

ACCELERATING THE IMPACT OF HIV PROGRAMMING ON HEALTH SYSTEMS STRENGTHENING

Pre-Conference Meeting of Health Systems Experts, HIV Researchers and Implementers
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Session 2: Service Delivery

Noerine Kaleeba: Moderator of Session 2

In this session we have two women and two men. This morning we have stimulating discussion and debate and a lot of issues came up but ones that are close to my heart relate to the notion of equity and human rights in all of these issues that we are discussing including the issue of social determinants; as we discussed the complexities of health economics for the future and the present. And the very important easily forgotten commitment that we as the global community made to primary health care. All of these are very important foundations upon which we should go into the next session and need to listen and see what lessons we learn. And I would like to draw your attention once again to the objectives of this day and what we do aim to learn and share. We are also reminded that we do have data and now we need to take that and in the context of service delivery. Thank you.

It is my pleasure to introduce our first speaker Wafaa, who is well known to many of you. She is a Director at ICAP. She will take us a 15 minute journey of service delivery.

Wafaa El-Sadr: [Director, International Center for AIDS Care and Treatment Program (ICAP); Director, Center for Infections Disease Epidemiological research (CIDER), Columbia University; Professor of Clinical Medicine and Epidemiology, Columbia University Mailman School of Public Health]

Title: HIV Program Design: Lessons Learned for a Broader Impact:

Thank you, Noerine. Good afternoon to everyone and thank you for the opportunity to share with you some thoughts. My presentation is entitled “*HIV Program Design: Lessons Learned for a Broader Impact*”. And what I’m going to highlight are some real key characteristics of HIV that really position it to be a platform for achievement of much broader impact globally.

As we heard this morning from many of the speakers, there’s been a rapid scale up of HIV/AIDS programs [ppt slide]. There was an emergency response required to scale up this kind of new public health sector program. As was demonstrated this morning, again there was a dramatic increase in funding for AIDS related activities but also what is very important, not just increase in funding, at the same time there was a remarkable accomplishment which was unprecedented expansion of service delivery in health systems.

Again with vast successful scale up of HIV treatment in particular in sub-Saharan Africa, one of the regions of the world with the weakest systems of health in general, recognized. And I want us to keep this in mind throughout the day: How did this happen? How did this remarkable achievement happen in the region that has the weakest health systems? How did it happen and what can we learn from it and how can we capitalize on this achievement?

What is unique about HIV/AIDS that actually drives program design and why should we consider HIV as quite different; the funding for HIV as quite different from other diseases in the past and other programs [ppt slide]. And what is it about HIV that makes it uniquely capable and actually serving as a very successful platform. And it’s important to keep in mind that HIV impacts throughout the life cycle. It affects newborns, children, women, pregnant women and adults. It affects families, not just simply individuals because of course of the HIV transmissions in families but also because of the psycho-social issues associate with HIV.

It is distinctly distinguished by periods of health and periods of illnesses; many years of feeling well, often being unaware of HIV, and then periods of illness and then health again and then illness again and then health. It involves diverse periods in a person’s lifespan with HIV where they have very different needs. There’s a need for laboratory monitoring and secure drug supply which is very important and the word ‘monitoring’ is very important for this distinguishes the program from HIV.

There’s also a need for high levels of retention and adherence that is required [ppt slide]. It’s associated with severe sickness and discrimination and most importantly both HIV prevention and HIV treatment are chronic endeavors [ppt slide]. And I think the word ‘chronic’ is very important. Primary health care is about chronic care. It is about keeping somebody in primary care. So both [HIV prevention] and [care & treatment] are chronic interventions.

Now let's look at each characteristic and what it requires. The impact, through the life cycle means you to have to have services for adults including pregnant women, for infants, for children, for

adolescents with all the challenges in those populations. The periods need a systematic approach; periods of acute illness and chronic symptoms compel us to have a health maintenance approach with continuity care and linkages.

The multiplicity of clinical and psycho-social needs - which means that there is a need for a multidisciplinary team approach rather than just focusing on one type of health provider, the need for referral systems, and for all of these needs and partnerships between health facilities with community groups. The importance of adherence and retention is very critical and this highlights the importance of building a relationship [ppt slide]. And the very fundamental core of HIV design of programs is that relationship that has been established between providers and patients in order to maintain them in care for their lifetime and of course the outreach and tracking means that there is a need to reach beyond the walls of facilities, to reach to communities as part of the spectrum of where the care is provided.

The need for clinical laboratory monitoring, medications commodities of course means there is infrastructure that is required. A whole medical record, systems and registers for continuity primary care, laboratory procurement systems.

And it's a transmissible infection which means it highlights the importance of counseling in antenatal care, family planning and prevention methods.

Now as you know health systems are in crisis, these are just some photos [ppt slide] of components of facilities from sub-Saharan Africa. This is the baseline where many of these programs had to be implemented with dilapidated facilities, laboratories, overcrowded hospitals and clinics, this, ordered from pharmaceutical supply systems, as well as of course a demoralized and often overworked workforce.

So what has happened and what are the models that could be informative and could help design and drive the HIV programs? I think some of the key ones have been in the workforce innovations and this is focused on the use of non-physician clinicians to expand the work force [ppt slide]. For example shifting and changing the roles of nurses, who I believe are the backbone of health systems in many countries, task shifting and task sharing, the introduction of new cadres especially lay workers, people with HIV themselves, very important expectations are called in some countries and some cadres, for example, come to collect the key information.

And the appreciation and importance in mentoring, and supportive supervision instead of addiction to formal didactic education, and finally, very important innovation is the use of multidisciplinary teams breaking down the hierarchies that exist between and across disciplines- having an adult physician and pediatrician sitting together, having a nurse having a voice at the table, having the outreach person sitting at the table talking to the doctor, providing key information. That is the fundamental change and could transform healthcare.

So what is it meant is that quality services are focused on the needs of the patients because the patients had multiple needs; the effective use of the workforce and enhancing the moral of the health workers themselves. There are new roles and new appreciations and you can see here at the top [\[ppt slide\]](#) , that is the task shifting at the program that we [ICAP] support in Ethiopia where the testing for HIV used to be done in the laboratory and we shifted rapidly and effectively to have a point of care testing and with that was the massive increase in the testing accomplished and there are many other examples of such accomplishments.

There have been lots of innovations for retention and adherence and again at the core of chronic care and primary care, the color coded scheduled family appointments, appointment systems from simple to complicated and the very important adherence support in terms of the relationship that has been established between providers and patients, the defaulter tracking using retention and adherence as quality indicators and in this you have responsive health services; the design is able to reach beyond the facilities and enable them to meet the needs of these patients and families.

The fundamental key part of HIV programs is the stakeholder engagement, engagement of persons living with HIV, communities, civil society, country coordinating mechanisms (CCMs) and a clear accountability and transparent target setting [\[ppt slide\]](#). This is very important because the engagement of these communities can have an impact in generation of demand for services, something that is the key and often a challenge, the establishment of communication and then the peers themselves and the people themselves who are the clients of the services demanding accountability.

In addition, data collection can drive quality programs [\[ppt slide\]](#). The aggregate use of data; the use of data at a site level rather than data going to the district and to the Ministry of Health and never coming back to the facility to drive the quality, the completion of that circle, to use the data effectively.

Some innovations in electronic medical records and very key is attention to outcomes even in addition to enrollment targets but also to quality outcomes and I think the lesson here is that the focus on outcomes is very critical. Focus on quantity and empowerment of the workforce themselves in shaping the programs they are delivering.

Another key part of the delivery of HIV has been the importance of linkages and integration of programs and services [\[ppt slide\]](#). And that is the model that has been achieved in a variety of different venues. Primarily I think in the context of TB and HIV programs where the traditional model has been separate programs at the national level, separate services and investment in HIV programs - programs have been brought together both at national level and also integration at the facility level. This is focusing the new way of thinking about the individual patient rather than the programs and breaking down the silos that exist between programs.

So the systems for HIV are really systems for chronic disease and the fundamental issue is what you want to accomplish with systems and what you want to accomplish for the sake of patients whether they be children or adults who have continuity care systems that are really focused on the principles of chronic disease management / processes of chronic care; which means again that all the components that I mentioned to you earlier [are included] [\[ppt slide\]](#). These are some of the examples of them - effective medical records, outreach, laboratories, linkages, family focused care and multi disciplinary teams.

Now many of the countries especially in sub-Saharan Africa clearly the burden of disease is not exclusively HIV, considering from this WHO report [\[ppt slide\]](#). This is Africa - here and the darkest blue is communicable diseases, maternal, perinatal, nutritional, heart conditions responsible for most of the disease burden and DALYs per thousand population. There is also an impact on this group two, these are non-communicable diseases and in group three are the Injuries.

Another way of looking at it, if you look at low and middle income countries here, you can see here communicable diseases are often responsible for most of the DALYs here - low respiratory infections, HIV, diarrheal diseases, malaria, tuberculosis, lung infections, but nonetheless they are non-communicable diseases in these same countries [\[ppt slide\]](#). They are there including ischemic heart diseases, depressive disorders and mental illness in particular.

So there are commonalities, barriers and challenges [\[ppt slide\]](#). If you want to tackle many of these other burdens of diseases and many of these other conditions, the same barriers exist as they exist in HIV programs and in the slide you will see some of these barriers - the demand side barriers, inadequate and unavailability of human resources, lack of adherence, referrals and lack of community involvement. These apply to maternal child health, TB, diabetes, hypertension, mental health or HIV and through a model that has been established on the ground that overcomes the challenges through HIV programming, one, is essentially, it could be helping to resolve or develop models to resolve the impediments for many of these conditions that also threaten the health of people in these communities.

There's an effort we are attempting on embarking in Ethiopia on leveraging HIV programs to strengthen non-communicable disease services [\[ppt slide\]](#). This is the one facility in Ethiopia where there's a very strong HIV program with more than 12,000 patients enrolled. There have been significant enhancements through HIV funding for infrastructure, lab, pharmacy, medical records throughout the facilities not just only the HIV clinic. And the HIV program is the first large scale chronic disease program at that facility. It's a model, it's something new, it's that has never happened in many of these facilities which are usually used for acute episodic care.

And we will be attempting to use the tools and develop the HIV program to support the care and treatment of diabetes in their facilities to demonstrate again the ability of leveraging some of the tools and systems that have been successful for HIV programs.

Now, chronic endeavors are not just needed for dealing with HIV disease itself but chronic endeavors is needed for prevention and what are called acute conditions. HIV prevention is not episodic one time deal as many of you in this room know. One has to accomplish behavior changes, repeated exposure to messages and other interventions [\[ppt slide\]](#).

I think there is another...acute condition [*not clear*]. There is a kind of false dichotomy of acute conditions and chronic disease that I think of does not help us achieving our goals. For example we tend to think of diarrheal diseases as an acute disease, but actually it's due to chronic behavior - exposure to unsafe water sources and we have to think of it as a chronic intervention, malaria again is exposure to mosquitoes, lung diseases exposure to cooking smoke continuously and STI - it is continuous exposure in social networks. So the concept of chronic interventions is trying to think of people in chronic therapeutic preventive interventions, is one that could help us achieve our goals for many of the conditions and health threats many of these countries face.

So in summary the characteristics of HIV have necessitated unique service models [\[ppt slide\]](#). The models that have been established are necessary if you are confronting communicable and non-communicable chronic conditions. The models are also appropriate for achieving behavior change for what I considered acute diseases. I go back to the slide and say again that this has been a remarkable achievable accomplishment of the anti-retroviral therapy programs. On the yellow and very weak baseline health systems, there are critical and important lessons to be learnt in how this was accomplished. It must have entailed tremendous health systems strengthening in order to achieve what has been achieved with the scale up.

It's not just the money; it is what the achievement with the money has brought as concrete achievements. So in conclusion, HIV programs have offered an opportunity for health services unprepared for confronting chronic conditions achieving ongoing unprecedented services i.e. in order to achieve the ideal goal of primary health care for all [\[ppt slide\]](#). The lessons we learned from effective HIV programming implementation should guide efforts in implementing other programs and health systems strengthening. I think a model that focuses on the goal of what the health systems is supposed to deliver in terms of outcomes is critical in order to achieve the success we are all aiming for.

So in the end I offer this model here that maybe a vertically funded program like HIV program; what it takes is how one implements it [\[ppt slide\]](#). So you can implement it in a successful way or you can implement it in an unsuccessful way and I think the key is how does one take the funding maybe for HIV or any other funding source and think about the design of the model of

implementation that can really lead you [to specific] impacts you want to have and the broader impacts.

For example, the horizontal implementation of HIV programs has the potential, as I have described, for implementing not just the HIV MDG [targets] but also others [including] maternal mortality and child health and potentially also some of the other MDGs as well.

So I want to end by thanking my colleagues and funders and the government and nongovernmental organizations that we have worked with for many years and then of course the persons and families affected with HIV who trust us for their services.

Thank you.

Noerine Kaleeba: Excellent and exemplary only for keeping her time but also for keeping her eyes completely off me as I attempted to show the five minutes. But well done. Thank you. Our next speaker is David and he's taking us from the lessons we have learnt and giving us some framework. Please.

David Peters: [Director and Associate Professor Health Systems Program, Johns Hopkins Bloomberg School of Public Health]

Title: Frameworks and Evidence on the Impact of HIV/AIDS Programs on Health Services Delivery in Developing Countries.

Thank you, thank you very much. Just to say Maria and Tory were doctorate students at John Hopkins. Of course they have done most of the work but I will take responsibility for any of the errors.

This is work that I'm looking at frameworks and the evidence around health systems program and how they relate to health services delivery. We actually did this over a year ago at the request of Robert Oelrichs at The World Bank. So I'm going to talk a bit about what we found in terms of frameworks. At the time there was an idea about a lack of a common framework around this question, was a constraint moving forward; give some ideas of where we may go with some of the frameworks for future work.

We are going to talk a bit about some of the evidence we reviewed around the relationship of HIV programs and health services and then think about where we are going in the future. All of this in just a few minutes of looking to the right.

Let me just say that when we intended to look at the frameworks, we took a very systematic approach to searching in terms of trying to find any kind of literature that relate to low and middle

income countries looking at HIV and health services. We took a broad type of research strategy and we ended up screening over 1,500 articles and what we ended up with was 19 somewhat distinct frameworks that we identified [[ppt slide](#)].

We find that they were useful in purposes; and two of them were actually designed specifically to look at the question of HIV programs and health systems; the one done by Sarah Bennett and the other one looking at Global Fund Performance Management System.

We tried to review these frameworks to find pros and cons; we [also] tried to find some common ground. We found that there were many different kinds of actors involved, many different kinds of health services and many different types of support services.

I should say that most of these frameworks were fit for purpose. Many of them were never used though they were good pieces to think about, but several had been used. We then tried to put them in a type of common evaluation framework.

We were really building on the work that was going on concurrently with International Health Partnership and the evaluation frameworks being done there and international programs trying to pull together frameworks around maternal child MDGs, and trying to come up with an evaluation framework.

So at the core of this is basically this rather unimaginable type of results chain leading to inputs and impacts and to unusual in terms of a chain of results. In this case we tried to put in the HIV relevant aspects in this chain [[ppt slide](#)]. Starting with the input of policy and funding to what kind of processes were involved to outputs that really led to production of services be they preventable or clinical, to the outcomes which have to do more with responses on the uptake within populations, patients, effective coverage leading to impact in this case we are looking at the HIV results chain. So this is really fairly typical.

For purposes we then want to look at how it looks when you look at impact on other health services [[ppt slide](#)]. Of course other health services at the bottom have the same type of results chain. Now this is not true – some of them are quite close whether it tuberculosis. Some of them are quite different – whether it's maternal child health or whether you are trying to aggregate and look at the performance of all patient care of preventive services but basically the type of results chain that you are looking for non HIV/AIDS services.

I think the interesting part is looking at the connections between the two – the group that affects results change and effect either the results change.

We heard this morning a lot about the substitution or additionality of resources. I think there's a lot that can be examined in the second column, second box there in the middle, looking at the change of processes and this really has to do with processes and how does one type of process

impact and change motivation. As a result do you add to them or do you substitute them again. In terms of outputs, again we look for competition, redistribution, moving along and seeing what types of things we might change in disease profiles.

This is a rather deterministic core part of the results chain. In the paper we have a larger set of the framework, of course leaving out of social, economic, political, institutional aspects that are very important and prominently determine the ultimate outcomes of some of these things..

So it is useful to look at those kinds of determinants, both as an initiating condition as well an enabling and inhibiting factors and then also again look at multiple types of outcomes in fact on other kinds of outcomes, particularly if you are looking at equally concerned or other kinds of health system outcomes.

So, I 'm going to pull up the broader framework if you are interested but I think we came to the conclusion that in fact having a common framework isn't really the main constraint to doing what is needed. What is needed is really more of a commitment to doing the kind of evaluation and having accountability by using that kind of evaluation or operational research. I think there are a lot of good questions that can be asked and it is really a question of doing them because the frameworks can really be adjusted to do that.

So let me then look at the second part which is this literature review and trying to look at existing literature on HIV programs how they contribute to broader health systems particularly as they relate to health services and then how do HIV programs contribute to social needs [[ppt slide](#)].

And then again I want to remind you that we did this about a year ago and then there have been publications even by people in this room who have built on this from the past but nonetheless I'm going forge ahead anyway. We did try to take a Cochrane-like approach basically having systematic criteria for reviewing articles and look at HIV programs and health services while we address several components of the conceptual frameworks and look at HIV as well as other health services.

We did that in a systematic way, looking at the design of the study, the types of outcomes and other factors. The quality of the scales is a little bit more difficult because of the consensus on how do you assess the systematic reviews and qualitative research, is a bit more on a developmental stage. So we focused more on critical appraisal skills program and the quality of qualitative research approach as a way of assessing some quality of research and you can see some of the factors there.

So we ended up with 1,400 citations before 2008 [[ppt slide](#)]. So again 15 studies that came up from the positive synergies group were not included at this time but I will say that we did have 16 studies that were in the inclusion criteria. And one of the first findings is that none of them were

particularly qualitative studies which have adequate study design will be included in the systematic review. So there were none of these types of well known and clinical public health researches in terms of strong designs for making probable possibility type of inferences. I have read the 15 studies but having looked at the study designing, also they would not have been included in a Cochrane type of review which is not to say that they don't provide a lot of information but it is a different type. So in terms of conventional criteria for evidence, it's a very low level in terms of making inferences.

So we did look before and after comparisons; cross-sectional surveys and the quality of studies [[ppt slide](#)]. Let me just show you, I'm not going to go in detail, basically we found both positive and negative effects in terms of results of health services [[ppt slide](#)]; with effects on health services other than HIV; with effects on human resources; with effects on other health systems dimensions. You will find, in the same country, the negative and the positive and even in the same domain you will find different facts in different places.

In qualitative studies, they found many reasonable explanations that both had positive and negative effects both from insiders and from beneficiaries which have very useful types of explanations. I'm pointing at examples of how HIV programs when they were done through nationally channels actually supported local policy and decision making processes so strengthening those processes.

In other cases where there is claim that scarce managerial resources were totally consumed by HIV programs or the duplicate systems were served and of course we are exposed to these things. Again these are types of descriptions that come up from the types of evidence and I think a growing body showing that when there are intentions to have positive synergies to that effect, you going to find more of them. So I think we are seeing more of that kind of literature emerging.

So in conclusion around this type of exercise, we found little scientifically robust evidence either for or against these two hypotheses that HIV programs even distort services away from needs or that HIV programs contribute to additional health systems objectives but certainly there are a lot of positive and negative experiences [[ppt slide](#)].

I think at this point really the task is to see how do you actually claim those types of positive synergies, how do you reduce those negative effects that can occur and for this you really need to have good data and good operations research and good types of evaluation and good accountability. So I want to talk a bit about two slides that were involved.

So in terms of better design I think it is clear that both quantitative and qualitative methods are needed [[ppt slide](#)]. Qualitative methods are particular needed to have explanations of how things actually work; while better quantitative studies are needed to actually track things better. I prefer to

have, I think it is quite clear, that much more research needs to have comparison groups, randomization maybe possible, matching possible.

There are good examples out now with large programs in other areas as you roll out programs you are able to find randomization and matching. But you certainly do need to have prospective tracking. The argument for tracking both the primary and secondary result chain and the linkages between the two and then I think the other part is to collect data on all relevant parts of the conceptual framework much of what I didn't actually.

But what this means, I think, is that it measures the relevant initial conditions [[ppt slide](#)]. You know in the external environment I think we are really talking about the facts of poverty, economic policies, and political situation and labour market issues, institutions, governments. These are the areas in which we need information both in the broader environment and also within health systems. Within health systems there are clearly other kinds of institutions which need to be actively accessed. Being able to track prospectively the results chain; one of the results chain both primary and secondary and how they connect is critical to getting better and [*pronunciation not clear*] and more robust evidence around what is the relationship between HIV programs and other types of health services.

And then I think it is important to look at some of the key enabling and inhibiting factors. There are critical players and institutions whether it be regulatory bodies, whether it be unions, whether it be hospital groups, professional associations as well as the key functions of the health system, which are described in many different kinds of frameworks. The other thing is you will find things where you look for it, if you don't look for equity and poverty facts, chances are the program will not have any results there.

Same thing when you are talking HIV within other parts of the health systems; it is important to get beneficiaries perspectives and impacts on beneficiaries as well as other parts of the health system and not just shine the light on the intended effects which you expect from HIV but also on some of those other unintended consequences.

So I think that these are difficult measurement challenges, they can be done, they have been done in other spheres and I think it is partly a question now of having the [*pronunciation not clear*] [research] results [and to] actually invest in these types of enquiries. The final point is not so much that we do these for academics' sake to produce some kind of results that can be generalized across countries and but it is really a question of being able to use them to make them available for managers, policy makers and the public. Partly this is for learning to do re-planning, partly for disclosure and accountability.

Thanks very much.

Noerine Kaleeba: Excellent you have actually saved us 2 minutes. That is really, really exemplary. I would like to take us more a bit specific to learn from UNICEF experiences.

Rene Ekpini: [Senior Advisor, Health Section, Programme Division UNICEF]

Title: New insights into Research and Evidence on how Investments in PMTCT and Paediatric AIDS has contributed to Health Systems Strengthening

Thank you Madam Chairperson. Firstly, I would like to thank the organizers for giving me the opportunity to participate in this meeting. During this presentation I will cover several areas. Firstly I will be talking a bit about the key elements of PMTCT. Why health system strengthening is critical to PMTCT and Pediatric HIV/AIDS. I will talk about new evidence with implications for the health system, some evidence on how PMTCT and Pediatric HIV/AIDS can impact the health system and finally the way forward.

I was just trying to figure out if I needed these slides, but I thought it was very important at least to start defining a bit the key elements of PMTCT. There is a new move in terms of combination prevention [[ppt slide](#)]. Personally I think PMTCT is the best available model of combination prevention with a strong link to treatment of evolving needs; and PMTCT is definitely the main entry point to HIV prevention, care, treatment and support services for a majority of women and children living in resource limited countries. Secondly PMTCT is not only about the provision of ARV's to prevent infection from infected mothers to their children, in fact PMTCT and Paediatric HIV involve overall maternal, newborn and child health programs. It includes the four components we all know: primary prevention [HIV], prevention of unintended pregnancies, HIV prevention and infection from an infected mother to her infant and then care, treatment and support for HIV infected women, their children and families.

Specific intervention pertaining to all four elements are accurately provided at antenatal, delivery and postnatal care centers with central role of care centers, families and communities. In preparation for this presentation I was trying to figure out exactly what I could say with respect to the current debate and I was doing some Googling and I found a presentation, which has a title the good, the bad and the ugly. I don't even know this movie, I like it, personally I think there is a bit of bad and the ugly in the good as well as a bit of good in the bad and the ugly The inner nature of PMTCT and Paediatric HIV indicates the right debate should not be about whether investments in this program area are weakening or strengthening existing health systems.

Reaching the MDGs 4, 5 and 6 require that we collectively define policy, financial and operational environment, which force and guide the use of PMTCT as an opportunity to strengthen existing health systems [[ppt slide](#)]. In the past five years the global community has strengthened

commitment to the MDGs and Universal Access to HIV related services; to various global health initiatives including The Global Fund, PEPFAR, The World Bank AIDS program, Clinton Initiatives - which also include important funding dedicated to PMTCT and Paediatric HIV.

This global commitment has been translated into an impressive increase in AIDS funding, the majority to resource limited countries especially in sub-Saharan Africa. PMTCT and Paediatric HIV funding represent a significant share of domestic AIDS spending in most countries [ppt slide]. However these countries face significant challenges translating this commitment into equitable access to quality health services for the majority of women and children. Yet despite the international declaration of commitment, far too few women, their children and families are benefiting from available interventions.

This slide summarizes the traditional cascade of PMTCT interventions starting with HIV testing among women attending antenatal care, with the provision of ARV regimens to those identified as HIV positive and to their infants, [pronunciation unclear] to HIV exposed children by the age of 2 months [ppt slide]. Overall, PMTCT programs are challenged by significant drop-off of mothers and infants from the time pregnant women are offered HIV testing, down to the uptake of ARV and [pronunciation unclear] for the infants.

If this can be seen [parallel – ppt slide] as a value of PMTCT and Paediatric HIV programming, it is critical to recognize the situation reflects in fact system constraints that have challenged maternal, newborn and children health services over decades. Overall coverage of PMTCT is relatively high over 70% for at least one visit. However the proportion of deliveries assisted by skilled assistants is very low at around 40%. More importantly in most resource limited countries postnatal follow-up care for mothers and infants are weak and not well organized. Recent scientific and programmatic evidence in PMTCT and Paediatric care show that supported HIV treatment has presented additional challenges but also and more importantly offered opportunities for strengthening existing maternal, newborn child health services.

Several national programs have not adopted a set of strategies of quality antenatal and delivery care as integral components of PMTCT [ppt slide]. Initial testing and counseling, phasing in more advanced regimens of PMTCT including building capacity for ARV for pregnant women, provision of treatment for HIV infected pregnant women, mothers and their infants as a component [of national programs]. All these program elements have direct or indirect implications related to policies, norms and standards; program management and coordination; human resources for health; health infrastructure and equipment; service delivery; linkages with communities and program monitoring and evaluation [ppt slide].

The following two slides summarize data from Kwa-Zulu Natal PMTCT program, showing improvement of health systems for PMTCT program to be effective. This slide [ppt slide] shows the impact of single dose Nevirapine and the combination of AZT single dose on the baseline

MTC rate of 25% in the absence of any intervention; in the context of the current system which has a relatively high coverage of 92% but with only 75% of infected pregnant women offered CD4+ cell count and only 50% HIV positive pregnant women receiving ARVs. This leads to overall transmission risk of 19.5% and 17.2% of ARV which are not significantly different. If we increase the performance of the system up to 95% by strengthening existing maternal and child health services [[ppt slide](#)].

In conclusion PMTCT cannot be successful without strengthening the existing health system. WHO describes the health system as all organizations, people and action whose primary intent is to promote, restore or maintain health. On the basis of this definition WHO outlines the following six (6) health system building blocks [[ppt slide](#)] - strong leadership and governance; good health financing system; responsive health care, effective, safe and high quality health services; equitable access to essential medical products, vaccines and technologies; [skilled, adequate, motivated and equitably distributed health workforce]; and a well functioning health information system.

I would now like to take you through a set of slides showing how investments into PMTCT and Paediatric HIV contribute to Health systems strengthening focusing on some of the WHO Building blocks. Strong government leadership and commitment address various areas of action including high level of advocacy, development of policies, enabling legal and organizational framework and leveraging allocation of resources for planning and implementation [[ppt slide](#)]. In countries as Rwanda and Botswana strong political leadership has been instrumental to increasing access, equity, efficiency in the context of PMTCT and Paediatric HIV through the implementation of enabling policies on HIV testing and counseling and increased access to ART for women and children.

In an effort to integrate PMTCT and Pediatric HIV into maternal, newborn and child health services antenatal and delivery care - some national governments have adopted the abolishment of user fees for antenatal and delivery care; at service delivery level, the package of antenatal and delivery care has been revised to include additional services for HIV infected pregnant women, HIV infected mothers, HIV exposed and HIV infected children; in addition some countries are implementing innovative approaches to financial resource allocation to coordinate and harmonize a standard and domestic contribution and facilitate expansion of services at national level, this includes performance based financing and health policy reform and targeting barriers in order to increase uptake of services.

For instance in Rwanda women with high attendance of PMTCT services are offered free institutional delivery, and community based health insurance has been established to elevate consumer direct health expense. Significant progress has been made by the national government in harmonizing and aligning the national program including sexual and reproductive health,

nutrition, MCH and HIV and partners including participation of the country coordinating mechanism.

Achievements regarding program monitoring and evaluation have positively impacted maternal, newborn and child health services throughout the revision and adaptation of national indicators, the development of monitoring and evaluation tools and human capacity building, management analysis and use [data and outcomes to inform policy and programs] [\[ppt slide\]](#). More importantly current ethos of national programs in setting of mechanism for information sharing and referrals are including notification of HIV information on child and maternal health and linkages with Child Survival interventions such as immunization, ART or improving postnatal care for both women and children.

Finally the growing support for impact evaluation and research on PMTCT and Paediatric HIV in the context of maternal, newborn and child health care is instrumental in addressing system bottlenecks. Scaling up of PMTCT and Paediatric HIV has significantly contributed to addressing shortages in immunization, maternal, infant and child health services and laboratories. This has been achieved through task shifting, improving [and sharing] infrastructure and equipment, optimizing working conditions and efficient delivery of services [\[ppt slide\]](#).

Further, PMTCT and Pediatric HIV have been one of the program areas which has promoted and guided engagement of civil society, women living with HIV, male partners and communities. Lay counselors, peer support groups, mothers to mothers post clubs are well known innovative approaches. The next three slides show examples of how implementation of PMTCT can positively impact the delivery of optimal antenatal, delivery and family planning services.

This first slide [\[ppt slide\]](#) summarizes the result conducted by Terence Delvaux et al. on the impact of PMTCT on urban health facilities in Cote d'Ivoire. Overall the access found is significant improvement in the quality of antenatal and delivery care. Data from Rwanda summarized on this slide [\[ppt slide\]](#) shows that implementation of PMTCT can improve the utilization of delivery care services. Findings from analysis comparing delivery rates amongst HIV positive women show that HIV positive pregnant women are more likely to deliver at health facilities as compared to what is observed in the general population.

This slide [\[ppt slide\]](#) shows the proportion of married women age 15 to 49 with an unmet need for contraception according to the HIV sero-status in 12 countries. In 7 out of the 12 countries, there is no significant difference in the unmet need according to HIV sero-status. However in five countries including Ghana, Lesotho, Zimbabwe, Ethiopia and Rwanda - where there's a difference - HIV positive women are significantly less likely to have an unmet need as compared to HIV negative women.

I would like now to share some insight on the way forward in countries heavily hit by the HIV epidemic [ppt slide]. Reaching the MDGs requires - PMTCT and Paediatric HIV for maternal, newborn and child health services. We have, Madam Chairperson as a last point; we have collective responsibility to close the funding gap through resource mobilization and allocation and to make services available for all; to close the gap in access to the most vulnerable; [access to] interventions for all by scaling up regimens for PMTCT and ARV for children; to close the gap in access and equity for the majority of mothers and children in need through the utilization and scaling up of innovations to service delivery.

To close the gap between health facilities, health care workers and communities by involving individual families and communities and service provision; to close the gap between the present and the future by building capacity and setting up appropriate fiscal policies and operational mechanisms to ensure sustainability [ppt slide]. Finally because the ultimate goal of health system strengthening is about improving outcomes - to close the knowledge gap through promotion and support to impact evaluation and operational research to inform advocacy, policies and programming.

Madam Chairperson we saw pictures of health facilities in the DRC [ppt slide] and in the developed countries [ppt slide]; two worlds, two realities - but one hope for access to basic health care. For the majority of women and children living in resource limited settings the perception of health system strengthening goes beyond the six building blocks. It is a matter of human rights, it is a battle for survival, and it is simply about equitable access to basic health care. The current commitment to scaling up of PMTCT and Paediatric HIV, Chairperson, ladies and gentlemen should not be a missed opportunity.

Thank you.

Noerine Kaleeba: Excellent hey, excellent. I think we should thank the three distinguished speakers in a very, very special way. [] We adopted a best practice and that is you are allowed to speak, but only if you speak briefly. [] Shall I see by a show of hands?. Okay I put on my glasses and I can see Professor Harris.

Questions and Responses/ Contributions:

Professor Harries: Okay Noerine. Thank you. A contribution and a question together - Wafaa it's to you. I like very much your description of ART program as a chronic disease model. How this can be used for diabetes and hypertension - so it's a sort of comment and a question.

If you look at the health care system, you say go to the Tertiary Care Centre - you'd have separate clinics but as you move down to district rural hospitals and health centers I wonder what you think about combining these into a chronic disease clinic where we look after ART, diabetes, hypertension – all together. This to me would make sense in terms of M&E, supervision, etc.

And I am aware that in Cambodia MSF did this with some success. And can I ask one more quick question? It's very quick. I think Wafaa in this room you are probably talking to the converted, people who believe this but I wonder how many people in this room are from the diabetes world, the hypertension world etc. I wonder - we should be talking, I think, to the non-communicable disease experts; how do we do this? Are we doing it and if we are not doing it, how do we go about talking to these people about integrating chronic disease care?

Male Speaker: Yes I completely agree and I fully support Wafaa in this presentation and if we want to move out AIDS from this exceptional arrangement and take this opportunity as a model for chronic care management for all the diseases especially non-communicable diseases we have not to forget that it's completely linked with our previous session on financing health. *[It's difficult to understand what the speaker is saying in his next sentence].*

In some countries, and I would not mention in which country in Africa, you have a chance to survive if you are co- infected by HIV and Hepatitis B; not if you are only mono-infected by Hepatitis B and yet both diseases are treated with the same drugs which are available in the country. If there is a challenge with financing, [financing for HIV and for other chronic diseases], the chronic disease which could be monitored and managed with the model of HIV/AIDS, we have no chance because there are no resources to treat even if it's the same drugs.

Female Speaker: Thank you for all the presentations. They were really interesting. One of the things I have a big question about at the moment is I think we can show from the HIV perspective how HIV can contribute to health systems strengthening granted that we might not have the robust scientific evidence. I think we need to find a way to gather that but one of my concerns at the moment is also there is nobody or there are very few people from the health systems strengthening world in this room with us now. How do we get other people to also take on the need to make sure that health systems strengthening draws on the lessons from the HIV response rather than feeling that it's us working in the HIV world that have to demonstrate how we are strengthening health systems? How do we get that input and buy-in from people working on health systems strengthening to learn from what we have done?

David Sanders: Thank you I wanted to ask Rene a question. It's striking to me that when you describe PMTCT Programs, you've only talked about treatment. You haven't at all talked about the infant feeding, problematic, and there's considerable evidence now not only that a significant percentage of HIV is transmitted through inappropriate feeding – mainly mixed feeding - breast and formula - but worse still that probably, well in fact there's robust evidence from South Africa

and a number of Southern African countries that Child Survival is dramatically reduced because of poor infant feeding in PMTCT Programs. So it worries me that even now after all the research evidence has been produced that when we talk about interventions for children, we are not thinking about Child Survival. All we are thinking about is drug treatment to reduce transmission of HIV and actually the reality is that very large numbers of children are dying, we have evidence in South Africa, because of failure to provide optimum feeding. So we do really need to think a bit more broadly than just about HIV transmission. We have to think about Child Survival in this regard. So I really will be interested in your response to that. Thank you

Female Speaker: The slide which you presented on the marked achievements of HIV Programs. My question is like, are those achievements matching the amounts of funds that had been used in HIV Programs? The question is also linked to the earlier comments on how these funds are being utilized. Are they being utilized effectively to achieve the best outcomes? Maybe you can talk about that. Thank you.

Jacqueline Bataringaya: Responding to the question- Are we speaking to ourselves?

Thank you. I think this is one of the few meetings I've been to where I can confidently say that we are not. I think we have about half of the participants who are leading health systems researchers and implementers who wouldn't normally come to an HIV Conference and we have a lot of talent that's from within this province in South Africa, universities around but also more broadly within the region. I think for that I'd wish to congratulate those that reached out to experts, researchers and implementers in the health systems field. Perhaps those that we don't have are the experts from other chronic disease / non-communicable diseases. Those that manage diabetes, hypertension, etc; neither do we have experts that manage HIV co-morbidities including TB/HIV, Hepatitis C, etc - that are engaged with HIV patients but we have lots of people that also cross both HIV operations research and health systems strengthening. So those maybe more familiar but that's the general background of participants at this meeting. Thank you.

Wafaa El-Sadr: Responding to Questions

Thank you, thank you very much. Can you hear me? I'll start with the first question which is from Tony Harries about how is one likely to achieve such integration and such a model of care and I do agree with you. It's often in the primary health centers where actually there is no distinct HIV Program. It's integrated within the services that are provided in that study and the clinician who is the provider who is there seeing one HIV patient followed by somebody who has diabetes, by somebody who has seizure disorder etc. I think what needs to happen though is to take that kind of conceptualization and the way that HIV has been conceptualized and mentored and delivered and try to translate and have that provided [for broader impact].

Do the same thing, use the same tools establish the same systems for these other patients who don't have HIV. It's right there. It's just a matter of almost psychologically mentoring and systematically trying to expand it to the other patient population. It is not happening and again happening. And I think again that's why I'm saying how we implement programs and how we think about these other conditions in our implementation plans is likely to achieve it. And I think it's a credit that it's much more likely to happen in a setting where there are independent services.

I think the issue of bringing the audience here, sadly I don't know. Sadly in many settings there really isn't good management of diabetes or heart disease or mental illness. I mean people can disagree with me but it's my observation. Is that often again it starts off as an acute intervention - somebody comes in sick and somebody does something for the client but its not thought of as a chronic disease that requires the support services and continuity care. So unfortunately I mean we can try to bring the extras in the room but also we need to build the bridges but also we need to extend the pool of people who are interested in these other chronic conditions in poor countries because I think again there's a depth of interest in reality.

So I think we have to think of how do we do that and we need to reach out to societies of people who treat diabetes and people who treat heart disease and bring them to the table because I think there hasn't really been a conversation and engagement that can lead to the synergies that we want to achieve.

The question from the back about the funding - are the achievements consistent with the funds? I don't know the answer to that but I think it's an interesting question. It depends again what are the outcomes of interest. I mean these women are quite young and you can look at the outcomes of interest at how many lives saved; you can look at outcomes of interest as infections prevented; you can look at the outcomes of interest as mothers are live and their children can stay alive or there are lots of ways one can look at the impact and try and come up with what's the cost effectiveness of these programs.

I'm not an economist. There are others in the room who are economists who can hopefully come up and tell us if this is consistent with what could be considered as a cost effective program. Again it depends with what you call cost effective and clearly there are differences of opinion about that.

Somebody here mentioned a question – learning from HIV and how to do it - and there are several ways of thinking about this. If you think about HIV – to have an achievement in HIV one has to have strengths in health systems. So you have to think how did that happen, is an interesting question all by itself. Apart from the other questions on - what is the impact on the other conditions; I think ultimately we all want to strengthen the system so we can have some complete achievements and we can learn by looking at both how it was done within the context of achieving HIV related outcomes as well as in the context of trying to look at the impact on the non HIV outcomes.

David Peters: Responding to Questions

Thanks. I would like to also follow up on that question of how other health systems can learn from HIV/ AIDS. I think one of the questions that needs to be asked as well is who are you interested in learning. I think on the research side I think it's true that many people gained their research credibility mostly by having a lot of focus on particular disease and conducting very focused research. On the other hand there is a growing group of health systems researchers. I think I'm in that group but who are very interested in this question, I'm very happy to do it.

The major constraint really is funding for this kind of research. The questions they usually ask of you are pretty sloppy evaluations after the work is done as opposed to from the beginning when you can actually design decent research and evaluation. So if people will pay for it they [researchers] will come and do it; in this question in terms of learning from HIV - but I think that there are bigger questions. By the way, think of any health systems research group; but I think there are other people who also worked on HIV and have done that for the Global Fund and The World Bank and I currently work on the chronic diseases in Bangladesh. There are people who do this. Peter Berman would say no, well that's interesting.

I think it is a question more about how do you get learning at a program adequately. I think that there are a lot of concerns at how you do this at an international level largely because Global Health Initiatives merged at a time when sector-wide approaches and the intention to come together were really just starting to take off and then you had basic non responsiveness to some critical conditions. So it has these whole other types of politics at the international level.

It's probably much more important to have learning at national and local levels and therefore it is important to find ways of convening, bringing systematic planning to these key players but overall I would say there has been relatively little investment in evaluation of health systems strengthening and the key part of that would be trying to make linkages between whether its chronic disease models or HIV and learning across different cuts because there will be different types of research. Then it's traditional, done through clinical or standard approaches of public health.

Rene Ekpini: Responding to Questions

[It is not clear at all what Dr Ekpini is trying to say.] Thank you very much. I will first refer to the question on infant feeding in terms of the audience. I think at least with respect to Peter Berman and his team and referred to HIV beyond involving people working in health systems strengthening, the collaboration, partnership, accountable in people working with HIV especially AZT and both working on different products such as nutrition even malaria *[audio not clear]* is very

important and this is something we are seeing currently at country level. You look at the coordination group you look at internal planning in terms of monitoring and evaluation.

We have studies at country level in terms of integration because integration shouldn't be on the service delivery level. Integration should start at some level if all the programs are involved. Definitely if diet is important as it is pointed out people working with HIV are trying to figure out how to strengthen to have the same kind of feed back from both working different programs like it relates to PMTCT. I would just be frank and point it out that I don't think in 5 or 10 years we will have the PMTCT programs. Definitely the move will be towards the integration of PMTCT with maternal essential services.

Getting back to the point in terms of infant feeding, maybe I was not clear enough but the point is that it didn't get to technicalities but definitely infant feeding is a key element of the program. Infant feeding needs constant support, is what we called [...] of the strategy but when I was explaining the new problematic and scientific evidence and integration at [*audio not clear*] level, I did actually highlight what we have in terms of scale of modification which have implications in terms of possible transmission of HIV especially ART administered to women in need of treatment.

I also mentioned in that presentation that there can't be [*audio not clear*] child programs including immunization. And finally, as I pointed out the ultimate goal is definitely to improve the maternal and child health and Survival and looking at these at this angle, there your point is obvious. What we need now is to go beyond the [HIV] infection.

Looking at HIV survival, integrating HIV, integrating maternal [*audio not clear*] services including postnatal services in this area.

Male Speaker: So a lot of the discussion has been on health service delivery; somewhat from health workers per say – some reference to the role of communities in [*audio not clear*] and civil society certainly from some of the speakers but not always as a central piece. And I guess I do want to emphasize that I think the impact of communicable diseases - civil society act as monitors and implementers and are critically important to anything we going to call positive synergies.

In part of the absence of positive synergies with respect to other disease and priority health needs is the lack of communication on those issues. So that we need to have a significant piece of this not only focused on strengthening what we traditionally thought of as health services but also the community systems. So the Global Fund now has some magnificent for supporting that but it's not robustly used at this point. I think that we should be thinking about how it could be done.

I think another thing it was somewhat neglected in the presentation earlier in the opening session this morning is the recognition of clear labor in homes - all the support in terms of medication in home care and what the community health workers do. I think we need to put on the table that

creating these linkages and strengthening those systems is critically important to the success not only of HIV but any other expanded health outcomes that we want for the countries we are talking about. Thank you.

Male Speaker: Thank you. I think what I want to say actually stems from what the previous speaker said. I do want to talk to the theme of service delivery and what service delivery means in the context of what we are talking about. I want to commend the models. I think broadening and integrating to do with chronic diseases is necessary good but what I want to suggest is that it's not sufficient.

The point I want to make is that HIV is profoundly affected by many socio economic determinants – income, poverty and equity and other social factors. In fact we got this vicious cycle. And in that way many of the AIDS related illnesses – TB, pneumonia, diarrheal disease, (nutrition not the same) they all interact negatively to produce a very dangerous situation. Now if poverty and social factors are not identified in the list of causative things in which we are going to intervene, obviously the interventions are not going to address these fundamental factors and I didn't see any of the socio economic determinants identified.

Now my view is that you can't limit health systems to what happens in health services without considering other facilitating interventions which address these socio-economic determinants. I would like to end, Noerine, by going back to the question I think you asked us earlier in the day. You said if health and disease are made at home why when health breaks down relating to [the presentations]. I've got a fictitious answer to this adage – if all you have is a hammer, every problem begins to look like a nail.

Male Speaker: I would like to come back to the beginning of the talk on HIV Program Design– just to remind ourselves that both the definition of health systems as well as the nature of AIDS responses is multi-sectoral of course. I mean health systems can't just consist of the health sector or health delivery system.

So education nutrition, water and sanitation all that is part of health - now the question that David Sanders raised on nutrition was not completely answered but could you perhaps have some example on overseas programs which by nature not health systems or sector whatever but protection programs that do have an impact on Child Survival and that are very much part of the AIDS response? What's the evidence there? We see programs for example on infant mortality, on pneumonia, death rates issue.

Kathryn Stinson: I'm coming into this more on the health systems strengthening side and one follow up with what some of my colleagues were saying because I have interest both in advising PEPFAR Programs in Southern Africa also working with governments depending on the focus country. And it gets to the point about how we implement programs because that's what they want

to know and that's what governments want to know. And the recognition me and my colleague have is that the systems also exist outside of health and one thing I have noted in all three presentations is this very facility based approach. And to get to your comment that was made earlier about at the home – how many of the interventions around health systems are in the facility for health? And then the impressive efforts on treatment scale up which is very successful but prevention scale up, that's not really happening yet.

So looking then at Wafaa's line where you have vertical programming and horizontal implementation I would push that further because I see our programs and I'm over generalizing here but - donor funding to diseases going primarily to health and primarily to the Ministries of Health; and within the Ministries of Health primarily to the HIV/AIDS unit; and the Ministry of Health which does [implements programs]; when you negotiate at that level, [Ministry of Health] can make a big difference; and how it looks to broader government. And I think its changing under PEPFAR [2] because they are doing frameworks. So we are moving into an era where US Programs are looking broader but I find it fascinating how they continually move through the same people.

And in doing that I have a question [*audio not clear*] about fat Ministries of Health; they are fat and they are becoming lazy and when you look at the way the things that need to happen, they rest often times in the Ministries of Local Government, Ministries of Education. I worked a lot on workforce issues and that's the Ministry of Public Service that does not engage with a lot of these programs. So challenging the statement made by colleagues, other institutes need to be assessed. I think other institutes need to be implementing these programs and to do that it has taken on my UNICEF's colleague's breakdown of the WHO building blocks which is leadership, governance, health financing, workforce, procurement and implementation systems.

All those granted decision making pieces while outside of health– one example is health workforce; you can't expand your establishment for workforce until you have public service on your side and if you continue to engage with health, that's not going to happen. And you are not empowered to do that and often not trained how to negotiate those skills. So to all three presenters I ask the question then, how will the programs you represented at the research stage being designed and implemented with sectors from outside of the Ministry of Health and outside of the HIV/AIDS unit – looking at these health systems which are larger than health systems issues? Thank you.

Sharonann Lynch: I just wanted to say that I agree whole heartedly with Wafaa, with what you said that to utilize more of the PHC facilities which obviously not only for patients in terms of decentralizing services but also good for health systems that were better utilized in the capacity that exists. And secondly to say that so much of the discussion that I've heard in this room

thankfully - but what the discourse is pretty much all about, is this conflation. I appreciate that Wafaa has a distinction between vertical funding and what happened in terms of implementation and most certainly need to improve implementation.

And I think PHCs are a good place to do just that because after all not only are we talking about the same patient in terms of MCH and HIV but we are also talking about the same clinic and even the same healthcare worker.

The case in point, you used a photo that I rather appreciate is from the MSF project in Lesotho where there is one clinic with two nurses. Some people that they had are initiated on ART. One of these nurses one, she's on the right and I have a nice quote from her, because unlike South Africa in Lesotho nurses are allowed to initiate and manage ART. She says "when I was a nursing student I had to ask myself why am I going to nursing at all because I had the feeling I was just learning how to move patients from the consulting rooms to the mortuaries. Now that the ARVs are here, all that has changed. I feel more again that there is hope. Now my only problem is the shortage of staff."

And again there are still two nurses at that clinic and it has gone from a rather dead clinic where only a few people were coming in, to one that has a heck a lot of patients now. Why - because HIV is part of the comprehensive package of the PHC services and that's also true for PMTCT where before women were not pitching.

So I also agree we need to get the Ministry of Public Service involved but also to send a clear message that we can better utilize the capacity that we have. There is most certainly something we have in common with PHC activists in terms of ensuring that HIV is integrated as part of that package.

And that we look there in terms of reaching those people because as we have heard that there is a lot of funding and equipment that's going to be coming down the pipe and even though we haven't yet talked about it, Global Funding is facing a tremendous shortfall even of demand and the proposals linked to the Fund.

Male Speaker: Well I guess I will use that opportunity to actually give a very contrary comment stimulated I think by Wafaa's presentation. I think I consider myself in the health systems side of this conversation and I found that most of the things that were far listed as being unique characteristics of HIV/AIDS programs, I find are not at all unique. They have long histories and they have been around since we have been working on health care in resource constrained settings. In fact even from before we did that in the 20s and 30s – I kind of have an old collection of papers and things. Think about things like task shifting. This is an idea that emerged in the 50s from the idea the physician assistant and the physician extender it's been used in developed countries, often used in developing countries. The community health worker – David Sanders and

I worked on community health workers, I can't remember how many decades ago – [*speaker turns away from the microphone*] – this is not a new idea. This is what I call an idea whose time has come, gone and come again. So we have to ask why? What is the reason this idea came, why it went and why it has come again?

I think a multi-disciplinary approach is what we have been talking about with nutrition – hygiene and sanitation are multi disciplinary approaches.

So the point I want to make is that we shouldn't give in to this notion that somehow HIV/AIDS [Programs] is entirely different or new. It is a new disease and it has different characteristics. There's no question about that, but a lot of what we were talking about from assistance perspective is not new ground and the warning in that message is that many of the problems we have encountered in past approaches may come back to haunt us again. Community health worker programs did come and go. Why did they go? Are we sure that we are not making the same mistakes now that we made 20 years ago with these programs? So that's one point I'd like to make. I think it's really about a sense of not automatically accepting the notion that everything is new and different because it's HIV/AIDS.

The second point I wanted to make is this question of chronic diseases. I think it is a very important issue to bring up and I do think that there is a huge need for addressing chronic diseases in poor countries but one of the dilemmas we are faced with in trying to address that need is that the organizational models we have for service delivery are not well designed to do that. One reason why they are not well designed to do that is because that kind of care is much more resource intensive; requires more continuous and is more expensive.

And so coming back to the earlier discussion about resource constraints and so on and cost effectiveness which was raised today – we really have to think carefully about transforming the organizational model for care especially one designed for clinical level of care and again I think about strategies that have been out there before community based interventions, community health worker task shifting and so on and needed some new approach that might come after us.

Wafaa El-Sadr: Responding to Questions

I totally agree that actually unfortunately some may have got the impression that I was talking about facility based. I actually mentioned the word beyond the walls of the facility. One has to reach out to the community if you are trying to establish lines of care that are appropriate for these ongoing chronic conditions and a lot of that is happening in the community. Mobilizing the community itself is very critical and working outside the facilities is very critical. I think the other issue is multi-sectoral involving other Ministries other than the Ministry of Health. I have to say that again countries themselves are often, in many countries that I have experience working with, depends on the country in some cases - they have taken sort of control of the funding from HIV

and brought to the table all the different players from the Ministries – Ministry of Health and other Ministries and have come together to shape the programs. That's the ideal situation.

The ideal situation is if the funding that comes from HIV or whatever is discussed and maneuvered and used in programs and shaped by people sitting on the table that represent those various different interests, I think that's critical in achieving the goals.

It is going to be more expensive to think of dealing with chronic disease but that's the bottom line. These people have chronic disease whether it's HIV or another chronic condition. If you look at the burden of disease map that I showed, it is chronic disease whether it's HIV as a chronic disease or it is the other chronic conditions and as I try to say also even the acute conditions they do become chronic behavior. So we have no choice. If you want to have an impact on health, if you want to have an impact on the outcomes of the people in these communities, we have to shape our programs and we have to shape our assistance to respond to what they need. What they need is essentially transformation of assistance that really is addressing things in a completely different way and will cost more money but it might have better outcomes.

I think you are right certainly that the community health worker movement was there and ran away. I think we should ask why it went away. Why didn't we keep that going? Why did we abandon it? Was it again a lack of commitment of resources or lack of vision of how we want to utilize this for the future?

But I think again these are good ideas that were good then, are good now and we need to sort of shape them, keep them alive if they demonstrate that they are useful.

But I have a sense that we need to shape models that are responding to the needs and the bottom line is that they are going to be much more complex and waiting in the clinic for somebody to come in sick, I don't think we going to help achieve anything by sticking to the model that's dealing with one person after another coming in sick without any form of, without any interest in the follow up outside the walls of the clinic and without any attention to re-conceptualizing our system to respond to their needs.

David Peters: Responding to Questions

I fully endorse the comments ...*[speaker turns away from the microphone]*... but also that much of the implementation really occurs outside of health services as well. I was working within the time - because the focus of the talk is on health services that is what I showed you. However it is not a complete framework, I'm going to put it out but I'm not going to describe it in great detail though but I will also, that's fair enough, and I think much of the determinants *[the speaker turns away from the microphone and he fades away until he finishes his contribution]* – *[reference slides for the framework]*.

Rene Ekpini: Responding to Questions

Very quickly, I think on the first point of social protection, we all recognize that social protection goes beyond HIV. I think definitely there is clearly a link between PMTCT, HIV and social protection targeting children. The fourth component of the strategy includes the support which is also part of the social protection for children.

In terms of impact I don't have evidence but definitely one thing I can personally see quickly is at least the impact on the burden of the health system in terms of morbidity and mortality for children.

The last thing is about – there was a point about nutrition and HIV, infant feeding, counseling and support. Yes, in the area of PMTCT which is an area which is very important in terms of addressing specific issues not only for children but also for mothers and some of the Global Health Initiatives are supporting PMTCT and not supporting the nutritional component. I mean for example [*speaker not clear in what he is saying*] and again in terms of impact on the system when we you are unlocking a program in this area, you are not targeting HIV infected children but targeting all children which is an indication in terms of strengthening the overall assistance reaching the children. [*speaker fades away as he finishes his contribution*]

Noerine Kaleeba: Excellent and well done. Well done everybody. We have conducted a marathon. We have done very well. We have raised more questions than answers which is good because then we go out there and we are even stronger to explore even how to do a good job even better. Because we've done well, I understand they are going to feed us. I thought we were going to go out and look for food.

Jacqueline Bataringaya: Thank you very much Noerine and the speakers for the very rich discussion. Lunch is ready and waiting for you next door. Those of you that may not stick to Noerine's advice in terms of being healthy, there's a smoking room next door. Please be back here in order for us to get back on schedule. We will give you an extra five minutes. So at five past two please make your way back so that at ten past we are ready to start. Thank you very much.

End of Session 2