

Gaming guru: Gamification of health is marketers selling snake oil, but gaming has powerful applications - MedCity News



The former chief game designer at Google and reportedly an early employee in what became LucasArts Entertainment has something to say to folks developing a gamification of health strategy.

“It’s snake oil,” said Noah Falstein, at a lunch in San Francisco hosted by Level Ex, which makes video games for doctors.

The lunch brought together video game experts like Falstein along former Dell Chief Medical Officer Dr. Nick van Terheyden and other physicians, [Level Ex](#) executives and some reporters. The attendees were in San Francisco for GDC 2019, the game developers conference. The goal at lunch was to elevate the conversation about how video games have an impact on cognitive functions and how that neuroscience knowledge can be applied to medicine.

In other words, it's serious business and very far from what "gamification of health" or gamification of anything else conveys, Falstein implied. He referred to a [2011 article in the Atlantic](#) where the term is excoriated as "marketing bull—."

Falstein contended that what "gamification of health" has done is somehow make it appear that blending games and other, serious non-entertainment subjects such as healthcare is simple and easy.

"The bottom line is that there's just no easy solution to this. Game design, the games industry — it is a deep discipline. Like medicine, we even have some PhD programs now. The point being ... that there are no real shortcuts. So when people come offering you [something like create] high-score tables and give people badges" it just doesn't work, he said.

So what can work? Falstein pointed to Akili Labs, Level Ex and [Mindmaze](#)— three companies that he has consulted with — as having cracked the code of applying game design and the fun aspect of gaming to medicine.

Last week, Chicago-based Level Ex launched the Cardio Ex video game at the annual meeting of the American College of Cardiology. The game is intended to help interventional cardiologists hone their skills. In other words, educating in an engaging manner, educating while also entertaining.

"We are evolved to enjoy games. The sense of fun we get is basically a reaction

to acquiring skills that could be useful for survival in a non-threatening way.,” Falstein said of the philosophy behind games, especially for those applications in medical training and simulation. “You’re not creating harm in a game. You can make as many mistakes as you need to get good and of course with live patients you don’t have that option.”

But all video games are not in the realm of simulation and training. Some are actually aiming for improved outcomes. Take [Akili Interactive Labs](#) for instance. The Boston company is developing digital therapeutics to address cognitive conditions such as autism and ADHD. Its AKL T01 is being reviewed by the FDA for a de novo 510(k) classification as a prescription therapeutic to address pediatric ADHD.

“The research they have done shows equivalent efficacy to adderall and ritalin,” Falstein explained without the side effects that come with those well-known ADHD drugs. Actually, the side effects for these games are headaches and frustration, he said of kids whose parents have reported seeing these symptoms.

Another company that Falstein has worked with is [Mindmaze](#), which has received FDA clearance for an inpatient and outpatient neurorehab platform called MindMotion Pro and MindMotion Pro. Mindmaze is based in Lausanne, Switzerland.

Falstein and Level Ex CEO Sam Glassenberg stressed that these gaming products and techniques cannot be built for the healthcare industry without significant input from physician collaborators.

The games being developed now are on the cutting edge of what gaming can achieve, but in bringing such techniques to healthcare, the lowest hanging fruit appears to be in medical education and training. If such games become widely adopted, it would dismantle the approach that the practice of

medicine — and more specifically surgical procedures — has relied on since time immemorial: the “see one, do one, teach one” mantra.

If you are lucky, someone is looking over your shoulder and will take over because things are going wrong,” Dr. Van Terheyden said of such an approach.

This approach takes zero account of the simulation capability today, he added.

And that’s change in mindset that companies Level Ex is hoping to achieve as well as others like Osso VR.

Meanwhile, back to the whole terminology issue, if we can’t use gamification of health, does Falstein have better monikers? Turns out he can’t quite recommend a good alternative. Serious games? No. Edutainment? Not really.

“I actually proposed it to be transmogrified reality and it kind of fell flat instantly,” he said to instant laughter.

Photo: Cecilie_Arcurs, Getty Images