Editorials

Dear Apple

Benjamin Schwartz1 MD

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A letter to Apple challenging it to innovate in the healthcare space!

Dear Apple,

It’s hard to believe it’s been almost a year since my last letter. Much has happened over the last 10 months or so, most notably the world has been shaken by a generational health crisis, the novel coronavirus. Prior to the outbreak, American healthcare was very much a topic of debate from surprise billing to increasing frustration with lack of access, lack of transparency, and lack of value. The pandemic quickly and fiercely changed the debate by further exposing our health system’s shortcomings. Laid bare were our lack of preparedness, the growing disconnect between health system administration and frontline healthcare workers, and just how shockingly thin the margin between financial success and financial ruin is for many hospitals and physicians. Despite being overwhelmed with virus patients, US hospitals hemorrhaged billions of dollars per month as lucrative elective procedures were placed on hold. It has been another painful lesson in the skewed incentives of the American medical system.

One silver lining of the COVID-19 pandemic has been what many have declared the seminal moment for digital health, in particular telehealth. A combination of social distancing, stay-at-home orders, and fears of viral exposure led many medical practices and patients to shun in person visits. In order to maintain some measure of contact and continue to deliver needed treatment, healthcare providers and patients, once largely disinterested in the idea of video office visits, turned toward telehealth as a means to deliver and receive care. Almost overnight telehealth became the darling of the digital health world with insurance companies and CMS embracing the platform. The health tech ecosystem rallied to battle the pandemic with COVID-focused virtual hack-a-thons and resources poured in to designing and manufacturing much needed PPE.

Despite a global economic shutdown and US economic recession, digital health is expected to continue its ascent. Many feel there is no going back. Investors and pundits alike are bullish on the future of medical technology and its ability to revolutionize care delivery. Whether or not patients and doctors share this enthusiasm remains to be seen. As hospital and offices begin to reopen to routine care, interest in telehealth may wane (especially if reimbursement returns to pre-COVID levels).

While many startups led the way in tackling the problems posed by the pandemic, large tech companies also stepped up to play a role. Early in the outbreak, Google’s partnership with the government to bring a coronavirus tracking website gained significant media attention. However, the site ultimately fell short of what was initially promised and has underwhelmed. Microsoft was able to leverage it’s existing “Teams” platform to support telehealth visits, a functionality it now touts in a national TV ad campaign. Apple itself developed a COVID-19 screening tool, one of many such tools offered by a variety of sources and just today announced a handwashing app and emojis wearing masks.

Perhaps one of the biggest pieces of news surrounding the pandemic and big tech was the announcement of a part-

1 Benjamin J. Schwartz, M.D., is a board-certified orthopedic surgeon specializing in the surgical and nonsurgical treatment of arthritis of the hip and knee, including total joint replacement and revision. Dr. Schwartz attended the College of William & Mary in Williamsburg, VA, where he was one of a select group of incoming freshman designated as a James Monroe Scholar. After graduating with high honors from William & Mary, Dr. Schwartz attended the Virginia Commonwealth University School of Medicine in Richmond where he was elected to the Alpha Omega Alpha Medical Honor Society, graduating in the top 10% of his class.

Following his medical school training, Dr. Schwartz performed his residency in orthopedic surgery at Boston Medical Center where his research involving the treatment of hip fractures in the elderly and athletic activity after total joint replacement earned him the Lahey Clinic Resident Research Award during his chief resident year. After completing his residency, Dr. Schwartz performed a fellowship at the prestigious Anderson Orthopaedic Clinic in Alexandria, VA, during which he spent a year focusing solely on the treatment of hip and knee arthritis. Dr. Schwartz trained under pioneers of modern hip and knee replacement including Dr. Charles Engh, M.D., a world-renowned surgeon who pioneered the use of cementless implants in total hip arthroplasty, and Gerard Engh, M.D., one of the world’s foremost experts in partial knee replacement.

Dr. Schwartz obtained his certification from the American Board of Orthopaedic Surgery (ABOS) in 2010 and is a member of the American Academy of Orthopaedic Surgeons (AAOS) as well as both the American Association of Hip and Knee Surgeons (AAHKS) and International Congress of Joint Replacement (ICJR), two specialty societies focused on the treatment of hip and knee problems. In 2014, Dr. Schwartz became the first doctor to be named Physician of the Year (Clinical Excellence) for Columbus Regional Health. He was once again recognized for exceptional patient care in 2015 upon receiving the Partners Healthcare Award for Clinical Excellence and Professionalism. Dr. Schwartz remains engaged with national leaders in hip and knee replacement by serving as a publication reviewer for The Journal of Arthroplasty and member of the AAHKS Public Relations Committee. In 2018, Dr. Schwartz was named the first Medical Director of Orthopedic Services for Anna Jaques Hospital.
nernesship between your company and rival Google to integrate contract tracing functionality in your respective cellphone operating systems. The urgency of the public health crisis could even get Silicon Valley tech giants to put aside their differences for the greater good. Despite this unprecedented collaboration, the effort largely failed to resonate with governments and end users. Only a handful of states committed to using the technology, and the public largely ignored the functionality either out of privacy fears or general disinterest. While the pandemic has dominated 2020, the coronavirus wasn’t the only area of focus for the company’s healthcare efforts since last August.

The Apple Heart study results were published in the New England Journal of Medicine. An impressive 400,000 patients were enrolled in a relatively short amount of time, of which about 2,000 (or 0.5%) received an alert. The effort was, however, hindered by the fact that only about a quarter of identified patients followed through for further evaluation. Limited engagement, patient attrition, and privacy concerns dampened some of the initial promise of the study and led to questions about how best to proceed with future such studies. Apple has continued improve portability of health information through its “Health Records” function within the iOS Health App. More institutions and physicians have come on board to support Health Records, allowing patients the ability to view immunizations, lab results, medications, and vital signs on their devices. While this represents a step forward in making health information more easily portable, the complexity of accessing existing disparate health records remains a challenge.

Building on the Heart Study, Apple released ResearchKit to help medical researchers recruit patients and collect data more easily and at lower cost than traditional research. Such a tool has tremendous power and potential to revolutionize the field of research and bring insights to a wide array of health conditions in a way not previously possible. However, the challenges encountered during the Heart Study linger. Privacy concerns remain as do significant concerns about bias as ResearchKit supported studies may exclude patient populations who don’t have access to the apps or the devices they run on. The proof will be in the end results, in particular peer review and publication of the data in respected medical journals.

While these projects certainly have merit and may continue to grow and evolve over time, Apple’s impact on healthcare hasn’t yet had overwhelming impact. While there are upsides to using your company’s usual market approach to entering any market or introducing any new product or service, it somehow still doesn’t feel like enough for a company with so many resources at its disposal. And though ResearchKit and the Apple Watch are relatively safe bets, they come across as attempts to play it safe and pick at the edges rather than jump in with both feet. There are much bigger issues facing American healthcare including lack of access, poor interoperability and integration, lack of transparency, overwhelming and out-of-control costs, physician burnout, lackluster outcomes, and a desperate need to focus on quality and value over quantity and profit.

Perhaps it is unfair to expect a consumer technology company to step well outside its comfort zone and beyond its area of expertise to take a significant risk in tackling the overarching challenges of American medicine. Apple bears no responsibility when it comes to fixing a problem not of its own making and largely unrelated to its usual business and expertise. Or does it? The healthcare crisis was a daunting challenge before the pandemic and, with millions losing employer-based health insurance, hospital and physician office closures, and further consolidation, the issues have only gotten worse. It seems increasingly obvious that incumbents lack either the appetite or ability to alter the status quo. Despite many calls to use the pandemic as a flashpoint for systemic change, there is little evidence that there will be follow through. And while grassroots efforts to disrupt the system are gaining momentum, they simply may not be large enough or powerful enough to get the job done on a broad scale. Only an entity with significant clout, resources, and leverage could hope to shift models of care delivery and usher in a new era of healthcare with a fresh perspective. Apple is one of a few such entities.

Making progress on solving the problems facing American healthcare will require a bold approach that goes beyond dipping of toes in water. Meaningful change will require thinking big, taking risk, and building from the ground up. The suggestions that follow are far beyond what a consumer technology company would logically want to take on. And it certainly makes almost no business sense for Apple to even entertain these ideas. But you, Google, Microsoft, and Amazon have clearly set your sights on entering the $5+ trillion American medical market. And if you’re going to be in, why not be all in? The last thing our healthcare system needs is another pig at the trough trying to wrat away their piece of the pie without contributing anything of significance. And, unfortunately, the current state of wearables and virtualized models of care simply don’t go far enough when it comes to fixing what ails us. So here goes:

1. **Build an EMR (and a hardware and app ecosystem to support it)** – Ok, this one isn’t all that original. Blaming EMRs for our problems is a bit cliched and probably overdone. But they still aren’t great and the incumbents keep getting larger. Current options are still too inefficient, complex, and billing focused while being poorly interoperable. Granted, developing enterprise software isn’t necessarily Apple’s strong suit. But there are a lot of great smaller EMR companies struggling to survive that could be acquired and/or talented coders and software engineers with EMR experience looking for jobs. And why stop there? While any EMR absolutely needs to be interoperable and secure, why not create new medically focused hardware that deeply integrates with the EMR software? Imagine healthMacs and healthPads (hMacs and hPads – let’s face it, the letter “i” needs a break) specifically designed for medical documentation, data collection and analysis, portability, privacy, remote patient monitoring, telehealth and accessibility. Imagine seamless data collection from the Apple Watch and other future wearables that transmits directly into the new EMR. Imagine software and hardware designed with doctors and patients in mind instead of billers and coders. Even Siri could be evolved to support voice recognition and NLP to help free up doctors to spend more time with their patients. Finally, add in a robust Medical App store where developers can design healthcare focused apps that further virtualize care to improve quality, maintain access, and reduce costs. There’s no reason EMRs and medical hardware can’t be every bit as seamless and enjoyable to use as consumer products.

2. **Start your own insurance company** – Such an idea seems crazy. Why would a consumer tech company want to enter the risky, impenetrable, difficult to navigate, costly to administer world of health insurance? For all the reasons just mentioned. And it may not be that crazy considering Apple already launched a
Dear Apple

credit card and was reportedly working on a car. Of course, trying to offer a “me too” insurance product in an already cutthroat and competitive market would be extremely difficult and likely to fail. Existing players would laugh as the effort went down in flames. But to win, you don’t beat them at their own game, you create a new one. Health co-operatives are an underutilized form of insurance that bridge the gap between government run programs and commercial insurers. Some feel insurance co-ops can effectively solve our access and affordability problems by giving ownership to members who are incentivized to seek out high quality, cost-effective care. Insurance co-ops have largely failed due to limited economies of scale and a lack of clout needed to take on private insurers. But with a company like Apple backing the idea and using its tremendous resources and leverage, co-ops could become a viable option for solving the insurance conundrum. Taking a small fee to manage the co-op would allow for profit and building a technologically integrated health ecosystem would ensure co-op members know the exact quality and cost of the care they receive. It’s a win-win.

3. **Build your own hospital(s)** – Let’s get even crazier. If the pandemic has taught us anything, it’s that hospitals (and health systems) operate on a very thin line that can be sent to the tipping point with just a few months of disrupted elective care. Typical hospital margins are far below what you get on your average iPhone or iPad. But the reason hospitals are so fragile and economically risky is that they have become bloated by layers of administration, inefficient processes, inflated costs (costs they don’t even know how to measure), and lack of vision. Hospitals and health systems have become such a self-perpetuating morass that change seems impossible. But it doesn’t have to be that way. With the rise of digital health and a shift to virtual care and care in the home, fewer and fewer patients need to be in the hospital at all (just don’t tell them that). Studies have shown that physician-owned hospitals deliver high quality, cost-effective care because incentives are aligned. More and more procedures are safely shifting to lower cost ambulatory surgery centers. Apple could partner with doctors to build a hospital or network of hospitals that incorporates cutting edge technology, fully integrated telemedicine, and top notch patient experience all while delivering high quality, high value, and cost controlled care. Current economics are so far out of control that you could build all of this, save the system money, improve care, and still make a nice profit for yourself.

4. **Start Your Own Medical Group** – It’s becoming more common for large companies to begin offering health services to their employees. Amazon has started its own employee health program (Amazon care) and there are rumors Apple has as well. While this approach makes sense, managing the medical problems of your own relatively healthy, young, well-educated, and highly resourced employees is picking low hanging fruit. Doctors and patients are desperate for a new model of healthcare delivery that restores the doctor-patient relationship, reduces burnout, focuses on quality over quantity, and supports the consumer experience. Outfits like IoraHealth have embraced alternative approaches with some success. But their ability to scale and make their models accessible to a wider range of patients and physicians may be limited. Starting your own medical group while incorporating the above ideas will close the loop on creating a new paradigm for American healthcare. Integrating the entire process can reduce costs and improve quality while setting a new standard for how healthcare is delivered. Empowering doctors and patients will go a long way toward fixing a broken system and restoring stewardship of healthcare to those who deserve it.

I understand the above ideas are outlandish and a far, far cry from Apple’s usual business focus. Healthcare is incredibly complex, and ideas like these will take years (maybe decades) to come to fruition. But if you really want to be a player in healthcare and not just sell consumer health products of dubious clinical benefit, this could be how you do it. Google has Verily and Amazon is part of Haven Health. Perhaps Apple could find a partner or spin off its own healthcare-focused company. A paradigm shift is not only possible, it’s happening on a smaller scale everywhere from Omada to Livongo, from OneMedical to ChenMed, from the Surgery Center of Oklahoma to Intermountain. But these efforts need a boost – fertilizer for the grassroots, gasoline for the slow burn. Almost another year has passed and, if anything, the pandemic has further pushed us away from the solutions to our healthcare problems. But the appetite for change is still there for doctors, patients, nurses, and other stakeholders looking for a way forward. Are you content to keep nibbling or are you ready to take a bite?
Dear Apple TV+ please pay attention because you are not doing well. Greetings from another country, one where most of these people are of zero relevance and matter little to nothing. Not really much to like here, I tried an episode with one of the few people that could be interesting for audiences outside the USA but well, no no. Dear Apple, please make this big ass check box (and the volume HUD while youâ€™re at it) go away, forever. 2yr â€¨ jonhatting, â€¨ r/mildlyinfuriating. Dear Apple: Please get rid of this â€œNo older notificationsâ€ text, it looks ugly. 3yr â€¨ SapphireAries, â€¨ r/iphone. Dear Apple, fix these orientation bugs please. 3yr â€¨ hdxdaniel. â€¨ r/ios.Â Dear Apple, please could you make it possible to be able to change the default times on the timer...p. 6mo â€¨ PGMG17. â€¨ r/AppleWatch. Kudos to Apple for being consistent in expanding their scope of accessibility. The new case design is not an absolute improvement over the original one. Most notably, having the slots towards the outer side makes putting the pair back in difficult.Â Dear Apple, Siriâ€™s speech quality improved significantly in iOS 11. But why canâ€™t she read text? Inspired by Appleâ€™s groundbreaking â€œDear Appleâ€ spots, â€œDearâ€ takes an inventive and cinematic approach to biographies of the most iconic figures in society today by using letters written by those whose lives have been changed through their work. Each episode profiles internationally recognized leaders including Oprah Winfrey, Gloria Steinem, Spike Lee, Lin-Manuel Miranda, Yara Shahidi, Stevie Wonder, Aly Raisman, Misty Copeland, Big Bird and more. Apple today released its new "Dear..." biographical documentary series, which profiles famous figures through letters sent to them by people whose lives have been impacted and changed through their work. play. The series features stars including Oprah Winfrey, Gloria Steinem, Spike Lee, Lin-Manuel Miranda, Yara Shahidi, Stevie Wonder, Aly Raisman, Misty Copeland, Big Bird, and more.