Sattva Knowledge Institute SKI

DECODING Impact
WITH RATHISH BALAKRISHNAN

DECODING IMPACT

DECODING UNIVERSAL HEALTH COVERAGE WITH DR. NACHIKET MOR

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Acknowledgements

Contributors

This podcast was arranged by the **Health Team** in Sattva Knowledge Institute and was hosted by **Rathish Balakrishnan.**

We would like to thank **Dr. Nachiket Mor,** a visiting scientist at the Banyan Academy of Leadership in Mental Health and a Senior Research Fellow at the Centre for Information Technology and Public Policy at the IIIT Bangalore.

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About Sattva Knowledge Institute

Sattva Knowledge Institute (SKI), established in 2022, is our official knowledge platform at **Sattva.** The **SKI** platform aims to guide investment decisions for impact, shedding light on urgent problems and high potential solutions, so that stakeholders can build greater awareness and a bias towards concerted action. Our focus is on offering solutions over symptoms, carefully curating strong evidence-based research, and engaging decision-makers actively with our insights. Overall, SKI aims to shift intent and action toward greater impact by influencing leaders with knowledge. All of our content proactively leverages the capabilities, experience and proprietary data from across **Sattva**.

Introduction: You are listening to Decoding Impact, a podcast by Sattva Knowledge Institute hosted by Rathish Balakrishnan.

Welcome to Season Two of Decoding Impact. Every fortnight we will engage leading thinkers and practitioners to understand what it takes to solve systemic problems at scale. For all the curious changemakers committed to understanding the trade-offs and incentives to make this world a better place, this one's for you.

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Rathish Balakrishnan [RB[: [00:00:47] Globally, Universal Health Coverage or UHC has been highlighted as an important goal because of its close links to poverty reduction and potential to enhance the economic growth of countries. Today, India's UHC service coverage index is 63, still lagging behind the global average of 68. There continue to be troubling trends in health care access, especially when it comes to cost of services in India. The per capita spending on health care by each state government varies greatly. Far too many citizens are compelled to pay out of pocket, with nearly 70% of the total out of pocket payments attributed to medicines. As a result, we must grapple with the reality that systemic issues in health care create economic vulnerability, driving families into poverty, and discouraging many from seeking primary care. Join me for this two part episode of Decoding Impact, where we will explore what it will take for India to achieve universal health coverage. To unpack all the nuances of this discussion from understanding what universal health coverage is, highlighting existing bright spots, looking at the role of primary care, to tailoring an approach to UHC that leverages India's strengths, I'm joined by an expert who has contributed vastly to the discourse around health in India, Dr. Nachiket Mor. Dr. Mor is a visiting scientist at the Banyan Academy of Leadership in Mental Health and a Senior Research Fellow at the Centre for Information Technology and Public Policy at the IIIT Bangalore. He is a researcher, scholar, advisor and a thought leader at a national and international level. His current work is principally focussed on the design of national and regional health systems. Dr. Mor, Welcome and great to have you here with us on Decoding Impact.

Nachiket Mor [NM]: [00:02:35] Happy to be here.

RB: [00:02:47] Nachiket, I think whenever I talk about universal health coverage, it seems like the goal that everybody agrees should be present. But there is a lack of believability in India's ability to achieve it overall. It sort of seems like there are too many factors that are involved, and what I wanted to do as a two part conversation with you today was really to understand what does it truly take to make it happen, and in doing so, what parts are we sure of that this is absolutely the way to go and what parts are we not sure of; and given your experience, I'd love to sort of connect it back to global experiences - what are we learning from work that is happening in India today and what are your views on what does it truly take to happen? Because as I was reading the introduction, it sort of felt like this is something that needs strong political will, a lot of finances it really true, and what parts of it needs how much of it. So to begin and just set the context for everyone, where are we as India on universal health coverage?

NM: [00:03:41] I mean, it's safe to say we are not doing very well. You know, it depends on which metrics you look at, how you examine it. But to give you one number, the Institute of Health Metrics in Seattle brings out its annual, but every so often 2 or 3 years they will publish a full review. The latest data we have is, I think, 2019 - An assessment of health outcomes - a hundred thousand population measured using a metric called the disability-adjusted life years lost population. It's called the daily rate. The best that you are seeing in the world are countries in the Middle East because they have the demographics of a developing country, but the incomes of a developed country. Oman, for example, has 15,000 per 100,000 dallies. India is at 35,000, which is more than double the Oman's number, and somewhere in the 120 or 150th in the world. Of course, it depends on where we want to look. There are many countries, DRC, for example, that is doing much worse than we are, Nigeria that is doing much worse than we are. But this is not a good number, and so clearly that's one number. The other number that people look at is the extent of financial protection that is available, which is a measure of to what extent people spend money out of pocket for health care, and that number, even with the most recent data, is somewhere near half the money that is needed by us as Indians as spent by ourselves. That's a national average driven actually, interestingly, quite a bit by the poorer states because it's possible that the ability of the populations to spend more money is limited. But, if you look at some of the richer states like Kerala, somewhere near 70% of what is needed to be spent is spent by them out of pocket. Just to give you a global benchmark, Thailand is at 10% compared to the 70% we're talking about, so both of these were two dimensions. The third dimension people look at is customer satisfaction. It's a much harder measure to look at. But, if you look at the evidence of violence against women in labour rooms, if you look at - you know, evidence of long queues during Covid - the oxygen supply issues - you have a broadly unresponsive health system. You know, if we were able to measure customer satisfaction, it's possible we may find those quite low. So on all three dimensions that we look at health, outcomes that we are not doing well.

RB: [00:06:16] I'm glad you took the example of Thailand as out-of-pocket expenditure because a lot of times the conversations in some sense were India's performance becomes a global north versus a global South conversation.

NM: [00:06:26] Don't even go to Thailand. Vietnam - poorer than Thailand, perhaps even poorer than us - doing much better. Bangladesh, Nepal, Sri Lanka - doing much better than us. So it's not that. It's just our aspirational goal is, you know, we should be the best in the world. Why not? We have all the capacity. But if you were to say, is it only the rich countries that are doing poorly? Not true. There are many poorer countries that are doing much better.

RB: [00:06:54] That's an important point I wanted to sort of bring up, because every time the argument starts off from saying it's the 1.4% of our budget, it's 2.1% of our budget, depending on how you look at health expenditure. But if I had to ask you, why are we doing so poorly?

NM: [00:07:09] I think what has happened is if I were to go back in the history, you know, the model that we are running of our health system is what is broadly referred to as the

Semashko model. Semashko - Aleksandrovich Semashko was Stalin's health minister and he developed a certain approach towards running a government owned, government managed health system that many developing countries, not just India, adopted. It's interesting that right now the Russians and the Russian satellites, they have abandoned the Semashko model. But many developing countries continue with that model. Now, that model presumed that the government would not only supply the money, but would deliver all of health care. I think for a while we held that belief. You know, we felt that, okay, we don't have enough money today, but in a few years - I'm talking about 1950s - we would, and therefore nobody need worry, the government will provide and take care of it all. Unfortunately, that didn't quite happen. You know, neither did the government come up with the money, the Semashko model itself started to look quite shaky because it became clear that this kind of a low trust, line item, budget control type approach is not the best way, perhaps not the best way to control any sector, certainly in health, where sensitivity, connection, responsiveness are very important issues. This is not the right way to do it. In some ways, once these two started to become apparent, the government did not pivot to say, "Well, this is not working. Let's think of something else." They have held on to this approach in every state, which has meant that a large private sector has emerged, not corporate sector, disaggregated private sector. You know, more than 90% of providers have fewer than five employees. So tiny, tiny, tiny, tiny players across the country, and we all got used to paying for things ourselves, for doing things ourselves. You might say, "Well, why did the government not come up with more money?" Again, hard to say, but my own belief, again, sitting from here, not to second guess them, is that we were a capital short economy. We didn't have money. There was a general view - 'Things matter, people don't.' We have lots of people. We don't have things. Let's build the roads, let's build the ports. You know, let's do all of that stuff, and perhaps some of that has carried over today. Today's interest also is high speed trains, you know, big fancy projects. You don't see as much conversation about, you know, people matter. So maybe some of that has also carried over. Why we see this is because in part the problem is that we don't have universal care, in part the problem is we are comfortable with that. It doesn't cause us the anguish that the absence of a high speed road causes us.

RB: [00:09:58] I think that fascination on building things continues to today, as you said, and it is a commonly accepted norm today that you're going to get out of poverty by building things rather than building people. I think as they always say, are we looking at people as stomachs or brains? I think this idea of thinking of people as brains is still not as much as thinking people are stomachs we have to feed. So our welfare thinking, for example, schemes etcetera, is one thing which is all stomach focussed solutions, not from a health lens, but the pride we take in the roads in India - at every economic level of the country by the way - I think is one. So that struck me as you spoke. The second thing about universal health coverage is not just that the politicians don't think it's important, it's the people who also don't think it is important. You know, it is that in some sense we don't make it an electoral cause that we seem to care about.

NM: [00:10:47] I mean, I think people think it's important. I think they don't think that the government can do it, which is why it may not show up in elections, but it shows up in

poverty records. If you ask people what has had the biggest impact on you in the last five years, almost always the health issue will come up. But their sense is, "Well, that's my misfortune. I need to do something about it." et cetera, or if the government can help me, it's more privately, you know, MPLAD fund, something else, I need some support. But that they should build a good health system - that is not the expectation, and perhaps that is the expectation for a road. There is no sense that I can build my own road. Now that is clearly the government's job, even though one could argue that the private sector is well equipped now, it may not have been in the 1940s to actually finance and build these roads and collect tolls, but maybe that's that. The other issue, which I think is a deeper, more troubling issue with just what you just said, you know, and we've spoken about this before, what has also happened is that there is the economy of 200 million people. There is the economy of a billion people. The 200 million people economy at purchasing power parity is that per capita income that a Scandinavian 60,000-65,000 USD. The billion people economy is at sub-Saharan Africa levels $1,200 per capita incomes, right, and in some ways, a lot of the thinking has shifted to "How do we support this $200 Billion economy?" and the belief is that it's large enough, unlike other countries, you know, everybody has this division that there's 5 million people. The fact that there's 200 million people suggests that, well, that's a country by itself, and a lot of what we are doing is to support or to meet the aspirations of these 200 million people. What's happening to the billion people? Not entirely obvious. You know, they they are supporting us. You know, one metric that I use is to ask the question that if I have somebody supporting me like a driver or a maid or somebody else, they save me an hour of time. How much do I make per hour? How much do I pay them per hour? The difference is vast, and until the difference closes, you are not going to have an impact on that billion people economy; and my sense is that is perhaps what you're seeing a little bit as well as you are thinking about the high speed trains, the airports and all of that.

RB: [00:13:14] I was recently reading this JP Morgan report about India's decade and India's decade of glory, and I recognised the economic motivation behind that, which is we need to attract capital to this country. The more capital comes to this country, the more it fuels our growth and hence promising and showcasing the 200 million people that story is important for us to attract that capital. We already are seeing much money you know, in the venture capital space coming to India because of this narrative. But I worry that we start believing this narrative to be true for the whole of India, even in the highest echelons of the government and the markets, to say, "Yes, truly we are the Scandinavian country." and there is a fairly deliberate, invisiblisation of the rest of India in the narrative that is emerging, and sometimes this Overton Window shifts and people start to believe it to be true as well. A lot of choices we make from policy to markets to investments then otherwise, and I genuinely worry about it and it's struck me more and more.

NM: [00:14:09] What I worry about even more is that if I were to now forget this break and say, "Okay, let's just evaluate - Are the current policies, forget the poor, forget everything, are they enhancing the goals you have stated?" I would submit to you they not. I would submit to you are more feeding the desire of individuals, groups of individuals to pursue activities that they find exciting rather than those that are in the best interests of the

nation. For example, look at CSR agendas of many corporates. You know, ask them how is this CSR work, even indirectly? Directly, the law prevents it, even indirectly supporting what you do. Sometimes it is. Most times it's the CEO's personal passion that is fed by corporate money. Why? Because that's what he likes to do. Now, I think some of that is happening even in the growth conversations, even in the JP Morgan type discussions, if you go deeper and ask the question, is this really good for growth? Okay, we might debate whether growth is what we need, but are you really pursuing policies that are good for growth? You know, coming back to health, I would submit to you there are many things we could do. They don't cost money. Maybe we are even spending enough money already. It's really more - I must pay attention to it. I must think about this from national welfare perspective, even of the 200 million people - because the larger population may benefit as a free lunch. But that's not your passion. You want to build the roads, you want to build. Why? Well, I want to rather than this is good for the economy. Well, 'I want to' rather than 'This is good for the economy.'

RB: [00:15:55] Coming to UHC, let's unpack this. What are - if there are - moving parts in this universal health coverage conversation? Because, you know, when you say UHC, I think primary care. But I know there is secondary care, there is tertiary care, there is financing. Can you just put the various levers that we are talking about when we talk about for everyone's benefit? Because that will help us actually unpack what we have to discuss going forward as well.

NM: [00:16:20] You know, there are as many frameworks as there are people, right? One I think of as we spoke earlier is what we call social determinants, because my fear is that I was just looking at some data which showed calorie consumption per capita in India. Currently, India is close to Japan per capita. The US is almost double both of us. We could get there. If we get there. Population obesity could be 70-80%, which means given our, what we call the South Asian phenotype called the thrifty phenotype, you know, thin people getting heart attacks, young people getting heart attacks, because our cut-offs seem to be much lower than the global cut-offs. When it needs the 100 kilos to be called obese elsewhere, at 70 kilos, we start to be called obese because we have the same risk characteristics. If we don't take care of these social determinants, we are going to be in trouble. The people say, "Okay, we have to educate people." Education is a poor lever for this because if you say education, you have no obese doctors because they know we'll have to build it in the design of how we are doing things. Do we have sidewalks that people can use to walk to the train station? Do we have trains - because if we don't have trains, there's no point in the sidewalks. People take a car or motorbike or something else and go. Have you thought through have they evolved a nice phrase called 'Healthy public policy', not health policy, all public policy. Do we have building codes that allow us to build buildings that have air and light? Otherwise, latent tuberculosis - 40% of Indians have it. We'll switch to active tuberculosis and when 40% switch to active tuberculosis - game over. There is no way we can. Already we are losing 1000 people a day, right, and we have been for a while. That number will multiply. So clearly, social determinants is something I think about. It's broader. I see it as a free lunch, as it were, because we have to build the city. Why not build them well? We have to build buildings where people will live. Why not

put building codes that make sense? We have to have sewerage. Why not close it so that the rats don't emerge everywhere? The other big aspect is what we would call essential public health services. We have to know what is going on in our country. We have to make sure that people get the information they need if an epidemic is evolving somewhere. If water bodies are building out somewhere, if deforestation is going on somewhere, you know, do we have the machinery needed? With new technologies now, much more is possible from satellite imagery. Now, I can tell you with machine learning, where is water stagnating, because I know malaria will start to emerge. Where are bat populations congregating? Because I have to think about are they in large groups? Are they in small groups? Large groups are good. Small groups are not good. You know, there's a lot we can do there. But without that, we will respond too late. We will have epidemics on us. We will have opioid crisis emerging somewhere. We won't see it until it becomes so visible that you can't avoid it.

NM: [00:19:14] Now that's essential public health. That's a very important player. Social determinants, I would say, is almost free. Public health is somewhat expensive. States like Tamil Nadu are doing quite a bit of it. But, you know, the country needs to do it. Countries like Sri Lanka, Bangladesh have really spent a lot of money in building their public health infrastructure, prioritising it over primary care, secondary care, tertiary care. So it's a little bit more money than social determinants, but not too much. These are two important layers. Then we go to, you know - I would put secondary, primary, tertiary, you might put it as primary, secondary, tertiary - but these are important layers. And then, you know, one could argue that India has enough tertiary care capacity. What we don't have is the ability to pay for it. You know, as a country we have it, but as individuals we don't have it and we have to find a bridge between that - the country and the individual. Secondary, there is a real gap. Primary, we'll talk about what's going on there, and then there is the pillar of financial protection. How is this going to be paid for in a way that does not either impoverish me or does not come in the way of my seeking care or in a way propels me to seek care? How do we make sure that the system is paid in such a way, that it is interested in my good health. So there are kind of complex issues there that need to be sorted out in the financing and payment element. These are, you know, the various components that there are.

RB: [00:20:45] As you were speaking, what struck me and I want to talk about is - because there's a layer of people across all of this that we're talking about, not just people as in feet on the street, but I wonder how many people today are able to connect urban design and thinking to health and those multidisciplinary centres of excellence that can enable this thinking as well for us to truly think across the stack for a country like India, you know, because partly a lot of what we get might be global thinking, but it has to be contextualised for India. Like you said, the phenotype that we are - what does it mean when we see a global ad of somebody drinking? Pepsi is travelling across the world today and has repeated its ads in India, but what does it mean for our health?

NM: [00:21:27] It's not just the Pepsi, right? One of the things that people think is kind of international influence. But, if I now look at a plate of jalebi or a samosa, the McDonald's burger is far healthier than our traditional foods, right? So it's the beedi (a type of Indian

cigarette) versus the cigarette, we think it's the cigarette, reality - it's the beedi. In fact the worst thing is that because now you got oral cancer, lung cancer and overall tobacco challenge for the body, so the worst forms are local to us, not imported.

RB: [00:21:57] That's a good catch because it's easy to externalise this problem in some form as well, saying the Western import is the challenge, but there are probably endemic things that we've been doing for a while, which is wrong for us as well. But I want to start from what you believe is already working and what we are sure of. You know, are there some low hanging fruits that you think we can immediately look at across these five levels and subsequently then I want to come down to each of these levels and have some follow up questions as well.

NM: [00:22:22] I would say on the social determinants and the public health components, it is pretty clear what needs to be done. We also have very good examples, both globally but also in our country - Tamil Nadu, for example, is an interesting example of good public health work. If I look at social determinants, Indore has done a very nice job of social determinants, so we don't even have to look at Geneva to find the example. Rockefeller Foundation had an initiative of figuring out the 100 most resilient cities, and part of the resilience was health and there are several Indian cities in that, Pune Surat are included in those lists. So I think these - while we need more research, I'm not saying we don't - but there is a lot that is known that is understood. I think the challenge more is to say, can I bring some of that conversation front and centre into city design conversations? Why did Bombay in 2007 when they passed the Slum Rehabilitation Act, dilute the 1895 rule that had stood for 100 years on appropriate spacing between buildings? It has a curious name called 63.5 degree light rule, basically says - if you stand at the bottom of one building, look at the roof of the next building, that angle should be no steeper than 63.5 degrees to ensure that the building is sufficiently far away, and if you go to Bombay and you look at in Worli, BDD Chawls, built in 1926, they follow this rule and they are chawls. They're not highrises in which they're beautifully spaced, they're densely populated but healthy from a design sense. Unlike the newer buildings Bombay built in Govandi in network compound, for example, where if you go to those buildings and you look between buildings, you will see a dirty lane where people are throwing trash instead of this wide corridor where kids are playing. Clearly, these things I think are well understood and old. Somehow the connection is not happening. You know, when this discussion happens, those issues are not there. Is it because the research evidence is not visible to people? You know, is it that the officers are not fully conscious of some of these issues? I see that more as an advocacy guidance discussion challenge. I mean, if you look at, for example, motorbikes, one of the number one issues of deaths on roads is motorbike riders. Malaysia is the leader in how to solve this because they know like we know the motorbikes are going to be an important transportation vehicle for developing countries for a long time to come, not four-wheelers. Again, we know these things. It's a matter of what are we going to do about them.

RB: [00:24:57] I want to double-click on a couple of your examples. What is Tamil Nadu doing right on essential public health? I mean if you could enunciate that.

NM: [00:25:04] So for example, one very kind of a definite example that they have done and which I think there has been a lot of discussion elsewhere in the country as well, is they realised that if you create a single budget and a single staff, the curative will override the preventive. One could say the ideal design is that it should be integrated and what is needed should be done. But I think practical people in Tamil Nadu realise that it's not going to happen. So they built a separate cadre. They split the budget into one third, two third. One third for public health, two third for curative health, and they built a complete different public health department and they said, "You will only do public health and this is the budget you have. Nobody can take that away." Now, I would say it's a little bit of a bulldozer solution, but it's effective, you know, and they recognise the reality in which we are operating something that other states can quite easily learn from and figure out.

RB: [00:25:57] You said that, you know, cities like Surat reflect and resilient cities. Are there things that we can learn from them as well?

NM: [00:26:02] My understanding - now, I don't know Surat very well - but their sewerage, their understanding of what is going on. Nashik, for example, the amount of wastewater that they reprocess, these are all the exemplars. If I look at public transportation in Indore, again, an exemplar of what they have done. So pieces of the puzzle quite visible. You know, when the plague was there, Surat was the most impacted, and then, you know, the Surat from badsurat (unsightly) became khoobsurat (appealing) - and that was the whole message of Surat. It's possible to do, and crowding is not necessarily the problem. It's part of the problem, but actually part of the solution as well. So it doesn't mean that we have too many people who can be solving. No, no, no. Actually, too many people is sometimes good on some aspects of public health, like mental health. Crowding is good on Asthma, crowding is good.

RB: [00:26:52] Going back to the question that you asked, which is really if we know these work, why are they not transmitted far more than otherwise? I have a couple of hypotheses, and this comes back to the people question. I think as an administrative structure, we are not designed for multidisciplinary decision-making effectively in this country. One, our administrative cadre is a set of generalists which should have been a good thing, but then they all have a view of a problem to be optimised for 1 or 2 factors. But cities in some sense converge 15 different factors for them to be effectively designed, like there are 63 degree rule, for example. I don't know how many people are aware of, you know, the health implications of how close buildings should be. Today, there is a lack of such multidisciplinary forms of decision-making in public policy or in administration effectively, and that becomes a challenge, right?

NM: [00:27:42] I mean, the strength of the IAS is that - that's what they should be doing. They may be doctors and engineers by prior background, but their role is to bring ideas together. They are not civil surgeons. They are not city builders. They sit there to bring

people together. My own experience is some of the brightest human beings on the planet. Their ability to process, their ability to handle things is just quite amazing. And where they set their mind to it, for example, you know, take an example of that personal taxation, for example. They have executed remarkable change. I mean, Thailand we spoke about earlier, the entire success story of Thailand is driven by bureaucrats, not by politicians. So there is a lot that this group can do. Now, I'm curious why they're not doing it, because one could say they are in firefighting mode, but everybody is firefighting. It's not that you're not and you are really bright. I think the problem with my view is a bit with people like me because at the end of the day, you do need people who are digesting this information, coming up with something that makes sense. But, look at Thailand again, the bureaucracy drew on a deep resource base from the Prince Mahidol University, for example, and other universities to turn to for deep technical guidance. I think we have some of that. Delhi has, for example, a wonderful centre on safety and road traffic safety and all of that. We are building new institutions. There is in Bangalore, the Indian Institute of Human Settlements, for example, that Aromar Revi and Nandan (Nilekani) set up. I think those need to be strengthened so that if I am an officer, if I'm a busy bureaucrat, I've been given three years, four years, five years. I'm not starting a research project. I'm saying, "Guys, where is the blueprint? Where has it worked? Give me a synthesised document. Don't give me 20 New England Journal of Medicine papers to read. I have no time for that." I think that is missing. I personally feel it may be a more a self-serving comment because that's what I'm doing. I'm trying to you know, with myself and my network of collaborators, build this group of people that a bureaucrat, a politician, an activist sometimes can turn to and say, I need good ideas.

RB: [00:29:52] Actually, there's a lot of truth in what you're saying, and I'm saying this with my own personal experience. We're working with the government and what I've recognised is that it's not an unwillingness to listen. There is actually genuine curiosity to listen, and when there is a need for good ideas, there is actually a paucity of good ideas. But I think what is missing today is that the people who have the ideas don't understand the constraints within which the officers operate, both in terms of time, political manoeuvrability, etcetera, and not to say, I mean like what you said, what is the form in which it can be consumed that can make it actionable, and today there is a missing tissue between great ideas, strong intent on the other side, but the connective tissue of translating that great idea in a consumable, actionable model.

NM: [00:30:34] One is consumable. But I think we are missing one more step. The integration is not there, right? You're not asking me the question of what is good for TB? You're asking me what should a city do? That's a level of integration that requires me to think about sidewalks, public transportation, roads. It requires me to think about "Should I invest in - air pollution, is that very impactful? What about water?" It has to be brought together because you can't send somebody a pet idea of yours about climate change. But then how is this compared to 20 other ideas that have to worry about? I think that synthesis piece, you know, where somebody says this is a nice plan for a city, You know, I don't know if you know Swathi Ramanathan. They do wonderful work on city designs, and what I love about that work is they are indeed speaking to an integrated problem. They're not telling you take care of slums. They're saying here is the city that grows, that thrives,

that does 20 things. It takes care of slums. It takes care of rich people. It takes care of transportation. I think those equivalents, I mean, then, of course, the next question is how does it reach? But, I think people like you, for example, through your podcasts, people who write news, once you have good content, then you know, you can say, "Okay, you got good content, now let's talk to you. Let's find a way to communicate to people." And if you see your viewership, your readership, Karthik's readership, there are people who are listening to this stuff. Somebody is bringing it together. So I feel like some parts of the ecosystem are there, some parts are there, but need more investment.

RB: [00:32:05] I fully agree, and I feel like the multidisciplinary intellectual infrastructure we need to create that is able to talk to five people and say, "Hey, hence this", for areas of convergence like cities for gender as an issue I think is very, very critical. I want to come to financing.

NM: [00:32:19] So I want to stay with the original question. You know, we said "These two things we know, the other things we don't know." So if I were to, for example, ask the question - primary care, is there much confusion because government has the self-image of being a provider? There are some estimates put as 3 million quasi-individual providers out there, including a million pharmacies, solo providers, all kinds of people that are in the market. We need only 300,000, we have 3 million. Also, what is primary care? If I look at the experience of Iran starting in the 1940s, not even like news, you know, tech and all that stuff, they realised fairly early that most of the diseases, diabetes, this, that and the other - the diagnosis is not complex, the treatment is not complex. The challenge is people don't follow the guidelines that have been given, and they realised, as Thailand realised, that you need an in-your-face direct engagement model drawn from the local community. If you look at their behaviours in Iran, one person trained roughly at the level of what we would India in government set up called the auxiliary nurse midwife. But, per 1000 people not sitting in a clinic in the community - main job - make sure you take your medicine, track the 5% high-risk people, go after them, and make sure that they are not remaining high risk. They have controlled non-communicable diseases at levels that are the envy of the developed world. In fact, their rural is doing better than their urban. So these pieces, we don't know yet. How do we bring it all nicely together? You know, secondary care.

NM: [00:33:45] We certainly have a sense of its need. We have a sense of how is Andhra solved it. Andhra as rural, a state as any other, vacancy rates of specialists - 3%, vacancy rate of specialists in other poorer states - 80%. Clearly, they have done something that has addressed this issue differently. Maharashtra quite a rural state. Yet if you go almost anywhere and you ask the question, a remote district, "What's your C-section rate?" In many northern states against the required number of say, 15%, you will find 1%, half a percent. Maharashtra - 20%. So they have figured this out. But how does it translate? What are some of the solutions there? I think one needs to think about - much more carefully - financing. You know, the question you had in mind, at some level, it seems clear, you know, from one of my recent papers that I might have shared with you that we actually have cost advantages, that the world is not properly factoring in. Our true implied health exchange rate is not ₹80, not even the IMF ₹22, but closer to maybe ₹3 or ₹5, right? A nurse that costs 80,000 in US, in India costs two lakh rupees, implying an exchange rate of two and a

half odd rupees. How does now, if I were to go back to a state and say, "Well, sir, this new research says that your current expenditure is enough for universal health coverage." You know, I got a lot of angry feedback from several government officials to say, "Please come and present to us what is this crazy idea you have? People are telling us suddenly we have enough money but I don't see it, I don't see the money." Again, while for a researcher it's okay to put a broad brush argument and say "This is it." What is really going on? Why is it that a state like Kerala, with all its capacity, not just is not delivering UHC from the government, it's losing market share even in the non-UHC services, maybe delivery in states like Bihar, the government is delivering 60-70-80% of the babies. In Kerala, that number is 35% and falling. So what is going on? Not totally clear. And then there's the whole issue of incentives. How do I build a health system in which the doctor, the hospital, the diagnostic lab are all pulling in the same direction as me, the consumer, to keep me? Well, we are not pulling in a tug of war where he or she wants to sell me lots of medicines, C-sections, all kinds of random saline injections and don't know what to do. These are I think good global examples we can learn from. It's not as if no country has solved this. Many have. I gave you some examples earlier, but how does that you know -d we don't want what, you know, Lant Pritchett could call isomorphic mimicry, you know, or somebody else called the travelling model, in which in a suitcase you brought it here. What is that? Not totally clear, and much of my work is to try, and at least in my mind, bring some clarity as to what makes sense. Maybe it will be 35 different clarities - one for Kerala, one for Goa, one for Meghalaya.

RB: [00:36:44] Let's double click on some other things that you mentioned because you said so many wonderful things so quickly, and I think it's helpful to go deeper. One is you talked about the behaviours in, you know, in the Middle East and you talked about the similar model in Thailand. But isn't that what our ASHA worker, ANM workers are supposed to do? In some sense, we have created a cadre of those people who become the, you know, what ARMMAN's Aparna Hegde calls the tech plus touch model. They are the touch in some sense to say, "Hey, you have to do this and so on." Is there a way we are maybe in the right track, but implementing it poorly? Are there things we should do differently for it to be as effective as what is happening in Thailand and Iran?

NM: [00:37:20] So Iran and Thailand, I would say have got different models. But Iran and Alaska are the two places I would point your attention to. In a new paper that we have, we call this the fourth stage of the evolution of the community health worker. The first stage being the health messenger, which is the Asha. The system has said, do some stuff, I communicate that message. I'm not a clinical worker. I don't have any such goals, and these health messengers are narrowly structured. They will do maternal and child health. They will do this, they will do that. That's the Asha. There are good examples elsewhere as well. Ethiopia, for example, has a People's Health Army or something. They are called Good Health Messengers. Even in India, there is a challenge about the way the Asha's work is structured, that she doesn't meet many people that she is supposed to, but those that she does meet, you see a definite impact on them. So the underlying idea is a good one. But I think we are underpaying these people. We're not structuring the work well, which is why the Ethiopian model I find more appealing and I'm told they learned it from us, but they

seem to have done a better job of executing it. Then there is Thailand, Costa Rica, Brazil - these are all what we call physician extenders.

NM: [00:38:29] So the physician is still at the centre of the action. Now the health worker is extending what they do. They will go out and say, "The doctor gave you this prescription, what are you doing about it?" The third generation, the third stage, you know, some countries have done it in India, some experiments have been done. It is to say that "I'm going to now make you do a lot more complexity." So if I put the two dimensions of breadth and complexity in the health messenger it's narrow breadth, narrow complexity. The physician extender is hybrid - narrow complexity. The specialised focussed worker, which is the third stage, is high complexity, narrow breadth. Ethiopia, for example, has trained these workers to do eye surgery to deal with trachoma. SEARCH in Gadchiroli has trained these workers to give Gentamicin injections when there is neonatal sepsis and they have been able to bring infant mortality down from 120 to 20 without necessarily waiting for the poverty issues to get sorted out. So very complex tasks, but one task. There are many models of this. The fourth model, which is what I'm talking about, the fourth stage, which is the Alaskan, the Behmars, and it's similar to the third stage in which the physician has now moved to the periphery, no longer the central actor.

NM: [00:39:45] Even when the eye surgery is being done, the physician may support somewhere from - remotely, but the whole reason why surgery is being done by health worker is that the physician not there. Same thing in the Iranian, same thing in the Alaskan, where, in fact, what they have done is they have not even built the primary care machinery. There is no UHC, there's no sub-centre, there's nothing. There is this and the hospital, and now the focal point of this work is this individual. In India, for example, you know, in the paper we highlight the work of Swasthya Swaraj. They work in Kalahandi in Odisha. They have now trained these workers in a partnership with Centurion University called Community Health Practitioners. One and a half years of training, somewhat like an ANM, but I would say a lot more complexity, a lot more breadth. Now they are still supported. The physician is still there because legally these people can't prescribe and correctly the physician has to have an involvement. But now imagine a situation where in the UK a GP, Family Medicine - MD, serves 1700 patients. That's the average per GP, right? One extreme could be 3000, maybe some are 1000. 1700 is the average compared to that model. A Swasthya Swaraj model or Behmar's model or an Alaskan model. Each worker is working with, say, 1000 families.

NM: [00:40:59] Each physician is working with 20 workers. Physician to population ratio - one lakh. That's a very different idea, where the physician is not meeting patients or is meeting patients only at the point of prescription. On all other issues - Went home? Did you take your medicine or not? All of that stuff is being done by this individual. Who's worried about the patient in all the other models, the physician, the health worker is supporting the physician in this. The physician is supporting the health worker. It's a very different idea. Now, if you combine that with tech, you combine that with Babylon, you combine that with Screenless ultrasound, you combine that with many other tools that are emerging - digital microscopy, thermal mammography. You suddenly have a model in which primary care is now looking turbocharged. You know, in that paper we also have a cartoon strip in which

we talk about Wynyard of 2030. What does that look like? It looks like this - where this individual worker is doing a whole lot of stuff guided very tightly by protocols. And again, these protocols are not new. If you look at the South African ideal clinic model, which is a collaboration between the government of South Africa and Cape University of Cape Town, beautiful symptom-based protocols. Alaska, their entire what they call the the Community Health Aid manual.

NM: [00:42:16] It's a series of symptom-based protocols; and why is the Alaska model so successful? They've been at it for 30-40 years. It's not some new idea. Community health worker is told they call them the community health aide. When you go to a patient, open page one, do not rely on memory. You are not a trained doctor. Your job is not to hark back to your training. No, no, no. You are trained to use the manual. Turn to the manual. Manual - you ask these questions, Manual says, go to page 42. Turn to page 42. Do not show up at a at a patient's home without the manual. So it's a very different approach. It will not work in secondary care and tertiary care, but could be quite effective because now the range they deal with is 150 conditions. With our tools you can put the latest ideas - if, for example, the consensus on what is the right BP cut off changes - you change the setting at the back end. A million workers on the ground from tomorrow are implementing a new setting because they didn't even know that the setting changed when they went to a hypertensive. It said "This person is hypertensive. You need to start treatment." They said, "Okay, let's do it."

RB: [00:43:21] When you spoke about the community health aide following that page number 42, I was reminded of what Atul Gawande says about doctors, that it is hard to enforce process adherence with doctors as a function of their education, as a function of their own self-image, to say, "Hey, I have to do these things, and I'm not generalising." I'm sure there are doctors who follow protocol, but the learnability in the context of where they are compared to a learnability of a community health aide who sees themselves punching above their weight, particularly.

NM: [00:43:47] In primary care, yes. I wouldn't say this in secondary care, I wouldn't say this about the specialist, because as soon as you have comorbidities, I know what to do about Covid, I know what to do about pregnancy, pregnant women with Covid protocols? Can't help you. Now, I need a specialist. Now I need somebody who understands the human body. The science is not clear. You do need them. Primary care - first contact. Maybe with some support from the doctor. Dr Sr. (Aquinas) Edassery of Swasthya Swaraj will tell you the doctor is an important part of the equation, but not in the way we imagine the doctor to be. Now he is a support person. He's guiding you, training you, he's listening to you and saying to you, "Well, all the other things I don't really know. But, I know diabetes needs metformin." Now, will they take it? Will they not take it? How does it fit into their culture? How does it fit into their time frame? You figure that out. I don't know anything about it. You are the expert. You teach me.

RB: [00:44:42] Just building on what you're saying. Not only the fact that we can change the setting, we can contextualise the setting for the type of communities that they're

talking to saying, "Hey, if you're talking in tribal communities where we know a certain deficiency is prevalent, can you actually dial this down, dial this up?"

NM: [00:44:59] That's a very important point you're making. The evidence is that in different settings, you need you know - there's a very nice paper by Dr. Richard Pryor who says we need not just cultural sensitivity, but cultural wisdom, for example, Florida. They were very successful in dealing with tobacco addiction amongst young people because they brought the understanding that young people don't respond well to risk-based messages. If you tell them something is risky, they do more of it. They respond much better to messages about honesty because teenagers know everybody is lying to them. That's cultural wisdom. You learn from the community that you are serving. You don't dismiss. If you look at the work of Dr. Christine Lagarde in Bihar, much of the traditional rituals of, say, a thing like Chati (a Hindu Vedic festival) has powerful therapeutic value that the medical profession doesn't recognise. If you bring a worker like this who is from the community, who is already culturally wise and add the protocols to her, you now create a combination that could actually be superior to having a British GP in every village because now you have somebody that takes the best of science, the best of local understanding and blends it.

RB: [00:46:11] I want to spend a little bit time on the phrase you used - isomorphic mimicry, and for the listeners who might not have heard of it before, there is a trend in change, especially multilaterally driven change, that you take an idea that works in a certain context, move it to another context, but you don't respect the underlying infrastructure, norms, cultures, capacities of the society to be able to replicate that change effectively in this particular case. Iran has done it. Alaska has done it. For India to do it, are there specific aspects in our system capacity, in our cultural norms, in our even the skills and training of the individual that we need to focus on in India to make it happen?

NM: [00:46:50] See, the good thing in India and it's a strength we have is the voluntary movement. If I take an organisation like SEARCH, if I take an organisation like MAHAN, if I take JSS in Bilaspur, they know in great depth what they need. In that context, what is that local context? Why is alcohol such a big issue? In Gadchiroli, for example. Opium is such a big issue in Rajasthan. Something else is the big issue elsewhere, they know already. I think where we struggle a little bit and it's really where the travelling model or the isomorphic mimicry becomes a problem is that we think of administration as a tool of "I got an idea, I banged out a memo, it boomed out across the country." That's my model. My model is not, you know, I set up a structure that listens, responds and solves issues on the ground. That's not my model. I don't know where it came from, from us. But if we could turn that model on its head and in every district, every - not village maybe - but every community has its own share of these very grounded actors. Instead of thinking, you know, "We have 2 million NGOs, Oh my God, what are we going to do with it? Oh, my God. We have terrific opportunity." It's been my recommendation to many governments to say they are doing primary care, in fact, they're doing social determinants. Sometimes you go to an NGO and say, "Sir, why are you not doing too much? Shouldn't you just be doing one focus thing?" They know they always knew Baba Amte knew.

NM: [00:48:23] Dr. Abhay Bang knew well before we understood it. The social determinants matter, so they are doing many things. Dr. Vandana Gopikumar of the Banyan. You tell her, "Madam, your focus on mental health. Why are you getting into minimum basic income?" She tells you, "No, no, no. Everything is connected." and now, like yoga, the world is telling us this. So we say, "Oh my God. So I think we have a shift to this idea." It's more we need our governance response to find a way. I'm not clear how one does it because clearly one has to have outcomes. We cannot simply have discussions. But I think this is where you go away from the isomorphism. It doesn't mean global ideas are bad. Alaska is good, Iran is good. I'm going around the country talking to these very NGOs about the Iranian model. Many are saying we are already doing it. Many are saying it's an interesting idea. We haven't really empowered our own workers as much. And we thought this is all they could do. But what you're saying is somebody else has gotten a lot more, you know, and tech tech is a new capability rather than, say tech will replace these people. What I'm trying to do, what others are trying to do is to go back to these organisations say, here is a nice tool.

NM: [00:49:34] What do you think? So some people say, "Oh my God, this is going to really solve an issue I've been struggling with." Does it really work? We say, okay, let's try it. So there is an opportunity here, I think, of kind of bringing these two things together, particularly as primary care is concerned. And not just this, for example, organisations like Noora is working with families. That's another interesting opportunity for us, which elsewhere in the West may not be there, right? As to how can a family caregiver be compensated, but while in the US, this is an unusual idea, in many Scandinavian countries, this is actually the idea. Now you might say, well, are we copying from them? Maybe we are. Maybe we are just learning from them that what we were doing here for free, we need to start compensating for it, right? And then now we don't have to send a community health worker there because now a member of the family is being paid. So there are many interesting opportunities. Pharmacies - the French are using pharmacies legally in the ways we are doing it in practice, but they have then added a layer of training, a layer of accountability and a layer of, you know, what can we learn from them? Brazil is doing it, Nigeria is doing it. So I would say that's where the isomorphic mimicry problem can be then dealt with.

RB: [00:50:52] I want to pause here and just reflect back on what we've discussed so far. I think India as a country is always going to have lesser number of doctors than we want, and it's only going to the demand is only going to raise and our ability to meet that supply in a high quality way and not what we did with engineers is always going to be restricted. We are a country with deep contextual differences depending on the place you live, the population, you are the cultural context that you belong to more than many, many other countries. And so as you were talking, I was asking myself, "Is there a system design for health that doesn't see this as a problem but designs for it, saying this is the truth, and it may be the opportunity?" One of the things that I point out in this and I've gotten pushback from it is if you think of the family doctor and use modern Bangalore language to describe that it's a black box system, right? Trained 20 years ago, it's making mistakes. You know, in the UK, for example, there are massive delays on cancer referrals from GPs because the experience that they have is restricted to 1700 people. The training they had was a long

time ago, right? They are making mistakes in the US. The evidence is and this is not just us, I'm just giving you the US example. It's all over the developed world. Somewhere near 80% of individuals that died by suicide had visited their primary care doctor in the previous 12 months. The doctor, "Forgot to administer a basic mental health questionnaire." Even though the protocol requires you to do that once a year, maybe half of them could have been picked up because there is an explicit question there which says, are you willing are you considering harming yourself? So they're making mistakes.

RB: [00:52:41] If we truly accept the fact that we need context-aware, culturally rich, proximate people with social capital who may not be doctors but are willing to learn and commit to a process of delivering effective care, we can create many more touchpoints of pharmacies, community health aides and other people who then use the doctor as a way of enabling their ability to deliver better care in a very, very contextual way.

NM: [00:53:06] Beautifully put. That's exactly where I think the primary care solutions will lie.

RB: [00:53:09] That brings me to the last question of this section, which is really the question of cost. You said ₹3 is the number that you think can be met, you know, to deliver UHC. I know you said this as a researcher's perspective. The administrative will be different. But take us through the thinking.

NM: [00:53:24] So the view the calculation we did was a, you know, when you say what will it cost? We came up with a number of ₹2,000 per capita, right? The question is, we don't know what it is, exactly. Does it include sex change operations? I don't know. If you're in Brazil, it does. If you are in some other part of the world, it does not. What about dialysis? Well, in Thailand, for a long time it was not included, right? Because it is one of those rare procedures that is both high cost and high frequency. A heart attack is high cost, but low frequency. A common cold is high frequency, but very low cost. This is an unusual thing. That is the third dimension. So it's a very cultural social judgement, right? Brazilians believe if you are living the wrong your gender and your sex don't match. The strain on you as a person is unacceptably high and therefore the state has a responsibility to help you reduce that strain. Other countries may not take the same view. So what we did, therefore, is to kind of dance around the problem. We said we are not going to answer precisely either what is or what precisely that definition will cost. That's not a - we took six different ways of thinking about it. Two of them, we relied on other people's work that had done this exercise, that had gone and written down a set of procedures, a set of treatments that were included in UHC, came up with a number.

NM: [00:54:38] We took another approach that said, I don't know what you will do with it, but here is an infrastructure you need to build to provide all forms. And the Government of India has a guideline called the guidelines which give a norms how many doctors, how many, what medicines, this, that and the other. So it's a view of disease agnostic infrastructure. We took that calculation. We then put ourselves - another perspective we took was in the shoes of an insurer to say, "I'm an insurer. I'm only looking at frequency severity. I don't know which disease. I'm only using two metrics. What does that tell me?" So we use six different methods to try and come up with what that number looks like and a

range of what that number is, and it comes to a range from ₹1600 to ₹2600 at 2018 prices. Now, you might say, well, therefore, are you saying ₹2,000 is an exact number, approximate number? I would say it seems like in the right ballpark. Another question somebody asked us is, well, Kerala should cost more than Bihar or X State should be more expensive than Y state. We said, okay, 60-70% of health care costs is HR.

NM: [00:55:43] Why don't we directly look at job markets in these states to see what is the price of a nurse? It turns out it's not that different in these different states. On the contrary, in the less attractive states, quote unquote, is actually higher. So if at all it is, it is opposite, but only slightly. So we were surprised at that. We expected to find distinct differences. You know, like I quoted this number to you of nurse cost two lakh rupees, registered nurse. It seems to be approximately the number in Kerala, in Bihar, in Manipur, everywhere. So because, you know, the sense we got is that in a way what is going on is getting the same benefit as the UK is getting quoting doctors from India. Kerala is importing doctors from Jharkhand because the job market within India is totally open and you can go anywhere you want. And equally, Kerala is supplying nurses to the rest of the country and the rest of the world. This is how we did it. You know we found no evidence of differences. Then we took another approach. Many people have done micro studies, for example, to inform medical tourism industry to inform something else. How much does a heart surgery cost in Mayo in the US versus how much does it cost in India? How much does Aravind Eye Hospital charge for a cataract versus some other facility named facility in the US or in other parts of the world? All of them gave us a sense of what the implied exchange rate would be, what the implied costs, and this is how we came up with the number.

NM: [00:57:06] What it tells me is we are in the ballpark is the true number. ₹3,000, could be, but it's not ₹30,000. It's not even ₹6,000. It's somewhere in that neighbourhood. Which that tells me is that we are in the realm of feasibility and whatever number you take, there are many states. We found 14 states, for example, that are already spending more money from the government. There is more than this number. But equally we found something quite disturbing, which is the opposite. Also true that there are four states, Bihar and Jharkhand, in which the government's ability to spend even this much money is so constrained that from own resources they will never find the money. Their share in India across the board, for a variety of reasons, we spend 5% of our budget, 1% of GDP, 5% of budget on health care. In order for Bihar Jharkhand to get to the ₹2,000 at 2018, now it will be higher because of inflation. We are already five years into it. They have to take it to 25% of their budget, which means many other services.

NM: [00:58:08] Our thought was we'll have to go back to the Finance Commission and say, "Well, you have to rethink the formula. Every child in this country, whether a Bihari or a Keralite, deserves some basic minimum services. You can't just use the forest cover logic to distribute on that basis." So we don't know that. I mean, I'm just saying this is a proposal idea that we have to solve that. So on the one hand, some states are already beyond the threshold. Some states are so far behind the threshold that we now know that there's no point in talking to the governments. They just will not be able to find the money. We'll have to have a more national conversation about that issue. Of course, there are several states in the middle that are gradually getting there, but encouraging news is they are getting

there, you know, maybe too slowly, maybe not as fast as we expect them to, but it turns out that they don't need to take their numbers, to 3%, 4% of GDP, one 1.5% may be actually enough for a richer state. It's for the poorer states that we have the big concern that actually there they might have to take it to 8% of GDP of their GSDP, which they can't.

RB: [00:59:16] But I think the key, so what for me is that the fiscal constraint is not the largest problem in most of the states. It is an efficiency.

NM: [00:59:26] And this is our new insight. Frankly, even before we got into it, we didn't expect to find what you just said. We thought, "Oh my God, money is the issue, unless states find a way to give us more money." There is a separate conversation which I mentioned to you earlier. Other states spending the money that they do have to correctly enhance the growth of their state. I would submit to you not, but at least I can say with some confidence that I don't need to worry about that for health. I do need to worry about how they are spending it, what they are doing with it. But Kerala, for example, or a Delhi for example, or Goa for example, or Himachal for example, they are already spending enough money if I need to take them on a journey, I need to talk about what are you doing with it?

RB: [01:00:08] I want to come back to where we started. You mentioned when we started that we talked to the Semashko model. And while others have let go of it, we still continue with it. Wisdom is always in hindsight and if we had to go back to 1950 and ask ourselves if there was a different choice we could have made, would you? In the benefit of hindsight and this is not to blame the people who made the choices in 1950. What would you have chosen?

NM: [01:00:30] I don't think we would have made a different choice then. I think at that point we knew very little about anything else. There was not that much private sector activity. The Tatas, Birlas who were even then there's the Bajaj's were not that big and indeed the state had to play a big role in doing this. In the heady days of independence, I would imagine that we thought of the state as benign or knowing, sensitive, supportive. After all, we were the people that brought you freedom. We will work with you. We engage with you. And the whole idea of the community, Gandhian thinking was all the rage, and it fed into all the way when I was a young man trying to figure out what to do. Where did this image of the khadi and the Kolhapuri chappals - it came from that background. I think the world started to learn about these ideas much later. In fact, the initial proponent of the modern ideas of what to do about this were people like Margaret Thatcher. They they had built post-Second World War one of the best health systems in the world, which even today is a high quality health system in the world. But she discovered that while there were many things good about it, waste, inefficiency, all kinds of stuff had crept into that system, poor service. And she said that we need to think about how we deal with the government, how we deal with the government provider, even within the government in a different way, and new thoughts and new phraseology. Strategic purchasing, for example, purchaser provider split, for example, started to emerge from Margaret Thatcher and her ilk and gradually swept through.

NM: [01:02:09] Now, if I look at the developing world, Turkey, Thailand, Vietnam have all switched to this, recognising that if you build a low trust system, which is what the

Semashko was. What is with the Semashko mental model, is that I worry that people in my own service will cheat me, demand will take care of the service that is needed. I don't need to worry about that. The consumers will pull what they need. I have to worry about these guys stealing the gloves that I gave them. Are they selling the syringe in the black market? That's what my focus is. Are they showing up at work? That's my focus. Not even showing up at work. Are they misusing the resources I gave them because things are scarce? I think at that point we didn't realise these notions like incomplete contracts. Incomplete contracts are contracts in which you don't fully observe everything that's going on. So a doctor patient conversation is a private conversation. No amount of precision and laws are going to allow you to sit there in that conversation with another doctor who is equally trained to observe the conversation between doctor and the patient. We don't have enough duplicate doctors, and that system has to be a high trust system. It cannot be a low trust system. It has to be a system in which you go to the doctor or the system and say, I will give you money for the whole year, for the whole five years in advance. I will evaluate what happens at the population level every so often, and the contract we have is the money I gave the system, not the individual. And the outcome that I got at the population level have to match.

NM: [01:03:39] That's a very different conversation. It's very different from "I will manage every glove you've got, manage every detail you've got" because that produces a very warped response, including I've seen, for example, in facilities where you go and not just in health in others too. I went to one of the facilities in which computers were given out for use by the target audience, the nurses, the teachers, everybody else. They were all locked up. I asked the person, "Sir, why are the computers locked up?" He said, "What if they get stolen, there'll be an audit query against me." I thought, "Let's keep them here so that tomorrow somebody comes to check." So it's not the corruption, but the fear of corruption that has become our impediment and not so much because the individuals should not be the should not act as somebody should not act. The system design has to say it's a high trust system. I think these are new ideas. These are not ideas that were there in the 50s because there the belief was trust the government. We know what we are doing and we will turn to the local government. We will turn to local NGOs, local people. After all, we are your government. The sense that there will be a distance concerns. For example, Ambedkar himself had to say, "Well, is the village really that beneficial, benign and environment that will take care of the whole village, or is it full of internal divisions, internal challenges that the centre needs to figure out?" So I think this is new learning and I think our challenge has been that learning has not been internalised by us.

NM: [01:05:08] We have stayed with that idea, and not just in health, but in many other fields in which the government continues to be an economic actor in commanding heights sense competing with the market.

RB: [01:05:33] I want to bring this to a close now, and I just wanted to firstly thank you for the coverage that we've had and want to share- maybe take three minutes to just summarise my reflections of what I took from this conversation. For m, this conversation re-emphasised how the first step for any design of the system is the mental model with which you approach the people in the system. We approach them. We trust you. You

design them very differently. If you believe things are more important than people, you approach it very differently. But if you truly want to look at the unit in which you want to operate and trust the unit, you approach it very, very differently. I think that's number one. I think the conversation we had in the beginning to say we've learned our way to get out of poverty by building things and building people and hence a view to health care, I think is a very important conversation in terms of even setting the population expectation on health care and what they expect from the government to do, and I think the point that we made around how system, social determinants and essential public health are critical components. It's like the below the iceberg conversation on any health care conversation and are actually not as expensive to do is a very critical part. I think the point that you made that the constraint is not proven practices. They exist, but designing the intellectual infrastructure to turn research into a multidisciplinary approach to then capsule it in a way that can be made available to an officer who's really smart and well intentioned is the infrastructure that we need to build for effective replication - what honeybees do to good ideas.

RB: [01:07:00] You know, to just take them everywhere I think it's necessary for us to build on the primary care. Accepting the fact that we are a country that is large, diverse in context and always short staffed on resources that are expert, resources like doctors, requires us to leverage what we have in abundance, which is local social capital proximity, and empower people who feel enabled to be able to go follow a process, to be able to deliver value so that we formally acknowledge their roles and then treat them in the fringes and allow for actions that we cannot control. I think on the taxation, the news, I mean, on the financing, the news that for 17 states we have the money, but how we spend on it I think is important. I've always realised in India that we've changed rapidly as a country in 75 years. A lot of population has evolved, but our thinking and imagination of the country and what is possible hasn't, and if now is the time to actually reimagine that, I think that's a good opportunity. These are ideas that we believe can work, and one of the things that excites me, again, to your point on top down thinking we are finally seeing a district as a unit in many ways, you know, with the current government as well, can they also become units of experimentation? States become units of experimentation so that we learn faster as a system and figure out what works in different contexts a lot more than having to approach a top down as a one nation, one plan type of an approach.

NM: [01:08:23] Yeah, I think that's a very nice summary- very, very nice summary. One kind of meta point, you know, I think about is that we have learned how to administer and inherited that idea. I think governance is a different idea, right? That involves more partnering, more people say "Governance means laws, police - penalties." No, no, no. That's not necessarily governance, Right? It involves partnerships. It involves patience. It involves conversation. It involves being supportive rather than being punitive. That idea, I think we still have to unlearn this notion of administrator, the district collector, you know, from that to a somebody who is responsible for, you know, what is going on locally and then is empowered to work locally with the resources they've got. And therefore our tolerance for failure will have to go up in order to build more success. If you say no, everything has to be

perfect from the get go, otherwise there is corruption involved. I think we will struggle to find the solutions.

RB: [01:09:34] Thank you. Thank you so much.

NM: [01:09:36] No, thank you so much for having me here. This conversation helped me become clearer about some of these ideas, and it's wonderful to have the opportunity to be here. Thank you.

RB: [01:09:53] Thank you for joining us here on Decoding Impact. We hope you enjoyed this episode and the conversation with our expert. To learn more about the Knowledge Institute and our evidence based insights, follow us on LinkedIn, Twitter and Instagram and explore our content on our website, all linked in the description.

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