

Why I Disagree With Vinod Khosla About Digital Health -- And Hope He Succeeds Brilliantly

David Shaywitz

At the recent Rock Health Health Innovation Summit (where I participated on an angel investing panel with Dave McClure and Esther Dyson), tech VC legend Vinod Khosla expanded in his keynote discussion themes he's introduced in previous articles and interviews.

Taken as a whole, Khosla's comments and digital health investments suggest four key theses:

1. Medicine requires disruption;
2. Entrepreneurial technologists focused on consumers are ideally poised to deliver this;
3. Most doctors are so enmeshed and invested in the current system that they are more likely to be part of the problem than part of the solution;
4. In an ideal future state, most care would be delivered by robust computer algorithms ("Dr.A") and doctors would no longer be required.

As Khosla surely intended, these provocative comments have generated a predictable buzz (see this thoughtful piece by Dr. Davis Liu here; this is a useful summary as well).

I've previously discussed what I think Silicon Valley doesn't understand about medicine (here), and why I'd choose to place my bets on innovations seeking to enable rather than replace physicians (here); I won't rehash these arguments.

Rather, I'd like to focus on an important question about the origin of new ideas that's implicit in Khosla's theses: is disruptive innovation most likely to come from within or outside a domain?

While there is a popular, even a romantic view of the naïve outsider wandering into a new area and radically transforming it (similar to Khosla's view of healthcare innovation, as I understand it), most rigorous examples that I've seen describe a very different pattern; domain expertise is often critically required, first to deeply understand the problem at hand and then to come up with an implementable solution – though the solution is often informed by insight gleaned from a different discipline or domain.

Even Khosla doesn't appear to reject domain expertise entirely — while he may view deep experience in medicine as a potential liability, he seems to believe that the most successful disruptors of healthcare will likely have experience in technology and entrepreneurship, and some idea of how to apply this to health.

Coincidentally, investors such as Khosla have the most comfort (and demonstrated success) in identifying promising technology entrepreneurs, but have appreciably less experience navigating the complexities of our existing healthcare ecosystem. Thus, while it may be bold for Khosla to call for a radical reinvention of medicine, it's also convenient, and understandable.

Like other physicians in the valley (e.g.), I disagree with Khosla's perspective, or more accurately, I bring a different set of experiences and biases. Trained as a physician, and working in the medical products industry, it's perhaps not surprising I view deep experience in healthcare and the complexity of the healthcare system as enormously enabling. While Khosla worries healthcare domain expertise may stifle innovation, I see this type of experience as essential, providing the needed foundation for understanding problems and developing workable and relevant solutions.

The beautiful thing about the free market is that these sorts of disagreements don't need to be — and shouldn't be — solved by endless debate, but rather by doing the right experiment, and seeing what sorts of innovations (informed by which investment strategy) actually work and take hold in the real world.

Which brings us to the true problem — and it's certainly not Vinod Khosla. To the contrary, Khosla is doing everything right: he has a passion for health, a thesis for how to develop solutions, and is aggressively investing in this space.

The more serious problem is that most traditional healthcare VCs — those with medical product experience — are effectively not in the game; it's a tough time (especially following the Kauffman report) to be a VC, and a brutal time if you're investing in healthcare, a space now reviled by most LPs (whether this reflects insightful prudence or a trailing edge herd mentality is a subject for another day).

As a result, with a few exceptions, investors who arguably are best suited to identify, evaluate, and cultivate important emerging opportunities in digital health have been sidelined, leaving digital health to the brave tech investors like Khosla with cash to spare, and who are willing — courageously — to explore a phenomenally promising, but also tremendously uncertain and unproven space.

Given the unquestionable need to improve medicine for patients, I hope Khosla succeeds — brilliantly.

But as C.S. Lewis observed, "What you see and what you hear depends a great deal on where you are standing. It also depends on what sort of person you are."

There's no doubt that Khosla is a bold, imaginative, and creative sort of person. But all the same, I'd feel a lot better to see additional investors with deeper healthcare experience and a different set of beliefs get into the game, and take a stand as well.