

A Proposal to End the Covid-19 Pandemic: Update as of Mid-August

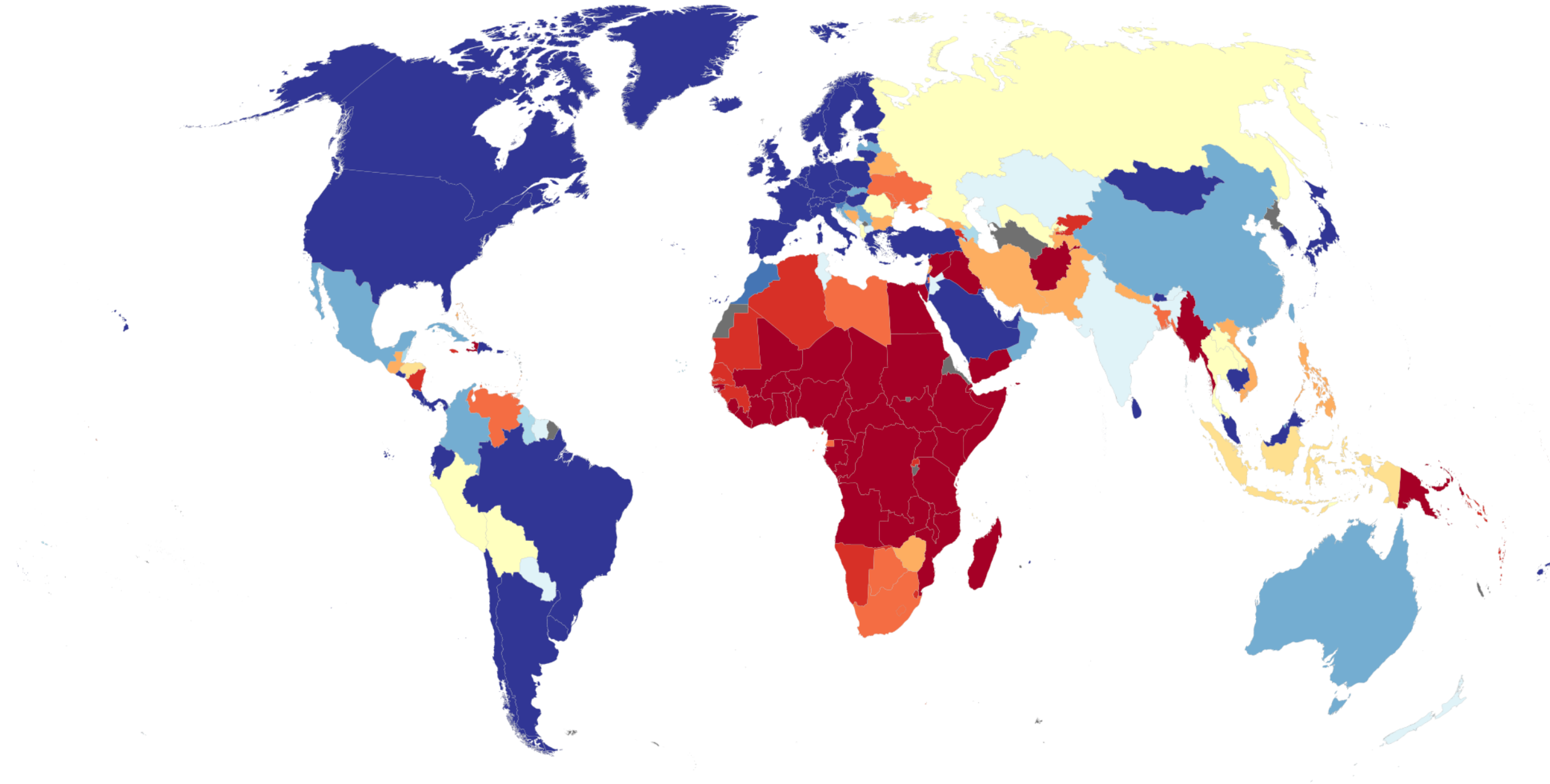
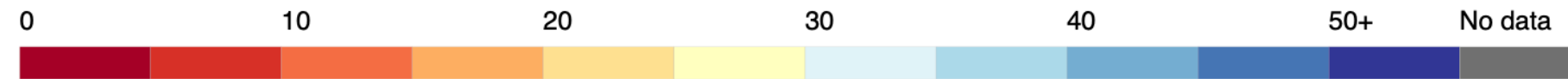
August 23, 2021

*Based on the IMF SDN [“A Proposal to End the COVID-19 Pandemic”](#)
by Ruchir Agarwal and Gita Gopinath

Two Track Economic Recovery Due to Divergence in Vaccination Speed

Last update: 23 August 2021
Source: Our World in Data

Share of People Who Received At Least One Vaccine Dose (% of population)



Proposal: Targets → Actions → Financing

THREE TARGETS:

I. Vaccinate at least 40% of the pop. in all countries by end-2021 and at least 60% by the H1 2022

- In line with African Union and other national targets

II. While tracking & insuring against downside risks

- Including with at-risk investment of 1 bn vaccine doses
- Given the rise of delta variant, serious downside risk has already materialized, suggesting scope to raise H1 2022 vaccine target to 70%

III. Scale up testing, maintain adequate supply of therapeutics, PPE, and enforce public health measures in places where vaccine coverage is low

Financing = \$50 bn, of which \$35 bn in grants

Status of 7 Key Broad Actions

Status of 7 Key Broad Actions Identified in the IMF Pandemic Proposal (as of August 2021)

	ACTIONS	STATUS	KEY PROGRESS	IMMEDIATE PRIORITY
1	Procure sufficient vaccines to reach at least 60% coverage in every country (incl. by fully funding COVAX AMC and AVAT to ensure 30% coverage from each facility)	Nearly Done	COVAX funding reached \$9.6 billion after COVAX AMC Summit in June '21, sufficient to meet 30% coverage; New contracts with Sinopharm and Sinovac to make 110 million doses immediately available to COVAX	(1) Advocate with and assist all AU countries to place sufficient orders through AVAT and COVAX to achieve the AU's 60% target, so no country is left behind; (2) Execute the AVAT optional contract of 180 mln J&J doses immediately to ensure 30% coverage to AU countries through AVAT; (3) Nudge countries with gaps to place orders as soon as possible, including through the COVAX cost sharing mechanism and utilize funding made available by MDBs; (4) Encourage countries with already-approved MDB financing to execute orders for vaccines immediately, given long lags between orders and actual deliveries
2	Ensure Free Cross-Border Flows of Raw Materials and Finished Vaccines & Prioritize Deliveries to Countries with Low Vaccine Coverage	Partial Progress	U.S. removed Defense Production Act (DPA) Priority Rankings for three vaccines, which has helped boost production of Serum Institute of India and others	(1) Remove DPA priority rankings on all vaccines in the U.S.; Resume vaccine exports from Serum Institute of India (incl. to COVAX); Remove other trade barriers as identified by WTO; (2) Ensure that a much greater share of the J&J vaccines fill-finished by Aspen, SA is supplied to AVAT (beyond the current split of 60/40) until vaccine coverage in African Union reaches 40%; (3) Prioritize allocations to countries with low overall vaccine coverage by moving COVAX & AVAT up the vaccine producers' queue by swapping delivery dates with countries that have surplus, so more vaccines are delivered to countries far from the end-2021 target of 40%; (4) COVAX and AVAT to make country-specific indicative supply schedules for next months available to help countries plan and scale up their absorptive capacity
3	Donate 1 bn Doses Before End-2021	Partial Progress	Of the 870 million doses announced by G7+, about 500 million doses is supposed to be delivered in 2021 (although delivery schedules are still uncertain), of which about 90 million has been delivered by mid-August	(1) Ensure low and lower-middle income countries have access to additional doses to achieve at least 10% coverage by end-September (currently the gap is estimated at 260 m for LMICs and 160 m doses for Africa), at least 40% by end-2021; (2) Convert G7 Summit pledges into accelerated up-front deliveries (and are unearmarked). As of Aug 6 th , only 10% of the G7 pledges have been delivered; (3) Explore options to preferentially allocate COVAX doses to AMC countries with the lowest vaccine coverage, irrespective of the source of vaccines (e.g., using overall coverage as a proxy for COVID-19 mortality risk); (5) Step up efforts to raise vaccination rate and absorptive capacity in coordination with COVAX/AVAT based on supply forecasts
4	Make At-Risk Investment in 1 bn Doses on Behalf of LMICs to be Delivered in Early 2022	Partial Progress	As part of the U.S.-Pfizer deal, 300 million doses will be delivered to COVAX-AU in first half of 2022	Raise grant financing to reach 1 bn doses goal for 2022 to handle downside risks or additional demands on behalf of LMICs; at the same time COVAX should clarify their 2022 target;
5	Scale up Genomic Surveillance and Systemic Supply Chain Surveillance	Partial Progress	On genomic surveillance: Limited progress; On supply chain surveillance: COVAX manufacturing taskforce and ACT-A working group on manufacturing established; In July CEPI launched COVAX Marketplace to match buyers and sellers of critical manufacturing supplies	(1) Step up efforts to enhance genomic surveillance in line with the Next-Generation Sequencing (NGS) Capacity Mapping by FIND and partners; (2) Build on the successful launch of the COVAX Marketplace, including by expanding the group of participants; (3) Conduct scenario planning to identify bottlenecks in supply chains of critical COVID-19 health tools ahead of time—including based on a survey of manufacturers
6	Ensure Access to Diagnostics, Therapeutics, PPE and Prepare for Vaccine Deployment	Little Progress	Little to no new funding for diagnostics, PPE, and therapeutics has been raised in recent weeks; On vaccine delivery World Bank announced new partnership with African Union and with COVAX to collaborate on in-country delivery; WB and ADB financing reached over \$4.5 bn to 50+ countries	(1) Urgently close funding gap for ACT-A, especially for Diagnostics, Therapeutics, & PPE for which large funding needs remain unmet; (2) Urgently fund the Rapid ACT-A Delta Response (RADAR) to combat the Delta variant surge; (3) Increasing daily testing rates to at least 1 per 1000 in the short-term in LMICs and more thereafter, including by addressing the sizable ACT-A funding gap
7	Evaluate & Implement Dose Stretching Strategies (where approved)	Partial Progress	Several new trials studying dose stretching, incl. that suggest scope to optimize use of scarce vaccine supplies by adopting fractional dosing	In consultation with regulatory authorities explore ways to extend self life of vaccines; and give greater regulatory attention to dose stretching strategies to optimize use of scarce vaccine supplies (see SDN for various options)

Financing Raised and Financing Gaps Table

Source: ACT-Accelerator Hub on behalf of ACT-Accelerator partners and Fund Staff calculations. For further information see [ACT-Accelerator Commitment Tracker](#) and [A Proposal to End the COVID-19 Pandemic](#) ACT-A Hub and Fund Staff Calculations

In USD billion

Pillar	ACT-A 2020-21 budget as of Sept 2020	Cost adjustments ¹	Contributions as of May 2021	ACT-A 2021 funding gap as of May 2021 ²	Additional Grant Needs Identified by IMF SDN for ACT-A and Others as of May 2021	Tentative Funding Raised Since June	Further Cost Adjustments	Residual Grant Needs Identified by IMF SDN for ACT-A and Others as of Aug 2021
Vaccines	16.0	- 4.3	9.0	2.7	2.3	3.4		1.6
Vaccines for Downside Risks					8	2.1	-0.9	5
Therapeutics	6.6	- 2.7	0.7	3.2	0.8			4
Diagnostics	6.0	+ 3.7	1.0	8.7	0.3			9
Health Systems Connector	9.5	- 1.6	0.5	7.4	1.6			9
Sub-total	38.1	- 4.9	11.2	21.9	13			28.6
ACT-A pending allocation			3.6	-3.6				-3.6
Total	38.1	- 4.9	14.9	18.2	13	3.5	-0.9	25.0

NOTE: This includes estimated net \$2 billion raised for Gavi a tentative treatment of the 500 million dose Pfizer deal, of which 200 million is expected to be delivered in 2021 and go towards reaching the 30% AMC target. Using an at-cost pricing of \$7 per dose, \$1.4 billion is allocated to the vaccines pillar, and the rest for at-risk vaccines (with a cost-adjustment to account for the lower cost per dose of mRNA vaccines compared to the \$10 per dose assumed in the IMF SDN). Reflecting ongoing discussions, the numbers remain subject to significant uncertainty.

¹"Cost adjustments": Detailed in ACT-Accelerator Strategy & Budget, released on 12 March 2021 ([Link](#))

²"ACT-A pending allocation": Including pledges yet to be allocated from Canada and Switzerland, WHO flexible funding from multiple donors, and USD 2.7 billion of the new USG commitment of USD 3.5 billion to the Global Fund – The precise composition of grants under C19RM 2021 will be determined by recipient countries and reported once funding requests are approved

Recent Multilateral Developments

1. Multilateral Leaders Task Force (MLT) formed in June by leaders of IMF-WB-WHO-WTO, and launched a dashboard to identify gaps
2. IMF-WHO Vaccine Supply Tracker launched in end-July to track vaccine doses secured by each country by source
3. IMF Governors approved \$650 billion allocation of Special Drawing Rights
4. COVAX and World Bank introduced a new financing mechanism to accelerate vaccine supplies, building on prior collaboration between the African Union and World Bank
5. ACT-Accelerator launched an urgent \$7.7 billion appeal (RADAR) to stem surge of dangerous variants and save lives everywhere

**Background Slides
on the Key Priorities
under the 7 Broad Actions**

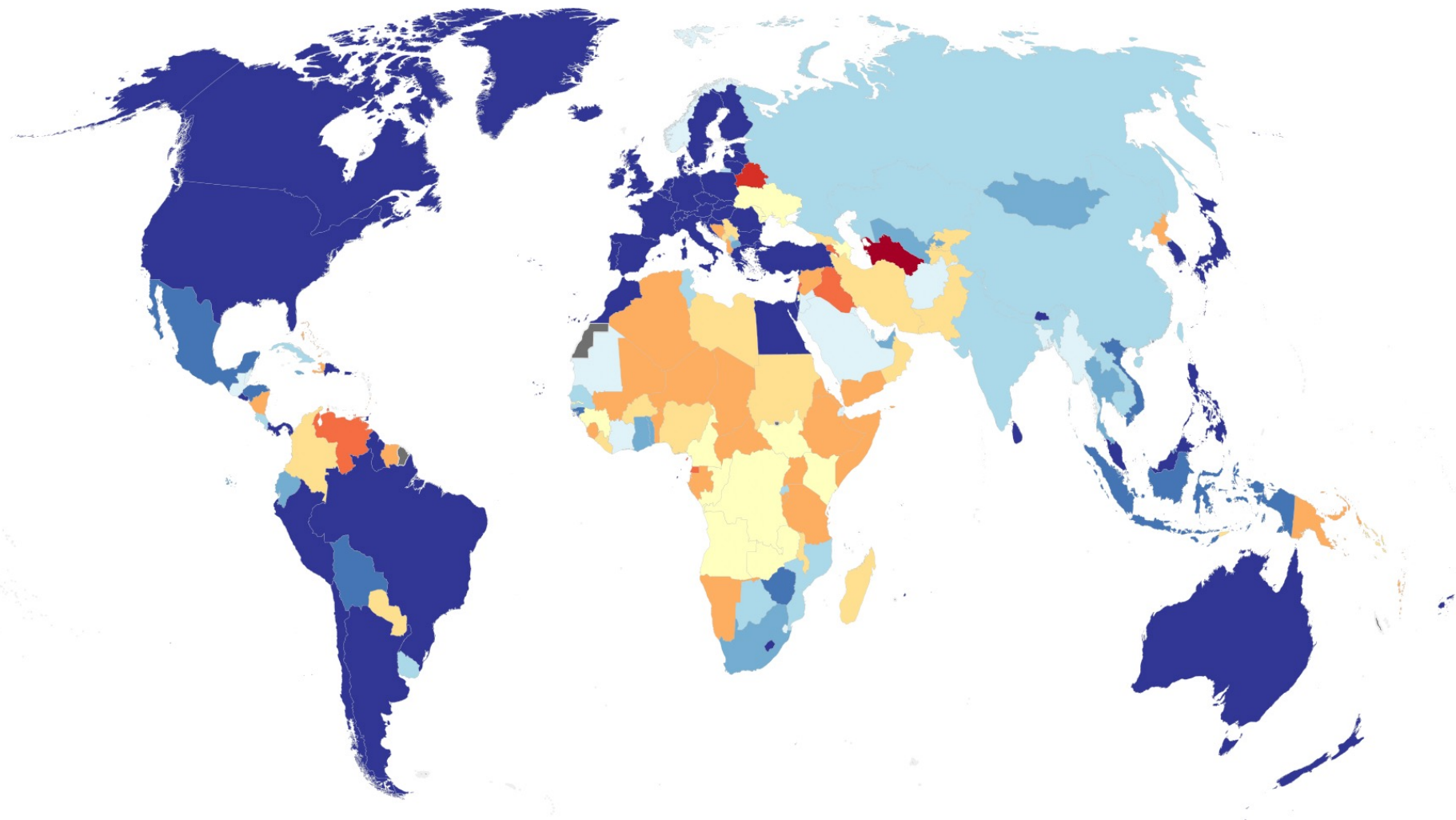
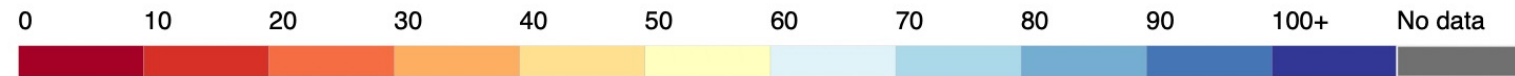
ACTION #1:

**Procure Sufficient Vaccines to Reach
At Least 60% Coverage in Every Country**

(including by Fully Funding COVAX AMC and AVAT to
Ensure 30% Coverage from Each Facility)

Where Does the World Stand in terms of Pre-Purchases of Vaccines?

Secured Vaccines and/or Expected Vaccine Supply (% of Total Population)



Last update: 20 August 2021

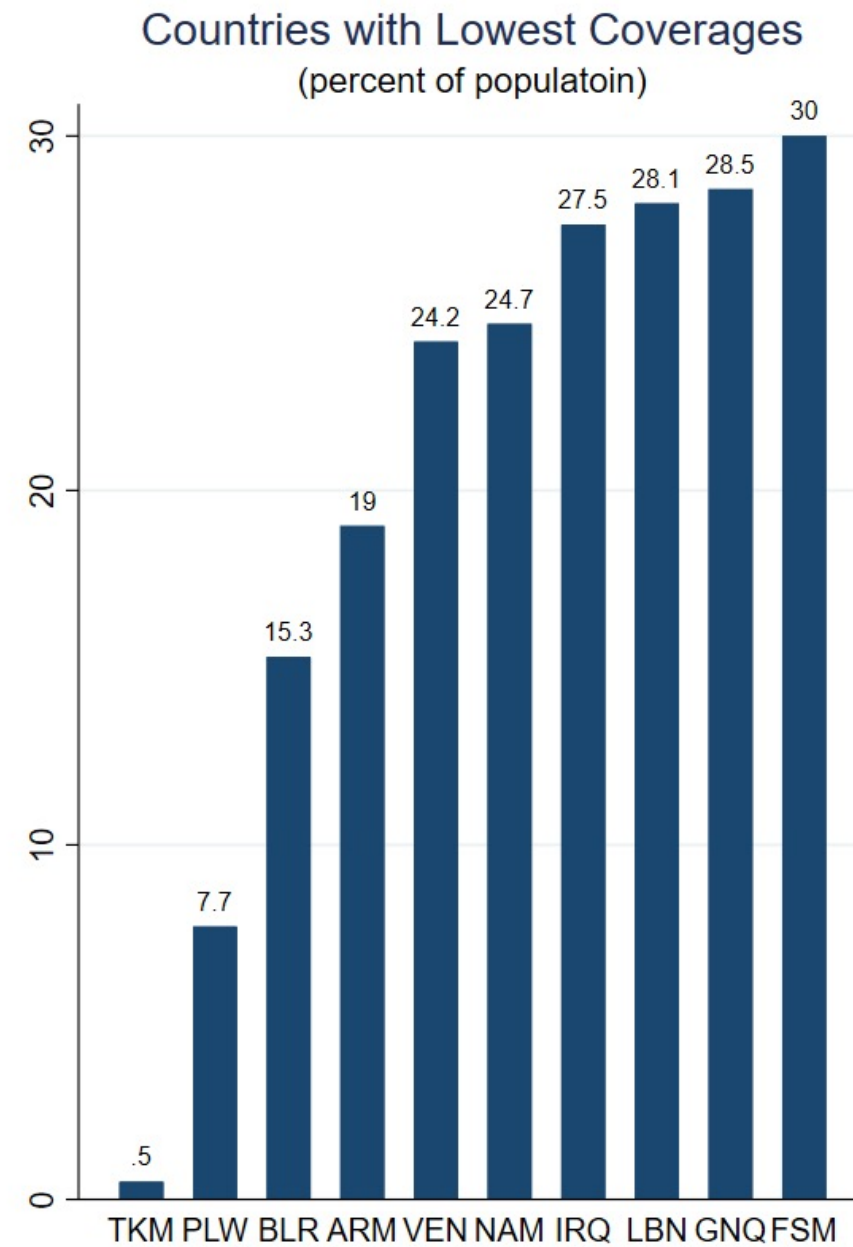
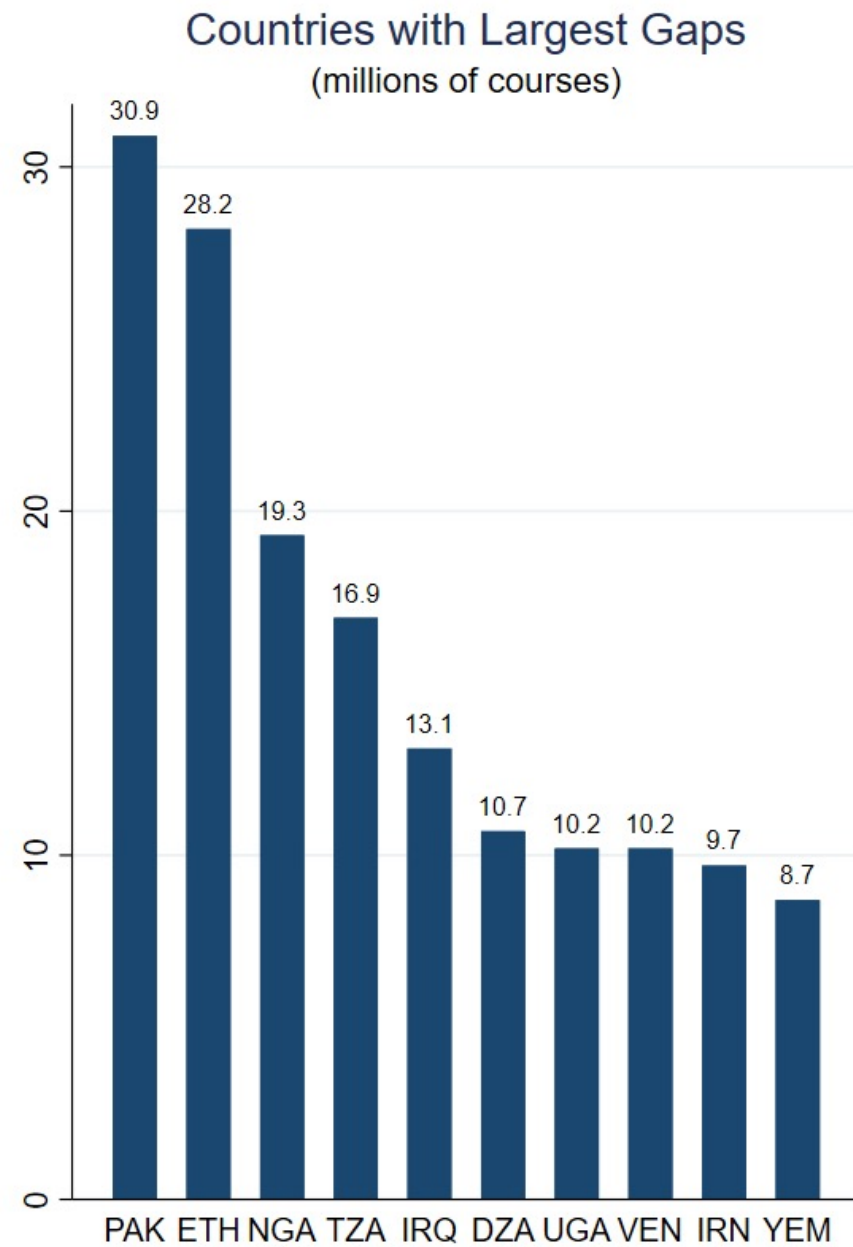
Source: [IMF-WHO COVID-19 Vaccine Supply Tracker](#)

Note: This includes coverage from bilateral contracts, regional deals, COVAX, in-kind donation, domestic production, and contracts supported by MDB financing. Some contracts are unobserved, which may lead to under-reporting of coverage in some countries. Optional contracts, and unallocated AVAT doses are excluded to remain conservative.

Key Developments

1. Vaccine procurement has reached over 60 percent in most countries worldwide, including due to COVAX AMC raising its coverage from 20% to 30% and AVAT orders
2. Gaps still remain in several AU countries that can be potentially filled by the 180 mln optional doses under the AVAT J&J contract.
3. Some countries in Middle East, Latin America and parts of Asia need 'nudge' to immediately place orders to ensure sufficient coverage
4. Overall, the world needs to order about 266 mln courses to reach 60% coverage (not accounting for AVAT optional doses)

Where are the Biggest Gaps?



Key Gaps

1. AVAT countries still need to order 147.7 mn courses to reach 60% coverage, which can potentially be met by their optional J&J contract of 180 mln doses
2. In terms of absolute numbers, as of Aug 16th, the gap to reach 60% is largest in Pakistan, Ethiopia, Nigeria, Tanzania, and Iraq.
3. In terms of percentage of coverage, as of Aug 16th, the coverage is lowest in Turkmenistan, Palau, Belarus, Armenia, and Venezuela

Key Priorities on Action #1

1. Advocate with and assist all AU countries to place sufficient orders through AVAT and COVAX to achieve the AU's 60% target, so no country is left behind
2. Execute the AVAT optional contract of 180 mln J&J doses immediately to ensure 30% coverage to AU countries through AVAT
3. Nudge countries with gaps to place orders as soon as possible, including through the COVAX cost sharing mechanism and utilize funding made available by MDBs
4. Encourage countries with already-approved MDB financing to execute orders for vaccines immediately, given long lags between orders and actual deliveries

ACTION #2:

**Ensure Free Cross-Border Flows of
Raw Materials and Finished Vaccines
&
Prioritize Deliveries to Countries
with Low Vaccine Coverage**

Only a small fraction of COVAX & AVAT procured supplies have been met, harming access to LMICs and global recovery

COVID-19 Vaccine Supply Tracker: Deliveries to COVAX and AVAT (millions of doses)

	COVAX												AVAT
	Products with WHO EUL							Products Yet to Receive WHO EUL			Donations	Total	J&J
	Serum Inst. of India – AstraZeneca	J&J	AstraZeneca	Pfizer/BioNTech	Moderna	Sinopharm	Sinovac	Novavax	Serum Inst. of India - Novavax	Clover			
Secured Supply Agreements (Committed Doses)	200	200	170	340	34	60	50	350	350	64	480	2298	220
Shipped so far as of Aug 18th	30	0	64	15	0	10	0	0	0	0	90	208	~ 2
% of Supply Met (as of Aug 18th)	15	0	38	4	0	17	0	0	0	0	19	9	1
Date of Deal	Q4 20	Q2 21	Q4 20	Q1/Q2 21	Q2 21	Q3 21	Q3 21	Q2 21	Q4 20	Q2 21			Q1 21

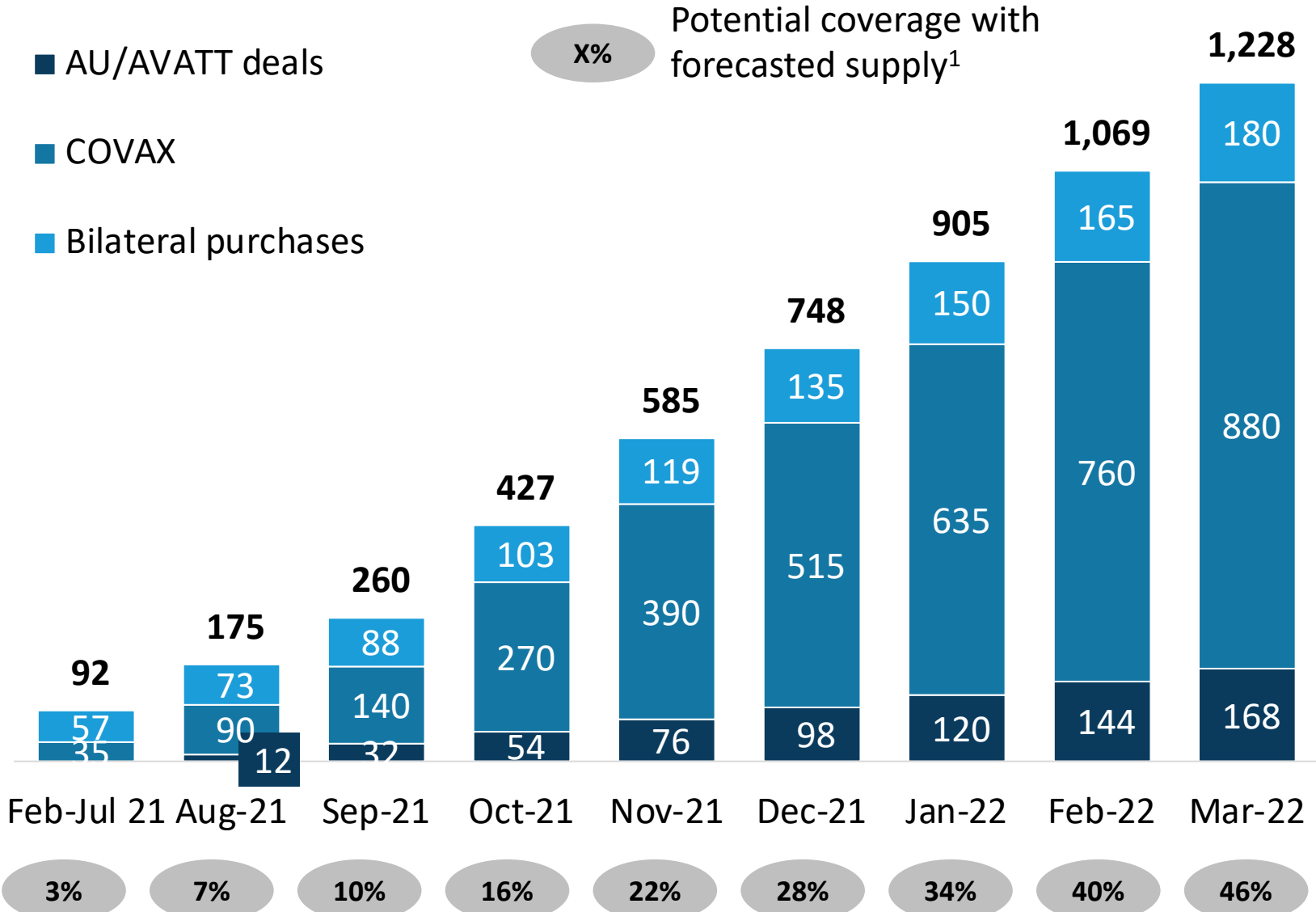
Sources and Notes: COVAX, UNICEF, Africa CDC, IMF staff calculations. Committed doses are doses that the COVAX facility is required to procure. Support from the U.S. in Q2 2021 has allowed COVAX to secure an additional 500m Pfizer/BioNTech doses. Reflecting U.S. funding above its original pledge, 200m of these are recorded as donation, and the rest under committed doses. The secured supply agreement numbers for SII AstraZeneca and SII-Novavax are approximated based on COVAX Facility candidate-specific supply information. Note that the dose donations are based on COVAX estimates based on commitments from donors to share doses bilaterally with the COVAX facility. The dose sharing pledges to COVAX far exceeds amount reported as commitments under donations, and the percentage of pledged doses met as of mid-August is closer to 10%.

Even Under Best Case Scenarios Most Countries in Africa Will be Below 40% Target

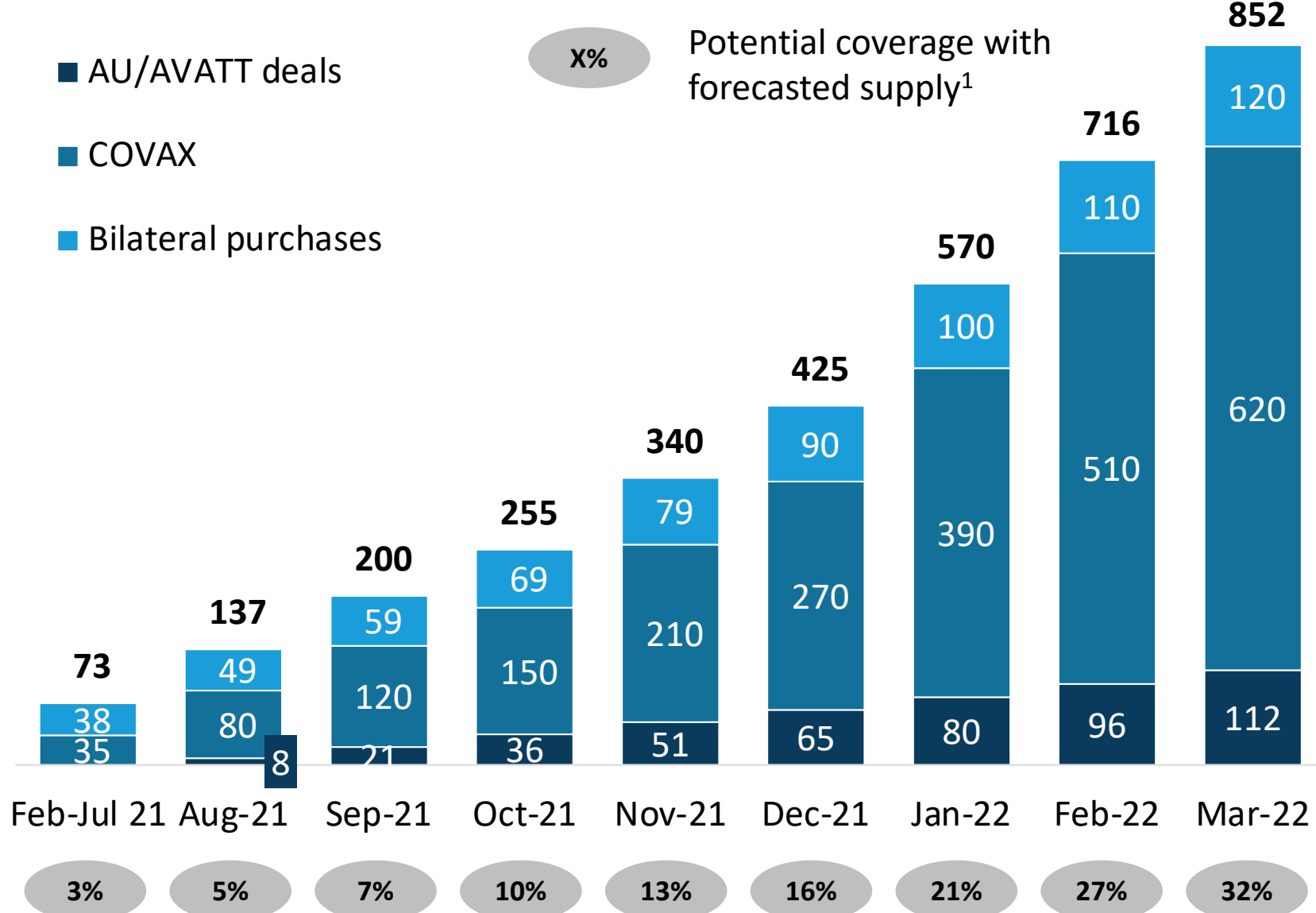
(And coverage is likely to be worse when accounting for likely supply delays to Africa)

Cumulative forecasted supply for AU member states, mn doses

Baseline scenario



Risk-adjusted scenario



1. Based on a 2-dose regimen, potentially higher given the significant share of JnJ doses in AU portfolio
 2. Adjusted with 1 dose regimen for JnJ
 3. WHO Africa COVID-19 Vaccination Daily Update Dashboard, accessed Aug 4, 2021
 Source: COVAX Supply Forecast, Jul 12; Press search; WHO Afro dashboard, and IMF staff calculations

Key Priorities on Action #2

1. Remove DPA priority rankings on all vaccines in the U.S.; Resume vaccine exports from Serum Institute of India (incl. to COVAX); Remove other trade barriers as identified by WTO
2. Ensure that a much greater share of the J&J vaccines fill-finished by Aspen, SA is supplied to AVAT (beyond the current split of 60/40) until vaccine coverage in African Union reaches 40%
3. Prioritize allocations to countries with low overall vaccine coverage by moving COVAX & AVAT up the vaccine producers' queue by swapping delivery dates with countries that have surplus, so more vaccines are delivered to countries far from the end-2021 target of 40%
4. COVAX and AVAT to make country-specific indicative supply schedules for next months available to help countries plan and scale up their absorptive capacity


















ACTIONS #3 & #4:

Donate 1 bn Doses Before End-2021

&

**Make At-Risk Investment in 1 bn
Doses on Behalf of LMICs to be
Delivered in Early 2022**

Dose Donations to COVAX: *Progress on Pledges but Not on Deliveries*

Donor	Pledges immediately after the G7 Summit (mid-June)		Additional announcement for 2021-22 (in millions)	Total delivered (in millions)	% of the G7 Summit Pledges met
	for 2021 (in millions)	for 2022 (in millions)			
 Team Europe*	100+		60+	5.5	< 5%
 France	60		-6	3.3	6%
 Germany*	30		0		0%
 Italy*	15		0		0%
 Spain	22.5		0	0.8	4%
 Portugal**	5%+ of domestic		0		0%
 Norway	5		0	0.4	8%
 Belgium	4		0		0%
 Sweden	At least 3		0	1	33%
 Denmark*	3		0		0%
Others	Tbc		66+		
 USA***	260	300	30	74.3	13%
 Japan****	30		0	8.3	28%
 Switzerland			4		0%
 New Zealand	1.6		0	0.2	13%
 UK	80		0	2.9	4%
 UAE	1		0		0%
 Canada	13		17.7		0%
Total**	528+	300	111+	~91	17%

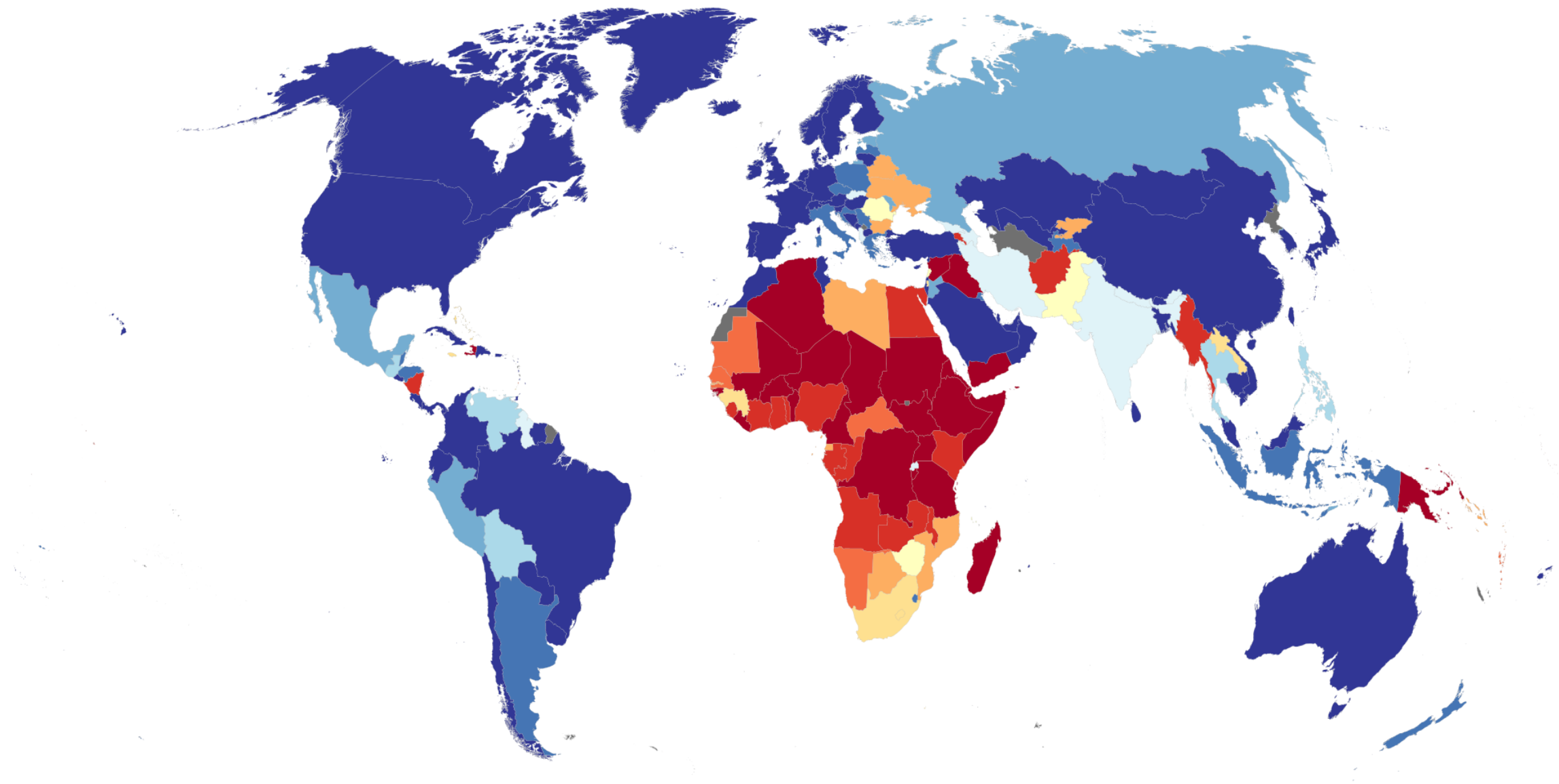
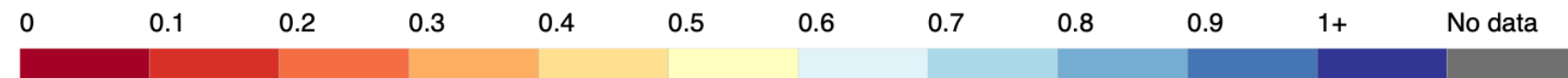
*Primarily through COVAX., final amount tbc. **Final amount through COVAX tbc ***US support has allowed COVAX to secure an additional 500m Pfizer doses. These include a donation of 200m doses which are reflected in the 2021 column, while the residual 300m doses are reflected in the 2022 column as per Fund staff calculations. ****Mainly through COVAX, final amount tbc.

In-Country Delivery Problem is Often a Vaccine Supply Problem

(Most Countries with Low Delivery Rates have received Very Few Doses)

Last update: 23 August 2021
Source: Our World in Data

Maximum Observed Daily Vaccination Rate (per 100 people)



Key Priorities on Actions #3 & #4

1. Ensure low and lower-middle income countries have access to additional doses to achieve at least 10% coverage by end-September (currently the gap is estimated at **260 m for LMICs** and **160 m doses for Africa**), at least 40% by end-2021
2. Convert G7 Summit pledges into accelerated up-front deliveries (and are unearmarked). As of Aug 6th , only 10% of the G7 pledges have been delivered.
3. Explore options to preferentially allocate COVAX doses to AMC countries with the lowest vaccine coverage, irrespective of the source of vaccines (e.g., using overall coverage as a proxy for COVID-19 mortality risk).
4. Raise grant financing to reach 1 bn doses goal for 2022 to handle downside risks or additional demands on behalf of LMICs; at the same time COVAX should clarify their 2022 target
5. Step up efforts to raise daily vaccination rate and absorptive capacity in coordination with COVAX/AVAT based on supply forecasts

ACTIONS #5:

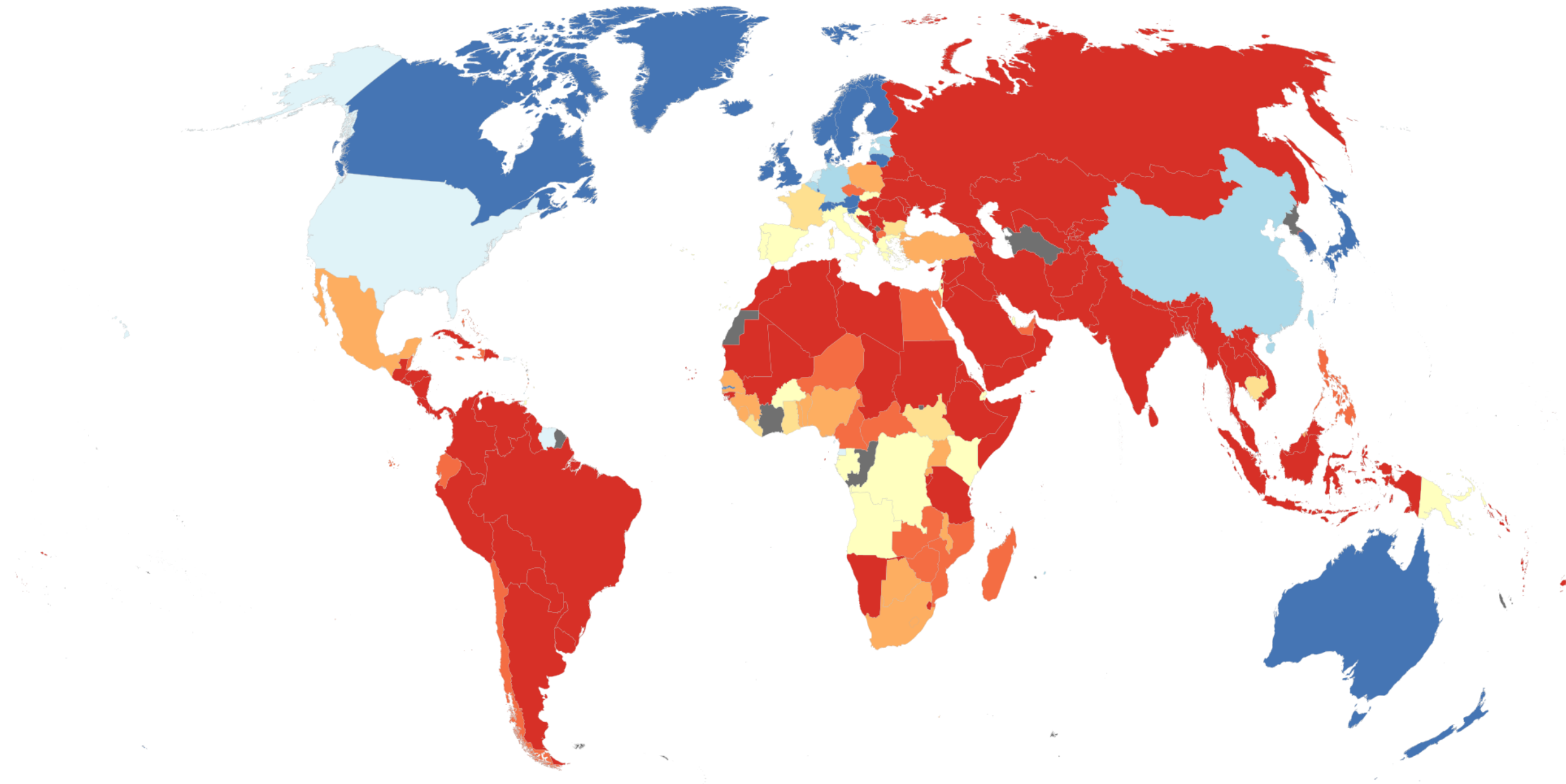
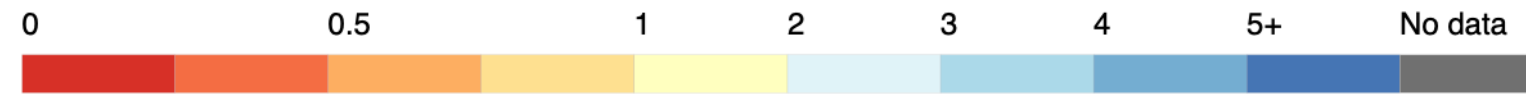
Scale up Genomic Surveillance and Systemic Supply Chain Surveillance

Genomic Surveillance still Insufficient

Indicative Target > 5% of Cases

Last update: 23 August 2021
Source: GISAID

Genomic Surveillance: Percent of COVID Cases Sequenced

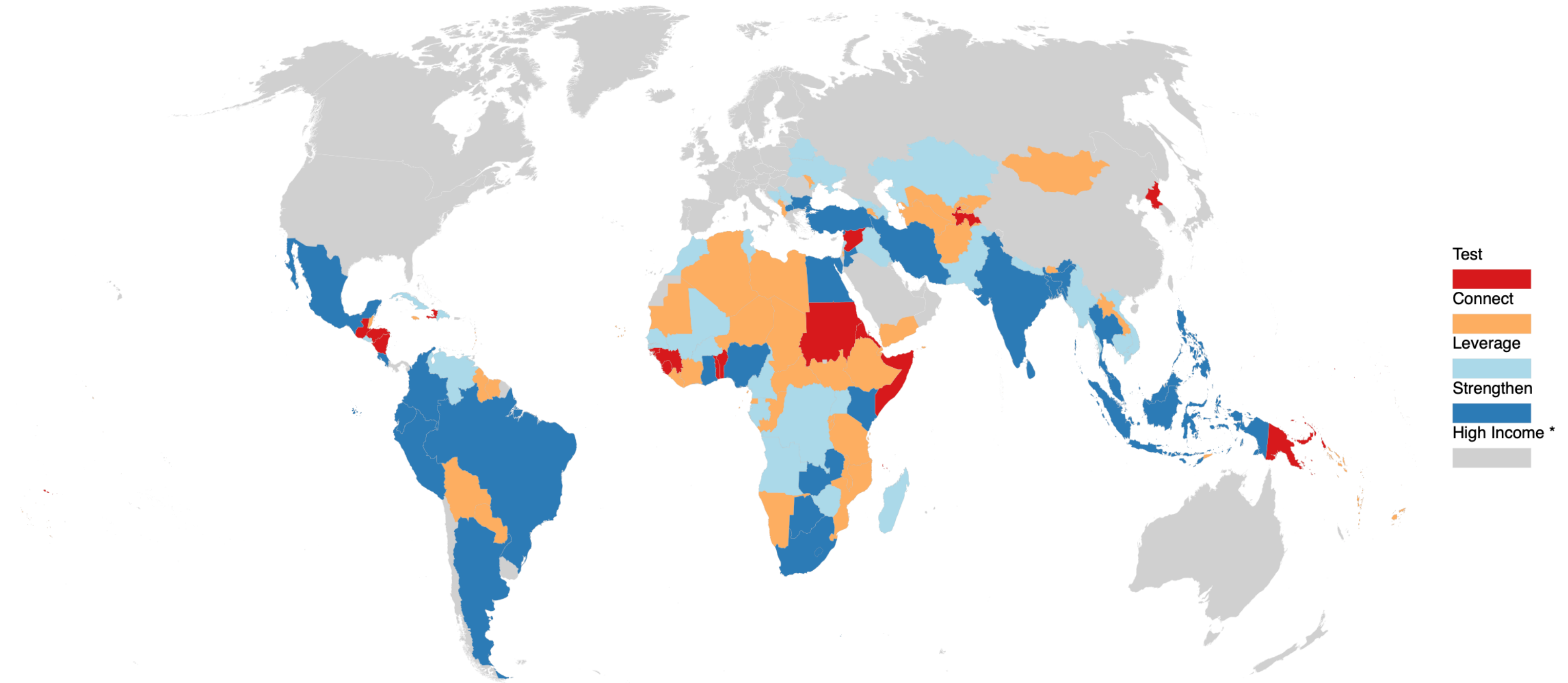


Capacity for COVID-19 Genomic Surveillance in LMICs

(Assessed with a 4-tier country-level classification framework)

Last update: 13 August 2021
Source: GISAID, FIND and WHO

NGS Capacity for SARS_CoV-2 Genomic Surveillance in LMICs



* includes China & Russia

Key Priorities on Action #5

1. Step up efforts to enhance genomic surveillance in line with the Next-Generation Sequencing (NGS) Capacity Mapping by FIND and partners
2. Build on the successful launch of the COVAX Marketplace, including by expanding the group of participants
3. Conduct scenario planning to identify bottlenecks in supply chains of critical COVID-19 health tools ahead of time—including based on a survey of manufacturers

ACTIONS #6 & #7:

**Ensure Access to Diagnostics,
Therapeutics, and PPE**

&

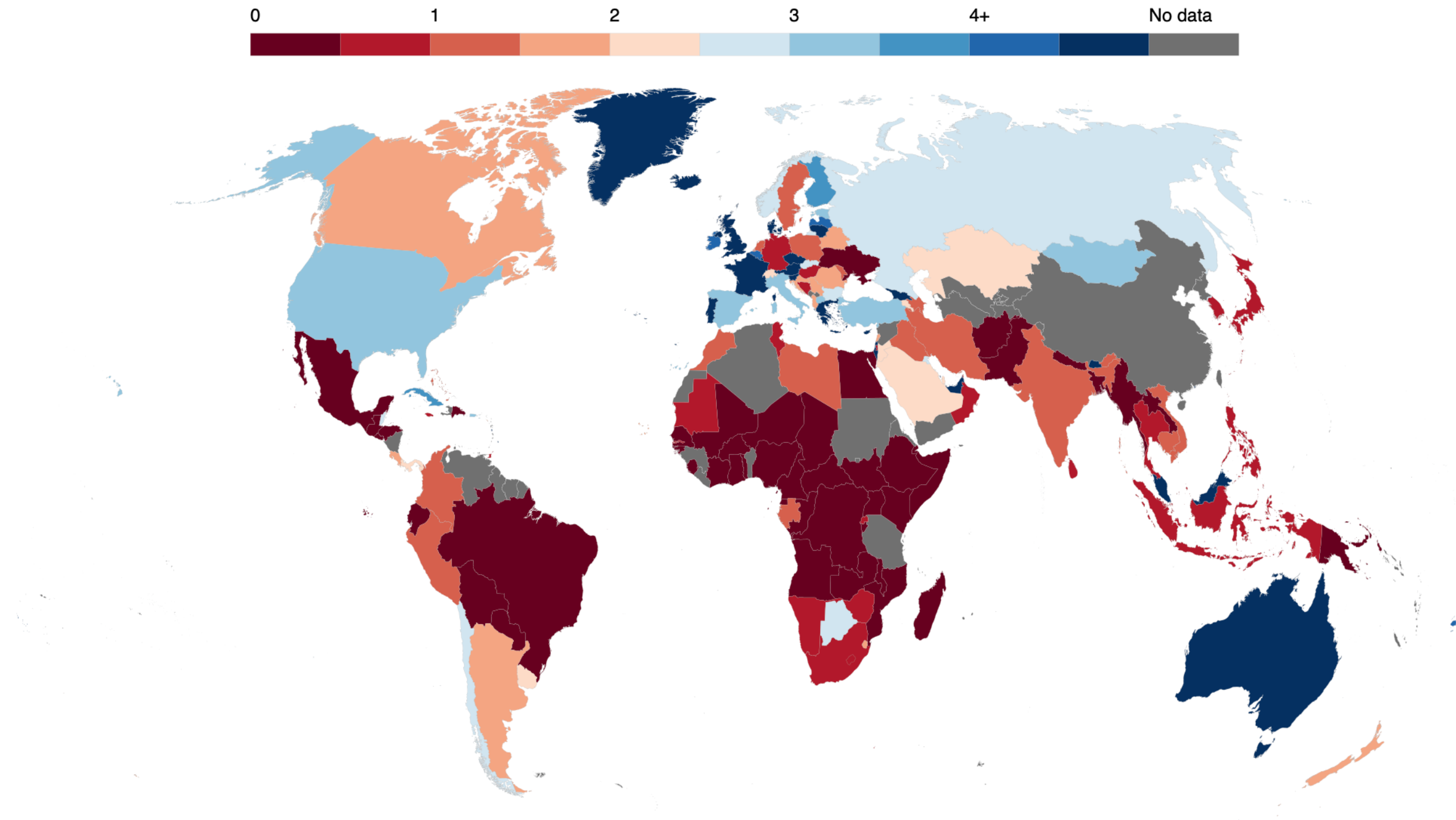
**Evaluate & Implement Dose Stretching
Strategies (where approved)**

There is a Testing Crisis with Too Few Tests Conducted in LMICs

Last update: 23 August 2021
Source: Our World in Data, FIND

Indicative Target = Daily Tests > 1 to 3 per 1000 people

Average Daily Tests (per 1000 people)



Key Priorities on Action #6 & 7

1. Urgently close funding gap for ACT-A, especially for Diagnostics, Therapeutics, & PPE for which large funding needs remain unmet
2. Urgently fund the Rapid ACT-A Delta Response (RADAR) to combat the Delta variant surge
3. Increasing daily testing rates to at least 1 per 1000 in the short-term in LMICs and more thereafter, including by addressing the sizable ACT-A funding gap
4. In consultation with regulatory authorities explore ways to extend self life of vaccines; and give greater regulatory attention to dose stretching strategies to optimize use of scarce vaccine supplies (see SDN for various options)