

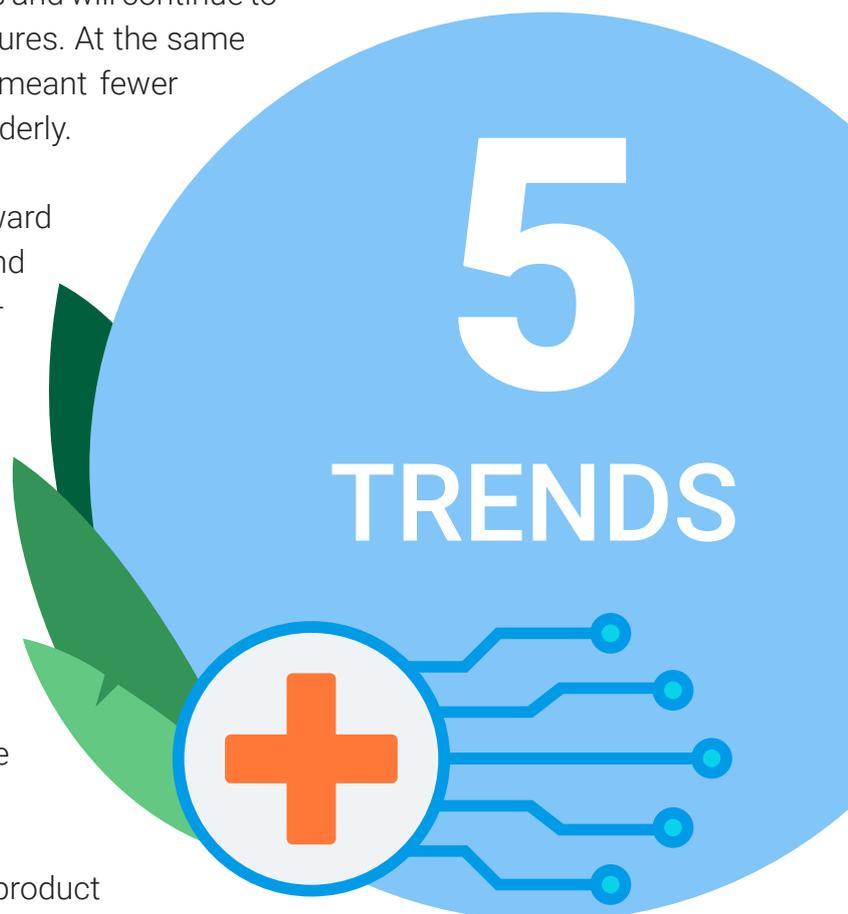
It's **2030**: Do you know where your **healthcare** is?

When we think about the future of healthcare, perhaps the largest factor in play is the ageing population. By 2030, all baby boomers will be age 65 and older. This demographic has and will continue to put a strain on existing healthcare infrastructures. At the same time, smaller subsequent generations have meant fewer people joining the workforce to care for the elderly.

As leaders in the healthcare sector look toward the future, their goal should be to transform and reshape the way citizens think of the continuum of care in order to meet the challenges this elderly and workforce burden presents.

To ensure this ageing population – and the population as a whole – continues to benefit from affordable, effective healthcare, healthcare leaders must envision a future in which the majority of healthcare moves from hospital to home, and the citizen is more actively engaged in their own healthcare needs.

To that end, Mikkel Harbo, the director of product management at Systematic, discusses a future shaped by **5 key trends** which will define the way we tackle our healthcare challenges. The clear path forward: **new technologies and increased digitalisation**.



Five key trends

New technologies and increased digitalisation

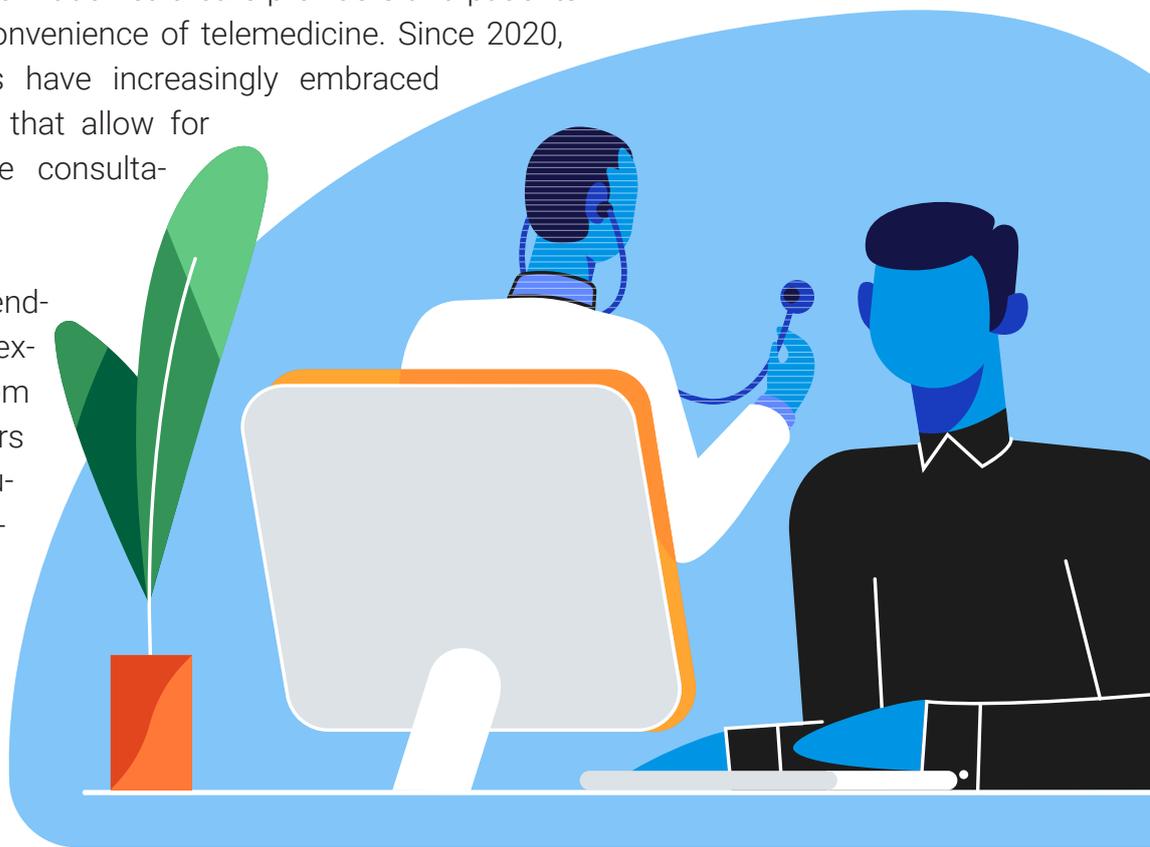
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1. Telemedicine and the patient-empty hospital

“Spending on telemedicine will quadruple. Technologies in place need to be scaled up, and the capabilities that exist will need to be knitted together along the continuum of care, and internalised with the electronic patient record.”

The COVID-19 pandemic made healthcare providers and patients acutely aware of the convenience of telemedicine. Since 2020, patients and providers have increasingly embraced emerging technologies that allow for and encourage remote consultations and follow-ups.

Following this path, spending on telemedicine is expected to quadruple from now until 2025. Providers and patients are continuing to realise the potential benefits of remote monitoring and diagnosing, and technologies are catching up to the convenience of home-based health care solutions.



Looking forward, better telemedicine infrastructure and technologies will give patients the freedom to stay at home for routine monitoring and treatment. This will advance the goal of a ‘patient-empty hospital’, meaning a hospital in which resources and beds are directed toward caring for the most critical cases.

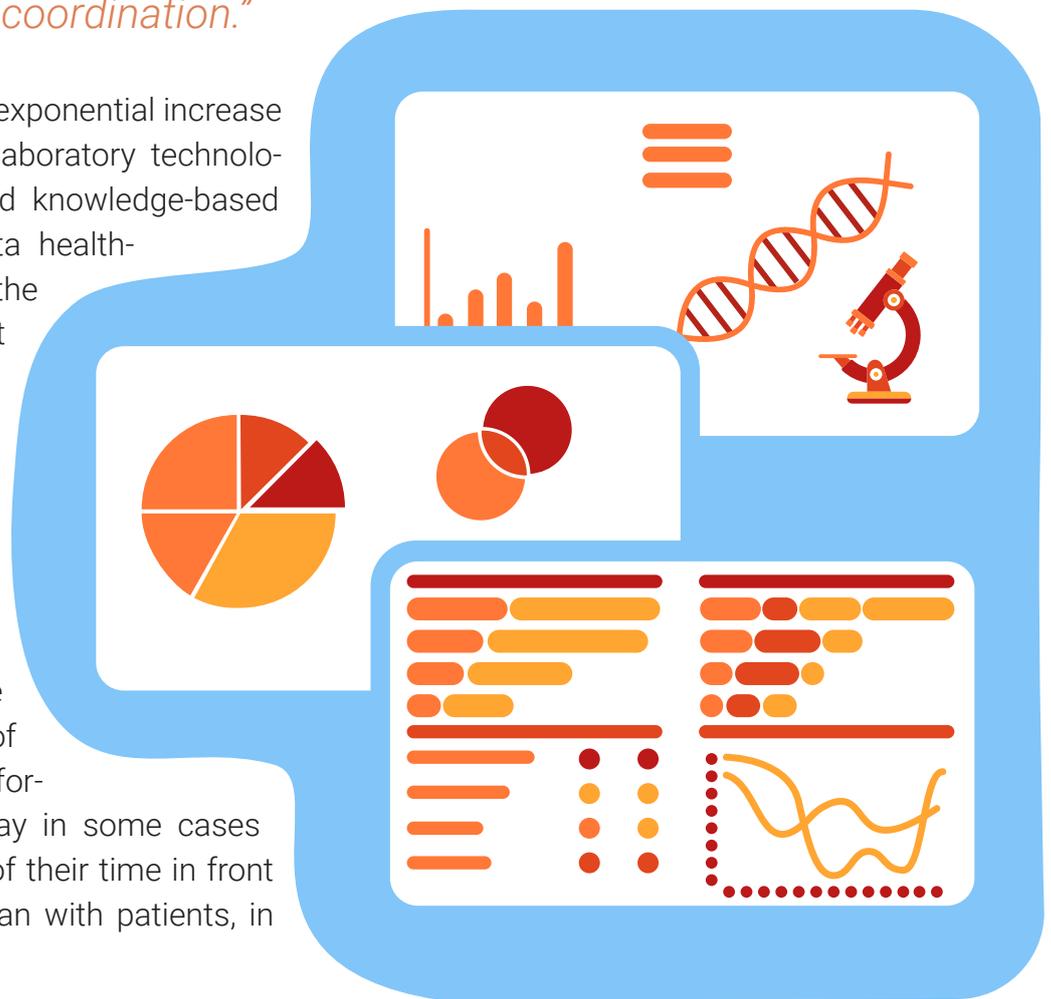
2. Data-centric treatment

“Health care over time will be more and more data-centric, so we can measure more and more stuff. We need to be better at using this data in our treatment and our coordination.”

We are experiencing an exponential increase in data volumes from laboratory technology, medical devices and knowledge-based sources. The more data health-care providers have, the better they can pinpoint a patient’s individual needs and customise treatment to ensure the best care and outcome.

But with this explosion of data comes the immense challenge of sorting through the information. Physicians today in some cases spend nearly one third of their time in front of computers, rather than with patients, in an effort to keep up.

Emerging software will make it easier for physicians to sift through this avalanche of data by using knowledge graphs and machine learning to bring the most important data to the forefront. In turn, this data-centric treatment will make it easier to encourage a more open flow of information and collaboration across all sectors.



3. From intuition to precision

“We might be on the verge of a golden age in health care with regard to handling some disease groups.” With gene segmentation, “the accuracy of the treatment cannot just double, it can be tenfold as effective.”

Research is constantly improving our understanding of medicine. And as our understanding of individual diseases improves, so will our capability to both diagnose and treat them.

With advancements in medical knowledge and device technologies, diagnostics and treatment will move from intuition-based to precision-based. And there may come a time in which computer algorithms – to a much larger degree – will guide medical care.

For example, the advent of genome segmentation technology has allowed physicians to identify diseases with precision. As this technology becomes more cost-efficient, the treatment of certain diseases can effectively be tailored to an individual’s needs, not simply generalised based on a broad understanding of the disease.

This precision-based healthcare will in turn serve to lower the complexity of treatment of these diseases and allow for easier, lower-cost care along the spectrum of treatment venues.



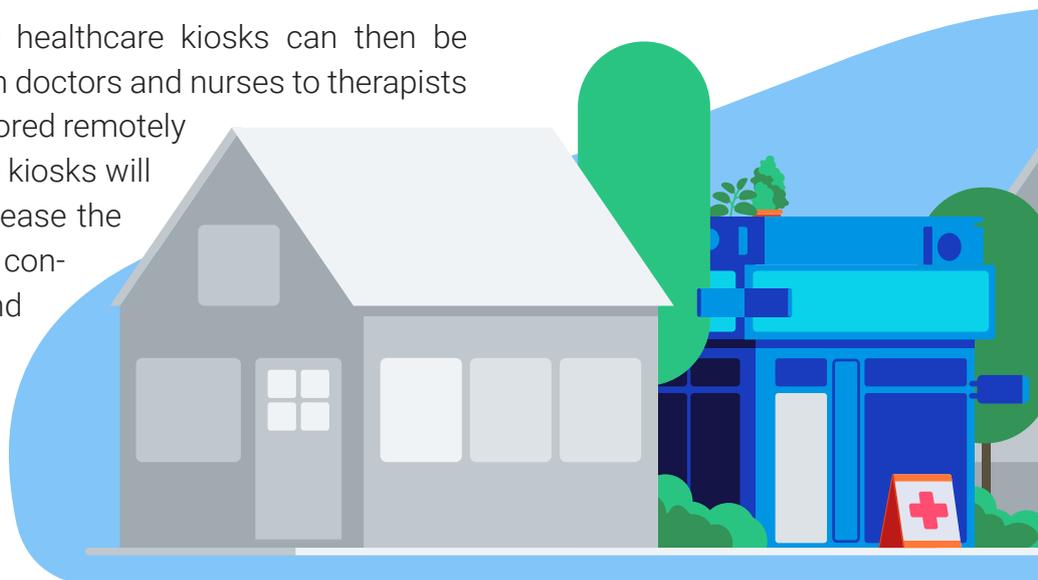
4. New types of **health-care venues** emerge

“Health kiosks are a thing of the future. General practitioners are overburdened enormously, so there’s lots of things that could be moved to pharmacies and other close-to-patients venues. As a society, we should try to push offerings to lower-cost venues.”

As new ways to treat common chronic diseases emerge and become less complex and rule based, new, lower-cost venues for treatment of these conditions could spring up. Healthcare of all but the most serious cases will move away from hospitals and primary care providers and into new types of specialised health venues.

For a contemporary example of what this future could bring, consider eyecare. Some decades ago, patients needed to see an ophthalmologist at a hospital every time they renewed their eye prescriptions. Now, patients can visit an optical shop in their hometown or even in a supermarket to address everyday eye care needs. The eye care model will scale to the treatment of other chronic conditions. Instead of visiting a hospital for treatment, patients will go to a venue focused solely on a set of conditions.

Measurements taken at these healthcare kiosks can then be shared across all sectors – from doctors and nurses to therapists and social workers – and monitored remotely from a command centre. These kiosks will support the open flow of data, ease the burden of treatment across the continuum of care ecosystem, and ultimately foster a more collaborative approach to treatment while easing the burden of care from hospitals to more cost-effective locations.



5. Citizen-central care and a focus on social well-being

“If you look at the dominant reason for people living a longer life, it’s not their weight or their smoking habits or what have you, it is actually their ability to socialise.”

Although it may seem cost-driven, the shift from care within a hospital or nursing facility to care within the home should directly benefit a patient’s overall mental well-being. Research has found a direct correlation between quality of life and socialisation. People who are actively engaged in their communities, with the chance to interact with friends and family, ultimately live longer.

Municipal leaders should look toward a future in which citizens and their immediate social relations play a more active role in their own healthcare, supported by new at-home devices. Taking and self-reporting health measurements will ultimately allow citizens to more easily age in place. Citizens are thus more empowered to become masters of their own health.

