

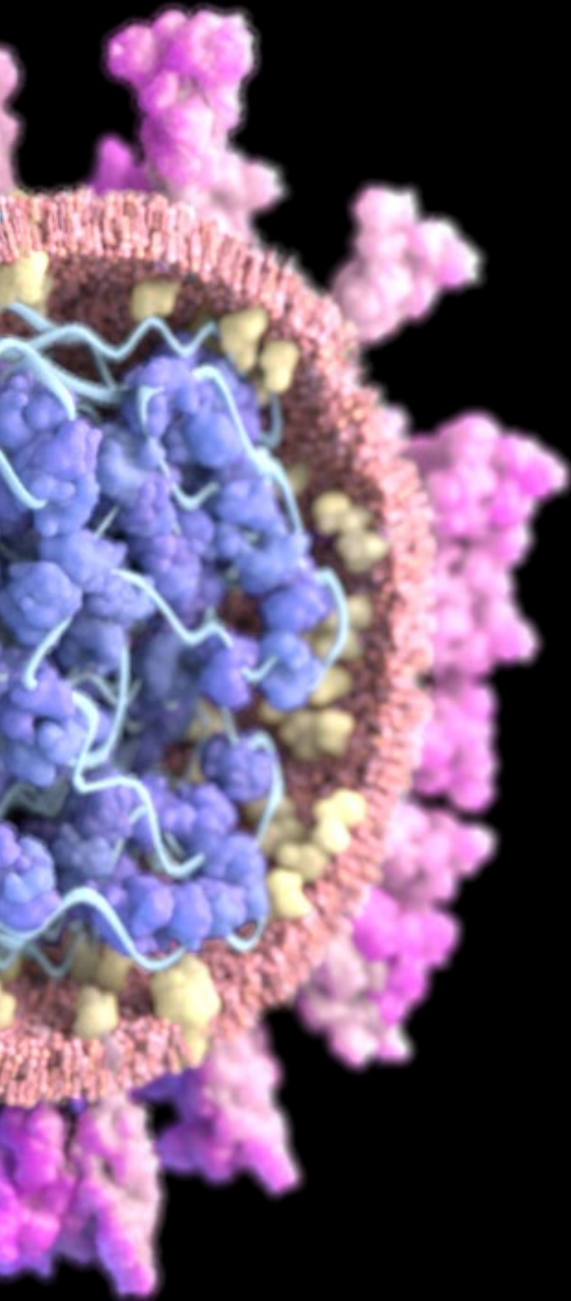
LIFE
(SCIENCES)
AFTER
COVID-19



**Reimagining Creative Uses
for Underutilized Resources**

Authored by
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HEALTH



The piece you're about to read is from Klick Health's Life (Sciences) After COVID-19 series, a collection of expert perspectives designed to inform and inspire the life sciences community for the coming changes and opportunities we anticipate as a result of this global health crisis.

We invite you to engage with a multitude of these viewpoints by seeking out other pieces from this series, including *Sometimes It's What You Can't See* and *The Doctor Will Zoom You Now* at **covid19.klick.com**.

THE INSIGHT

For most industries, sharing underutilized resources is nothing new. Most of us have become accustomed to sharing vehicles through Uber, rooms through Airbnb, and perhaps even fashion attire via Rent the Runway.

But does the 'sharing economy' serve any value in healthcare? If so, how can life sciences organizations leverage the sharing of resources to drive efficiency, productivity, and flexibility?

For the purposes of this piece, we will define 'sharing' as the repurposing of existing resources for alternate uses, may it be from a 3rd party or from within an existing organization.

While we have seen a few examples surface during the pre-COVID-19 days—such as the Klick co-founded platform *Circulation* which repurposes a fleet of ride-sharing vehicles to service non-emergency medical transportation needs—most of the health industry still operates in silos, being slow to adopt shared models that cross-leverage critical resources.

Could this pandemic serve as a catalyst to accelerate the application of shared resources?

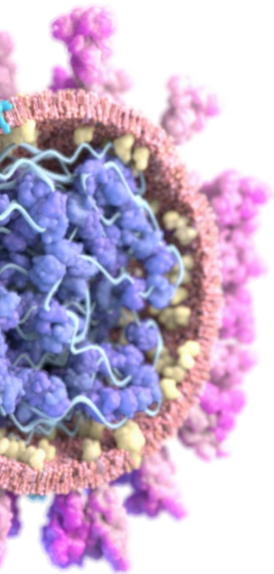
It's been said that "necessity is the mother of invention," but in the case of the pandemic, perhaps we could rewrite that adage as "necessity is the mother of new models of care delivery."

Like most countries, we were vastly unprepared to handle the urgency of the COVID-19 crisis, and as such, many local facilities and state governments were left to their own devices when it came to acquiring needed resources to both flatten the curve and treat the surge of incoming COVID-19 infected patients.

When faced with dire and desperate situations, it's no surprise that a surge of creative thinking forces us to look at the same old things in brand new ways. It makes us ask new and interesting questions such as:

- **Can we repurpose existing technologies, machines, materials, and resources (such as diagnostic test kits or manufacturing supply chains) for alternate, on-demand uses?**
- **Are there hidden, underutilized resources outside of the traditional health system (such as the patient's own home) that we can tap into?**
- **Are current modular fixes temporary, or do they have the potential to stick beyond the pandemic?**

If there is one lesson that stands out from this unworldly pandemic experience is that those organizations that have the ability to flex and adapt during uncertain times possess the greatest odds of not only surviving but also thriving. To do so requires us to think differently and look at new ways of doing old things.



THE EVIDENCE

While I pointed out earlier how *Circulation* serves as a pre-COVID-19 example of the creative use of shared transportation resources repurposed for non-emergency medical needs, the coronavirus pandemic era has spawned a whole new set of creative ideas applying principles of the shared economy.

Below are a few select examples we have observed during the current pandemic.

Hospitality

With few people traveling at this time, Hilton Hotels saw an opportunity to leverage its high vacancy rates by offering rooms to first responders in search of a quarantine sanctuary to prevent the unnecessary transmission of coronavirus to their families.¹ In addition, unused convention center spaces, such as New York's Javits Center flipped its massive facility into an emergency response and overflow center.²

Ventilators

In response to the potential shortage of intensive care unit (ICU) ventilators, the American Society of Anesthesiology offered guidance on how to temporarily repurpose anesthesia machines used in operating rooms into ICU ventilators.³ Reportedly, several hospitals also leveraged available, onsite 3D printers to print required spare parts for ventilators.

Supply Chains

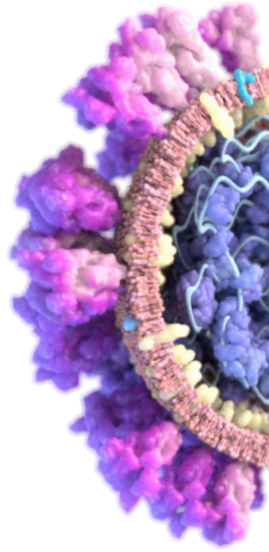
The pandemic has revealed unprecedented collaboration among biopharmaceutical and medical device companies⁴ where many have repurposed manufacturing supply chains towards producing critical personal protective equipment, ventilators, COVID-19 testing kits, treatments, and vaccine development.

Modular Shelter

In the event of a natural disaster, many countries often tap into pop-up shelters as a backup resource to assist those that may be suddenly displaced from their homes. In the era of the coronavirus pandemic, we are seeing the creative reapplication of such concepts by companies, such as Jupe Health in creating modular and portable quarantine units with multi-use functionalities that can be shared and re-purposed for a variety of emergency scenarios.⁵

Our Own Homes

For a variety of reasons, some we can predict and others we cannot, a hospital bed may not be the best choice for the sick. In the case of this pandemic, depending on geography, some hospitals were beyond bed capacity and required overflow assistance. Additionally, bringing highly contagious patients into a hospital setting puts many other compromised patients at risk. Neither situation is ideal. To resolve such challenges, some systems like Tufts Medical Center opted to utilize the patient's own bed at home as a place to get monitored, to heal, and recover.⁶





THE POSSIBLE FUTURES

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Reimagining creative uses for existing underutilized resources offers up a whole set of opportunities for what could provide alternative modes of care delivery.

Making the case against...

As an organization, one can make the argument that there's little economic benefit to sharing resources with what could be competition. After all, if we apply the classic principles of supply and demand to such a situation, one could imagine a scenario where one would be tempted to capitalize on a market where supply is limited yet demand remains high. There is money to be made when markets are inefficient and an asymmetry

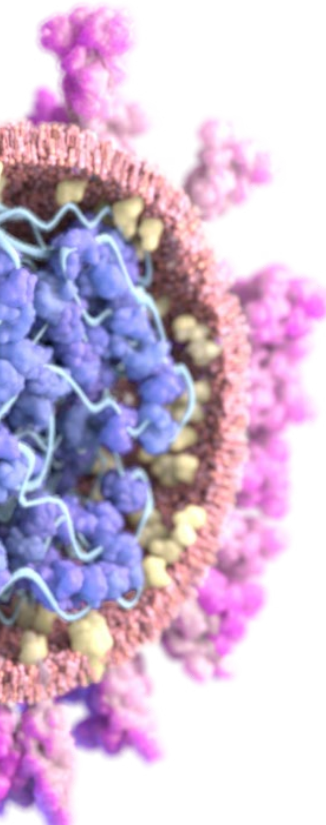
of balance exists. In the absence of some sort of altruistic measure in place by society (such as the social contract in play during the pandemic) or an inevitable disruption from a newcomer, many rigid and incumbent players may choose to default back to status quo after the pandemic to protect their (temporary) competitive advantage. Additionally, if we remain a system which profits from volume and waste, the incentives to change becomes less attractive.

Making the case for...

The above thinking is often what results in being blindsided by disruptive innovations. While companies may temporarily thrive on market inefficiencies and asymmetries, the world is moving towards rewarding those organizations with ideals and values that best serve society's collective needs.

While some seek to preserve the status quo, others could carve out new economic opportunities by reimagining new ways to use old things.

While some seek to preserve the status quo, others could carve out new economic opportunities by reimagining new ways to use old things. After all, where there is inefficiency, there is abundant opportunity. One can either choose to disrupt, or be disrupted. Those who can flex and adapt to reimagining better use of our resources could (and should) come out on top.



THE ACTION PLAN FOR LIFE SCIENCES LEADERS

Applying an adaptive mindset to the status quo presents new perspectives on how to innovate and thrive in uncertain times.

1. PEOPLE: The reallocation of skill sets.

In a post-pandemic future that may potentially require a real-time shift in skillset needs, should life sciences leaders consider applying the concept of asset allocation (physical goods) to people's individual skill sets (intellectual services)?

Individuals often possess many different skill sets, yet are often niched within the terms of what the role or title is asked of them. Depending on the scenario at hand, be it a pandemic crisis or simply an unexpected surge in demand for one product over another, can we reallocate skilled resources to meet the immediate demands, even if that is not the primary function of the person? Perhaps we should each have a primary and secondary role?

Interestingly, many pharma companies have already applied this idea to the creation of on-demand and contract sales reps. Can we think of others that can be cross-leveraged such as pharmacists, nurses, technicians, etc.? What about tapping into the potential of skilled stay-at-home moms, or freelancers in the gig economy? Are there some individuals we can perhaps uptrain to have cross-functional roles that can provide significant productivity gains



in times of need? Are some skilled resources already underutilized?

2. TECHNOLOGY: Repurpose existing technologies for different uses.

How might life sciences leaders and researchers reimagine the benefits of existing commercialized drugs to serve the needs of different, unrelated indications?

Can we teach an old dog new tricks? I believe we can. Just because certain technologies were initially designed to serve a singular purpose does not mean they have to forever remain constrained to a singular function. In this particular instance, I'm referring to the technology of medications.

The advent of new artificial intelligence and machine learning technologies allow us to revisit a library of drugs that can be repurposed for new conditions for which it was neither studied nor intended. As an example, the malaria combo of hydroxychloroquine and azithromycin were explored as potential treatment options for COVID-19 patients. The reality is "we don't know what we don't know." So let's use technology the way it was meant to be used and find out. This could result in significant economic upside by identifying a host of missed opportunities.

Additionally, how might we cross-leverage 3D printers focused on device parts manufacturing into on-demand print hubs for critical supplies and equipment? How might we scale up pill printing capabilities based on supply and demand metrics to meet the variability in geographic needs?

3. INFRASTRUCTURE: Repurposing underutilized physical spaces.

How can life sciences leaders efficiently repurpose unused and underutilized physical spaces into flexible and modular solutions that can serve multiple functions for varying needs?

Both unused and underutilized real estate is such a waste. The pandemic has shown that not every employee needs to work on-site. The idea that every worker must be on-site is an assumption by most companies that has been rarely challenged over the years. As we get more comfortable with the idea of having some remote staff members, how might we maximize usage of the underutilized vacant space in their absence? Can we maximize productivity by square foot by doing so?

The same holds true as we think about hospital systems and their hospital beds. Do we need all those beds? For specific instances, could we use the patient's own bed in their home as a replacement for the hospital bed? Could we achieve better patient outcomes and satisfaction? If so, what could we do with the now available hospital space to drive more revenue and/or productivity?

What's interesting is that the idea of the patient-centered medical home is not a new concept. But it is getting new life breathed into it with the advent of the coronavirus pandemic. By self-quarantining, many individuals and families are getting comfortable and accustomed to self-care and monitoring at home. In fact, I would imagine, combined with telemedicine, many would prefer to receive care and recover in the comfort of their own home. Should this convenience sustain beyond the pandemic era, how might this shift our approach to managing chronic conditions? Should we explore new tools the patient can use at home for their health and well-being? What other ways could we help the patient best manage their condition while remaining at home?

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We hope you've found this piece from our Life (Sciences) After COVID-19 series valuable and engaging. For more content like this, download our other published perspectives at **covid19.klick.com** and sign-up to receive future insights as soon as they become available.



Dr. Gautam Gulati

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Gautam (Dr. G) Gulati is a polymath doctor who speaks, writes, teaches, advises, invests, and builds cool things.

As an innovation-focused executive for the past 20+ years, Dr. G has studied, interviewed, worked for, and advised forward-thinking leaders from the world's most recognized companies. Companies such as Marriott, Roche, Google, American Express, LG, Genentech, Disney, Digitas Health, Merck, Astellas, Medstar, Johns Hopkins, HealthLoop, and many more have sought the perspectives and ideas from Dr. G to help them both think and do differently.

In addition to serving as the founder of WellPlayed.health, Dr. G is currently an Innovator-in-Residence at Klick Health where he helps leaders of life sciences companies to see around corners and better understand how to innovate during uncertain times. He also serves as the head curator for the Klick's world-renowned Ideas Exchange Author Series.

Dr. G is an acclaimed speaker on innovation who has delivered over 250 inspirational keynotes—including at TEDxMidAtlantic, Exponential Medicine, SxSW, and Health 2.0.

In addition to his executive roles, Dr. G serves as an Adjunct Professor of Medical Innovation and Entrepreneurship at Johns Hopkins University Carey Business School, Duke Corporate Education, and Singularity University.



While change can create challenges, it also opens the door to new opportunities. Join us as we explore the many imaginable paths to post-pandemic growth. We welcome you to start a dialogue with the author of this piece:

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