

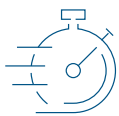
# Design, development, and manufacturing for point-of-care devices

Healthcare solutions

Today, patients and providers have new expectations about how, where, and when they would like to be treated. These trends have helped point-of-care testing (POCT) take on an expanded role in modern healthcare.

Diagnostic technologies that were once limited to hospital settings are moving to clinics and homes, with patients taking a more active role in their care as the line between medical and consumer devices blurs.

We offer a unique set of capabilities that enable healthcare companies to meet their goals. We partner to create business value across the product lifecycle, from design to end of life.



**Capitalize on innovation cycles and accelerate time to market**



**Lower risk and increase resiliency with global footprint**



**Create value across the product lifecycle**



**Integrate sustainability from design to end-of-life**

Our experience in the design, development, and manufacture of POCT products includes:



Fluidics



Sensor Integration



Optics



Miniaturization



Thermal Control



Connectivity



Reagent Management



Advanced Circuit Design



Precision Plastics



Clean Room Manufacturing

## Project Case 1: Point-of-care analyzer user interface design



### Challenge

Develop a user interface for an optical analyzer platform for use at the point of care in a doctor's office or clinic

### Solution

- Understanding users: Provided ethnographic research in urgent care centers to uncover unmet user needs and pain points at the point of care
- Reduced wait time: Analyzed the practitioner's workflow to optimize tasks and shorten overall test procedure time
- Design exploration: Generated multiple wireframe and visual design concepts to explore different workflows and branding applications



### Technology

- Sensor Integration
- Optics
- Miniaturization
- Connectivity

## Project Case 2: Smart Lateral Flow System



### Challenge

First-generation lateral flow systems had subjective test results and lacked connectivity. Patients and clinicians are looking for faster and more accurate test results and prefer not to go to a hospital or lab. Clinicians also prefer multiplex testing. To add to the challenge, OEM companies can face delays and costs while building their own internal expertise, and are seeking external expertise to scale more efficiently

### Solution

- A high sensitivity spectral sensor to deliver quantitative test results and multiplex testing
- Connectivity allows digital results to be shared immediately with a companion mobile app and medical cloud.
- The device features NFC, rather than Bluetooth, which automatically connects to the patient's phone and obviates the need for a processor inside the system.



### Technology

- Sensor Integration
- Optics
- Miniaturization
- Connectivity

## Why Flex?

Accelerate time to market while reducing R&D investments by partnering with Flex. We'll share our cross-industry expertise, knowledge, and experience in the design, development, and manufacturing of PoC products, and the materials and components you need to build your reliable and resilient platform. Our design and manufacturing services can help you develop your next PoC product, scale to volume production and provide the supporting supply chain and forward/reverse logistics. Our global scale also provides regional presence so we can tailor our solutions to your tax and trade situation and minimize the landed cost of your products.



Let's collaborate to create the extraordinary in point-of-care products  
For more information, visit [flex.com/healthcare](https://flex.com/healthcare)



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