Supply Chains, Disaster-Mitigation, and State Manufacturing

Robert Mark Simpson

Justice Everywhere, 6th April 2020

Abstract. This short piece outlines and examines the case for creating state-owned health supply manufacturing companies, in order to mitigate the impact of public health crises, by reducing the likelihood of market failures in the supply of essential health supplies.

The COVID-19 pandemic has exposed serious vulnerabilities in healthcare supply chains in many countries, including the UK. Shortages in protective equipment are leading to *staffing problems* in many hospitals. If these problems aren't soon resolved they could jeopardise the operations of the entire health system. The same threat looms over the *care sector*. And even if the NHS remains well-enough staffed to sustain its operations, *ventilator shortages* may mean that critically ill patients don't have access to essential life-saving treatments at the peak of the pandemic. Moreover, stocks of the chemical supplies needed in order to produce test kits, and vaccines – if and when one is viable – are *running short* as well.

Countries should try to take proactive measures to pre-emptively mitigate the harm done by future pandemics, by disaster-proofing their healthcare supply chains. The probability of another pandemic in the foreseeable future that's as bad as or worse than COVID-19 may be small. But the probability-weighted downsides of this possible outcome are great enough that they warrant action in strengthening supply chains. This is just one action that's warranted among others. The question I want to consider here is whether we can disaster-proof supply chains without it being so expensive as to (a) carry prohibitive opportunity costs, or (b) become politically untenable once the galvanised mood around COVID-19 subsides.

One option that should be on the table is for countries to create state-owned manufacturers of health supplies. These companies could be independently operated, with arms-length government oversight around routine operations, but with a mandate to (a) stockpile disaster-proofing quantities of essential health supplies, (b) send those stockpiled supplies back to public health system at or beneath cost during a declared health emergency, and (c) store stockpiled supplies in a way that allows for easy distribution to frontline health services in a crisis.

Obviously these requirements would impinge upon the profitability of these hypothetical companies. But they can be set up in a multi-armed fashion. Their loss-making arm – in the production of disaster-proofing supplies – could be cross-subsidised by a profit-making arm, acting as a supplier of run-of-the-mill healthcare consumables and equipment (dressings, drips, disposable gowns, beds, surgical scrubs and equipment, etc.), and competing with other suppliers in the domestic and international market. If the profits aren't always sufficient to cross-subsidise the losses, the taxpayer can pick up the tab. It's better for the taxpayer to absorb this modest upstream cost, than to wear disproportionate downstream costs in cases where manufacturing shortfalls and supply chain limitations allow a preventable healthcare crisis to escalate to the point where we have presently found ourselves.

In some contexts there are *state aid rules* that disallow the government from providing support to any one supplier in a market. Under these rules the cross-subsidies for stockpiling that I describe above should be made available to any company that wants a slice of the action. The underlying idea is that stockpiling in the health sector for the sake of disaster-mitigation isn't necessarily a job that has to be performed by the state. It's a job for any manufacturer to perform, and the state should contract this work out to the best provider.

But these complications around state aid rules are, as much as anything, a good argument for suspending those rules when they impose constraints upon key state functions, such as disaster-mitigation. To insist that states prioritise the maintenance of market competition above disaster-mitigation just seems like late stage capitalist ideology run amok. The priority should be reducing the risk of mass loss of life. If a state-owned manufacturer is the easiest way to achieve this, then so much the worse for state aid rules that would disallow it.

This isn't to say that market principles should be totally set aside when it comes to managing health care supplies. One might reasonably worry about how the introduction of a state-owned manufacturer could crowd and distort the market for healthcare supplies in ordinary times. It could disincentivise private companies manufacturing those same supplies, and gradually nudge us towards a system which is dominated by a single, government-backed firm. At worst this could lead to a grossly inefficient planned economy in healthcare supplies.

But this seems like a manageable problem. The state-owned manufacturer may need to ring-fence its stockpiling operations, and make guarantees not to use its stockpile in ordinary times to flood the market and undercut private manufacturers on price. And in its profit-making activities it might also need to calibrate its prices and production targets to broadly align with existing suppliers. Under ordinary conditions, a functioning, competitive market in healthcare supplies will generate a range of cost- and efficiency-related benefits for our healthcare systems. That isn't what we have now – we have something more like an oligopoly than a healthy and competitive market. But still, the introduction of a stateowned manufacturer would need to be approached in a way that didn't prevent the establishment of healthy market conditions. Ideally, for run-of-the-mill healthcare supplies, the state-run manufacturer would operate as one supplier among others, and would support the vitality of the market by undermining various forms of cartel-like behaviour among other suppliers.

Another argument against this approach might be that state-run manufacturing companies are too politically fraught to manage. In theory an arms-length relationship to government might be workable. But in practice, so the worry goes, the company's operations will become politicised, in a way that compromises its effectiveness in achieving the purposes for which it was established - namely, disaster-mitigation. But this is too pessimistic. In the UK there are a variety of services which are ultimately state-owned, in some sense, but which are operated at an arms-length distance from government officials, and staffed by industry professionals rather than party-affiliated apparatchiks. This includes the Met Office, the Royal Mint, the Ordnance Survey, the Land Registry, Scottish Water, and of course the BBC. If it's possible to run these services in a way that isn't politicised to the point of being unworkable, it should be possible to effectively run a stateowned health supplies manufacturer as well.

One last argument against this approach might be that it runs a risk of responding to today's crisis, instead of anticipating tomorrow's crisis. As the saying goes, generals are always preparing to fight the previous war. The health supplies needed to battle a deadly pandemic involving bacterial superbugs will not be exactly the same as those needed to battle a pandemic involving a viral respiratory condition. But again, this isn't a good reason to abandon the proposal. It just raises the question of how to best manage a state-owned healthcare supplier to achieve our disaster-mitigation purposes. And the challenge at the heart of this - extracting general lessons in crisis-prevention, from today's singular and unprecedented crisis - is one that will arise in relation to every practical measure that is taken in response.1

¹Thanks to David Hall and Catriona Hobbs for valuable input on this piece.