

# The six fundamentals

reshaping health screening today

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The seismic changes created by the Covid-19 pandemic have taught us many valuable lessons, especially when it comes to recognizing the deficiencies in global screening and testing systems. How we recognize those vulnerabilities and collaborate to mitigate them, is now key to the creation of robust new systems designed to cope with the demands of a post-Covid world.

The last 18 months have proven to be the most disruptive in recent healthcare history, not simply for individuals, but for all Healthcare Institutions and Governments. As authorities begin to ease travel restrictions, the challenge of mass testing motivates us towards expediting and democratizing access to reliable and speedy diagnostics.

The deficiencies in screening response have led to new levels of innovation that will profoundly affect the future of testing around the world. Covid-19 has demonstrated that innovation and adoption of new protocols is in fact far more achievable than previously assumed.

For the past 12 months, Futurecast has sought insights and collaboration with stakeholders including Governments, Healthcare Providers, Airport Operators and Medical Technology Companies, in order to develop the most effective screening strategy and a solution for a sustained recovery. What has become most apparent is that by decentralizing access to RT-PCR testing, we can begin to ensure ease of access, transparency, speed and accuracy.

Six fundamental factors have shaped our view:

#### 1. The Gap in Strategies

Covid-19 has seen governments at all levels operate in a context of radical uncertainty. This uncertainty has generated vastly different approaches, not only between governments but within them. Most authorities suddenly found themselves with unexpected inconsistencies or incompatible procedures and protocols. Many governments have differing levels of resources available for innovation, infrastructure and the general healthcare system. They also have differing approaches to civil liberties and digital identity. Understanding these fundamentals has allowed us to examine the major gaps in these differing strategies.

The regional and local impact of the Covid-19 crisis is highly heterogeneous, with significant implications for crisis management and policy responses, both in the short and long term. Bridging these gaps in strategy has required analyzing the prevailing forces and creating innovative systems and solutions that work effectively and crucially at a human level.



The Prevailing Forces Source: https://www.oecd.org/coronavirus/policy-responses/building-acoherent-response-for-a-sustainable-post-covid-19-recovery-d67eab68/

## 2. Strengthening the PCR Gold Standard

The PCR test has proven to be the unshakable gold standard tool in accurately helping prevent the spread of the pandemic.

By making testing technologies, products, reagents and assays easily available, and employing RNA extraction-free (one-step) RT-PCR methods, it is entirely possible to bring this gold standard on-site to airports, cruise liners, office buildings and other high demand locations, using compact equipment and minimal infrastructure.

We can reduce RT-PCR testing timelines from over 24-hours to under 1.5 hours, thus reconfirming it as the indisputable gold standard.

### 3. Scalability and Decentralization

It has become increasingly apparent to all stakeholders that if we are intent on bringing timely and accurate testing to critical points of need, we must also bring a scalability and flexibility that was previously thought impossible.

Effective control of the pandemic now requires us to decentralize on-site testing procedures at the point of need. In doing so, maintaining the highest of technical and clinical requirements at all locations is key. Regardless of local infrastructure and funding, the provision of local certified diagnostics can empower jurisdictions to put into place an effective testing regimen that can solve the pressing issues of access, price and speed.

This means creating tailor-made solutions that can scale and therefore serve to democratize healthcare by linking not only diverse healthcare operators but also nonhealthcare operators.

# 4. The Emergence of New Players

The scale of the pandemic has presented challenges that require a concerted effort to combine diverse expertise and best practices from disparate sectors.

In order to address the sheer volume of demand for screening venues, the emergence of innovative non-clinical partners with all-in-one solutions has provided the means to deliver efficient large volume testing.

These new players can effectively collaborate with traditional players and allow them to focus on delivering their primary service: screening.

By introducing smart specialized partners into the equation, existing players can find the support they require, particularly in managing pricing, stocks, logistics and financing. These new solutions link together wide ranging issues such as containers for laboratories, the complexity of the consumables supply chain and the level of capital investment and staffing.

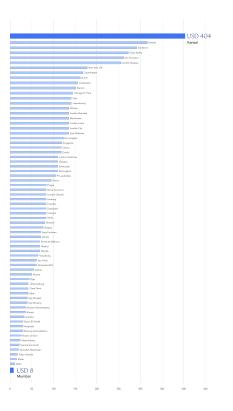
With a reduction in complexity, all players involved in delivering front-line diagnostic solutions can now enjoy the practical benefits of innovative collaboration.

### 5. Pricing and Democratized Access

Research has shown that pricing for PCR testing can vary as much as USD\$404 per test to \$8 per test at various airports around the world. Obviously there is a compelling need to address these discrepancies.

Through closer integration across the value chain, there are many new opportunities to improve outcomes for everyone.

By introducing highly vetted and costeffective innovations for both healthcare operators and those non-healthcare operators tasked with implementing diagnostic systems, we can reduce operational costs. By designing tailormade solutions that are innovative, comprehensive and inclusive, we can achieve large economies of scale.



Airport PCR Testing Prices Source: https://skytraxratings.com/the-varying-costs-of-a-pcr-test-at-airportsaround-the-world

### 6. Thinking Beyond Covid-19

In dealing with the present crisis, we inevitably look towards preparing ourselves for the next.

While innovative solutions are increasingly available at record speed, Futurecast's challenge will be to provide an equal and effective response to any future pandemic by creating groundbreaking global collaboration between all stakeholders, thus accelerating equitable access to further innovations.

### Conclusion

The pandemic has forced the world to find new methods of managing our entire healthcare system. As Futurecast continues to rethink and innovate, it is clear that all players in the diagnostic sector must now simplify and democratize the way we deliver screening procedures.

This has required us to identify and analyze key factors, build upon proven existing technologies and link together healthcare and non-healthcare operators. By working closely with laboratories, public authorities, transportation providers and equipment manufacturers, we can effectively build an innovative, decentralized system.

We have only just begun to create solutions that are faster, cheaper and tailor-made to a range of practical purposes. We seek to empower all participants to find further advancements that will prepare and protect the world from both present and future exigent healthcare emergencies.

Find out more at www.wefuturecast.com

