have happened and what we have driven out of it. In the healthcare life sciences practice itself this is just what we are doing with the traditional companies,



that in some way you would consider a healthcare company. This isn't including the companies that I have mentioned that we are working with; there might be in other sectors on a healthcare play. But just in the healthcare industry segment some of the data around it, we have over 7000 employees working in healthcare and pharma across the world but when you add in what is working with all these other companies in other industries, we are probably over 10,000 employees that are working on healthcare and pharma with initiatives across the entire industry landscape that synthesis operates in. So the cent percent of our revenues translates to closer to cent percent of our employees as well that are operating in this space and the number keeps going up. We were in this segment, the healthcare and life sciences segment grew many times faster than the Infosys growth the last fiscal year because it never slowed down. People were still in the US healthcare spending went up, we had huge increase even in the US with the uncertainty around healthcare reforms, huge increase in the US healthcare business that we were doing as well as the developing markets in Europe, we were establishing a stronger presence there in these industries. But some of the things on the left that we developed iTransfom I want to talk about that briefly because Shibu referred to that. There is a Y2K type of event that occurring in the US. The mandate was extended once already and it is unlikely that it is going to get extended again because what this involves is there is certain diagnostic codes that are used to add the healthcare system to enable payers to interpret a diagnosis that a provider has made and the provider is required to categorize what they see in a patient in order for the reimbursement to occur. So if you do not accurately record what the set of diagnostics codes, you are not going to get compensated correctly. So the current set that is in effect in the US since ICD-9 is the new set of diagnostic codes that has been out for number of years called ICD-10, and this is a many to many conversion. It is not trivial like Y2K was by comparison. So it is impossible to do a fully automated conversion of ICD-9 to ICD-10. There is a significant opportunity to do business transformation if you don't wait too long to do this conversion. Just like in Y2K a lot of companies that went about it early or able to bring in an ERP system transform their company while dealing with something as mundane as the Y2K event same opportunity exist here. The mandates for ICD-10 are 20:13 currently. And the healthcare reform means the granularity provided by the ICD-10 code and that is why it is not expected for that date to get extended again. There was a sub-compliance requirement which Shibu referred to was 50:10 that is the EDI transmission protocol. There was a 40:10, the 50:10 conversions that just handles what is the format for passing this health information between different players in the system. That mandate is approaching much sooner next year. So at this point it can't really be extended and everybody is underway on that. Now what we have done with iTransform is built a suite of tools. We licensed this product. It was developed between my business unit and our product engineering organization. We have created a product that will start at the first stage which is doing an assessment where you just scan your entire technology environment and find every place where you are potentially going to be impacted by an ICD-9, ICD-10, or 40:10 to 50:10 conversion requirements. Then we have a series of tools after that for automating the conversions to the greatest extent possible. Like I said because it is a many to many conversion which you cannot build business rules to handle every possible conversion, there will be parts of this conversion effort that will be manual in any company. And especially if you want to take advantage of this for business transformation opportunities, you think about it, if a set of diagnostics has been blown out into three times that number of codes and there is radically different reimbursement rate for that new set of codes from the smallest to the largest, there is a tremendous business benefit to a provider to be able to accurately say what the precise code is. So there is reengineering of diagnoses processes in providers that need to happen to take advantage of those transformation opportunities. That is why it cannot just be a straight automated conversion, that being said, we think the 70% or so can be a straight automated conversion. We feel we are already seeing interest. We sold this to over half of our existing health insurance clients and we are seeing an opportunity now the providers with smaller annuity, I think they were hoping for another change in the date but now it is becoming obvious that the administration feels like disgranularity is going to be immediate component to drive down healthcare spending, so we feel like the licensing opportunities will now move into the provider market. We have sold it to one provider, all the rest of sales have been in the payer markets and there is a series of projects both



consulting and traditional IT services projects that get built around buying the license to this suite of products. So there is a lot of flexibility involved with it. To some companies we just sold a license and they have done the work themselves at least for the assessment and for other clients, we are their partner, all the way through from an assessment consulting project, using our assessment, all the way through is doing the conversion through a cross walk technology that we have that does this many to many mapping that I talked about. This is an example of an investment we started. Even before it was clear whether we actually started it before the last time the date was changed. The day was changed about two years ago and we were just starting to lay out what this products suite would like. We decided to stay committed to it because with healthcare reform we guess correctly that healthcare reform would say that this was a necessary conversion and we thought that once healthcare reforms mandated that it had to happen and it is actually the requirement for this is the same by the way as what the final completion of healthcare reform is, it is 2013, which is same is the date that the Obama administration has announced for all elements of the healthcare system being transformed in the U.S. So it turned out to be a good bet to make and so we are proceeding with continued investment in ads and building out the team as the number of clients' increases on iTransform.

We have another offering that we are starting to work on which is 'iExchange'. I do not know how familiar you are with the U.S. Health Reform but there is a requirement for every one of the 50 states in the U.S. to set up at least one healthcare exchange for dealing with the uninsured population. There is something like 40 million uninsured that most people, there are higher and lower estimates, but I think that is the most commonly used number and the approach when they decided to not eliminate the private health insurance system to deliver healthcare reform, the approach that they have taken in dealing with the uninsured problem is to say that each state is mandated to set up an exchange. And that exchange will basically be open to qualifying health insurers that can come in with a suite of products but definitely an affordable product for uninsured to be able to purchase on the exchange with a lot of that purchase does not all of it, depending on the income level being handled by government subsidy and so there will be some kind of voucher system or transfer payments of sometime is yet to be established exact model that is going to be employed, but even somebody that has no taxable income would through some kind of subsidization, probably a voucher system, will go on to an exchange, it has to be low tax as well as high tax and purchase their insurance. So it is also the ability for higher income individuals and these exchanges to purchase insurance directly and bypass the way that it works today which is in an employer centric model. So this is part of the evolution of how health insurance will be handled in the U.S. These exchanges once in place, will be almost impossible to unravel will be extremely difficult because it will be in the fabric of the of the system and this is like \$50 bn of itself that is being created that the estimate just by 2013 what it's going to consist of when you look at all the spending, it is going to have to happen. This is an unfunded mandate where the federal government has just said, 50 states! You have to do this. They are not providing on any money to do it. And so the states will be highly motivated to do this in a most cost effective manner possible. So some state governments that traditionally wanted to build everything themselves and not have any infrastructure out side of the state will be very open to using cloud technologies. Some space that were resistance working with anything other than a U.S. company that had all U.S. employees doing all the work will be very open to off shoring and whatever else they can do to drive the cost to this down, because right now a number of states have no idea how they are going to pace with this. So we are very excited about this opportunity. Infosys is big, but we are not big enough to take the storm by itself. So this is an ecosystem play, we have to do this with partners and we are in discussions with some of the partners in other areas like hi-tech and infrastructure that can supply things that we are not capable of doing on the scale that is necessary for this. So this will be something where Infosys will be a participant, we are going to bring the healthcare knowledge but the infrastructure maybe supplied by somebody else that is a much more known player in the government space in terms of infrastructure today. So we hope to get some of those announcements out later this year about who, what the consortium is that is going to be addressing this opportunity, because the work is expected to start early next year on these



exchanges. The regulations are still being thrashed out because it was not clear in the bill what is required there.

Scientific innovation is another interesting one and I will just highlight; I am not going to go through all these, but scientific innovation is, it is interesting the number one problem that most pharma companies see confronting them when they look at their research pipeline; and that is the ROI from their huge investments, if you look at the top 25 pharma companies globally, the amount of money that they spend on R&D has continued to go up and the productivity of that R&D has continued to go down. And that is across every company, no exception. Some of them for a year or two might have a couple of things approved and have a few good years but with patent expiration with the cost of research they tried all kinds of things. They moved a lot of research to India and China. They have formed partnerships with biotech's and basically given up on as much innovation in-house and said, particularly, some of the big Pharma's that were strong in chemistry, but not that strong in biologics, went to biotech's and just said, "We will acquire something that is in early stage trials or something that is even pre-trial, we will acquire that research and then we will take it through the D part of R&D" or they will just make an equity investment in these companies and leave them alone. There have been all different approaches taken. And what this is addressing is for the large pharma companies, all of whom have maintained some kind of inhouse R&D as well as the larger biotech's, is how you improve the collaboration in the ecosystem for research and development. How do you lead data from the academic world or publicly available data open source researches out there in increasing amount, how do you take gene sequences that have been developed elsewhere and apply them into your research area and how do you collaborate inside of your organization or with some of these partnerships that your company is formed with smaller companies, how do you do this collaboration to drive higher productivity in your R&D. So this is one that we have been working on for a few years and we have a royalty arrangement with one of the biotech's where we are working with them and there is some other stem cell lines and applying this with their research team. And as we sell it to other biotech's we will get a royalty payment, we will make a royalty payment for them, because the IP that we use from them to build this and we also have got this been implemented in some chemistry based companies just using our own IP. So also we gained significant revenue from these investments and we are trying to stick to, even through the downturn we maintained this 10% of revenue investment in building the future.

So I just want to talk about a couple specific examples and then close. This is another medical devices example where they had a product that they had built for cardiac care. And the problem with it was it required the presence of a provider and it was also teem into in terms of its disease stage, it came in too far down the line for them to fully capitalize on the opportunity that was there. So working with that medical devices company and using some of our wireless expertise, that we have developed in the company, we built a way to actually take off-the-shelf components that are available for them to assemble a next generation device that was able to be monitored without the access of a provider to alert a provider if necessary and to even do some preliminary diagnosis remotely. And this has created a new market opportunity for this medical devices manufacturing instead of something that could only be used by a provider and can only be sold to provider, it could be sold to hospitals that the provider was affiliated with to be used at a low cost because we are using off-the-shelf components to build it and actually be distributed to any of the members that provider network had. So this is something that we hope to build off of another area that that medical device company works at.

This is just an example of iTransform, how we applied it, to one of the larger payer clients that we work with currently. We have the assessment and remediation roadmap, it is very similar for those of you who are familiar to how Y2K worked, it is the same kind of stages you go through. Business spaces created that take what are the other opportunities associated with the remediation besides just meeting the regulatory requirement and then the fact that we were able to get through this assessment, in 70% less cost in only seven weeks for a massive payer organization has provided



them a lot of benefits because they will probably be compliant ahead of most of the other payers in the U.S. because of the early jump that they have gotten on it. We are continuing to work with them on the later stages of that initiative.

When you look at the affordability aspect in the trends I mentioned, this is an area that we have been working on for a while even before 'building tomorrow's enterprise' became a company tag line. We have been trying to work with payers to transform themselves because the trend was obvious that the affordability issue was causing people to drop out of the health insurance system. Even before government driven healthcare reform, there was tremendous pressure on the payers to come up with lower cost offerings or people were young employees of companies were saying I do not even want to participate in your plan because it is costing me too much for how much I am never going to have anything happen for the next two years. So we have been working on affordability for a number of years. And some of the more recent ones that we have had are, if you look across the broad areas of reducing time to market, and the TCO reduction, we have some of these examples. I am not going to read through them, but these are the examples that we have done, all of these happened within the last two years then concluded either last year or will conclude this year. So these are the kind of savings that are still possible even in a context of the current system. There has been a lack of innovation really in the current system and it might have been possible to fix a lot of the yields to the current U.S. system, if more innovation has been applied. But now, there is a government mandate that this innovation will have to occur within the context, but it is still exciting area that continue to innovate and we tried to align in terms of the clients that we invest in and try to work with are the ones that are not just waiting for the government to tell them everything to do but the ones that are actually trying to get out ahead of it. For example, we see tremendous revenue uplift last year in the health insurance segment, doing business intelligence work for three or four of our health insurance clients, they had funded proactively had said we do not know how healthcare reform is going to turn out, in its particulars but we know no matter how it works out, if something is going to happen and we know that whatever happens is going to put a huge burden on us to manage information, be able to draw more conclusions rather than an information, be able to report that to various government annuity, and so let us get our data warehouse our data mark, let us get our analytics tool all in place and be ready. And so those are the kind of clients that we try to align with and the number of those clients is increasing more and more, now that healthcare reform has happened, there is not really an excuse that boards are allowing some of these companies to get away with it to say what we affiliate for healthcare reform before we do anything.

So just a few things in summary, this is a key component of building of tomorrow's enterprise that we see. And we see it applying to all industries and not just to the traditional healthcare industry. And we were looking proactively for opportunities across all industries. I am very grateful to the other business units in the company who are taking this up and actually having this discussions around this, just like they are around, this digital consumer market of one, which is the key trend we see across everywhere in the economy. We see this healthcare issue becoming more and more important across all clients, all geographies and so it is not just a U.S. healthcare phenomenon. That is the other key point I want you to understand is that, I spend a lot of time in the U.S. market because it's where half of the healthcare spending happens today in the world. But we see actually longer term, a much faster rate of growth in the business outside the U.S. What we are doing right now is focusing I think in two or three different areas. One is U.S. Healthcare reform and staying relevant to that with offerings that will allow us to deliver the same kind of growth that we have had in this segment. Also, taking some of the concept that we have from the U.S. healthcare market into other geographies and then also having discussions with other companies and other segments about the opportunities that exist for them to play in the global healthcare market that they may have never thought it before. So this is everything I had to speak to you today about the healthcare economy. Do we have any time for few questions?.



Participant

Thanks. Thanks for the presentation. I wanted to understand what has been your current share of revenues for healthcare? How much is currently addressed by the U.S. government? The next is I understand that there are limiting factors for the U.S. government especially healthcare to outsource their IT budget for offshore companies like Infosys? So what is the limiting factor, how do you think that mindset will change?

Eric Paternoster

Let me answer the first question. We have almost all of our health insurance clients that we work with have a government play of some kind. And we have four Health Plan clients where their primary market segments are government sponsored health plans, i.e. Medicare and Medicaid. So we drive within our healthcare revenue out of the three industry verticals of my business units, we probably drive, let us say, today, about 10% to 15%, health plans where the government is the ultimate payer at the end of the day where they work through these health plans as intermediaries. We also have relationship with the JV that is supplying all the long-term care insurance to all Federal employees in the U.S. that is a six client relationship. One thing I found in moving into this new role heading up IPS is that Infosys has been doing surprising amount of government work up till now, that are scattered around geo's and inside business units. And one of the reasons why was asked to do this IPS role is because healthcare was increasingly becoming government business and over the last year we have had to comply with requirements from these companies that are either flow down contractual conditions that come straight off of like the GSA, the standard federal government procurement template or the federal acquisition regulations that exist around special requirements on affirmative action and things like that, that you have to comply with. As healthcare reform rolls out it was obvious that more and more of that regulatory overhang that is now just applies to defence manufacturers and people that sell to the federal government directly was going to get applied more and more to the healthcare sector. So, going to the next question you asked which is: is there a limiting factor around the government traditional biases against off shoring, the only unions that are growing in the U.S. are the government unions and the union influence on decision-making related to off shoring jobs potentially and what that means? What it means is a variety of things. First of all, we will be required to maintain our current share of this market to build the U.S. execution capability of sometime with U.S. citizens applying it. Will it be in place this year? No. The beginnings of getting that established will have to occur and we will be putting it in place. We already have the beginnings of it on the BPO side versus some nonhealthcare related things that we already have some BPO clients that are requiring U.S. citizen to do all the processing. So far it is not clear to me whether the desire to lower costs, win out over some of the inevitable off shoring backlash that happens in economic downturns. Actually, in the U.S. market we have not seen that much of an impact in our existing business against continuing off shoring, that the companies are under so much pressure with what is happening in taxation and their need to invest to be able to continue to compete against companies in other countries that have advantages right now that do not exist in the U.S. market. We see off shoring having increased across Infosys in the last year in our client base. So it will definitely be a discussion that happens, that did not have to happen in some of our traditional private health insurance clients, as they become more and more regulated but it is not clear to me that it automatically translates into a barrier because right now the government is under so much pressure to prove that this huge cost that they put on to the economy is actually going to lead to some benefit. And like I said they put a lot huge burden on private insurance companies and make this happen without giving a much help. All they have done is just given them the regulations that they have to comply with. They have not given them funding to do any of it. So it is going to be difficult for the federal government to say you cannot off shore but you have to do all these things in the next four years. So we have had some early indicators of this - I do not know if you are aware but, if you look at the Blue Cross system in the U.S. there are 39 Blue Cross plans and there is a mixture of core profit, mutual and non-profits that are included in that mix of Blue Cross clients. And they are limited by some state territories in terms of where they can operate. We had an experience with



one of these non-profits four, five years ago, where we offered to do some migration work for them I think it was BB, the dot net and they put it on bid and we had a very compelling bid except the problem was is that they were going to save so much money by doing it our way with our remote remediation that we do for taking 1000s of desktops and moving them from one version desktop software to another that they were going to lose some of their IT budgets. If they did this project with us, they said, we cannot do it with you as we will save too much money. They actually told us that and we lost this project because we were too efficient in how we were going to do it. At that time they said now, if you do it with 100% onsite, and make it closer to some of these other alternatives that we have been considering then we think you can do the work, but we just do not want to do it with your way of doing it because it is too cheap. This is like five years ago in the early days of a business unit that after we verticalized. That company is now doing off shoring. And so, they are a non-profit still. It is one of the blues. So, I think that it is hard to say how this is going to play out. It depends on a lot will be I think you should watch what happens in U.S. elections cycle, the mid-term elections this fall and that will give you an indication I think for how much of an off shoring backlash will be put on us and our other India based competitors because I am not sure right now, I thought I have a good opinion about what was going to happen but I think it could go either way, it depends on what happens in the political system to some extent, what the leadership, how they communicate the current problems in the U. S., and who they choose to blame for those problems in the next cycle will I think determine some of what, how much is the barrier versus actually the huge problems that the U.S. has right now, actually creating an opportunity to like it did in this one Blue Cross plan to do off shoring that they never really wanted to do before. But even this non-profit was finding it impossible to come up with the funding through grants and content donations and what they were allowed to charge through the regulator for people that they insure, they were finding it impossible to even comply with regulations, let alone be competitive with private insurers, they could come into that state without doing off shoring. So I think that very well happens.

Okay. All right; thank you very much.