

Dr. Kevin Volpp:

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LuAnn Heinen:

That's Dr. Kevin Volpp, founding Director of the Center for Health Incentives and Behavioral Economics at the University of Pennsylvania, where he's on faculty at the Perelman School of Medicine and the Wharton School. Dr. Volpp works on developing and testing how to apply insights from behavioral economics to improve patient health behavior and provider performance. His randomized controlled trial of financial incentives for smoking cessation at General Electric led to a tripling of long-term cessation rates and he has led research that's informed the design of smoking cessation incentives for CVS Health employees, as well as increased medication refills for their customers.

I'm LuAnn Heinen and this is the Business Group on Health podcast, conversations with experts on the most important health and well-being issues facing employers. My guest is Kevin Volpp. We'll be discussing city and statewide financial incentives to increase vaccination rates, how companies can promote vaccination, and considerations related to equity and inclusion.

Kevin, welcome to the podcast. I'm really excited you're here today.

Dr. Kevin Volpp:

Thanks so much, LuAnn. I'm excited to talk to you.

LuAnn Heinen:

You're a behavioral economist who has studied incentives in all kinds of settings. My understanding is that you've recently been tapped by the Mayor of Philadelphia for a little help and guidance on increasing vaccination rates to achieve the hoped for herd immunity. Can we get there? Tell us a little bit about what you've been doing with the Mayor.

Dr. Kevin Volpp:

Well, I'm working with a team that's co-led by Katy Milkman at Wharton and Alison Buttenheim from the Penn Nursing School. All three of us are members of the Penn Center for Health Incentives and Behavioral Economics. There's actually a number of other people on the team, which is an interesting team and I wish I could tell you more about. In essence, we approached the city about interest in testing the use of financial incentives to increase vaccination rates. Philadelphia, like many other municipalities and states, would like its vaccination rate to be higher than it is and they are open to exploring alternatives and seeing what we can do to try to put the pandemic behind us. They were very receptive to the idea of testing the use of a financial incentive and seeing if we can drive vaccination rates up further.

LuAnn Heinen:

What exactly is that program looking like and when will you know how it's working?

Dr. Kevin Volpp:

There are three draws, each two weeks apart, the first one is on June 21st. For each draw, there will be two \$50,000 prizes, four \$5,000 prizes, and six \$1,000 prizes. The draw is basically split into two. We divided up the city and picked 20 of the 20 zip codes with the lowest vaccination rates which we

designated as priority zip codes. One of those is announced as drawn at random and announced in advance as the selected zip code for the next two weeks. One of the sets of winners will be drawn from that zip code and then one of the sets of winners will be drawn from the other 46. There's a total of 47 zip codes, 20 are designated as priority, of the priority, one of them is the so-called 'lucky' zip code and people in that zip code have an even higher chance than people in the other zip codes.

LuAnn Heinen:

So there's plenty of vaccine available and lots of communication to the whole city, but especially the target zip codes in advance of the draw dates, I'm imagining.

Dr. Kevin Volpp:

Yes, that's correct. We've gotten great collaboration from the Mayor's office and the city Department of Public Health, and also the Black Doctors Consortium that's run by a doctor named Ala Stanford. She's been a big help to us. There's lots of efforts to really make sure people are aware and hopefully that will help more people get vaccinated over the next five and a half weeks.

LuAnn Heinen:

I'm excited to see how that comes out. I know that there are some examples at the state level as well. I saw your *Washington Post* article about the state of Ohio. What states stand out to you in terms of strong design, based on research?

Dr. Kevin Volpp:

It's interesting. There's never, to my knowledge, been prizes given out before of a million dollars or more for a health behavior or even anything even remotely close to that. All of this is unprecedented, but we now have a number of states that are doing that. In addition to Ohio, I believe Colorado, California, New Mexico, Maryland, North Carolina, they're all jumping in with these high-stakes prizes that are tied to being vaccinated. In terms of the designs, it's a little bit unclear in terms of what the effectiveness is of what people are doing. It's still too early to say, but I think one of the big questions is are people automatically enrolled, based on voter registration or residence, or do they have to sign up? That's one difference that we're seeing that is emerging as one of the key design elements.

LuAnn Heinen:

Is anybody bigger than Ohio? It's a million dollars a week, I think for five weeks.

Dr. Kevin Volpp:

Yes, California is actually giving away \$156 million, believe it or not, which is a really dramatic escalation of what's being made available. It's a combination of guaranteed amounts. If you get vaccinated, for people who haven't been vaccinated yet, and some lottery-type awards of, I believe, up to \$1.5 million for people who have been vaccinated.

LuAnn Heinen:

What about states like Minnesota, where I live? Their incentives are free fishing licenses, state fair tickets, park passes, for the first hundred thousand people who are vaccinated in the month of June. If you needed to predict efficacy, what is it that you would predict? Is it really going to be the high stakes, low probability of winning, that carries the day?

Dr. Kevin Volpp:

It's a really interesting question and we will know the answer before long. If we step back and think about the underlying behavioral economic concepts, lotteries tend to be very effective, especially high stakes lotteries, because people pay a lot of attention to the magnitude of what they could win and not so much attention to the probabilities. Even if there's actually a very low chance of winning, which there

tends to be when there's a million dollars at stake, people don't focus on those low, low odds, they focus on the million dollars. That conceivably is going to really get and retain people's attention, especially if there's a campaign that runs over many weeks. So there'll be a lot of buzz around that. As an example of that, I was told by somebody in Ohio that the governor's office has estimated that they have gotten about \$26 million, of let's just say free marketing about vaccination in press coverage of the events around the lotteries. It's actually been a phenomenal return on investment for them to spend \$5 million, plus there's also free college education opportunities for people under age 18, each of those five weeks. Let's say that's worth \$200,000, so that's another million dollars. Basically for \$6 million of expenditure, they've gotten \$25 million of promotions around vaccines. That's a pretty good deal in itself. But leaving that aside, I think the question of Minnesota free hunting, fishing licenses, it's really a question of what do people value, and places like Krispy Kreme have made doughnuts available, one doughnut a day, to people who are vaccinated. If I'm somebody who really likes doughnuts, that might be very compelling. If I don't eat doughnuts at all, then that won't be worth anything to me. I think that's the challenge with the hunting or fishing license or other in-kind incentives, is that for some people that's going to be a very nice inducement and be very appealing, and then for others, it would in essence have zero monetary value because they don't hunt or fish. I think that's one of the appeals to the cash-type awards, because of course, those are valuable to everybody and they're worth exactly what they cost. You could say, maybe a part of why they're giving away the hunting and fishing licenses is that it doesn't really cost the state much to provide those. I guess there's some lost revenue, but there's not really a cost, per se, and that may be part of the appeal from the state standpoint.

LuAnn Heinen:

Let's talk a little bit about the potential efficiency equity trade-off. You mentioned that some states are auto-enrolling and others require proactive enrollment in the lottery or to be eligible for the prizes. Does that have equity implications?

Dr. Kevin Volpp:

Yes, I think it does. If you auto-enroll everybody, then there's no barrier to enrolling, based on technology, based on differential access to services where I might or might not be aware of the lottery even happening. I think enrolling everyone automatically has several advantages. One is that it's very equitable in terms of the potential to win the lottery. Two is you have almost automatically full participation of the population. Then three, it allows for leveraging a psychological principle called anticipated regret. The notion behind anticipated regret is that people can anticipate that they will be very upset if they would have won a lot of money had they done something they didn't do. For example, if my number were drawn and I was told I won a million dollars, but I never got around to getting vaccinated last week and I was planning to, but didn't do it, I obviously would have a palpable sense of regret. The idea is that this has motivational power over and above just calculating the expected value of the reward. You lose all that if people have to sign up and if you have to have people sign up, then you're in the world of opt-in enrollment where participation tends to be much lower. I believe that the reason Ohio moved from auto-enroll to opt-in, was they had gotten some concerns voiced about automatically enrolling people who didn't want to participate. I think an argument could be made well, if people don't want to participate, they don't have to accept the money, but there were some concerns raised about people with gambling addictions if there wasn't an easy way to opt out. That that all could be handled separately. I think if people wanted to opt out, you could let them opt out before the drawing was held. To me that would make for a more effective public health campaign than if you require people to actively opt in.

LuAnn Heinen:

We're going to see auto-enrollment, what that does in Philadelphia. Is California auto enrolling?

Dr. Kevin Volpp:

I think so. The lion's share of the money they're giving away is actually a hundred million of the \$116 million, is they're giving \$50 pre-paid or grocery cards for the next 2 million vaccinated people. There's another equity issue, by the way, which that introduces, which is that it obviously rewards people who did not get vaccinated earlier on their own without a financial incentive. I worry that rewarding people now for getting vaccinated, but not doing it for people who did it before could cause problems down the road if we need to give booster shots, and then we sort of taught people that if you delay getting vaccinated, you too might be eligible to get a financial reward. I like the auto-enroll model much better because then regardless of when I got vaccinated, whether I got vaccinated on my own or I got vaccinated after this lottery campaign was announced, I'm eligible and it doesn't disadvantage those who got vaccinated on their own.

LuAnn Heinen:

Let's talk about business. Best Buy announced what they're calling an employee sweepstakes. I want to ask you, first of all, is a sweepstakes the same as lottery for our purposes?

Dr. Kevin Volpp:

Yes, and there's a reason why the term sweepstakes is sometimes used instead of lotteries. A lot of states have rules about not having anyone else run a lottery and states, in essence, have monopolies over state lotteries.

LuAnn Heinen:

Makes sense. In this case, 21 team members will win \$5,000 each and 20 of those winners are going to be out at retail locations, various stores, and one at their headquarters here in Minneapolis. Other than that, does other retailers who have taken action as well, Kroger is giving employees a hundred dollars for proof of vaccination, Target is paying taxis to and from appointments and up to four hours of paid leave for employees getting vaccinated. What do you think about those and are there any suggestions or thoughts you'd have for employers designing vaccine incentives?

Dr. Kevin Volpp:

Well, if we think about the reasons for giving incentives, one is to offset costs people incur. The example you gave of the paid leave and paid taxis, that would be an example of that. People will incur costs from having to take off time from work. It's good to at least hold them harmless in terms of those costs. The hundred dollars would be another example of that, that would probably be more than enough to offset those out-of-pocket costs. But I think for the reasons we talked about earlier, a chance to win a lot of money is probably more compelling to people. It's hard to get excited about the possibility of getting a couple hours off or a free taxi ride, but I certainly would get excited, or most of us would get excited, at the chance to win \$50,000 or a hundred thousand dollars or a million dollars. It's interesting when you step back and you try to calculate how much does it cost per incremental person. The first week that Ohio rolled out their million-dollar lottery, I believe there were about 40,000 incremental new people who got vaccinated, so about \$25 a person. We could contrast that with the hundred-dollar gift certificate that West Virginia was offering each person to get vaccinated, and at least a preliminary conclusion might be that it was less expensive per incremental person to offer a chance at a million dollar lottery. Now that only works in settings where you have very large populations. Obviously if I have a hundred employees, it wouldn't make sense for me to offer a million dollars, because that's very expensive per person. But I could offer \$10,000 or something that would be proportionally in sort of the right ballpark.

LuAnn Heinen:

So whatever makes sense to combine approaches - for example, a higher stakes lottery or sweepstake and a lower value reward for everybody.

Dr. Kevin Volpp:

It's interesting that North Carolina is doing, what I might call, a hybrid approach where they both give \$25 gift cards to everyone who comes in to get vaccinated, as well as the person who brings them there and a chance at a large dollar amount lottery. I believe they're doing something similar to what Ohio is doing with the \$5 million prizes over five weeks.

LuAnn Heinen:

That's terrific. The hybrid idea. What do you think about non-financial approaches, something like social incentives? Is there a role for them?

Dr. Kevin Volpp:

Absolutely. I think that social incentives are incredibly powerful and ultimately might be a better, more sustainable strategy than using financial incentives. For example, if I were a large employer, I could set up a system whereby those who are vaccinated can come back to the office and freely congregate. Those who are not vaccinated, have to wear masks or have to work from home. I think the drive to get back to normal is really, really strong, particularly in group settings. I really feel like that type of social incentive would be a very strong motivator.

LuAnn Heinen:

It feels like we're dealing with such major high-stakes issues. It used to be that when we talked about incentives in the employer setting, we were talking about wellness incentives and getting your biometrics. I'm just wondering if we broaden the lens, what some of the learnings or implications are for employer incentive strategies beyond the vaccine going forward.

Dr. Kevin Volpp:

It's a really interesting question, because I think with COVID and the vaccinations, we see the very strong and clear relationship between people's personal health behaviors and choices and the impact it has on everyone else, and for that matter, the ability of the company to even function. In cases like that, where this connection is very strong and very clear, it calls for much stronger strategies around what I might call the nudge ladder, where at the bottom you have very ineffective, but very hands-off approaches, like giving information. Then as you work your way up the top of the ladder, you would require an activity or restrict choice. Then as you work your way down, you might have financial penalties for not doing something, you might have financial rewards for doing something, you would think about various strategies around changing defaults and making it more automatic, but letting people opt out. For different health behaviors, I think we're in very different places in terms of the nudge ladder. We've tended to leave it largely up to employees and perhaps provide some positive financial incentives for doing things. It's an interesting question as we see how the dynamics shift as a result of what we've learned from COVID, whether in some cases where there are, in particular, financial implications related to health behaviors, whether there might be a greater willingness to push harder to help employees change some of those behaviors and lower financial and health risks.

LuAnn Heinen:

That's terrific. It's been such a pleasure talking to you today. I really appreciate your wisdom about the vaccination and much beyond.

Dr. Kevin Volpp:

Thanks, LuAnn. I very much enjoyed our conversation.

LuAnn Heinen:

I've been speaking with Dr. Kevin Volpp about his extensive research on incentive strategies, including his recent role advising the City of Philadelphia on how to increase COVID-19 vaccination rates.

I'm LuAnn Heinen and this podcast was produced by Business Group on Health with Connected Social Media. If you've enjoyed the conversation, please share this episode with a friend or colleague.