Greetings and acknowledgements

What a braw day! I am thrilled at the opportunity of addressing you.

The images in this slide speak to the transformational power of research. Whether it is curtailing an epidemic of HIV/AIDS that was a death sentence and break the health system, or ridding us from the scourge of polio. The centre image has champion Ciro de Quadros, instrumental in using research to target effectively the eradication of polio with adaptive and knowledge based strategies. Luis Fermin Tenorio was the last kid with confirmed polio in the Americas (Peru, 1991)

Research as a driver of development. I will show images that attests to the impact of research in terms of driving human development, and to the role of champions. These images are contributions from documentary photographer Jane Dempster, and museum photographer Theo Chalmers. They are part of the Art for Research project that I curate. And after a short note, we will begin with a short video that highlights the many ways in which research can make a difference on what appears to be a simple infectious problem that impacts on development in complex ways. The work I will present here has been done through collaborations, strategic partnerships and by various teams.
I am proud to work for an Organization that has left a mark in me since my early years – I carry the scar of the smallpox and TB vaccines. I remember it’s logo and name since my earliest years when I was being given the bitter droplets of polio vaccine, and I am grateful to it because none of my classmates had to struggle with polio or smallpox. The international collaboration convened through PAHO is behind many success stories in improving health.

I was told when invited that it was an acknowledgement for working behind the scenes doing a difference. Frankly, I have had the most fantastic role models in every work and partnership, and I want to specially acknowledge a colleague at WHO, who throughout my professional career has been a beacon and example of quietly working behind the scenes integrating quality research and scientific method in WHO’s work, my friend Metin Gülmezoglu.
Now let me share with you 5 minutes of the work of young medical student Shelly Mingqian Xie. Our Art for Research projects can be found at www.paho.org/artforresearch
During my professional career I have had to take on different roles and activities moving from being a family physician and researcher in Colombia to advising WHO on using research evidence to reduce unjustified variations in health technology assessments, developing evidence overviews that allowed balancing benefits and harms on topics and outcomes relevant to patients, internationalizing publications, and more recently enhancing policies on research for health and supporting their advancement in countries and within WHO. And today we are in this seminar addressing an issue that is clearly related to the standards of research, and transparency. And this does not happen in the vacuum; there have been important changes in the research environment and there are new approaches to monitor and evaluate progress. The information society has taken over, and there are efficiencies in many of these developments.
As a scout in my youth I used to find my way using a compass and maps, that required training. In 2000 I moved out of Bogota, a city with a grid structure and excellent landmarks that make it easy to estimate distances and orient yourself, to London –streets in the UK change name every few blocks, and it is not easy to find your way without having a thick book of maps. I was mesmerized when in 2003 the first GPS systems became available and they quickly replaced the thick tomes of maps. No long after that JK Rowling was capturing our imagination with interactive maps...GPS prices fell and shortly after, we saw the integration of social media with GPS navigation systems. You folks may be acquainted with applications such as WAZE that allow users to update in real time information about hazards in the roads, traffic jams, and so on. However, when it comes to gathering information about how our health research systems work, and the outputs of research, in many situations we are still relying on asynchronous information, that is, we have not yet gone to far from the map tomes that are difficult to access and get easily outdated. Today I want to invite you to imagine how would it be if many of the things we discussed here could be integrated into real time systems to monitor and evaluate research for health at every level. I think it is an idea with a great potential to improve people’s health, and the opportunities for research to make a big difference.
As we keep our focus on our developments, the environment is changing. And without current datasets, our mindset may be in the wrong page limiting us from participating in well informed processes. As things pick up pace we need datasets that communicate effectively and accurately. On the left the creator of GapMinder, Hans Rösling, making the case that the term “developing countries” that was accurate 50 years ago is now an anachronism with no operational definition. Yet, the misleading term is still widely used.

The information we have gathered show that the environment for research for health has changed. We need to look into this data and adjust our mindsets shining light on what lays ahead under these new and changing circumstances.
Throughout the presentation you will see many examples that illustrate the value of strategic partnerships. Nothing here has been done by an individual group. That is a key message. I will focus on some principles that I am sure most of you promote, especially that we take stock before moving forward. I will illustrate some efforts being done to advance research for health – and the things you promote have been integrated in many of them. We have a productive partnership with the EQUATOR Network that goes beyond translating materials, we promote research reporting standards by integrating it into the training of graduate experts, who soon will be advising health authorities, in the training of research teams, and the enhancement of the technical cooperation we do at PAHO/WHO and with our strategic partners. I will inform you about some efforts to integrate research findings with policy, prevention and health care, and provide some insights on the value of research in such decisions. And finally, I will propose taking a leadership role energizing efforts to better assess transparency in research as part of a global initiative.
Taking stock
Of what the research for health systems has
This is a framework we use at PAHO to explain how research for health is essential to achieve our mission of improving people’s health with equity. From that perspective, research is a means towards that end, and it is helpful to strengthen the health systems. What you see here are the building blocks of a health system supported on the building blocks of the health research system that is underpinned by a policy framework, and we have included here three key policies relevant to research for health. Yet, it is important to highlight that all this happens in an environment with social determinants that influence health and are beyond the health sector. Hence the concept coined in the Bamako Ministerial Forum of 2008 of research for health, that involves working with other sectors; health research is a subset of research for health, but all research for health is relevant to the health sector. Knowledge translation is the catalyst for the improvement of people’s health, and requires a good interaction of the building blocks from within this system.
Hence, the faces of our target populations in research for health reach beyond patients in clinics and hospital: they include those delivering care in ambulatory settings, working in prevention and through other sectors, those doing prevention from within different settings, food safety, veterinary health, violence or road traffic accidents, it brings other sectors to work with health. To have impact in health, we need to work with other sectors, and we need to stress the benefits that health brings to development, to get the buy in and support needed to advance the enterprise of research for health. Think about it, and some of the most effective health changes to health come from outside the health sector, and some of the fields needed today to change health will require contributions from other sectors.
Now, let me quickly illustrate how the policy environment has changed. For time reasons I will focus on this millennium. In 2001 an assessment was made of research as an essential public health function. It looked basically at how research was used to inform policy from a pathocentric perspective, and the assessment was done in 41 countries with 2000 participants. It did poorly in most countries. WHO’s and PAHO’s Advisory Committees on Health Research had a very productive activity and there was a strong research team at WHO that resulted in the development of the Mexico Ministerial Summit on Health Research, where clinical trial registration was widely recommended. Similarly, momentum picked up to promote knowledge translation. Shortly after WHO launched EVIPNet, its knowledge translation platform, and ICTRP, the meta-register for clinical trial registration was established after the key variables for clinical trial registration were agreed in 2005. In 2008 the governments of the Americas called for the systematic use of systematic reviews to determine research needs, and the Bamako Ministerial Forum coined the term of Research for Health –as social determinants for health were acknowledged, and again emphasized the need for research transparency including standards for reporting and registration. Health Systems Research gathered momentum and PAHO Member States agreed on a Policy on Research for Health that specifically addressed research reporting and transparency, among other things. The consultations for the policy involved a broad range of stakeholders including several represented in this event, and it was done in coordination with the WHO Strategy on Research for Health approved months later by the World Health Assembly.

A challenge we faced in Latin America and the Caribbean was not really knowing what capacities and resources were in place. People complained the countries lacked elements of the health system, but they would not really know what was missing, what needed to be improved, what was in place.
Visiting the countries we noticed that frequently funding for research was provided by the councils of science and technology, while research priorities for health were to be established by the health authorities. However, the two sectors seldom worked in coordination. So we partnered with COHRED, and others including ministries of health and Wellcome Trust, and organized an event to bring those two key stakeholders together. Delegates were invited to attend a meeting I beautiful Rio, and the registration and funding were subject to delegates from both entities completing together a survey that described their national health research system. The meeting was called the Conference on Research and Innovation for Health and allowed us to gather data from 14 countries that led to a first assessment.
We have had two additional meetings witnessing an enhanced collaboration and communication between these sectors. As one delegate put it, before we knew we had a problem, now we know what specifically is missing and where to begin. Actionable data was obtained, and we used it uploading it into a wiki platform that we further developed as an open access wiki platform on health systems issues, the Health Research Web, hosted by COHRED.
This created incentives for countries to provide information. Envy and embarrassment are powerful motivators. And as we mapped policies, priorities on research for health, and ethics review committees, many provided the links and data to the institutions or documents because they didn’t want to be left behind. I will soon show you some of the data that is now available. So let’s look at his within the framework of the health research system.
We will begin with looking at the workforce on research for health. There are several initiatives assessing this, such as the Network of Indicators on Science and Technology. Here are some others.
This are screenshots from the Health Research web. The pointers on the left hand side will take you to a database with nearly 300 key institutions that have uploaded their information and webpages. On the right you see a database with over 900 ethics review committees in Latin America and the Caribbean. If you want to promote that ethics approvals become subject to adhering to research reporting standards, or to trial registration, here you have a helpful directory. It is unlikely that you will find a better database, even if this one has still room for improvement.
Last year established a partnership with the Organization of American States to expand their scholarships program to the health sector. To this month we have allocated 82 scholarships for Master’s and Doctorate degrees in Brazil and Mexico, and scholars and academic institutions will be exposed to the EQUATOR resources and some new training materials. This includes top Brazilian and Mexican universities so far. The program is quickly expanding and we expect other countries to soon join offering scholarships.
We also have a very productive partnership with TDR/WHO Collaborating Center CIDEIM, that includes a train the trainers scheme. We have trained several hundred research teams on effective project planning and evaluation, and the program has been integrated into the MPH program at the University of St. Georges. Furthermore, we have now 4 training centres serving the region (Honduras, Colombia, Jamaica and Brazil) and next week we will train a substantial number of the researchers in Suriname. The evaluations have proven that these research teams are more successful in getting grants and publishing their research, and yes, they will be exposed to EQUATOR Guidelines. Similarly, we have had training done with NIH, CARPHA, and the Ministry of Health of Colombia on grant writing and peer review for Central America, the Andean countries, and the Caribbean.
Several countries have now adopted and adapted a platform to account for their researchers and research production, and they have linked this to administrative tools. Essentially, you need to have your CV in the system to apply for grants. In the screenshot, the CVLattes platform developed by Brazil, that is being used with adaptations in other countries.
All our work is done through partnerships. And this are some fine examples of initiatives to capacities amongst researchers. Our partners at Cochrane Canada and the WHO Center for Population Health have been leaders in developing training materials to promote good research reporting standards, knowledge translation, and good research methods. We have had over 60 webinars with thousands of live connections and subsequent downloads of the recordings (about 40,000). Our WHO Collaborating Center at the University of Miami has a broadly used program on good practices for research and research ethics, and we are now discussing setting up a virtual course on research reporting standards. At the bottom of the screen you can see the massive influence of these courses.
In terms of access to helpful information sources
This screenshot shows you the Global.EVIPNet.org website that works as a single entry point to reviews, overviews, and studies on clinical and basic sciences, and health systems research issues – a collection of over 6000 documents including policy briefs and systematic reviews focusing on issues such as health governance, financial arrangements, delivery of services and implementation issues.
This addresses questions that health systems managers and policy makers usually ask.
We have been asking for policy makers to integrate scientific findings into policy. Well, now we have the opportunity of highlighting the relevance that our research has to existing policies and priorities because as from last year WHO and PAHO opened an indexed open access repository of intergovernmental policies, called iris. That means that if you are doing research on child obesity for example, you can more easily relate and link it to the policies on research for health and on addressing child obesity. This means a more balanced approach towards a dialogue between policy makers and research producers and sponsors.
**BIREME is the** Latin-American and Caribbean Center on Health Sciences Information, a PAHO Specialized Center, established in Brazil since 1967, in collaboration with the Ministry of Health of Brazil, the Ministry of Education, the Secretary of Health of the State of São Paulo and the Federal University of São Paulo. It has a collaborative network of virtual health libraries that provides topic and country/region relevant information for the region, and support to develop repositories such as global.evipnet.org, that exchange data and indexing with other global and regional databases.
Moving to the topic of regulatory structure and framework I will highlight some few issues, including some from resources I already mentioned.
The Health Research Web for example shows the countries that have developed policies on research for health including those of the Caribbean that share a sub-regional policy. If you recall the tables earlier, there were just 3 such countries in 2007. On the right you have those that have published priorities on research for health. Good to know if you want to make sure that your research addresses a local need.
Off course we strongly support ICTRP. I noticed by the way several reports focusing on ClinicalTrials.Gov. It is important to notice that ICTRP is a meta-register that pulls data from 16 different data providers, one of them being ClinicalTrials.Gov. Therefore, analysis would be richer if it were to be done with ICTRP, especially because the quality controls of some of the other registries are superior, and you can get a broader coverage with ICTRP. Imagine for a moment that you want to list the cars in your country and to do so you only count those of local companies, you would be missing many. Use ICTRP if you want to have a more comprehensive dataset of clinical trials.
While in 2005 there was one ICTRP approved data provider in the Americas, now we have additional primary registries, and furthermore, several countries now have legislation requiring mandatory clinical trial registration. This has all happened in the past few years.
And PAHO has established a regional platform on access and innovation for health technologies that works as an observatory and exchange platform for regulatory authorities.

Because of the nature of the information shared, it is a closed platform, never the less an important resource to engage regulatory authorities and obtain data.
Within our office we also have strengthened our standards and now any guideline or technical recommendation document has to go through a centralized approval system in WHO to ensure that it is informed with the best possible evidence and fulfill standards of guideline reporting. Our won ethics review committee requires clinical trial registration as a requirement for clearance of RCTs. All studies are registered, and all RCTs have to be included in an ICTRP compliant registry. WHO has used research to address unjustified variations in public health, such as those that had been detected in the interagency lists of essential medicines, that have now been harmonized.
In terms of policy, there are several on the topic but the key ones are:
PAHO’s Policy on Research for Health, and WHO’s Strategy on Research for Health. And although they have some structural differences, the key elements are synergic, and focusing on either is enough to fulfill the other one. The consultations were shared during their developments and the Advisory Committees on Health Research and partners contributed to both. Again, with regards to policy, as important as the agreement was the consultation process that allowed their approval by consensus with inputs of many stakeholders.
Now on to putting research to good use. Initiatives to integrate research with health care, prevention and policies.
As from 2007 PAHO Member States joined WHO's Knowledge translation platform EVIPNet. Here are the covers of some of the outputs produced by country teams. Health authorities decided on the topics to cover and the policy options to analyze, and PAHO and its network of supporters and EVIPNet global helped these teams in developing the skills to produce policy briefs, run deliberative dialogues, and in occasions, provide rapid response mechanisms to inform policy. These teams are less stable than research teams, but a local capacity is generated.
And this screenshot gives you an insight into the magnitude of the training and its impact.
Some Ministers became strong advocates of the initiative as they were able to focus debates on the merits, and embark in principled based negotiations. In a video the former Minister of Health of Peru highlighted how the evidence helped him address difficult issues such as deciding on the constitutionality of the day after pill, or determining the potential impact of transgenic potatoes in Peru. The video can be found at www.paho.org/researchportal/evipnet
This screenshot of an analysis of ICTRP illustrates progress but also the need to keep pressing for legislation. In a recent visit to Suriname we learned of over 30 clinical trials not in the database. Hence, we are talking all the time of an incremental improvement and we are working with countries such as Suriname, to incrementally address the structural and procedural issues, to address the problems in a constructive and helpful manner that also brings a clear added value to them.
But at least we can now have a better picture of what is happening. Here an analysis of registered cancer trials, showing the dominance of treatment, and the imbalance with diagnosis, detection and prevention.
And we have some better understanding of what kind of research is taking place in neglected and tropical diseases.
The point I do want to highlight now, is that when you look at the WHO Strategy on Research for Health, and the Lancet series, there is a striking correspondence as the topics are well aligned. Hence, an opportunity to broaden the scope and frame it within the political agreement already reached by countries in 2010 to address these issues.
Research is essential to inform policy, health care and prevention. But it is not enough. These fields also need to be informed by contextual and values issues, such as described in the original definition of evidence-based medicine, but these factors are far more relevant in policy issues. Effectiveness and safety are some of the many considerations a policy maker has to address. He or she will also need to look into cost-effectiveness, adherence, availability and alternatives, production issues, acceptability, presentations, etc. But the important thing is that using research evidence it is possible to ensure that the pool of interventions considered, for example are effective and safe, so that the contextual and value considerations focus on interventions likely to be beneficial.
Now, to walk the talk we need to evaluate what we do. And although we do, this is a weak link where we could do with help whether it is in developing meaningful indicators, or influencing managers to follow through and put resources into it, or using the various platforms to their potential. Think of the very many helpful reports that interns and students could produce doing research of research with ICTRP. Honestly, what is out there is just a fraction of what could be available to guide actions and shed light on imbalances and inequities.
And we do our best to do it. These are examples of evaluations of a grants program, and the baseline evaluation of guidelines done before adopting the new standards. But we need to do a better job at follow up.
There is an evaluation being prepared to assess progress with the policy on research for health in our Member States, and there is a follow up to be done on the baseline assessment of the implementation amongst PAHO managers. But with budget cuts and resource issues, evaluation ends up being frequently sacrificed for technical cooperation and other investments seen as more urgent. Hence we are less able to join the dots and show the returns in investment.
Now let me wrap up with some insights because I think this group has a tremendous energy and contributions that could energise some ongoing efforts. In 2013 the WHA mandated establishing an observatory on research and innovation for health. And many of the proposals and elements in the call could be framed to support such an initiative, getting an articulation and harmonization to advance together.
This would be entirely consistent with many of the principles behind initiatives such as those of Cochrane that have inspired much of the work leading to REWARD and EQUATOR. It may help to strengthen collaboration, avoid duplication, and strive for relevance, for example. And engaging intergovernmental organizations facilitates wider participation.
Such collaboration may impact on the pace, but certainly may allow getting farther, and stronger
It will also facilitate broadening the scope of the proposals to increase the value of research and reduce waste. It will bring on board elements such as implementation and relevance, so essential to avoid research waste. Now, there is a unique opportunity to influence policy now that Cochrane is an NGO in special relations with WHO, and I strongly think it could be used in a very strategic manner. Furthermore, Cochrane has appointed a policy savvy person to liaise with WHO. I want to challenge you to work with this and other partner to prepare ahead of the Governing Bodies meetings of WHO and PAHO. That is to come to the WHA and Pan American Sanitary Conference or Directing Councils with a series of prepared proposals to strengthen monitoring and evaluation and to systematically promote increasing the value of research and reducing waste appraising selected documents under discussion. Alto to follow through with the monitoring and evaluation of the policies, especially those on research for health. To work with the broad network of partners of this group, including Cochrane, Campbell, the Equity Network, Justice health, and many others to systematically raise support the integration of evidence with policy, prevention and health care, and keep a fluid exchange of knowledge between policy makers setting priorities, and research promoters striving for excellence and for making a difference.

You can become the leaders that push for a principled negotiation that efficiently transforms health care internationally.
And it may help us come with stronger ideas to integrate our information systems so that we can have integrated monitoring and evaluation systems that provide real-time comprehensive monitoring indicators even before the next blood moon takes place. That may help us have better research, fit for purpose that takes us from bed to implementation, enabling all to benefit of research for health.

You folks can make a big difference keeping the focus on good standards, evaluation, and support for successful initiatives. Preventing us for deviating into the siren calls of relaunching old initiatives with a new hat, supporting and building on what works.
Research for health can address diseases, promote development and even shape global geopolitics, as has happened for the past century.

The Interoceanic Canal in Panama would not have been built without research for health. The recent centennial of the opening of the Interoceanic canal reminds us of the transformational power of research, an achievement that impacted on geopolitics and brought wealth that has spilled well beyond Panama, we are reminded that investing in research for health has tremendous returns and that these can be lasting returns that reach society through other sectors. Considering the benefits and importance of the production and use of relevant quality research to improve people’s live and promote wellbeing, my intention today is to encourage you to explore novel ways of engaging with ongoing global efforts so that we can do a better and more efficient job, building on the transformational principles and enthusiasm that has led to initiatives such as REWARD and EQUATOR. Iain, those books from William Crawford Gorgas were added thinking of you and the James Lind Library.
Questions please!