Lancet Podcast Transcription Begins:

Tarun Khanna: Good morning, good afternoon, good evening wherever you are. I'm Tarun Khanna, welcome to the Mittal Institute and associated organizations, Harvard organizations sponsored events on the Lancet Citizen's Commission for Reimagining India's Health.

The purpose of this webinar, this hour and something session is to introduce this exciting and ambitious endeavor to the Harvard community. I'm joined by two of the three Co-chairs of this Commission, Vikram Patel, Professor at Harvard Medical School and Harvard School of Public Health and Kiran Mazumdar-Shaw, one of India's leading entrepreneurs. Our third Co-chair Gagandeep Kang is unable to join us but sends her greetings.

The idea of the Lancet Citizen's Commission is to pull together a very diverse group of people as befits trying to think about healthcare for 1.3 billion people in an extremely diverse and large society, to bring together these facets so that we can think about if you like a theory of change towards universal healthcare and a meaningful path that makes progress within a defined time period. I'd like to think ten years, but that's just me speaking, but something that is research-driven, fortifiable, and therefore, testable to hypothesis in a rigorous academic way but also has very concrete policy implications that a series of policymakers, academics, activists, entrepreneurs, who are commissioners on this Commission, several of whom are on screen here with us today, so that we can all see it happen in a defined time period.

By way of introduction, I just want to say a couple of things about what makes this effort distinct in our minds. Those of you who are familiar with India or familiar with healthcare in India or some sort of combination of those topics will know that there have been many Commissions in the past, most of which start and end with an exhortation towards universal healthcare. It's hard to imagine that you would not want to move in that direction, probably the earlier such exhortation goes back to I want to say 1946-47, I forget, with the Chore Commission. Most of these reports, while well-intentioned, haven't really resulted in universal healthcare, a fact that is painfully obvious to those of us who have been watching the pandemic rolling through that has been exposing so many schisms so sadly and so graphically to the world. Not just in India, many developing countries, and in a sense, a part of what I find interesting as someone who works in economic development and entrepreneurship in poor countries is that a lot of what we can learn in India would also be of interest to those in the Harvard community and around the world interested in other developing countries.

So, we have tried to do two different things from these past commissions. The first is a strong hint in the title of the commission, it is the Citizen's Commission, and the idea is to go out and very ambitiously try to hear, if you will, statistically and qualitatively, the voices of frontline users and providers of the healthcare system. Patients, community health workers, doctors, physicians what have you, and somehow capturing the views of the citizenry is something that's really quite distinct from a bunch of people in an ivory tower deciding on something important and weighty as universal health care.

The second thing I think is that we have consciously, for the last six months during which this Commission has been debating the issues, we've consciously embraced what I would describe as points of schisms that often are swept under the rug. Right upfront is the tension between, if you will, formal medicine, allopathy, as well as traditional forms of medicine, both of which coexist in a country like India, and again in many other developing countries that have traditionally tended to do their work in silos, perhaps with some degree of usual suspicion, we feel that differences of opinion should be encouraged both in an academic studying and the studying that seeks to create realistic policy frameworks and policy that can be implemented. They shouldn't be side-swept, they should be engaged with and we should find a way to leverage this sense of diversity as opposed to collapse under the weight of its difference.

The second schism that I want to bring up, particularly as someone at the Harvard Business School, is a schism between private sector and public sector. As regards to healthcare, private sector has often been demonized, there are surely grounds for being suspicious of some private sector activity but the fact is that private sector is also the engine of dynamism, it's also where much of the healthcare is delivered on the ground, and whereas we all recognize and this commission explicitly has stated that the government and the state ultimately is the regulator, financier, steward of healthcare, somehow the private sector has to be harnessed. So, again, I think in contrast to most prior healthcare commissions of this sort. Again, well meaning commissions staffed by extremely erudite people, that particular schism has not been embraced. So, we'd like to embrace that as well and bring it on board.

So, without further ado, I'm going to be the moderator of this panel. I've said pretty much all that I need to say. Let me give you a sense of how we're going to run this. In the interest of time, I'm going to call in one of my co-chairs, Kiran, to essentially describe the structure of the Commission and the introduction of work streams for no more than ten minutes. I will then moderate a discussion for half an hour, including Q&A for those who are on this session, then my colleague and also co-chair Vikram will give a sense of the research methodology that we will follow and hopefully we will have time for some closing comments and so on and so forth. Oh, I see I have slightly different directions. So, half an hour in between is going to be a discussion among the panelists and it's towards the end that we will solicit comments from the audience. Thank you for your patience.

One last comment that my bosses at the Mittal Institute are telling me is that there will be a survey to solicit interest from the Harvard community in participating in the work of the Commission. I think this will go up in chat, if it has not already, oh at the end there will be a survey that you will take after the webinar and it's also on the Mittal Institute website. You can go to that site, click on it and indicate what your interest is and how you wish to plug into it, and hopefully there will be a little bit more clarity once we get through this webinar.

Thank you for your patience. Kiran, can I hand it over to you for a few minutes?

Kiran Mazumdar-Shaw: Thanks Tarun. I think that Tarun has set the stage very eloquently giving you a view of what this Citizen's Commission is all about, and we believe that this Commission needs to start by asking the right questions on key areas of governance, finance, human resources, technology, and of course citizen's engagement. And, what we believe is that the commissioners will apply themselves through these five, what we call work-streams, each of which will ask defining questions that can hopefully solve many of the current day conundrums in healthcare delivery, many of which I think Tarun alluded to.

Let's start with finance, it's about who pays for what. It's about Centre and State financing, public and private sector financing, health vouchers to offset out-of-pocket expenses and here it's very important because right not out-of-pocket expenses are almost at 60 percent of people's income and this ought to reduce to at least 30 percent, it is what we believe. And insurance and manage care models are also going to be a very important theme. When it comes to technology, it's about not just digital but beyond. How does technology act as a substitute, like for example telemedicine, e-pharmacies etc. How does it become an enabler, such as data collection, aggregation of services etc, and how do you deal with technology as a barrier, for example, there's this constant query about data privacy, hacking etc, and then finally, how do you harness technology as an innovator. We want to look at low-cost therapies, med-tech interventions, techniques etc. And then you come to human resources and capacity building, how do we address training, shortage, distribution of healthcare workers, extent of specialization. How do we make efficient and innovative use of both limited resources and limited skillsets. And then you come to this big question of governance, how do we make sure that we focus on transparency and accountability? What kind of architecture do we need, how do we assess impact and outcome? How do we assess efficiency and quality of healthcare delivered? How should we regulate the private sector? This is a

big question that is being asked by all stakeholders, and then how do we deal with central versus state versus local initiatives? How do we harmonize them, how do we make sure that they don't work in silos etc etc, and then finally, it's about citizen's engagement. The pull verses push for services, I think that's very important for what we're trying to do. We want to run surveys to gather insights into experiences and expectations of citizens, identification of NGOs that can provide last-mile healthcare delivery benchmarking public health systems across the world, and so on and so forth. So, the Commission hopes to engage closely with the government's own initiatives in delivering universal healthcare through Ayushman Bharat, which is being perceived as a universal healthcare system and a very pragmatic national digital health mission amongst others.

As Tarun mentioned, citizen's engagement is at the heart of all these efforts and will serve as a fulcrum of the work streams to ensure that we have asked the right questions across all socio-economic strata so that we align on the right path to bring out a credible commission at the end of the process. So, I'm going to end there and hand it back to Tarun.

Tarun Khanna: Great. Thank you, Kiran. It's been really interesting, stimulating and fun, for the last several months to work with our colleagues, in these different work-streams. We are fortunate and privileged that we have some of the best minds applying to these issues in the country, whether it's on technology work streams or data gathering issues with citizen's engagement and so on. It falls to me now to moderate a conversation among those on the screen. We're hoping that a couple of the other commissioners will join us but it looks as though they currently have some connection problems. One of the moderators, Salman in the background, can let me know if Yamini or Rajneesh show up so that I can cue them

But in the meantime, Poonam let me start with you since it is the Citizen's Commission. Poonam Muttreja is leading our work stream on citizen's engagement, which as Kiran just mentioned is going to be the centerpiece of pretty much everything that the Commission does. So, Poonam, maybe you can just start giving a broad sense of the mandate of your work stream and in a big picture sense, how are you going about it?

Poonam Muttreja: Okay, so, I think this is the most exciting work stream and what makes the Commission unique is that it is an unprecedented effort to elicit the expectations and experience of citizens and bring together, as Tarun and Kiran said, wide and diverse perspectives in India, found in India's fragmented healthcare and landscape and I like how Tarun captured the frontline will be including the frontline users and providers. So, the effort of the Lancet Commission in reimagining healthcare in India will be underpinned by a citizen's engagement and gathering insights, perceptions, experiences of citizens across gender, age, reproductive health, geography, location and social groups on healthcare services.

So, what sets this endeavor apart from many, many similar efforts, starting with commissions forty and fifty years ago. Prior initiatives have base, this initiatives has a base, recommendations will be consulted, participatory and key stakeholders across fragmented healthcare landscape will be included, their voices, and their work all also reflect the aspirations of these stakeholders regarding the health system and how these can be realized across the domains of the commission, including finance, governance, technology and human resources. And finally, I'd like to say that at this point, tragic as the pandemic is, for India it is a huge opportunity for reimagining India's public health system and the historical as well as current situation puts us in a very important position to translate the challenge of reaching universal healthcare to the country, and at this point I think for researchers to participate from the Harvard community and other communities will be a great opportunity for, specially the Commission's work, which offers opportunity for strengthening research capacities but really, the research works team will be placed for specific research activities, but a lot of, maybe later on in the Q&A we will talk about the collaborations of other institutions, doing interesting, unique ways of doing surveys. I'll stope there, thanks Tarun.

Tarun Khanna: Let me just follow up with one question. What is the hardest practical challenge to actually getting to this diverse strata of people?

Poonam Muttreja: So, one of the big challenges is going to be for reaching, how do you reach where people are going to be able to express themselves freely without being seen as being critical but being constructive. So, how do you get there, and normally the kind of research we do across institutions is not in a pandemic. So, when we're talking about doing, getting people to express themselves fully and people are not used to actually being administered questionnaires. We are going to reach out to them using technology by and large unless the situation changes dramatically and the vaccines really transform not just our atmosphere but our health situation.

So, the challenge is going to be to get people in the community, healthcare providers, you mentioned the frontline health workers, get them to express themselves using questionnaires through digital technology. So, it'll be great, the challenge for this Commission is going to be to find the most effective strategies as well as how do you define the questions. So, people across the, not just commissioners but people we partner with, the young researchers or not-so-young researchers who are going to join us using our collective energies to really get the right responses and get people to express themselves, which can be captured for design of a program as well as policy. But, you asked me about the challenges, and I hope next time you'll ask me about opportunities because I could never have imagined as somebody in public health that I will have an opportunity to engage where citizens will participate in an endeavor like this.

Tarun Khanna: Wonderful. Your enthusiasm is palpable and I hope contagious. Poonam referred to doing this research as the pandemic is very much underway. Vikram will speak later to the timeline of the research process but the research is very much underway right now and the aim of the Commission is to wrap up its and make its final report on August 22. So, that's the time horizon on which we are operating.

Subu let me turn to you on the same issue. Subu is our resident data guru and statistician at the Harvard School of Public Health and a Commissioner on this Lancet Citizen's Commission. Subu, talk to the Harvard community a little bit about the statistical algorithmic approaches that we might need to bring to bear to do this practically but also in a methodologically appropriate way.

S.V. Subramanian: Thank you, Tarun and welcome everyone from the Harvard community or outside of it to the session. As Tarun said, Poonam's enthusiasm and drive for this is very infectious, needless to say. If I may build a little bit on the uniqueness that Tarun and Poonam have tried to underscore for this Commission, it is also like there is an element of discovery here. Typically, Commissions are like, okay we know whatever we can and there is obviously an element of we can do this better. So, there are certain things that are known where we can try to find the gaps but a huge component of this is really this aspect of how do you bring the citizen's perspective and in that sense it is quite novel for the entire research community. There is some kind of a precedence to fall back on but not in a very systematic and institutionalized way.

So, within that context, I'm sure many of you, especially at Harvard community who follow the US landscape on healthcare, especially since Obamacare, it's been like a mainstream issue. I think prior to Obama, health was not, maybe Clinton started to make it a mainstream issue and certainly Obama, whatever the plan is, we can disagree or agree on it but there is no taking away the credit for mainstreaming the issue of health and healthcare. I think that's a key component and I think in India, one of the things and why we felt this Citizen's Commission, that's the gap. Once an issue becomes mainstream, it becomes that much more, I wouldn't say easier is the right word, but it becomes more manageable to find solutions and work towards it despite the differences but if it's not even a mainstream issue, it's always going to remain what my colleagues referred to as the silo-ed approach, where everybody has their own kind of a blind. They go and do the best they can. So, I think to come back, I think that's the discovery that excites me the most because as a kind of an epidemiologist and a social scientist working on methods, we often rely on pretty much

what is known. It's very hard for us to go out, I don't do trials personally. So, again, or understand molecular mechanisms for me to discover something but if I am studying society, this is the opportunity for me to study society from a citizen's perspective.

So, there are two ways in which, if I may build on Poonam's thinking, one is to sort of understand what people's perceptions are. So, that is the first gathering and in that process to Tarun's question to me or prompt to me, we are in the process of identifying existing data sets where we can learn about people's perception. There are not that many in India that we can rely on but that's kind of one stream, what can we learn from existing data and then I'll talk a little bit about what perspective we should bring to analyze that data. So, that's the first task.

The other task is to launch new surveys, launch a new field of survey methods here that allows citizens to participate. And here I hope Sharad will talk about it as well, you know the brief engagement I had with Sharad. How do we leverage technology, we are in 2021, there are wide ranging system level informational gaps. We are talking currently about a particular program or an aspirational goal, universal healthcare and how do we deliver it for people and what do people think about it. So, that's clearly one goal, but there's also bread and butter sort of information like counting people or counting unfortunate events in the right way that we can. And I often say to this to my colleagues, in 2021 India does not count all its deaths. Forget cause and everything, even its children's death, so we estimate you know. There is no reason for us to estimate those deaths because again, once we start counting this information as the pandemic has taught us, it's not perfect but it really brings a lot of accountability. Sometimes people hack in haste as well, when this information came out we saw that as well in the pandemic but no one can deny the role that John Hopkins and a bunch of three people did because information is empowering and then, of course, there is a process of transition before which we bring some maturity to handling it. Unfortunately, we had to do it on the go but here we have an opportunity to do this in a more systematic way.

Just to sort of close it, that is one part that excites me, but I also do, as Tarun said, a lot on the existing data, which is what, can be mined something there and there we are bringing in, at least from my research that I hope to bring to the Commission and learn from others, is how do we, and this speaks to a little bit about Poonam's thing too, how do we bring certain degree of precision into focusing on groups whose voice is not heard or whose needs are often not fully on the table. So, we have been developing a combination of statistical methods and machine learning methodologies to drive down and see, okay, where are the pockets of population, right down to the village level. Obviously, there is a lot of leap of faith in methods we have to do but I also collaborate a lot with the government of India, so we're hoping some of this we can validate it on the ground. So, if I am coming up with a ranking for every village on the prevalence of stunting in India or prevalence of health insurance. How many people have health insurance in India at the village level? We can validate it because part of the word that we have been trying to do, including a lot of commissioners who are trying to work this in a constructive way with the government of India. So, we can try and also use that part of the survey. We do some of these fancy modeling and so on but then we need validation because ultimately, before it's adopted, people want to know is this real and you don't want that itself to turn into another research area where my colleagues from some other institutions are debating our numbers and so on.

So, I'll probably focus on bringing some degree of geographic precision is a key thing. Finally, something that I have been very involved in, my work, both in the US and especially in India, is how do you, this idea that we talked about mainstreaming an issue, and if we can make healthcare an election issue. So, that's my goal, so that would involve bringing politicians into the fold, that would involve bringing citizens demanding that. At least I feel, one of my, Anil Agarwal, who used to run Centre for Science and Environment, he used to say he would rather deal with a corrupt politician rather than a very sincere bureaucrat because the politician is accountable. Every five years, this guy or woman has to stand up and get an election. So, if you get the right set of incentives for these guys because all they care is to come back. So, there is a natural degree of,

but data is not available where we can hold them accountable one way or the other, or empower them if they wish to know what's happening.

Tarun Khanna: Subu, jumping in, you've said so many important things. I want to highlight two and then use them to jump off and bring in Sharad and Yamini. One that this is a process of discovery, it's really helpful to remind us also of that. That there are some things that we know, there are some things that we think that we know and there are lot that we know that we don't know. And really, the point of this Commission is to bring together diverse views to engage in that process of discovery, so that we come up with a policy advise that's tested in some ways.

The second is this last issue of health, anybody who lives in two societies as I do, in the US and India, and a number of folks on the screen, recognizes one thing that health has not been an electoral issue in India despite its raucous democracy, whereas frontally an electoral issue in this country, particularly since Obamacare and even prior to that. So, that's a very interesting thing and it goes to the heart of accountability and so on and so forth. Since we spoke about accountability, Sharad, I'm going to come to you about using technology to get at underrepresented data that we need to find in a second, but Yamini, do you want to chime in? I think you're there, I saw you momentarily, but if you're there can you say a little bit about the governance work stream and how we are thinking about the issue of accountability in general?

Yamini Aiyar: Yes, of course. In fact, I've just come from a panel discussion, we have a group of think tanks in India that get together to discuss the budget and health and the governance of health was very much front and centre in our debates. I think one of the most positive fallouts of the pandemic to the extent that there can be a positive fallout is that finally fiscal hawks are beginning to start recognizing that health and wellbeing is constitutive of an economy and investment in health and wellbeing is not an afterthought but central to what makes an economy, but that also brings to bear a very crucial question, particularly in the context of India about the governance of public health. Even a casual observer of India's public health system is perhaps well aware of the many acute governance challenges that the health system faces. High degrees of absenteeism, poor quality of care, a broken infrastructure.

The problems are enormous, but above all, I think there is a particularly crucial challenge of a system that is designed to be accountable to the extent that it is to itself rather than to the citizens and the patients that it serves, which together has created a very deep breakdown in public trust towards the public health system and strengthening the public provision of health, which is at the heart of what makes a robust universal healthcare system, requires regaining of that trust. The only means through which that trust can be regained is by building and strengthening the governance architecture that ensures that the system is incentivized to perform in a manner that provides high quality care to all those that access it. This sounds good in terms of a nice grand narrative, underneath this there are complex, very hard questions that need to be teased out and understood. On the one hand, there is a question of the regulation of the health sector and the government plays a central role in that as a steward as well as a standard setter.

For anybody who has followed the Indian economy closely over the last two and a half decades, they will admit that even though the mantra of the 1991 reforms was to get the state out of the way of everything and ensure that the state regulates, the state proves that the very anomalies that it caused once its inside things also found a way into the regulatory architecture that it built for itself for many parts of the economy. And the challenge in health is even more complex because it is a coming together of different, of a multitude of different aspects of the provision of care that requires teasing out what a robust regulatory architecture looks like, both in terms of determining the appropriate standards, capacitating it. One of the biggest limitations of our health systems is actually just the sheer lack of human resources and our regulatory systems have that too. Just to give you an example, when the Ayushman Bharat, our health insurance mega program was announced about three years ago, I did some back of the envelope calculations about how the trusts that are managing government insurance programs of people, just in terms of number of

people, we made a few phone calls across different states and found that the number ranges anywhere between five employees to a 100 and 250, I think in Andhra Pradesh.

And then we looked at what's happening US, Medicare and Mediclaim have a group of over 4,000 employees in Baltimore looking at claims data to figure out price setting. So, just very basic capacity issues confront the regulatory structure along with much harder ones. What to regulate, how to regulate, what's the best form to regulate and what's the best way to create an institutional architecture that both empowers patients and enhances their bargaining power but at the same time creates a regulatory architecture in which multiple participants and stakeholders, including the private sector can have a level playing field. So, that's one set of core questions. The second set of questions, and they're all quite interlinked, relates to the federal architecture of India's governance system. India is a union of states, there is a fairly complex intergovernmental transfer system and the Indian Constitution very clearly delineates subjects that are the responsibility of states and those that are responsibility of the centre.

Health is a state subject, and over the decades there has been a fairly complex intersecting of roles and responsibilities across centre-state, in ways where the centre has tended to, in my view, encroach on areas that are firmly within the state's Constitutional purview but also creating a fairly complex intergovernmental dynamic, which isn't necessarily serving the cause of the citizen and is, in stead, creating bottlenecks and hurdles. In fact, in some ways, the public health system, much as many other aspects of service delivery in India face a very fundamental first principles question: what level of government should be performing what level of function? And at the heart of all of this accountable system that is closest to people and that requires a robust role of local governance. India is probably one of the few countries in the world where the third tier of its governments, the rural governments and the municipalities play a very limited role in the provision of healthcare. Also, particularly in public healthcare, provision of civic services, which are very critical to creating an integrated and robust public health system.

So, how does one strengthen the role of local governments, and ensure that they play an important role in provisioning and holding the system accountable in a way that genuinely responds to needs of citizens is a third pillar. And the last piece we want to look at when we talk about governance and accountability, the tendency very often is to fall into the trap of talking about incentives and contract and also about carrots and sticks. But the real question at the heart of public sector in India, the actual professional environment in India is what shapes professional norms that drives behavior in ways that genuinely are service-delivery oriented, performance-oriented rather than waiting for biometrics attendance to get you to show up to work. We are all here, for some of us it's dinner time in India, there's something about our professional norms that are pushing us to be accountable, to be here, engage with you and engage with each other. Why is it that we are not able to instill those professional norms, what is it about the profession that is evolving in a way, that is breaking down that basic fundamental tryst of the public health system? It's a very ambitious agenda, and I hope we'll be able to at least cover some grounds in the roles and responsibilities with overlaps that empower rather than disempower as the current system looks. So, thank you.

Tarun Khanna: Thank you, Yamini. Very eloquent, we do recognize that we are pulling you from dinner. So, thank you for that demonstration of professional norms, which I heartily endorse. Yamini brings up a very important point that for all the, I'm trained as a mathematician, for all the gear heads and nerdy approaches to data gathering that someone like Subu or myself would embrace, that ultimately it's about using the data as a crutch to foster trust, to get over the mistrust in the system because no amount of technology or data are going to address ambient mistrust. And that really is a collective, almost a societal angst that we have to confront and sadly those schisms, on some direction, appear to becoming even more severe in recent times. More work for us as a commission but something that we readily embrace.

Sharad, let me turn to you, everybody has implicitly referred to your work stream on technology, Kiran did, Poonam did, Subu did and Yamini did in alluding to data. How are you thinking about the challenge of finding appropriate, using technology to address some of these issues?

Sharad Sharma: So, you know, our Commission is about reimagining the health system. So, if you go back to our last ten years, there are two remaining projects that have happened in India that are although controversial but also very successful. Clearly, one of them is about DBT, Direct Benefits Transfer, and India of course has the largest direct benefit transfer program in the world. And it's only one-third way in and it has disinter-mediated lots of players in the middle, and therefore, reduced corruption and the leaky bucket that we have had in many areas have reduced to the point where, at least, the current political party attributes its coming back to power largely because of this aggressive move of moving many of the government benefits to the DBT system and I like to tell a story that even in my state, which is Karnataka, which had a Congress government, which was opposing DBT, but when the elections were around they took the largest benefits program, which is farmers, and promptly announced that will go DBT.

So, DBT has political consensus, it started in Andhra Pradesh, it was very successful and is doing very well. So, that's one reimagination project that has happened at large scale. The second reimagination project, which some of you may be familiar with is to do with financial inclusion. So, this is why a former Harvard student Bill Gates go to Singapore FinTech Festival last month, and says, 'Hey guys, don't waste your time. All you FinTech guys, go and learn from India.' This is why you have the Bank of International Settlements in December 2019 issue a paper, saying that the financial model, the developmental model for emerging markets should be the India model. Now, what is this India model? The India model is really saying that if you want to solve for financial inclusions and have breakthrough results, DIS, in its paper, you are welcome to look it up, says India has achieved in seven years what normally would have taken a developing country 46 years to achieve. So, the crunching that has happened is quite significant, right. It's about 30-35 years.

If this is really what you want to achieve, what's been the principle behind it? And that principle behind it could be bring some of those principles to bear in reimagining health, and the answer to that us yes. Now, what are those principles? Those principles are actually very simple, that we need new innovation to solve this problem, right. Today, our healthcare delivery, if you want to do it at $3,000 per capita, of course we can do a very good job, but with a per capita income of $2,000, of course that's not even possible. Could we replicate the Thailand model and try it at $700, perhaps we don't even have money for $700. If we really want to solve this, we have to reimagine the system that would deliver it something in the range of 200, 250, 260 to 270 dollars, if at all something like that could happen. So, we cannot take existing templates that are there and simply bring them to India and expect that they'll work. It's not going to happen, there isn't an analog anywhere else in the world other than Cuba, which would allow us to do that and the Cuban model unfortunately may not work in our political economy.

So, if we have to reimagine, that reimagination requires, as has happened in the case of financial inclusion, it requires a partnership between innovation and digital public infrastructure, or public infrastructure. Why do I say public infrastructure? Because in India, it is easier to establish digital public infrastructure than to establish physical infrastructure for a variety of reasons, although some of that is changing. So, if we can imagine that bring very coordinated approaches related to that in policy, because there are three things that have to come together: public infrastructure, digital public infrastructure, innovation at the hands of the providers, and policy. Then you can do something that's never been done before. Now, India is right for this and in many way it is right for this. Why is it right for this? While I agree with Subu that it hasn't become a political issue, even before Covid happened, there was a national health agency that was set up. And some of you, if you follow this, the person who has been intimately involved in the earlier revolution, RS Sharma, was recently appointed, much to everybody's surprise, as the head of NHA, and this is a signaling from the government that it wants to replicate the same reimagining exercise in health. So that's number one.

Number two, it is ripe, why is it ripe? It's because of Covid. There is an appetite to experiment that wasn't there before, in a way would not have been the case, and the third is that some of the building blocks, which is why you guys asked me to speak about are related to data, have already been deployed. So, in August of last year, something called the Personal Health Records and the Health ID was announced and it is in the process of deployment. The personal health records and the financial data sharing, both are actually part of something called the Data Empowerment and Protection Architecture and this DEPA, as its called, is being rolled out for the first time in a techno-legal manner. The technology is DEPA and the legal is the data privacy protection bill, which is currently in the joint parliamentary committee. As some of you may be reading, they are about to issue a report and it's a very likely scenario that it will come up to parliament and, most likely, the parliament will approve.

So, we will take a coordinated approach. This was a mistake India did with Aadhar, they rolled out the tech infrastructure but not the enabling legal framework. So, it operated without legal coverage for some time. In this case, it is happening in a coordinated fashion. Now, bringing this data revolution that we're talking about, what does it do? It puts the control of health data firmly in the hands of the patient and the health ID system is very important in that way because it allows an Indian citizen to have multiple health IDs. One for reproductive health, sexual health, your regular health and there is nobody in the government who can know that these three IDs belong to the same person. It's impossible to know that, and so there is no mapper anywhere in the system, it's very private. Therefore, some people have referred to this as data democracy, right. And the second part is that it unlocks data for which more meaningful research can happen. So, in terms of research use cases, it'll take two, three, four years for it evolve but somebody sitting in Harvard, Satchit Balsari, our friend there who has been involved in this, wants to find out how many thalassemia minor patients are there, who are 45 years of age and above and take blood pressure medicines and have comorbidities with something else.

So, you'll be able to find that out. You won't know the names but there will be a procedure to enrol them in some kind of a trial provided there is an ethical approval that's being taken. So, this process, which has so far, in a way, has only been there in Denmark, will be available at India scale here in India. So, these are big changes that are coming. These are already in the hopper, we don't need the Lancet Commission to make them happen, what we need the Lancet Commission to reimagine what can be done on top of it as we go forward. How can we, as Kiran said, use the same approach of public infrastructure and innovation to reimagine point of care diagnosis, how can we reimagine how diagnosis will happen based on the back of biomarkers, how can we imagine early detection becomes much more pervasive than what it is today, how can we use methods, behavioral economic methods to work so that preventive healthcare becomes the norm. Now, these are the questions that we have to ask here in the Lancet Commission, but I think the timing is just right and if we all work together in an inter-disciplinary manner, I think we will come with some breakthrough answers and that will helps us take it forward. And maybe, we'll look back five, seven, ten years from now, and see this as the third reimagination success story. And in this story, the Lancet Commission had an important role to play. So, that's really what I'm hoping will happen.

Tarun Khanna: Thank you, Sharad. Very well said, a couple of things that were going through my head. It was great to hear Ram Sevak Sharma taking over the role, and that reminds me to get in touch with him, but to the Harvard community, if you think about the comments that have been made by Subu, Yamini, Sharad, they were essentially references to issues related to the law, issues related to data, even issues related to engineering and mathematical devices, to public health, to business, to political science, to economics, and in a sense, it's an invitation to all of you to participate in some way. Find the particular angle that speaks to your expertise and your desire to learn and contribute, please join us.

Vikram, before I hand off to you, I have a question to you in your guise as a medical doctor. Is there not some degree of skepticism about the use of technology on the product initiations, can you speak to that, and how are you processing it, not as a co-chair of the Lancet Commission but as a closest person on the screen to the practice of medicine?

Vikram Patel: So, I have to say Tarun that's a very complex question because it depends on what technology and what purpose it's being used for, and of course, I'm fudging it really. What I will say is that technology that comes in the way of engagement that a doctor should have with his or her patient is not good technology. Technology which enables and further strengthens that process of repo-building or therapeutic alliance, you know I'm a psychiatrist of course I put a lot of emphasis on the therapeutic alliance. I think it's very successful technology but I will give you one good example. When I first registered with my primary care practitioner in Boston, basically she spent almost 90 percent of the consult looking at a computer screen, I think that's rubbish technology, and I think we can all tell what that means from our own personal experiences.

But let me pivot to the piece that you really wanted me to speak about, just how can all of you who have connected with the webinar today get involved? If you're interested obviously, get involved with the Commission. And I wanted to say two things, first of all, about the participatory approach. We've heard a lot about the participatory approach, the citizen's engagement et cetera, but I wanted to emphasize that also includes those of you who are passionate about achieving a rights-based justice-founded approach to healthcare in India. Those of you, and I think Tarun rightly pointed out, that is not from any one discipline, it's already reflected in the incredible diversity of disciplines around this panel but if you look at the website, and I would encourage you to look at the website because you'll find heaps more on the website. You will find an incredible array of people in terms of their background, their work experiences, their sectors they work in, and I think that alone, Tarun, in my mind marks this as a very unique Commission in the explicit effort we have had to bring together scientists, academics, practitioners, civil society, activists etc onto one platform. And so, this is an inter-disciplinary effort and an inter-sectoral one, and all of you who are interested in healthcare in India could see that this could be a potential platform for you to engage with.

And the second thing I wanted to say is this is not a problem-finding Commission. God knows we know enough about the problems, I think this is very much a solutions-focused Commission. And I think that's something we need to emphasize that everything we're doing is not about identifying the problem, which all of us know, maybe not every problem but we know the big ticket ones are and Tarun and many others have spoken to that already. The real emphasis here is what are the solutions, and in particular, not aspirational solutions that are simply going to remain in the pages of the Lancet but solutions that are actually acceptable, that are trackable, that are fundable, and I better say acceptable by not only by the government, but very importantly, let's not forget the very big private medical sector of India. Tarun has spoken to this.

Historically, all conversations pf universal health coverage have either pretended that private sector does not exist or have really seen the private sector as a supplement or has seen the private sector as an enemy. And what we really want to do is to move forward from those sorts of perspectives and really reimagine, I think Sharad you spoke beautifully, but I think one of the reimaginations, I'm sure you'd agree with me, is how can we make all the providers of India work to a common purpose to serve the needs of all Indians rather than to be pitted against each other in these ideological debates and disputes that I believe for too long, 70 years, have really come in the way of progress.

Now, how can you all get involved? There are two big areas, one is research of course, I think many of you are probably students of faculty colleagues at Harvard and beyond. Obviously, this might be a more direct appeal to you, but the other, and I won't say much about that is dissemination and advocacy and engagement. I won't say much about that because I'm assuming that most of you are going to be coming from a more academic, science-driven background. We

have a very systematic research process that is underway right now, number of different methods that are being anchored at different institutions. The methods include a systematic review, or maybe a narrative or scoping review of the literature in the last ten years around the different work stream questions, which is being anchored at Christian Medical College, Vellore. A stakeholder conversation with both community health workers, community providers primary care doctors and private providers that is being anchored at the Population Foundation of India.

And then this will be followed, this is the first phase, identifying potential solutions. The second phase is a much more representative analysis of how these solutions might be implemented through two methods, the first is a large scale surveys of the population of the country, as well as providers anchored potentially at the Indian Institute of Population Sciences in Mumbai, and the second is the case studies of successful and less successful districts, Subu is going to help us identify those districts, that is anchored at the IIM, Indian Institute of Management, Bengaluru. So, you can already see four major Indian institutions who are actually anchoring and leading work, and I think for Tarun and me and Subu, coming from Harvard, this a very important thing to state at the outset that this is primarily an Indian-anchored, India-grounded, Indian-led effort where we are providing support where needed, but really largely this is led by Indian leaders.

And of course, there are some other ideas and pieces as well. One particular piece that I should mention is apart from this cross-cutting, work stream cross-cutting research methods, there are also work stream-specific methods, and the best example that I can think is that of the financing work-stream led by Nachiket Mor, one of India's leading economists and financial brain, really, where he is working with a diverse range of partner organizations to develop economic models that can examine the most efficient way of having a pooling of funds so that ultimately, the goal of UHC, which is zero out-of-pocket expenditure for most healthcare for most people in the country can be realized with the resources that are available.

Finally, how do you get involved? I suggest that you just go to the website. I don't know if somebody can just, oh yeah, it's there. The website address is there in the chat box, unfortunately for some reason today it's loading a little slowly, I don't know why but we are going to try and fix that quickly but basically if you go to the contact us page, you will see an email thing that you can fill in there. And the multiple ways in which you can get involved is, number one, you can be involved in any of the research methods, if you have an interest for example in reviewing the literature or you're interested in stakeholders consults, you can express your interest in that particular research method. In the next month, we are going to be posting a draft research protocol, explaining the entire landscape of research on the website so you can get a little bit more informed on what's planned and how you can get involved. You will see already on the website, already more than a dozen institutions around the country which are already signed on and there research faculty are and students are involved, and we are hoping very much that people from Harvard will also join that growing community.

The second is, just share resources, if you come across documents, publications, anything that you think is germane to the goal of the commission, please share it because there is no way we can know everything that's happening, particularly stuff in the grey literature that doesn't get indexed in one of the standard databases. Third, over the coming weeks and months, we are going to be posting our protocols, research protocols, just as we now do as part of the open access peer review process, so that you can actually comment on protocols. You can have your thoughts known, you can critique it and you can make these protocols much stronger. Fourth, you can connect us with people that you know might be interested, by the way, we're also looking for funds. So, if you know donors who might be interested in supporting this effort, or you might know other partners who can contribute in an academic or scholarly way, connect us with people. This is actually an active participatory process. Even this webinar, as it were, is an effort to reach out and be very open and inclusive. And finally, just share your thoughts. I think this is a very important question that you guys should address or I think this is a big concern that you are missing

altogether. We are listening and we are trying to incorporate all these ideas and suggestions in everything we do.

So, finally, I wanted to say is that I'm hoping ultimately, we will be forming a large community. We already have more than 100 people who have signed on to the website. I don't know Shaymli and Shubhangi, if you can just put onto the chat box, is there going to be an alert system? Ultimately, I think the website should have an alert system so that everyone who has signed up for alerts will get information of future events, webinars, publications etc. And for those of you who are wanting to contribute in a substantial way, for example, as co-investigators in any research exercise, of course there is always the carrot of possible authorship, if you play the role that merits authorship, and I know that everyone on the Commission is eager to see all the multiple publications that we see rising over the coming two years as being co-authored by as diverse a group of younger researchers from India and people who are passionate about India. Thank, Tarun.

Tarun Khanna: Great, thank you, Vikram. As you can see, an invitation that I would like to amplify, please do join us in many of the several capacities that Vikram articulated. I'm looking for a time check, we still have time for some questions, there are a bunch that came from a YouTube channel and the chat. So, Vikram, I'm going to direct one of these to you first, which is how is the Commission thinking about interfacing with the government? The question correctly points out that many of the past Commissions were initiated by the government, this one is not initiated by the government. Could you comment?

Vikram Patel: Yeah, thanks Tarun. The honest truth is let's be also very open about the process here. We did reach out to the government and we had terrific support from key thought leaders, people in authority like Dr. Vinod Paul from Niti Ayog, Dr. Vijay Raghvan, who is the Chief Scientific Officer to the Prime Minister. Dr. Balram Bharghav, who is the Director General of ICMR. The truth of the matter is they are all very supportive but they recognize that if this Commission has to be genuinely able to provide recommendations, it has to actually work independent of government. It has to consult to liaise of government, it has to inform the government of what it's doing in order to make sure that we're heading in a track that the government will ultimately find acceptable, but it cannot be part of the government. And all of these important thought leaders in government are clearly government employees, and they would feel compromised to be part of a Commission that comprises essentially a group of independent leaders, such as those you see on this webinar.

So, it's a delicate balancing game Tarun, as you know well. We want to work with the government, we have liaison officers in many of the departments of the government that we connect with every month. We intend to keep the government informed but we are an independent scientific voice. And finally, the Lancet is an independent journal, so whatever we publish will have to be free of all conflicts of interest.

Tarun Khanna: Just to augment what Vikram said, we have set up what I would call a process of liaising if that's even a verb with the government. There are people from Niti Ayog that we are in regular touch with, there are people from the Ministry of Health, and of course the Principal Scientific Advisor, and his office. So, the intent very much, if you go to the opinion piece that announced the launching of the Commission in the Lancet, you'll see and I'll just repeat what I said earlier is that the government and the state are the steward, regulator, financier of the healthcare system and it falls to the rest of us to support that agenda towards universal healthcare.

Kiran, let me turn to you. There have been a number of comments about the private sector, there are some questions on the YouTube channel also about how do you see both the positive and negative aspects of the private sector historically being, obviously the positives being augmented and the negatives being contained somehow, as informing the policy approach of the Commission.

Kiran Mazumdar-Shaw: Well, you know the conundrum is that we've always viewed healthcare through a prism of charity for the poor and commodity for the rich, and that cannot exist or sustain.

And we also know that the private sector has a very major role to play. If you think about quality healthcare, and specialist healthcare, it is largely being provided by the private sector. And even during the pandemic, you can see that the capacity that the private sector provided was very significant, and therefore, you cannot do without the private sector. And I think what we need is a governance model that is fair and equitable and clearly defines the roles and responsibilities of both the private and public sector.

In fact, the recent budget actually did call out a greater investment in healthcare spending. And they also called out the fact that the private sector has to play a very important role in capacity building, skill building, and delivering on the healthcare objectives of the country, and especially in also the digital health mission of the country. But they clearly acknowledge that they almost want to set up a health regulator to make sure that there is no profiteering at the cost of patients on part of the private sector.

That's really where the lack of trust is, which needs to be bridged. And I think we can address this fairly well and I think the Lancet Commission needs to play a very important role in addressing this conundrum that we have never really addressed and solved in an effective way. So, I think we accept the fact that the private sector is integral to our healthcare system, and it's integral to reimagining India's health system. So, I think the question is what should be the governance, what should be the guardrails, what should be the transparency and accountability of the private sector in delivering healthcare and I think we can find those answers.

Tarun Khanna: Thanks, Kiran. Yamini, you want to amplify? You mentioned in your comments that there is a collection of think tanks in Delhi and the rest of the country thinking about some of these issues. Do you have anything to add to this issue?

Yamini Aiyar: No, just to say that I think there is a number of stakeholders, think tanks, researchers, non profits, implementing NGOs, private sectors that are actively involved in engaging with and thinking about different aspects of healthcare. I think one of the challenges has been the absence of a platform in which different voices and different perspectives come together in a way to debate and dialogue and deliberate. And I think what is particularly important about this Commission is that it really brings together very different perspectives onto the same page.

For those of you who don't get to be a fly on the wall in some of our conversations, I can assure you, they are quite heated. And that actually gets to the heart of the opportunity and the challenge that India confronts today as it looks to think of addressing many of the gaps in its health system that Covid has presented and we as a group look to think a little differently about addressing what has been a long, known challenge but one that has been not necessarily prioritized. So, what is exciting about this is the variety of views, is the ability to bring different stakeholders onto a platform to engage in dialogue. And most crucially, the approach which is not just limited to the views of a group of experts but an attempt to try and reach out to a much wider set of stakeholders and participants in the health system through the citizen-led surveys, in particular, to get a deeper understanding on where perceptions on the health systems are, what experiences with the health system are, and to arrive at what could be a genuinely deliberative, consultative process of reimagining healthcare. I think it's also our contribution to deepening democracy through these processes which are equally important.

Tarun Khanna: Poonam, there is a question directed towards you on our YouTube channel. It basically says, what specifically, or how are you thinking about addressing marginalized groups, particularly those of disenfranchised caste, gender-related disparities and so on and so forth in your data-led approach.

Poonam Muttreja: When I mentioned it earlier that we will be reaching a diverse group of people, we were not only talking about the private sector, public sector, healthcare providers in both the sectors. We were talking about communities too, and in terms of communities, we have talked

about, for instance, women specifically through self-help groups working, reaching out to minorities, reaching out to people who have the least access to healthcare. So, that would be in terms of disability has come up, in terms of sexual orientation etc. So, all these are going to be categories that are going to be very much an important part because these haven't been heard. And here I might, if I may add, that there is a program of Government of India called CAH, which is Community Action and Health, and we have the privilege, this is the National Health Missions, one of the five pillars sits on it. PFI has privilege of being the secretariat for that and we have the opportunity with government funding and support to reach out to the most neglected, the most unreached communities to bring their perspective on an ongoing basis. So, we do have some data already but we will be collecting because we have this great collective intellectual, experienced, academic and non-academic group with us, where we will be redesigning some of the questions that we normally ask and it's going to actually end up strengthening the public health system, accountability, as well as getting citizens' voices.

So, not only are we going to reimagine India's public health but we will look at that and I cannot imagine citizen's voice without the most marginalized voices, which have not had an opportunity in the past. So, those who have had the opportunity to express their voices in the past is going to be captured as Vikram said to a great extent by the systematic review, the case studies, the ongoing work that I hope many of you will link us to, as Vikram said, globally. But within the surveys that's going to be done, both qualitative and quantitative, as well as the case studies, there is going to be a huge focus on the most marginalized communities.

Tarun Khanna: Thank you, Poonam. We know we are running out of time and some of us have a hard stop in a couple of minutes. There is one interesting question, which was posed to one of us but I'll frame it more generally. Is this Commission in danger of overpromising is the thrust of the question. Subu, you can answer in 15 seconds, and then I'm going to Sharad and then Vikram and then we'll wrap. You're on mute, please unmute.

S.V. Subramanian: Thank you for that, Tarun. I'm going to reply the way you replied to me when I reached out on the dashboard. Aspiration is good, we want to reach right to the Prime Minister, so I asked do you have context, and Tarun said 'good to be aspirational.' I don't think we're overshooting ourselves, it is certainly a challenge but wherever we get, I think we'd be in a better spot than where we are now.

Tarun Khanna: Sharad?

Sharad Sharma: It's more complex than financial inclusion, way more complex. There are some benefits, I mean in financial inclusion 70 percent is public sector banks, 30 percent is private. This is the reverse, but there you have a regulator that does not distinguish between public providers and private providers. We don't have a regulator here. It's a state subject. So, there are complexities and also adoption in the health system has generally been more state-based than what is happening in other sectors. So, I would say this is very complex. I think we should approach it with humility, without humility we won't have a learning mindset and we need all that. This situation is so important to India's future, one seventh of the world's population that we have to be ambitious about what we have to set out to do. It is better to be ambitious and fail than not to try at all. So, that is the way I would look at it.

Tarun Khanna: Thank you, Sharad. Vikram, last word.

Vikram Patel: At this stage in my life, I'm thinking to myself I either want to walk in the park or walk in the — and I have to say that the latter sounds a lot more interesting. Yes, of course, it's aspirational, of course it's ambitious, of course it's audacious but hell, if we don't try and do these things in our lives, what's the point of living.

One thing I will say is that I think it is also unique opportunity. Let's not forget the pandemic, as you remarked in the outset, has for the first time shown everyone, rich and poor, this is important Tarun, the wealthy in our country in India have always looked away from the condition of the rotten public healthcare system we have because we never use it. And I think for the first time we realized that when we neglect health, it ruins everyone's wellbeing. And I think this is there for a wake up call after 70 years that everyone must work together to ensure universal healthcare for everyone.

Tarun Khanna: Thank you, Vikram. Well said. Healthcare is a front page issue, perhaps for the first time in India in 70 plus years. It remains for me to thank the panelists and everybody participating in the Lancet Citizen's Commission. Thank you all for coming together and encourage the Harvard community to please join this effort in whatever way you find it interesting and useful to contribute. There will be a survey again at the end of this webinar, which again gives you a chance to express your interest in participating, and with that thank you. Have a good rest of the day and good night to our folks in India.