IN AND OUT OF LOCKDOWNS, AND WHAT IS A LOCKDOWN ANYWAY? POLICY ISSUES IN TRANSITIONS

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Summary: In the absence of effective treatments or a vaccine, governments depend on public policy to respond to COVID-19. This article reviews key issues surrounding transitions – the "closing" and "reopening" of economies during the pandemic. It identifies a number of key issues such as the use of data to inform decisions and the localisation of lockdowns, as well as key questions about how decisions are made and implemented. Identifying leadership, financing, key stakeholders, data, and communications strategies for different issues has proven crucial to managing transitions.

Keywords: *Transition, COVID-19, Social Policy, Leadership, Governance*

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Introduction

As there are currently few effective treatments and no vaccinations for COVID-19, physical distancing requirements remain among the most effective means of controlling the spread of the disease and reducing morbidity and mortality. Nevertheless, physical distancing and other public health requirements need to be aligned with measures that support economic activity. Most countries in the World Health Organization (WHO) European region are making and implementing strategic plans to manage the transition away from tough COVID-19 controls as well as developing and implementing plans to reimpose controls during surges. There are a number of common elements to this transition planning, described below.

This article synthesises many of the issues that were found in the course of a series of cross-cutting analyses on transition decision-making [1] [2] [3] based on evidence available from the COVID-19 Health Systems Response Monitor (HSRM).

We can understand governments' transition planning in terms of six categories. First, **policy capacity**, meaning a government's core capacity to make and implement COVID-19 related policy decisions. Second, policy measures addressing **geographic variation** in COVID-19 spread, prevalence and impact. Third, policies addressing specific **sectoral risks** such as those posed by school systems, higher educational institutions or sectors with many high-density workplaces. Fourth, **operational guidance** issued by governments, such

as rules on how to sanitise or change the layout of businesses. Fifth, policies to ensure **adequate capacity** in health and public health systems. Finally, many governments introduced or modified **social policy stabilizers** with the aim of limiting the impact of the pandemic on people and businesses.

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Across each of these categories, governments face challenges that fall within five domains: leadership, financing, stakeholders, data, and communications. The first domain is **leadership**, where challenges include basic questions of who has authority in a given area (the head of government, regional governments, an autonomous agency, a professional organisation, etc.) as well as challenges arising from the process of decision-making. The second domain is **financing**, where challenges arise because many of these measures directly cost money and it comes from somewhere. The third domain involves challenges in managing **key stakeholders** and the extent to which they are involved in informing decisions, for example the extent to which guidelines on issues such as hygiene in service establishments are written with or by trade associations. The fourth domain involves the **data** deemed necessary to make decisions (e.g. what indicators of COVID-19's spread are being used, and on what level of aggregation, from local to national). The fifth domain is **communications**, with challenges relating to the level of publicity and transparency for the scientific advice being given to governments or the approach to communicating guidance on physical distancing, personal hygiene and the relevant symptoms one must experience to warrant testing.

Table 1 elaborates upon these categories and domains, providing a conceptual matrix that can be used to identify the priorities and decisions being taken in any given jurisdiction in light of the approaches and issues elsewhere. The next section identifies in more detail the kinds of challenges that countries are facing as they make transition decisions.

Policy capacity: Policymakers are taking advice, considering data, making plans and using metrics

Most countries have established task forces with executive authority, advisory groups, or groups that mix the two. In Belgium, a "Group of Experts in charge of the Exit Strategy" (GEES) was set up on April 6th to advise the National Security Council in defining the national transition strategy. For this, the GEES relied on indicators such as the decrease in the number of daily hospitalisations and the flattening of the curve of deaths linked to the virus. The transition phase out of lockdown began on May 4th, then the reintroduction of more stringent controls began in late July.

The expertise that seems to be consistently useful includes epidemiology, population health expertise, expertise in health care and public health infrastructure, and expertise in logistics and business sectors. Behavioural and social sciences' appearance, and the decision as to who represents those fields, is less consistent. Governments also tend to identify clear and useful measures and metrics to understand when it is safe to open and when lockdown needs to remain or be re-imposed. Metrics and measures that have been deemed to be of value include:

- R0 (pronounced "R naught" which estimates how many people each person with COVID19 is infecting. However, this is a dangerous statistic on its own since it is an estimate, with potential error, and is also unrevealing when transmission is concentrated in specific settings such a prisons or abattoirs)
- total number of new cases (interpreted in light of testing rules and rates, which can produce undercounts)
- excess mortality (which shows the number of deaths above what we would have been expected under 'normal' conditions. It is arguably a useful measure for understanding policy effects, since it is not dependent on testing, but there is often a time lag in the data being reported)
- hospital capacity forecasts (availability of intensive care beds and normal beds)
- the testing rate (daily tests per 1,000 people)
- the test positivity rate (those that test positive for coronavirus which is an indirect indicator of whether enough testing is being done. A high test positivity rate, above 3% or 5%, suggests that there is inadequate testing and unmonitored spread)
- measures of adherence to policy requirements such as physical distancing.

These metrics and measures should be adapted to or complemented with measures to identify vulnerable populations and people at different levels of vulnerability to complications (e.g. co-morbidities) in order to identify particular risks. All of them, and possibly others, are necessary to inform an effective response. The total number of cases only makes sense when balanced against testing rates and test positivity, for example. Age-stratified excess mortality takes time and effort to calculate, but it is a more reliable measure of the severity of the pandemic and its impact across the population than a straight count of COVID-attributed deaths.

Clarity about government intentions, processes and decisions is a common objective and can be fulfilled through a published plan that is used or revised in transparent ways. Most countries are transitioning away from controls in multiple stages that account for different levels of risk across activities, sectors or geographic areas. France used a "traffic-light" system in which regions labelled "green" eased restrictions faster than "red" regions where the virus was still active. Several countries are using targeted

Table 1: Checklist to help policymakers systematically approach transition decisions

	1. Leadership *(who has authority)*	2. Financing	3. Key stakeholders	4. Necessary data	5. Communications	6. Other
1. POLICY CAPACITY						
Establish task force / advisory group						
● Epidemiologists						
● Population health experts						
● Health care and public health infrastructure experts						
● Economics, business, logistics experts						
Identify key measures and metrics, e.g.,						
● R0						
● Cases						
● Excess mortality						
● Hospital capacity						
● Testing rate						
● Test positive rate						
● Measures of adherence to policy requirements						
● Risks and spread among specified vulnerable individuals / populations						
Create transition plan						
● Description of multiple phases with measures at each phase						
● Plan for geographic variation *(localized variation + national borders)*						
● Assessment of sectoral risks *(spread of disease + economic vulnerability)*						
● Operational guidance						
● Plan to measure and assess systemic capacity						
● Details of social policy stabilizers						
● Metrics for decision-making						
Communications strategy, e.g.,						
● Targeted at individuals						
● Targeted at high risk populations						
● Targeted at employers						
● Targeted at potential social policy beneficiaries						
● Publish transition plan, rationale and metrics						
● Acknowledge potential to increase lockdown measures						
● Communicate criteria for increasing lockdown measures						
2. GEOGRAPHIC VARIATION						
● Is transition plan regionalized? Y/N						
● close off regional borders *(at which phases?)*						
● close off national borders *(at which phases?)*						
● quarantine measures for international travellers						
● pause or change immigration policies / procedures						
3. SECTORAL RISKS						
● Primary and secondary education						
● Higher education						
● Childcare *(institutional, e.g., nurseries)*						
● sports *(outdoor activity)*						
● sports *(professional)*						
● High touch retail						
▮ Essential retail						
▮ Small retail						
▮ Large retail						
▮ Shopping centers						
● High touch services						
▮ Restaurants						
▮ Hotels						
▮ Hair salons, etc.						
▮ Cinemas and large venues						
▮ Childcare *(individual)*						
● Construction						
● Health sector						
● Social care sector						
● Prisons						
● Transportation						
● Science, e.g., laboratories						
● Food system						
● Manufacturing						
● Export sectors						

	1. Leadership *(who has authority)*	2. Financing	3. Key stakeholders	4. Necessary data	5. Communications	6. Other
4. OPERATIONAL GUIDANCE						
Capacity *(how many people can be in enclosed space)*						
Physical distancing *(how far apart, under what circumstances)*						
Masks *(when required)*						
Hygiene *(institutional, e.g., how should restaurants be cleaned)*						
Hygiene *(personal, e.g., all employees should wash their hands)*						
Workforce protections *(necessary equipment, environment, procedures, contracting)*						
5. SYSTEMIC CAPACITY						
Testing supplies and sites						
Contact tracing system, workforce, technology						
PPE acquisition and distribution						
Research funding and prioritization						
Regulation of private companies, e.g., test manufacturers						
Routine health system capacity, e.g., workforce, beds, routine treatment/prevention						
Crisis health system capacity, e.g., field hospitals						
Community triage *(which care takes place where)*						
Dissemination of innovation *(technology + practice)*						
6. SOCIAL POLICY STABILIZERS						
Vulnerable populations, definition, support						
Unemployment insurance						
Income protection, including for precarious/independent workers						
Short-time work						
Health care access						
Labour market policies						
Food support						
Housing						
7. OTHER						

Source: Authors' own

local lockdowns, as with Leicester in England or Guterslöh in Germany. Some subnational governments, such as Saxony, have produced their own regional plans with detailed criteria governing future lockdowns.

A plan that explains the measures and metrics being used as governments add or reduce restrictions can, it seems, aid planning and public communications. It can include an explanation of the core criteria and thresholds for making a decision, plans for handling geographic variation (e.g. whether border controls can be imposed within a country or at international frontiers, why, and when), how policymakers assess sectoral risks (e.g. of opening schools or universities), operational guidance, transparency about the measurement of health system capacity, or clarity about social policy stabilizers such as unemployment benefits.

Finally, a clear and coherent communications strategy is a priority for governments, even if not all of them succeed consistently. Most communications strategies have dimensions targeted at individuals (e.g. with regard to physical distancing or personal hygiene), plans for communicating with particular geographic areas and local leaders (including during local lockdowns), high risk populations such as diabetics, hypertensives, people over 60 or people in jobs that put them at increased risk; communications to employers about the procedures, costs, and benefits of opening at a given time; and communications to social policy beneficiaries of the available support, in part to discourage vulnerable people exposing themselves when they need not. The strategy can include publication of the transition plan, its rationale, and metrics, and in order to prepare for what might be a long struggle it should clearly acknowledge the potential of increased lockdown measures and the criteria for deciding to lock down an area or sector. See also the policy snapshot looking at health communication channels across European countries.[4]

Geographic variation: There are regional differences in lockdown requirements and the loosening of restrictions

In many countries, the risks and the burden of COVID-19 vary considerably, and not just between urban and rural areas, but often within them in a pattern that is often not clearly understood. Most countries are adopting regional lockdowns, with some areas under looser controls than others, including France, Spain, and Greece. Many governments are making clear their criteria and decision processes for closing down particular areas or loosening restrictions, and whether

they will police movement internally. This might have benefits for transparency and adherence.

The possibility of international travel is likewise going to vary. On the one hand, explaining the logic of quarantine decisions for international travellers, and policies for issues such as people transiting at airports, will aid a resumption of safe travel. There is also a tendency to loosen controls at borders with countries at a similar level of perceived risk (e.g. Austria, Germany, and Switzerland). There was a time when Estonians, for example, were allowed to travel to Latvia, Lithuania, and Finland providing that they did not exhibit symptoms and had not travelled abroad within two weeks. Many strategies and plans try to make clear the criteria for such decisions. Coordination procedures would help ease decision-making in this regard and would support planning if measures have to be temporarily reversed.

Sectoral risks: Sector specific guidance allows for different levels of activity depending on the associated risk

Many countries have issued sector specific guidance that takes into account the different levels of risk inherent in different activities. The potential impact of school closures is a key issue given the uncertainty about their contribution to disease spread. This sector presents complex problems since childcare and schools are crucial to parents' participation in labour markets and the reopening of the economy.

In other cases, our review of plans suggests that decisions on sectoral guidance depend on assessing risk and balancing it, in some cases, against the economic importance of the sector (e.g. manufacturing and export sectors). The benefits of outdoor exercise and risks of individual sports are also much debated due to their overall positive contribution to health and wellbeing. Likewise, policies regarding retail tend to distinguish small and large retail (measured by size of business or number of people on the premises) as well as essential retail of any size, and shopping centres. In this concern with risk, "high touch" activities such as restaurants, concert venues and haircutting are all subject to different risk assessments in different governments. Explaining the policies to the public and the decisions underlying them might have value, given the high public visibility of these issues and the challenges of re-establishing high-touch services, leisure travel and tourism.

Some countries have specific policies addressed at enclosed populations such as care homes (see the article in this issue by Langins et al.) or prisons, as well as the employees in them who can rapidly carry an outbreak in one of them into a surrounding community. Prisons and detention centres in England, for example, are expected to follow guidance for isolating infected prisoners or admitting them to hospital as well as ensuring staff are physically distancing where possible and able to access appropriate personal protective equipment (PPE). Likewise, certain undeniably important industries such as abattoirs and social care (e.g. residential nursing care or care workers who travel from house to house) bring particular risks and can benefit from specific guidance. In late June, over 1,500 people tested positive for the virus after an outbreak at a meat-processing facility in Gütersloh, in the north west of Germany.

Operational guidance: Governments are setting operational guidance in collaboration with industry

Across many of these sectors, countries are issuing guidance with some common elements. In order to maintain physical distancing to the greatest extent possible, countries are setting limits on the enclosed physical capacity of locations including shops, restaurants and public transport. In Malta and Cyprus, the government issued mandatory conditions and guidelines for businesses, services and public transport to follow when reopening. Some countries are promoting guidance on institutional hygiene measures, and personal hygiene measures including the use of masks, or working in more or less formal partnership with trade associations. Most countries are working with relevant stakeholders to ensure greater compliance with safety measures. The Danish government discussed with unions and industry representatives to initiate a gradual increase in on-site work, as opposed to remote work. Businesses are being encouraged to utilise outdoor spaces where possible to supplement capacity. Some governments are putting in place measures to support the use of outdoor space, such as pedestrianising urban spaces (which can then be used by restaurants, which might enable reopening at reduced risk of transmission). Other regions and municipalities, including Berlin, London [5] and Paris, are expanding bicycle lanes to reduce the use of public transportation.

Systemic capacity: Countries are working to secure systemic capacity requirements in health care, public health and research

It seems that most governments view transition planning as more likely to work when supported by adequate capacity in essential systems such as health care, public health and research. Countries are addressing capacity requirements by securing testing supplies, recruiting or reassigning contact tracers, commissioning technological solutions to contact tracing, and acquiring and distributing PPE. Germany, for instance, emphasised contact tracing and sought to establish a five-person team for every 20,000 individuals (see the article in this issue by Hernandez-Quevedo et al. on contact tracing operations and the role of apps). Many countries use an app that records proximity using Bluetooth technology. If the app's user comes into contact with someone who then reports that they are infected with COVID-19, the app notifies the user and instructs them to self-isolate. Some countries are also prioritising research on relevant measures including improving on the validity of antibody testing and vaccine development. Monitoring health system capacity and its changes on a day to day basis matters here, in order to understand the level of risk being taken at any given time.

In terms of health care systems, countries are addressing capacity requirements by issuing guidance to hospitals about routine treatment and prevention activities, by setting up field hospitals and by overseeing community triage efforts. In Polish regions where there are two designated single-infection (COVID-19) hospitals,

one of them resumed their former activity on June 1st. Should incidence rates increase or a second wave of infections materialise, the hospitals will be able to revert to single-infection units dedicated to COVID-19 patients. Some are also actively working to disseminate innovation, both technology and good practice in a way that supports spreading clinical knowledge.

> no clear path to take, with uncertain and rapidly developing science

Social policy stabilizers: Supporting transitions through social policy

Governments are also using social policies to support transitions. There are three key issues for social policy. First, there is variation in the extent to which social policy cushions economies against the ongoing enormous demand shock of the pandemic. Restrictions on business hurt businesses and can hurt employment as well as government tax revenue. This creates pressure on policymakers to reopen. Second, there is variation in the extent to which it enables people to survive lockdown. If people's basic ability to survive depends on violating public health orders, many of them will violate public health orders. Supportive social policy enables people to adhere to public health rules. Third, there is variation in the extent to which social policy supports public health. Measures that protect income, housing, and similar necessities can increase adherence to lockdown measures since it means people are not forced out to work when it is unsafe to do so. In this regard, France, Germany, Italy, Malta and the United Kingdom all implemented some unprecedented measures. The approaches to social support are diverse: for example, Spain provided masks at no cost to every resident, while Austria provided additional financial assistance to particular categories of people, including students and older people.

Transition planners in practice consider the extent to which social policy measures are or are not supportive of public health measures, and enter into discussions on that basis, including by making the case that measures which predictably kick in upon renewal of a lockdown will limit the damage and improve adherence to public health measures. Social policy measures that stabilize economies and enable public health policies can include special measures for vulnerable populations (e.g. the homeless), unemployment insurance, income protection measures, including for precarious or independent workers (e.g. in the arts) and even basic income schemes, short-time work *(kurzarbeit),* measures to ensure health care access, labour market policies such as special support for high-risk workers to stay home, food support for people cast into food insecurity, and housing support.

Conclusion

There is a great deal of variation in how countries are approaching transitions. In many cases there is no clear path to take, with uncertain and rapidly developing science and difficulties in adapting general scientific findings to particular circumstances. Thus, countries are defining vulnerable populations in different ways, while others have paid less attention to some vulnerable populations, e.g. migrants, or were slow to include data, e.g. care homes; likewise, there is huge variation in the definition and handling of high-touch activities like hairdressers or the arts. The extent to which compliance will continue also relies on public trust, public messaging and law enforcement actions, all of which will be tricky for governments to balance.

Table 1 provides a checklist, informed by our rapid review of the decisions, for topics that analysts and policymakers should consider as they develop, implement, and fine-tune transitions strategies for what might be a very long period of crisis.

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