

3M Science.
Applied to Life.™



An inside look at point-of-care testing.

We experience health in every realm — out on a run or walk, when we travel, inside our homes and more. Health is personal, and it never leaves us. It's our constant companion.

During the pandemic, we saw health happen at scale when a global virus changed life as we know it around the world. Now, in the digital age, we're finding new ways to take health to the next level in a variety of settings. Point-of-care testing makes it possible for us to reimagine the way healthcare gets delivered and go beyond the limits of a specific site or setting.

Experience care — everywhere.

We can experience care almost anywhere, but we primarily encounter it in hospitals, at home and in the field. Each location comes with different implications and opportunities.

In hospitals.

During the pandemic, elective surgeries and other routine procedures were deprioritized due to the influx of COVID-19 patients. In the aftermath of the pandemic, we're exploring more options for how care gets delivered. Remote testing through simple point-of-care devices is one example.

Imagine if a doctor could rely on remote testing for exposure to infectious diseases or monitor various blood tests outside the clinic. Your provider could advise whether you should come to the hospital — without an initial in-person visit.

At home.

The introduction of telehealth and other digital solutions has given patients the opportunity to access care in the comfort of their own homes. Wound therapies make it easier for patients to heal at home, rather than in a hospital. Age-in-place technologies make it easier for loved ones to stay in their homes longer. And, of course, with COVID-19, we saw testing technology delivered straight to our doors.

What might the future bring as testing moves from clinics to the home care setting and we see improved access to critical tests for patients who are

many miles from a clinic? Consider how much time you spend accessing health care, including making and attending doctor appointments and checkups, getting tests and waiting for results. According to a case study from Lux Research, in Indonesia, 20% of patients spend more than 60 minutes getting to the nearest care facility.¹ Through the advancement of point-of-care tests, we can work to limit the number of appointments patients need to travel for by providing them with diagnostic tests that they can take at home.

In the field.

We have an opportunity to mobilize health and level the playing field, ensuring health outcomes aren't predicated on where you live. In response to Lux Research's data on healthcare access in Indonesia, Pfizer and Halodoc collaborated to help patients access their medications more easily. Patients who qualified for an assistance program downloaded the Halodoc app, uploaded the required documentation and ordered their medications via the app. Then, a Halodoc driver delivered the patient's medications straight to their doorstep.¹ With this collaboration, patients were able to access the medications they needed in a more efficient way.



¹Lux Research, Inc. 'Delivering Sustainable Healthcare Solutions to One and All.' Presentation, Lux Executive Summit, 2021.

A growing market with growing demand.



The global market share of point-of-care diagnostics highlights the many opportunities in this space. According to a report by BCC Research, North America had 40.3% market share in 2020, valued at 10 billion dollars. In Asia Pacific, China had the largest share at 26.4%, valued at 1.3 billion dollars.²

Looking ahead, India is projected to register the highest growth rate with a focus on innovative technology to counter the high prevalence of diabetes. Out of all the point-of-care diagnostics tests referenced, glucose monitoring takes up 28.2%, larger than any other test type.² With the point-of-care testing market growing, so does the demand for the products and **the need for innovation and advancement.**

²BCC Research LLC. "Point of Care Diagnostics: Technologies and Global Markets." HLC043G (January 2022): 90.



Solutions for better, faster care.

Another implication of point-of-care testing is that we no longer need to wait for results. With less lead time, we have the power to deliver potentially life-saving interventions sooner. But how do we create products that can provide these solutions?

Many diagnostics rely on microfluidics and pressure sensitive adhesives used with hydrophilic films to create point-of-care devices. Some of the critical adhesives and films needed include cover tapes, test strip components and lab-on-a-chip components.

Cover tapes with pressure sensitive adhesives are an excellent choice for sealing microtiter plates and are used in high throughput screening applications. Many of the sensitive PCR COVID-19 tests performed in laboratories around the world throughout the pandemic even used cover tapes for plate sealing during analysis.

Many capillary flow test strips also utilize both hydrophilic films and pressure sensitive adhesives in their construction. These test strips are common for many applications, including blood glucose measurements for diabetes care. Lab-on-a-chip designs also leverage these same materials for remote diagnosis of infectious diseases such as flu, strep and various hospital-acquired infections, plus the monitoring of chronic disease conditions.



Advancing care with science.

The advancement of point-of-care diagnostics makes it possible for patients to receive care in a wide variety of settings. Whether a patient is in a hospital, at home or even in the field, point-of-care diagnostics are taking healthcare to a new level. These innovative technologies will provide patients with the care they need — **without their location holding them back.**

Citations

1. Lux Research, Inc. 'Delivering Sustainable Healthcare Solutions to One and All.' Presentation, Lux Executive Summit, 2021.
2. BCC Research LLC. "Point of Care Diagnostics: Technologies and Global Markets." HLC043G (January 2022): 90.

