



Global Executive Briefing

COVID-19 Update: June 2020



Agenda

+ **Pandemic Status: Updated Spread of COVID-19, Transitioning to Stability**

An update on the spread, and a measure to assess reopening indicators

*Speaker: **Murray Aitken**, SVP, IQVIA and Executive Director, IQVIA Institute for Human Data Science*

+ **Medical Outlook: Virology, Disease Sequela, and R&D Progress**

New learnings, new concerns, and the progress toward treatments and vaccines

*Speaker: **Jeff Spaeder**, Chief Medical & Scientific Officer, IQVIA*

+ **Resuming momentum in clinical trials**

Moving from response to recovery

*Speaker: **Costa Panagos**, President, R&D Operations, IQVIA*

+ **COVID-19: A catalyst of change**

A look ahead to 2021 and beyond, and the long term impact and implications for life sciences

*Speaker: **Marla Kessler**, SVP, Strategy Marketing and Communications*

*Speaker: **Alistair Grenfell**, President Europe, Middle East, Africa, and South Asia*

*Speaker: **Murray Aitken***

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Section 1: Transition to stability

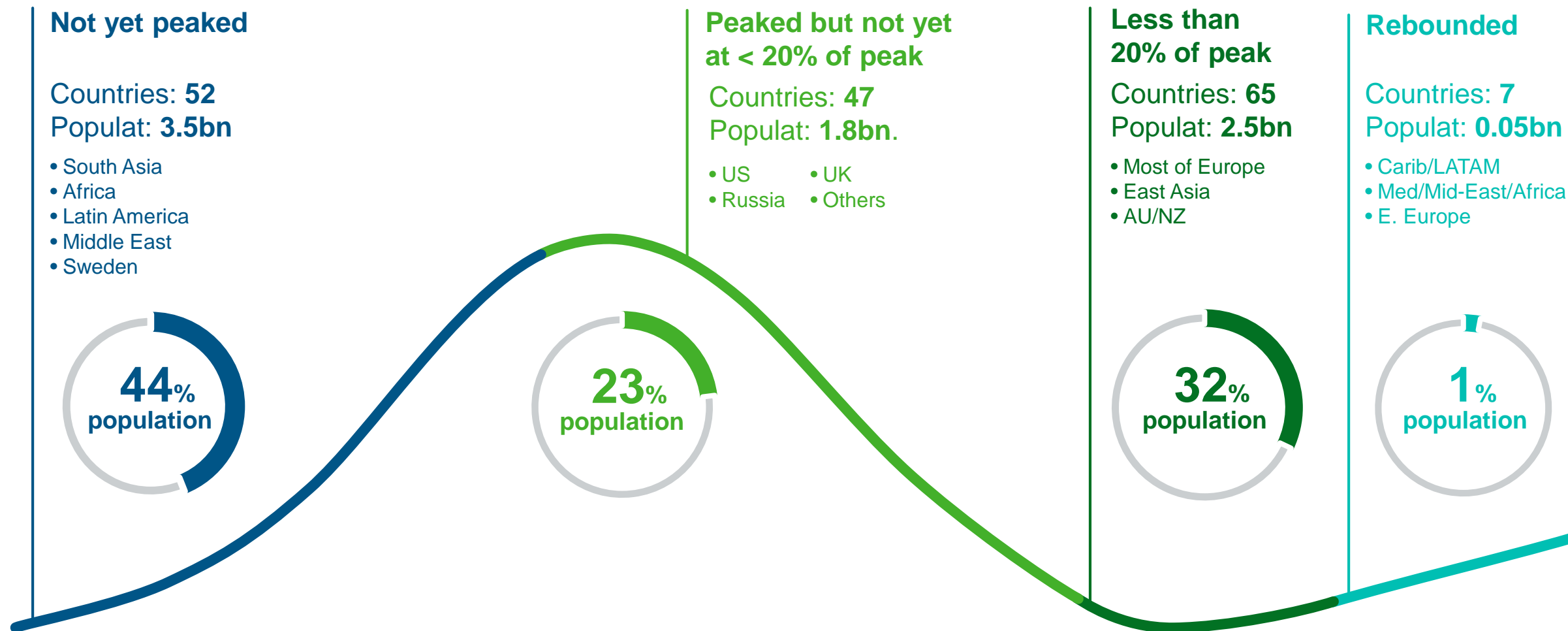
Murray Aitken

SVP, IQVIA

Executive Director, IQVIA Institute for Human Data Science

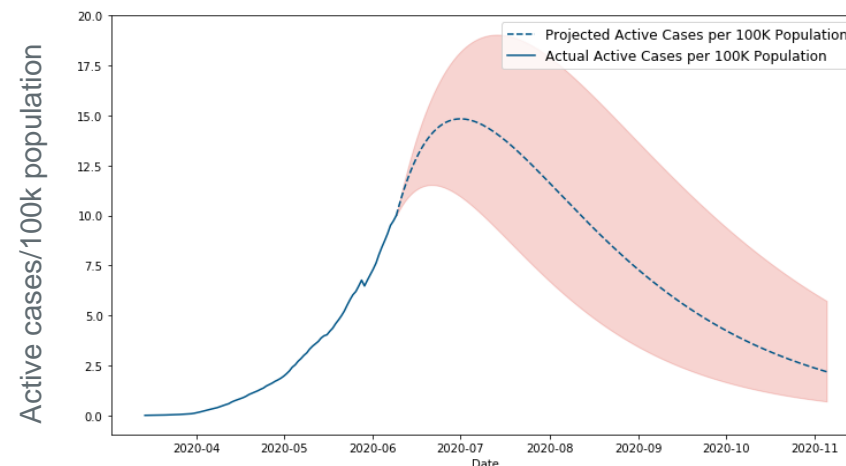
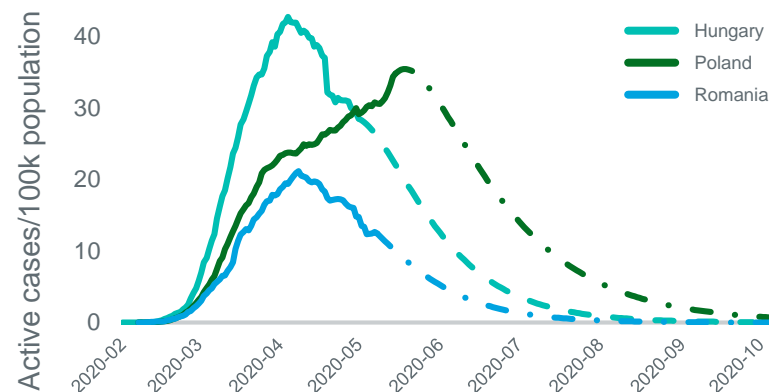
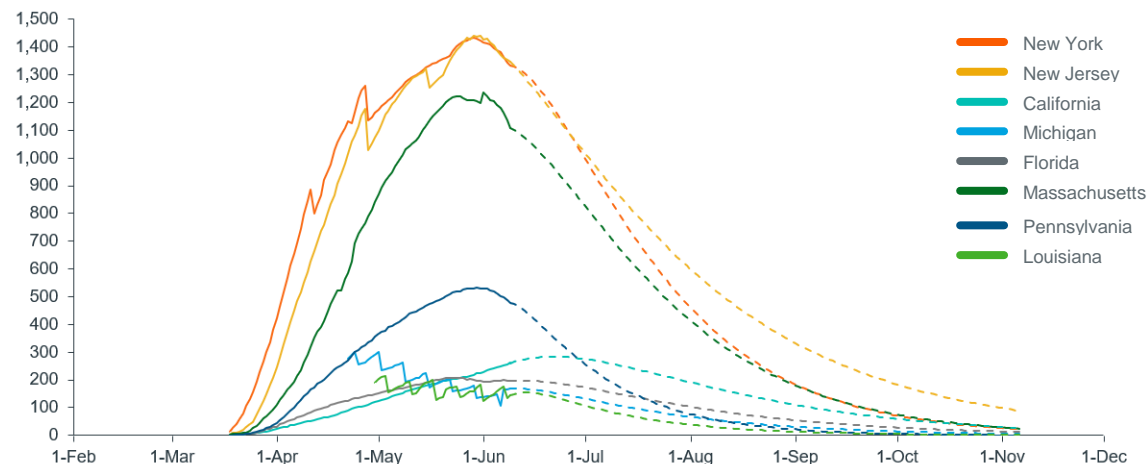
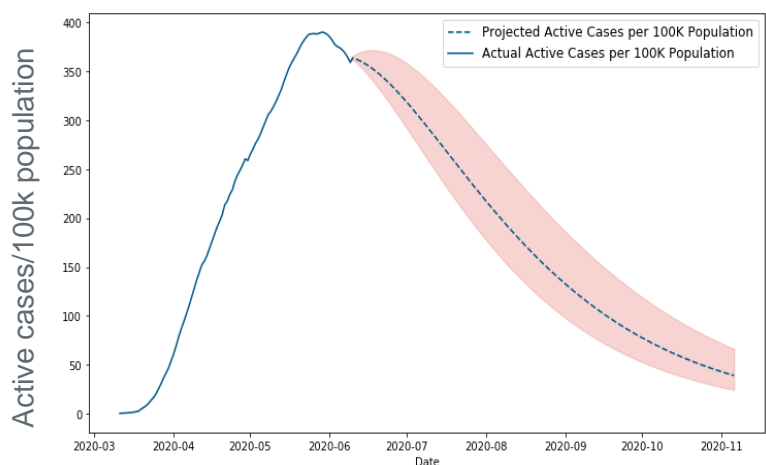
June 2020

Global look at where we are in the COVID-19 pandemic



Future COVID-19 impact is regional and heterogeneous

Significant international and regional variation: disproportionate impact on lower socio-economic + minority groups



Transitioning to stability

Readiness to reopen alignment with health system utilization

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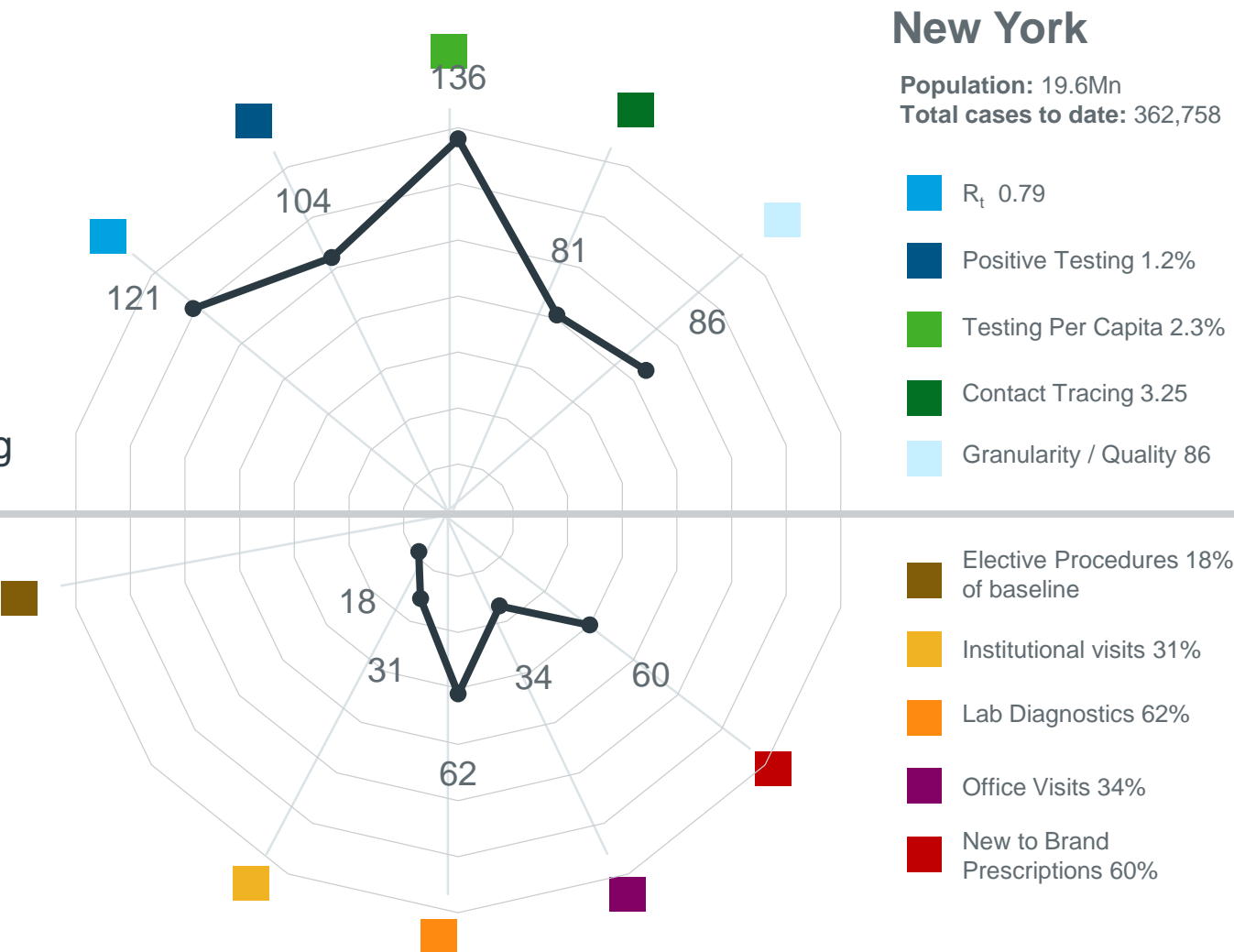
Re-opening Readiness Index

- Rt level
- Positive testing ratio
- Testing level per capita
- Contact tracing planning and implementation
- Granularity and quality of case reporting

41

Health Services Utilization Index

- Elective procedures
- Institutional visits
- Diagnostic lab tests
- Office visits
- New to brand prescriptions





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Section 2: Medical update and outlook

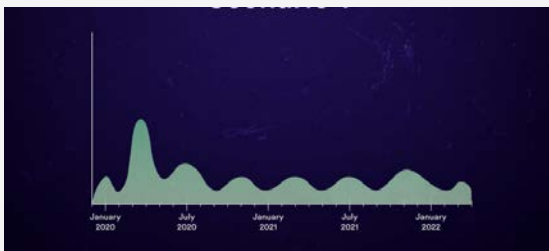
Dr. Jeffrey Spaeder, M.D.
Chief Medical and Scientific Officer, IQVIA

June 2020

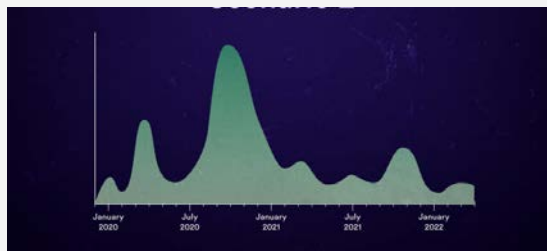
Learning from history, how do pandemics spread and end?

Perspectives on future scenarios

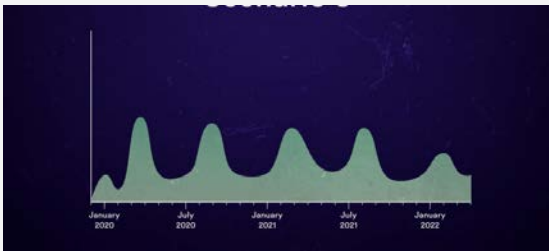
SPREAD



Persistent community spread



Spanish flu version 2.0

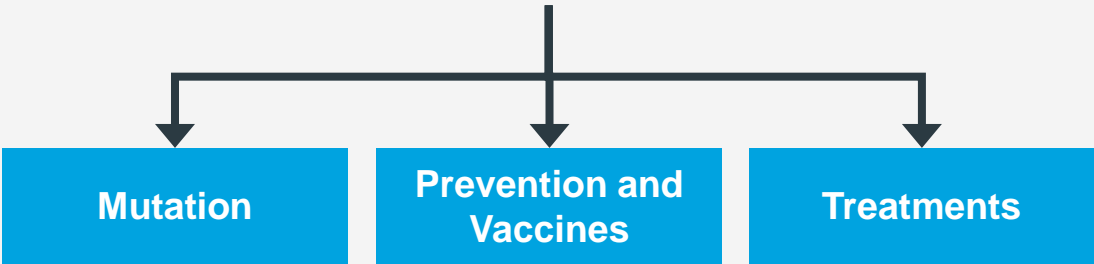


Repeated large outbreaks

END

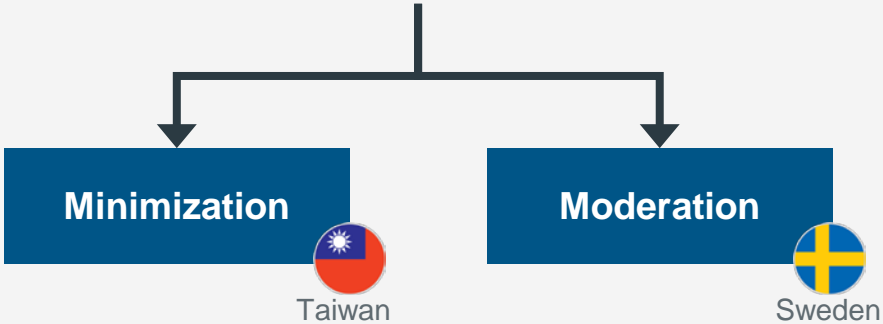
‘Medical’ end

Virus impact minimized by development of medical interventions, or mutates



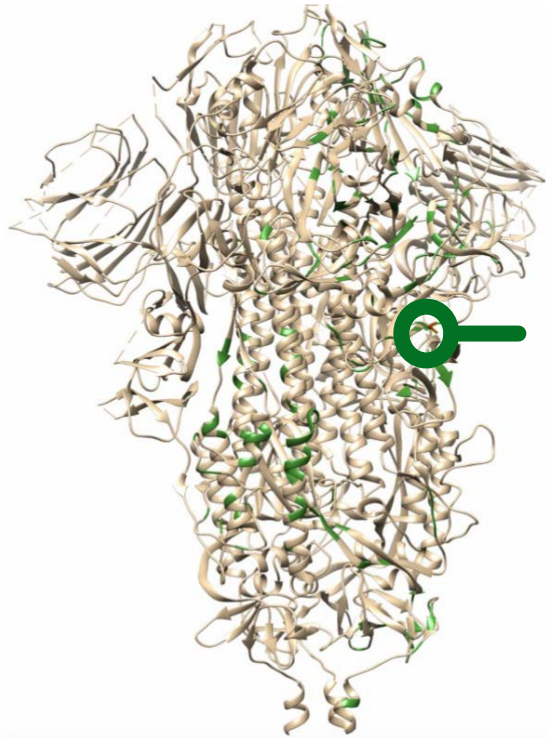
‘Social’ end

Societies adopt varying philosophies to respond to the virus



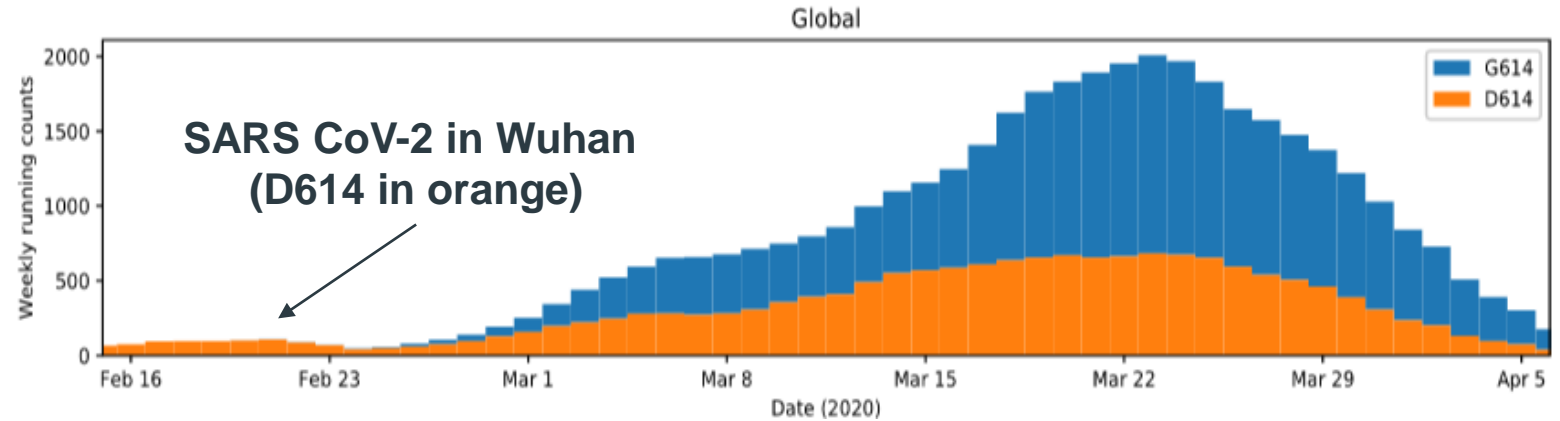
SARS CoV-2 mutations are relatively infrequent although D614G mutation has quickly become dominant globally

Adaptive pressures could impact future transmission as well as efficacy of vaccines based upon earlier viral characteristics



SARS-CoV-2 spike protein

- SNP mutations (green)
- D614G mutation (red)

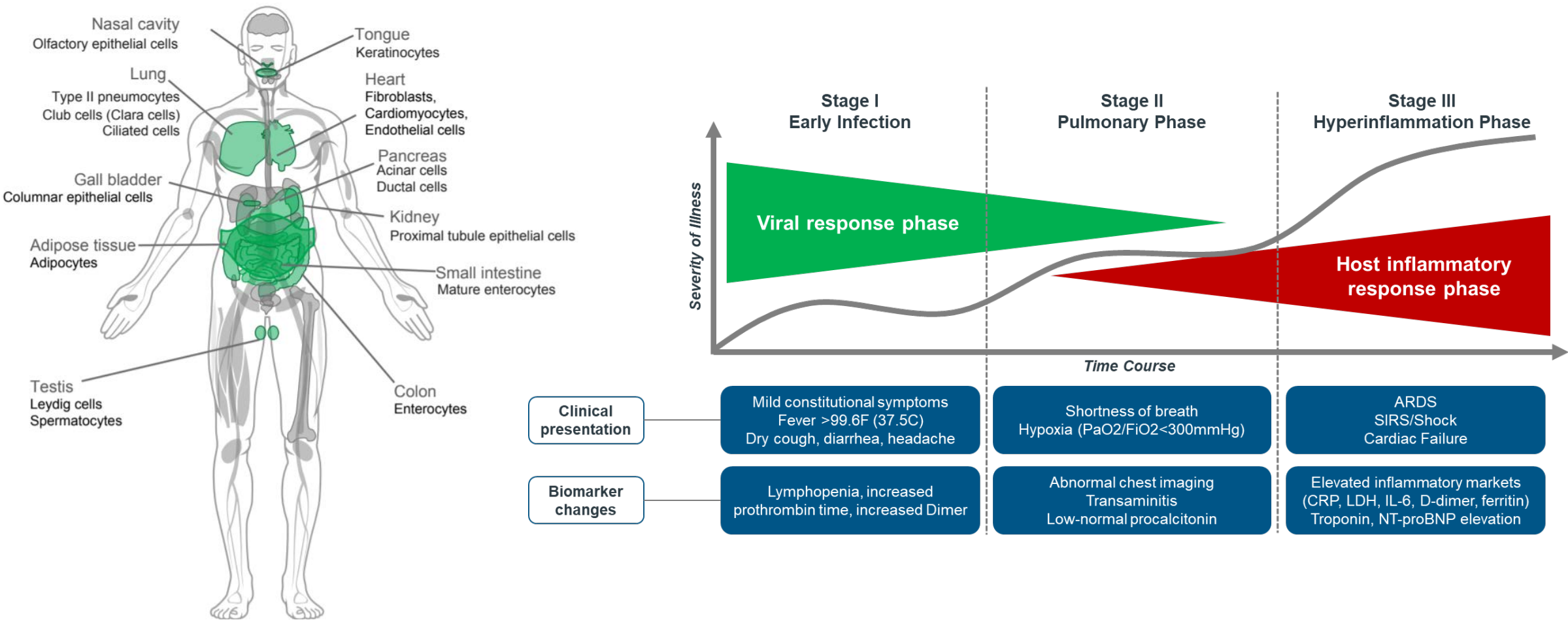


Impact of viral mutations:

- Increased likelihood of mutations as infections increase
- Efficacy of vaccines based upon earlier versions of virus
- Accuracy of diagnostic tests
- Transmission capacity
- Severity of infection
- Potential need for booster vaccines

COVID-19 is more than just a respiratory disease

Diffuse distribution of ACE2 and two-phase immune response complicates clinical course including neuropsychiatric effects



Source: <https://arxiv.org/ftp/arxiv/papers/2003/2003.12773.pdf>
 IQVIA Global Executive Briefing: COVID-19 June 2020; Copyright 2020 IQVIA.

The components of successful vaccine development

Treatments save patients, vaccines save populations

Scientific components

- Correct target
- Successful and long-term generation of protective immunity

Distribution capability

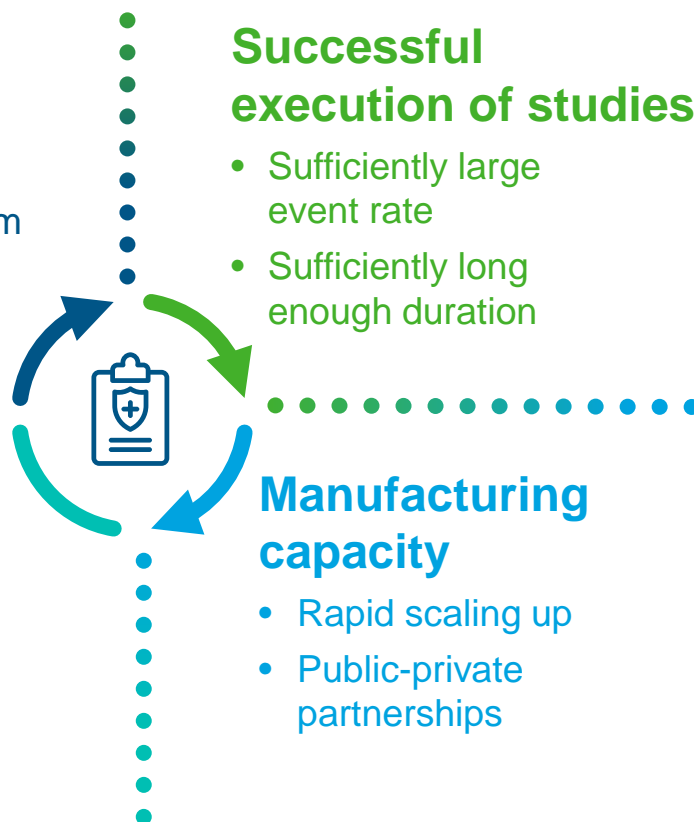
- Prioritization and coordination
- “Last mile” efforts

Successful execution of studies

- Sufficiently large event rate
- Sufficiently long enough duration

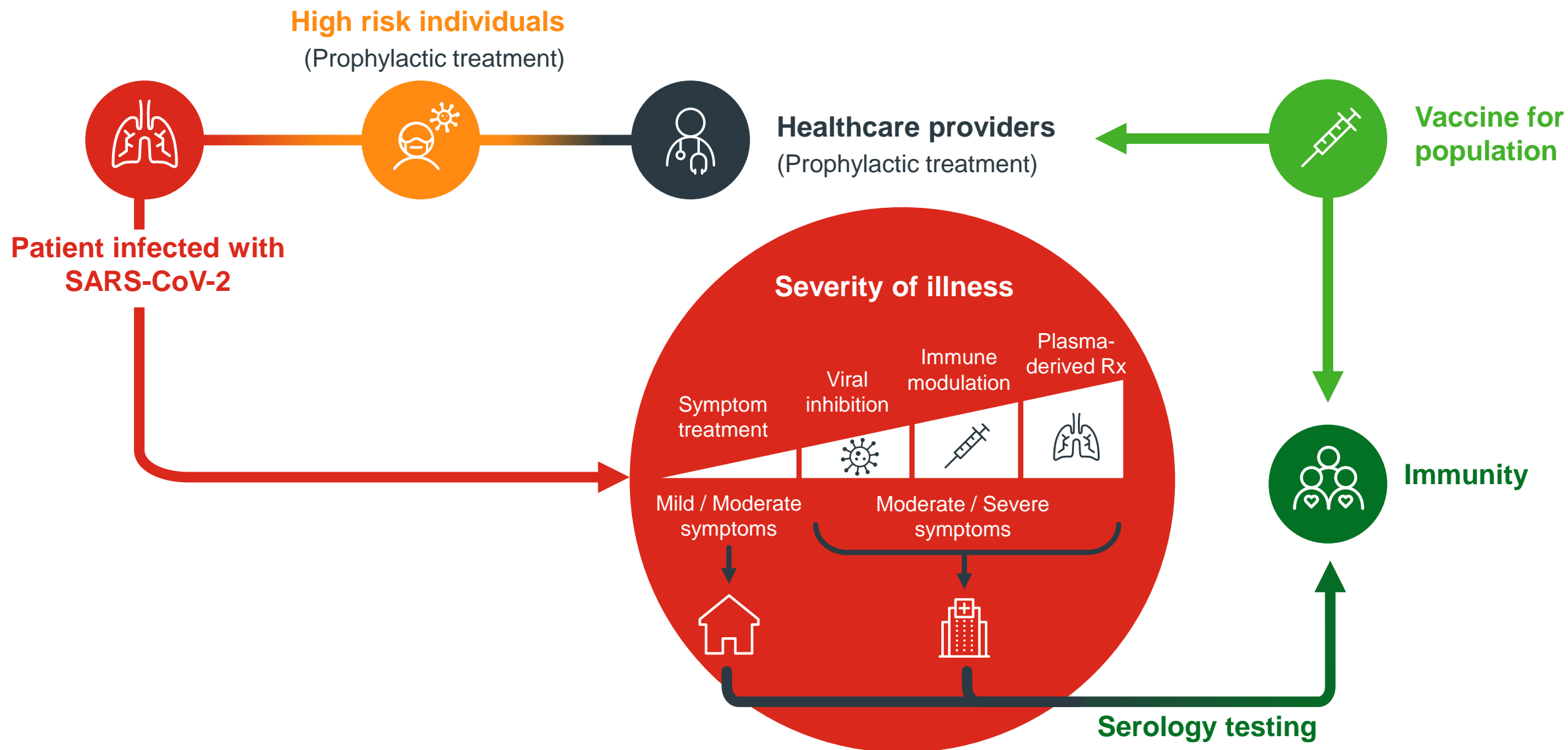
Manufacturing capacity

- Rapid scaling up
- Public-private partnerships

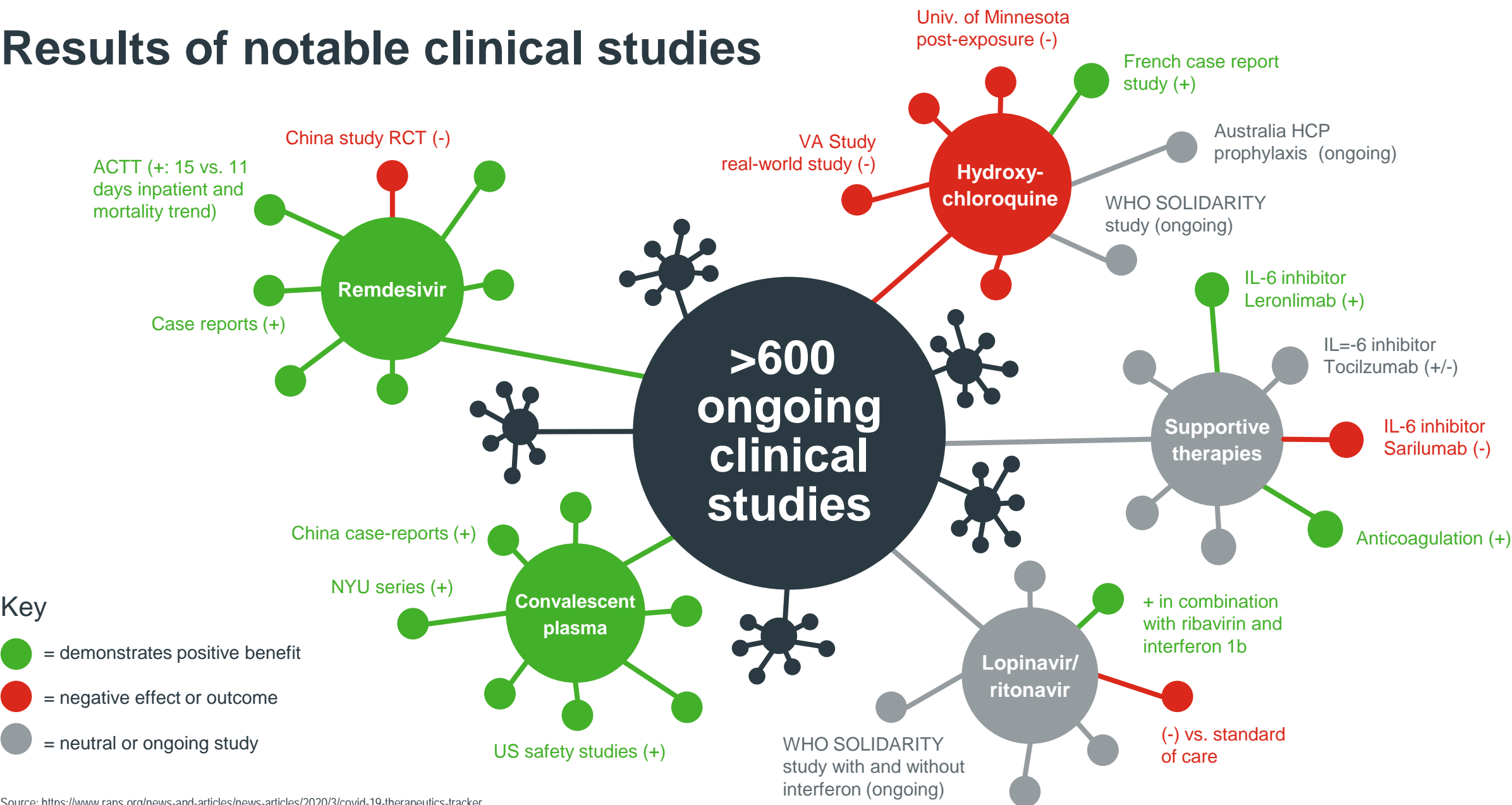


Compound	Institutions	Vaccine platform or delivery mechanism	Phase
AZD1222	Univ. Oxford & AZ	Adenovirus vaccine	2b/3
Ad5-nCoV	CanSino Biologics	Adenovirus vaccine	2
mRNA-1273	Moderna	mRNA vaccine	2
Unnamed	Beijing Institute of Biological Products & Sinopharm	Inactivated vaccine	1/2
BNT162	BioNTech & Pfizer	mRNA vaccine	1/2
NVX-CoV2373	Novavax	Protein subunit	1/2
PiCoVacc	Sinovac	Inactivated virus with adjuvant	1/2
Unnamed	Beth Israel Deaconess & Janssen	Adenovirus vaccine	

Potential integration of therapies under development



Results of notable clinical studies





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Section 3: Recovery in R&D

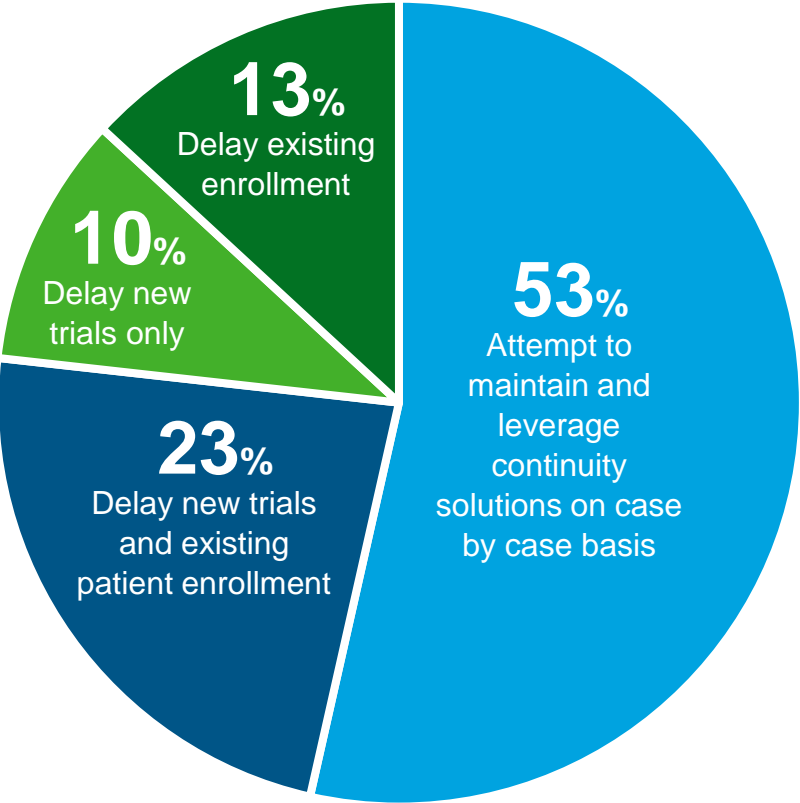
Costa Panagos

President, R&D Operations, IQVIA

June 2020

Pharmaceutical company decisions on clinical trial continuity have largely remained stable since end of April

Clinical trial continuity among
top 50 pharma
(n=30 companies with public statements)



Selected clinical trial continuity statements – April/May 2020



“While Biogen does expect there will be some impact to timelines for some of its clinical programs, it still expects the vast majority of the 10 remaining near-term readouts to occur before the end of 2021.”



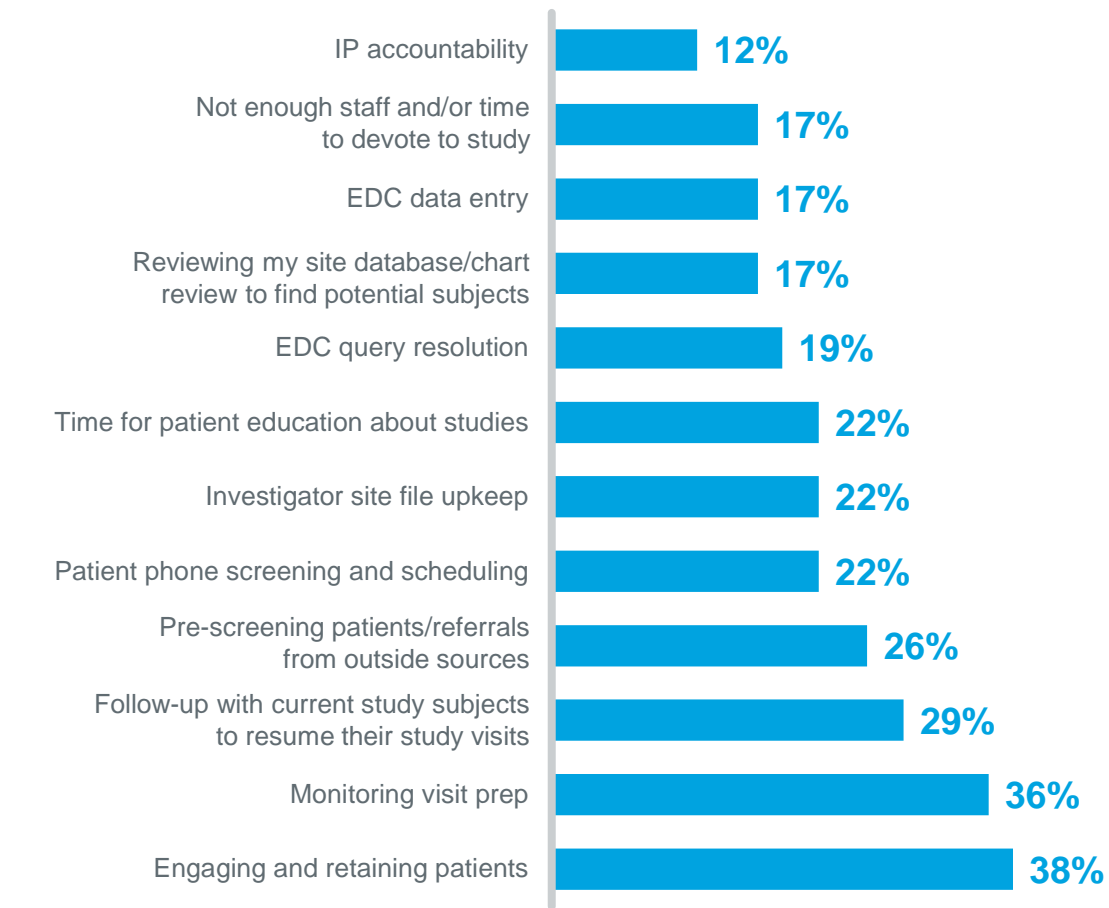
*“Clinical trials are continuing and we are leveraging our digital tools to limit the disruption caused by the pandemic. We are seeing slowdowns in new enrollments in ongoing clinical studies and start-up with new studies. At this time we remain confident the impact on our ongoing clinical trials is manageable. Looking ahead for the remainder of the year, **we do not expect delays in our planned 2020 regulatory submissions.**”*



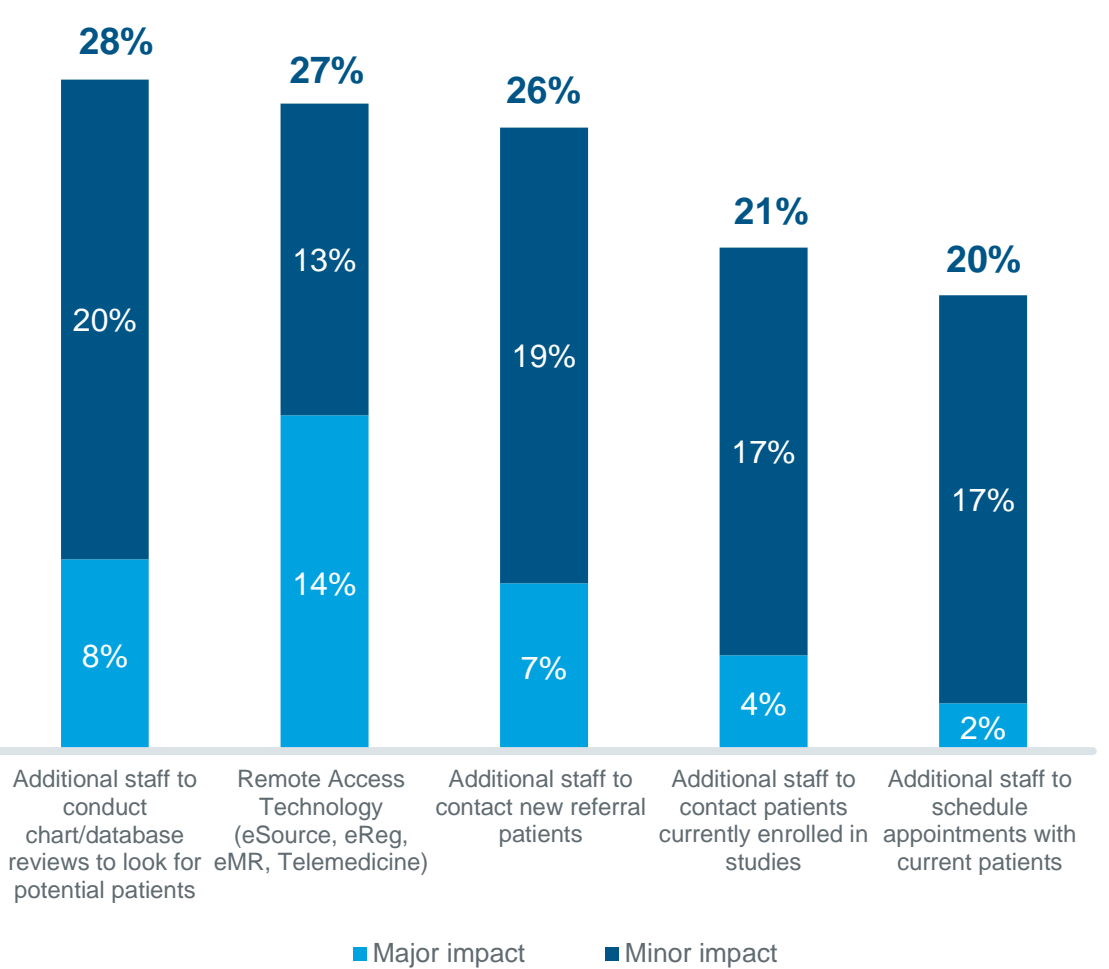
“While some of our clinical trial sites remain paused for new patient recruitment, we endeavor to continue our clinical research programs with the wellbeing of our patients as our guiding principle. We assess the situation continuously and where it is safe for patients and in line with local regulations, we have restarted patient recruitment at some sites for most of our ongoing studies..”

The site perspective: Challenges and opportunities for support

Key challenges during COVID-19



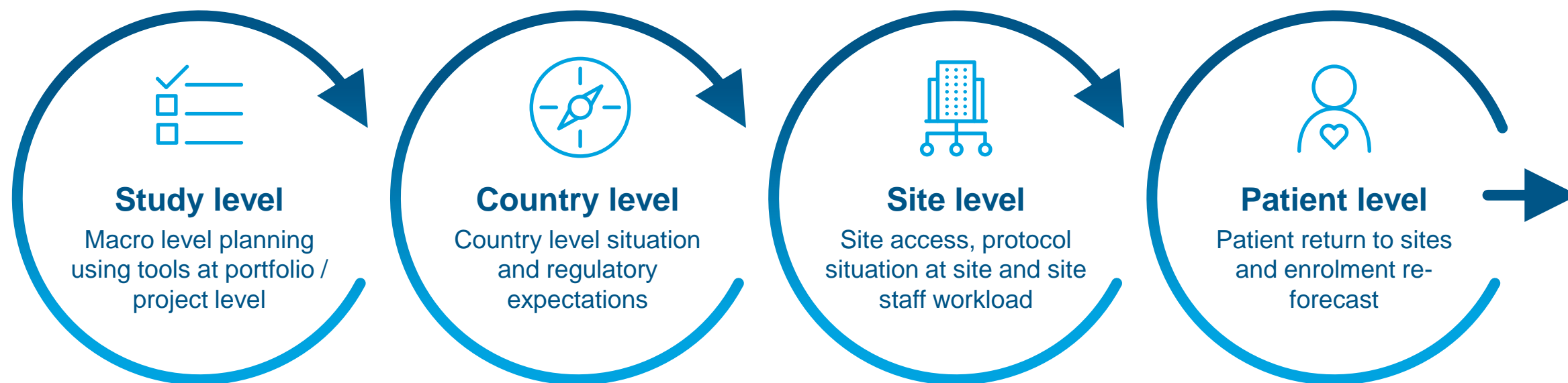
What would help



Source: IQVIA US and Canada Site Survey (n=138).
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COVID post-containment operational recovery framework

Enabling exit, limiting disruption from COVID-19 at a project portfolio level





Managing recovery with timely, adaptable forecasting powered by machine learning



Recovery curve forecast

Rate at which sites and patients return to pre-COVID activities



Forecast site reopen dates

- By country and region
- By US state
- By therapeutic area



Forecast patient activity

- Early: screening and randomization activities
- Late: post randomization



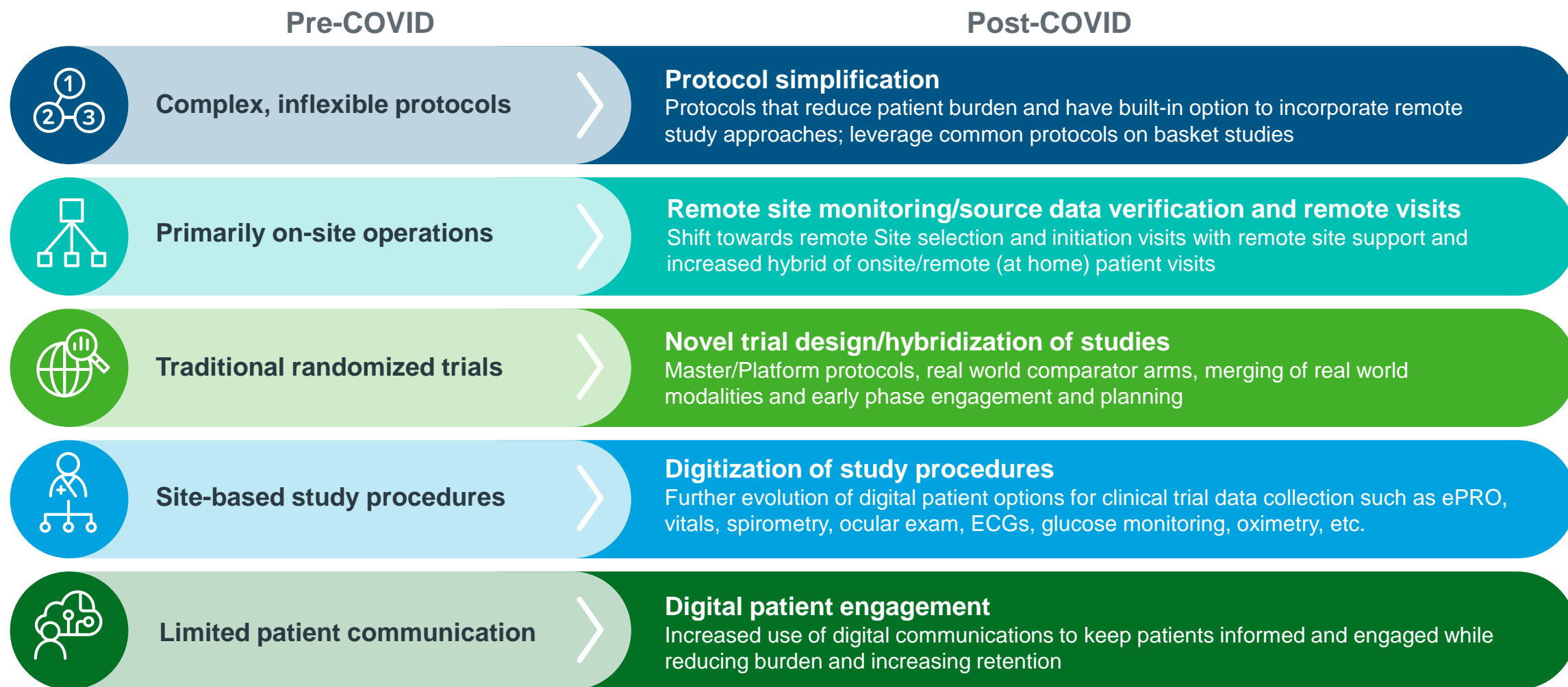
Forecast site reopen at a study-site level



Scenario planning simulations on shifting peak dates (5, 10, 15 days) and government regulations scenarios (none; mild; strict)

Accelerated innovation is paving the way for a new normal

Achieving agility with patient-centric design and the right technological infrastructure



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Section 4: COVID-19: A catalyst for change

Marla Kessler

SVP, Strategy, Marketing, and Communications, IQVIA

Alistair Grenfell

President, Europe, Middle East, Africa and South Asia, IQVIA

Murray Aitken

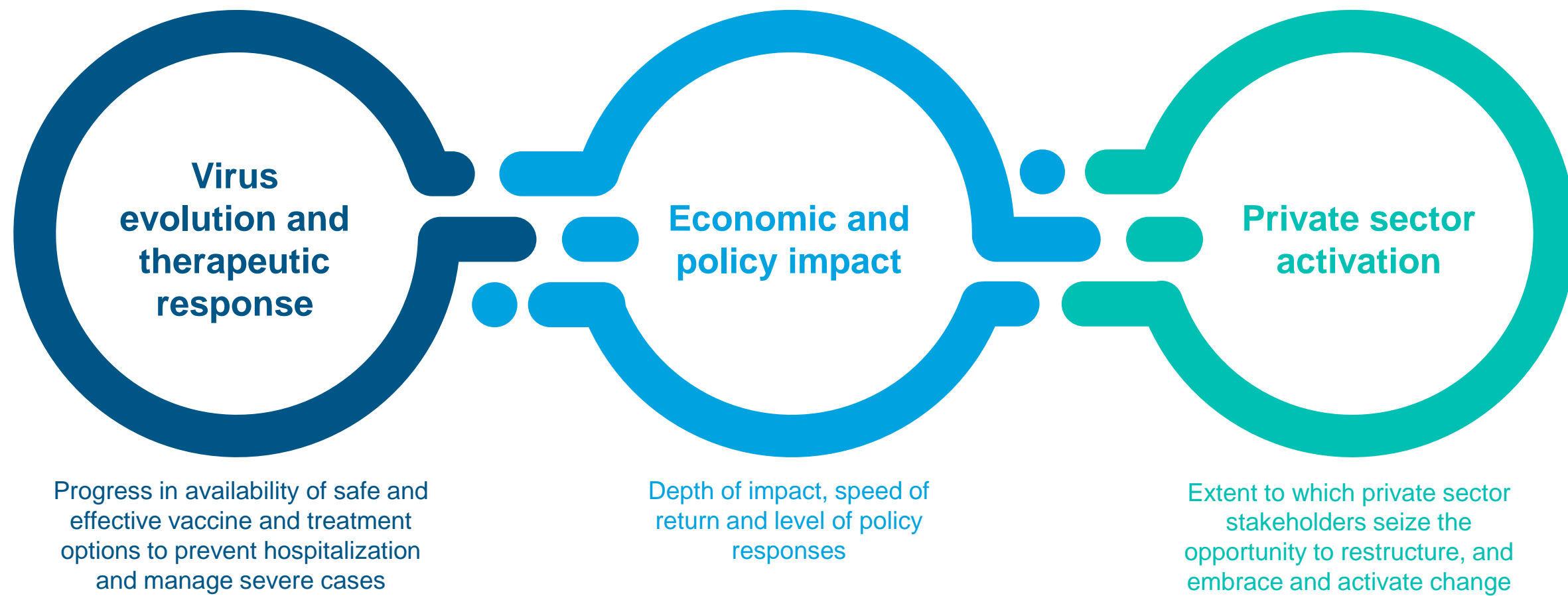
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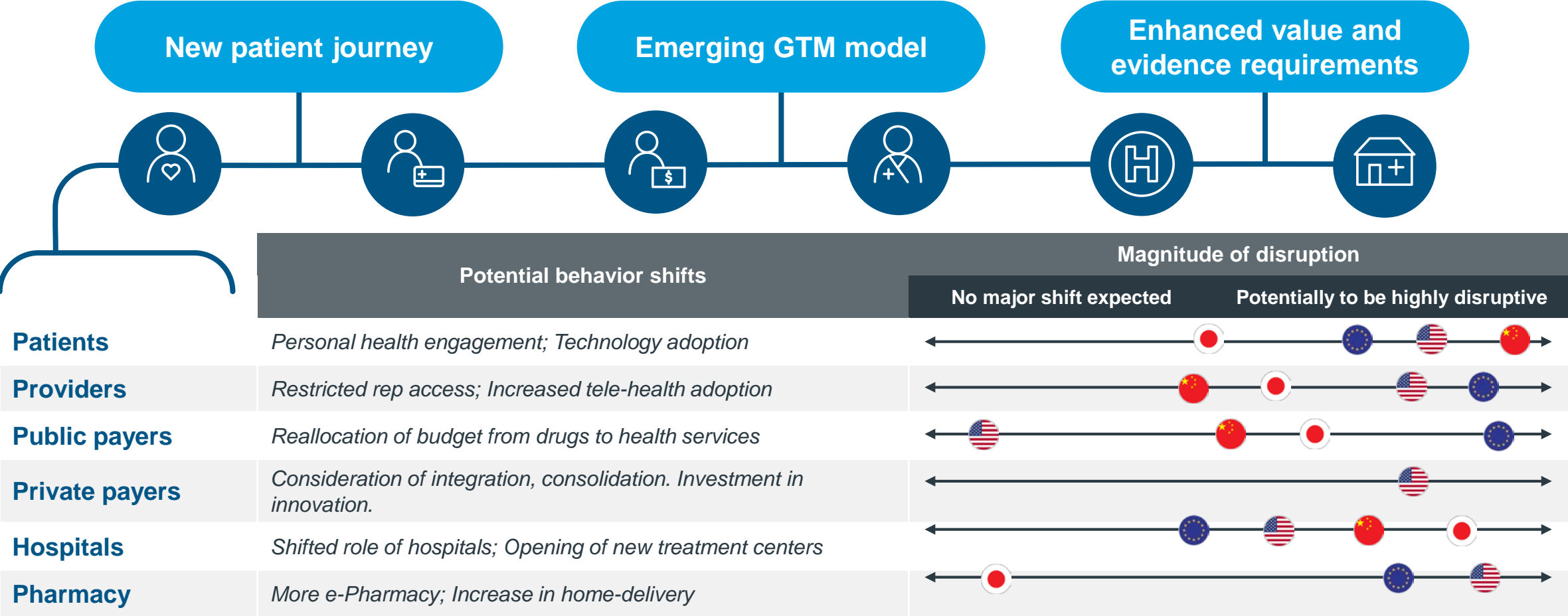
Looking to 2021

Driving forces that could shape the healthcare landscape



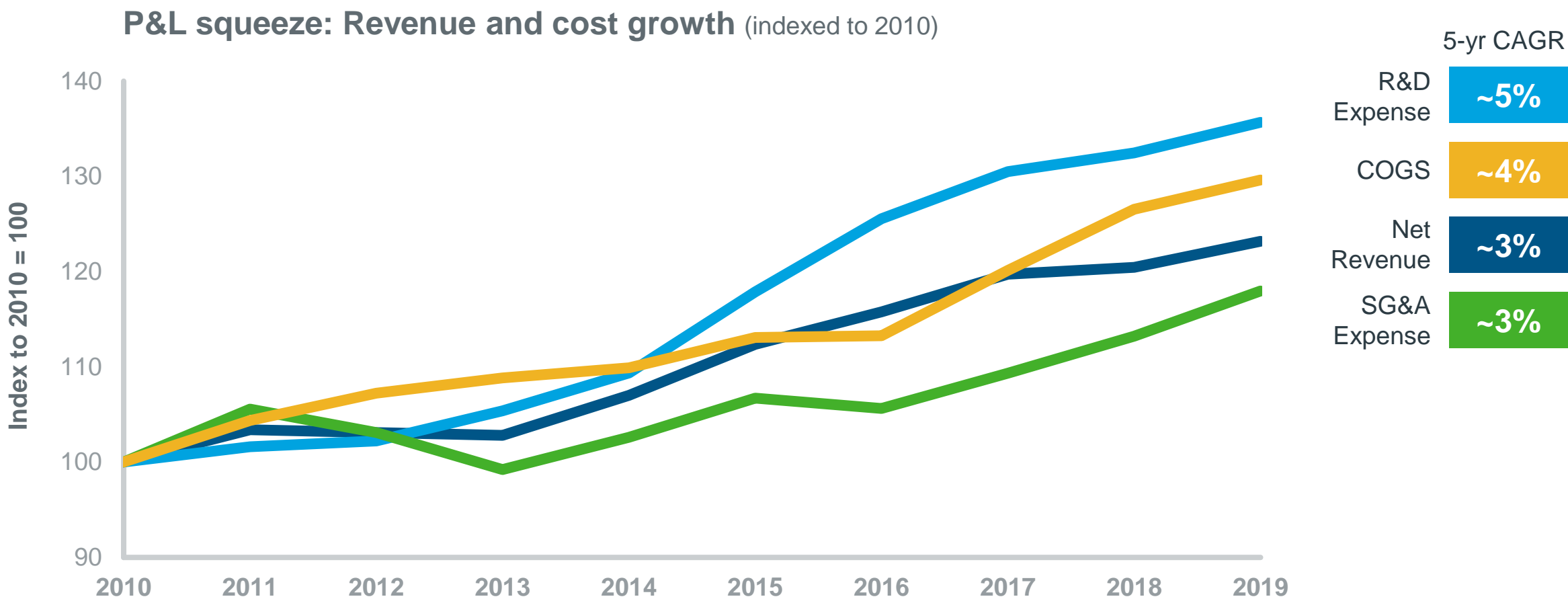
Behavior shifts

Driving forces shift behaviors



Business model under pressure







Pre-COVID costs growing faster than net revenue, eroding returns



Aggregated industry P&L, top 25 Pharma companies,
Source: Company Financial Report ; IQVIA Thought Leadership analysis 2020
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Implications for life sciences

New capabilities to adapt across the value chain

	TODAY	FUTURE
 R&D / Portfolio Strategy	<ul style="list-style-type: none"> • Focus on oncology and specialty • On-site complex protocol studies 	<ul style="list-style-type: none"> ✓ Refocus portfolio strategy on high-unmet need areas ✓ Innovative use of RW evidence ✓ Tech-enabled execution
 Safety	<ul style="list-style-type: none"> • Traditional PV requirements 	<ul style="list-style-type: none"> ✓ Long-term follow-up COVID-19 patients ✓ Evidence on COVID-19 impact
 Supply and Manufacturing	<ul style="list-style-type: none"> • Dependent on foreign API • Consistent and frequent distribution / wholesale 	<ul style="list-style-type: none"> ✓ Consider domestic / collaborative manufacturing to prevent any supply issues or policy changes
 Pricing and Market Access	<ul style="list-style-type: none"> • Price benchmarks • External technology review 	<ul style="list-style-type: none"> ✓ Plan for new evidence requirements ✓ Accelerated focus on value demonstration
 Patient Support and Engagement	<ul style="list-style-type: none"> • Disease state and treatment education focus • On-site specialist referrals • Hospital driven treatment and care 	<ul style="list-style-type: none"> ✓ Enhance support for patients within new care sites ✓ Strengthen pathways and guidelines to empower patients in care seeking behaviors ✓ Remote monitoring and tele-health continuation
 GTM Model	<ul style="list-style-type: none"> • Share of voice based customer engagement • Coverage and frequency models (F2F focus) • Key account management 	<ul style="list-style-type: none"> ✓ Local precision and coordination ✓ Call-center based remote engagement ✓ Scientific / clinically focused field-team

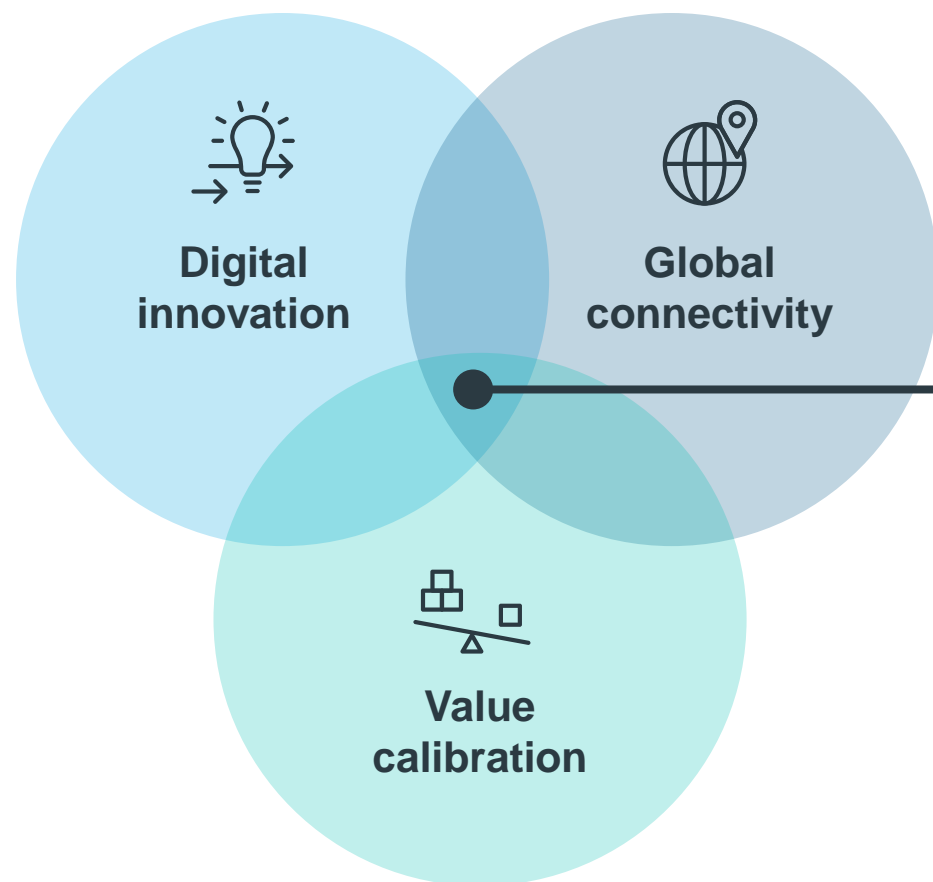
Profitability impacts

Operating margin at some risk (2021-2022)

	Large pharma baseline* 2019 actual	Impacts	Rationale
Net sales	100%	▼	Disruption in demand from April to June, offset by forwarding buying in March, and return in July-Dec at 95% of 2019 level
COGS	28%	▲	Slight increase due to shifting some production to more expensive locations
SG&A	27%	▼	Initial investment in virtual technology off-set by more significant rebalance of field force investment
R&D	19%	=	Maintain program at same absolute level
Operating margin	25%	?	Management priorities and actions to maintain operating margin

Building a more resilient ecosystem

Transitioning to the future with a stronger healthcare system



Re-establishing a stronger system:

- ✓ **Embrace the role of technology**
COVID-19 pandemic as an accelerator of change that promotes efficiency in customer engagement and ways of working
- ✓ **Learn from global community**
Global healthcare and life science community learns from historic response
- ✓ **Increase value to healthcare system**
Re-setting assessment of ICU capacity, testing capabilities, vaccine infrastructure and innovative therapeutics to optimize health system and life science value



Thank you

For more information, please visit
[IQVIA.com/COVID19](https://www.iqvia.com/COVID19)

Or contact us at
insights@iqvia.com



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