The Future Of Health Care Is In Data Analytics

[**Mike Montgomery**](https://www.forbes.com/sites/mikemontgomery/), CONTRIBUTOR*I write about the many issues technology entrepreneurs confront.*  Opinions expressed by Forbes Contributors are their own.

Every minute of the day, [eCare21](http://website.ecare21.com/), a remote patient-monitoring system, collects thousands of pieces of health data about more than 1,000 senior citizens. The telehealth system uses smartphones, Fitbits, Bluetooth and sensors to collect information about things like blood pressure, physical activity, glucose levels, medication intake and weight. The information is then compiled on a dashboard so that the patients’ doctors, loved ones and caregivers can keep an eye on them and provide proactive care, even from hundreds of miles away.

This is proving to be a valuable service for individuals managing complicated health situations. But Vadim Cherdak, CEO and president of eCare21, says we are only scratching the surface. Once his company partners with a big data analytics service, it will be able to glean even more useful insights from the intense amount of data flowing in.



*(Marketwire)*

Cherdak expects to be able to deeply analyze the data to provide better alerts and tailored recommendations for patients and caregivers. Cherdak has been looking at big data systems such as [IBM Watson](http://www.ibm.com/watson/), [Cloudvara](http://www.cloudvara.com/" \t "_blank) and [Hortonworks](http://hortonworks.com/" \t "_blank), but the industry is still in the pioneering stages. No one yet knows the best way to make sense of the vast troves of data.

This kind of telehealth — which eliminates geographical constraints by using technology to help people receive timely medical care no matter where they are — is on the upswing. In fact, [according to](http://www.mobihealthnews.com/content/survey-9-10-large-employers-will-offer-telehealth-next-year" \t "_blank) the National Business Group on Health, nine in 10 large employers will provide telehealth services to their employees in 2017. By 2019, NBG predicts, this number will leap to 97%.

Telemedicine may alleviate some of the struggles currently facing the health-care industry. We have an [aging population](http://www.aoa.acl.gov/Aging_Statistics/Index.aspx" \t "_blank), a [shortage](https://www.aamc.org/newsroom/newsreleases/458074/2016_workforce_projections_04052016.html" \t "_blank) of physicians and an [increasing need](http://www.fightchronicdisease.org/sites/default/files/docs/GrowingCrisisofChronicDiseaseintheUSfactsheet_81009.pdf" \t "_blank) to manage chronic diseases. We also need to keep burgeoning [health-care costs](http://www.pgpf.org/chart-archive/0056_health-care-costs-proj" \t "_blank) in check. Thanks to “constant technological innovation, increasing remote patient monitoring and rising use of treatments that require long follow-ups,” Mordor Intelligence [predicts](http://www.healthitoutcomes.com/doc/telehealth-market-top-billion-0001" \t "_blank) that the global telemedicine market will reach more than $34 billion by 2020.

“Our health-care system is in desperate need of reform, and technology is one of tool that can help,” says Charles Doarn, director of the Telemedicine and e-Health Program at the University of Cincinnati. “It can be a paradigm shift in how we practice medicine.”

[**Subscribe Now: Forbes Entrepreneurs & Small Business Newsletters**](https://app.e2ma.net/app2/audience/signup/1788435/1752888/?v=a%20)  
[All the trials and triumphs of building a business – delivered to your inbox.](https://app.e2ma.net/app2/audience/signup/1788435/1752888/?v=a%20)

Remote consultation platforms (video and audio) and remote monitoring ([wearable](http://www.wearabletechnology-news.com/categories/health-and-wellness/" \t "_blank) sensors and mobile phone apps that track chronic disease symptoms) are becoming increasingly common. Kaiser Permanente’s CEO, Bernard J. Tyson, [recently reported](http://mhealthintelligence.com/news/kaiser-ceo-telehealth-outpaced-in-person-visits-last-year" \t "_blank) having more telehealth patient transactions in 2015 than in-person visits. But there’s still plenty of [room for growth](http://www.medicalwebexperts.com/blog/four-healthcare-apps-you-should-be-building/" \t "_blank) in the industry.

“If you go to the [American Telemedicine Association](http://www.americantelemed.org/home) annual conference, you’re like a kid in a candy store — there’s so much wonderful technology and equipment,” says Heather Zumpano of [IMST Telehealth Consulting](http://imsttelehealth.com/). “But there’s a real need for big data and telehealth to merge into one. There are many opportunities for improvement.”

“Health data is being collected to inform clinical decisions and [to shape] personalized predictive medicine,” she says. “But there really isn’t integration to improve clinical trials and inform better health practices.”

Some areas Zumpano says would improve with better big data analytics: epidemiology, clinical trials, genomics, health insurance/medical billing operations and patient care. “All of the data being generated from the first four will provide new insights, leading to advances in patient care practices and health care operations.” She points to faster identification of disease outbreaks, faster time to market for new drugs, personalized medicine based on individual DNA makeup, faster approval of health-care coverage and faster payment turnaround times.

Avner Halperin, CEO of [EarlySense](http://www.earlysense.com/" \t "_blank), a medical tech company that remotely monitors heart rate, respiratory rate and motion, says he developed his own data analytics platform. “How do you convert smart monitoring and telemonitoring into outcomes?” he says. “You can dazzle with the amount of data but the challenges arise when you can’t show real impact on the outcomes.”

EarlySense, one of CB Insights’ “[82 companies reinventing the practice of medicine](https://cbi-blog.s3.amazonaws.com/blog/wp-content/uploads/2016/10/Unbundling_Template_2016-v10.png),” partners with bigger companies for more data analysis beyond that which his company provides — and this is the approach he recommends to all telehealth entrepreneurs.

He says there’s a balance entrepreneurs have to walk in this industry. “Once you show your initial value, you have to have your system interfaced with others to bring an even greater value as part of the whole ecosystem. Monitoring is not interesting,” he says. “It’s the outcomes.”