COVID-19 Crisis:
Integrating an
Essentials Service

A briefing from Autonomy

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An Integrated Essentials Delivery Service

Over the coming months, increasing numbers of people will be forced to self-isolate, with as much as four out of five UK citizens contracting the virus [1]. As the below charts demonstrate, extrapolated from current trends, at the peak of the pandemic somewhere between 1 million and 3 million people may be self-isolating at once. This estimate must be taken in the context where it is hard to estimate specific numbers of how many people will be self-isolating in the coming weeks and months. There are a number of variables, including governmental action and whether people are self-distancing.

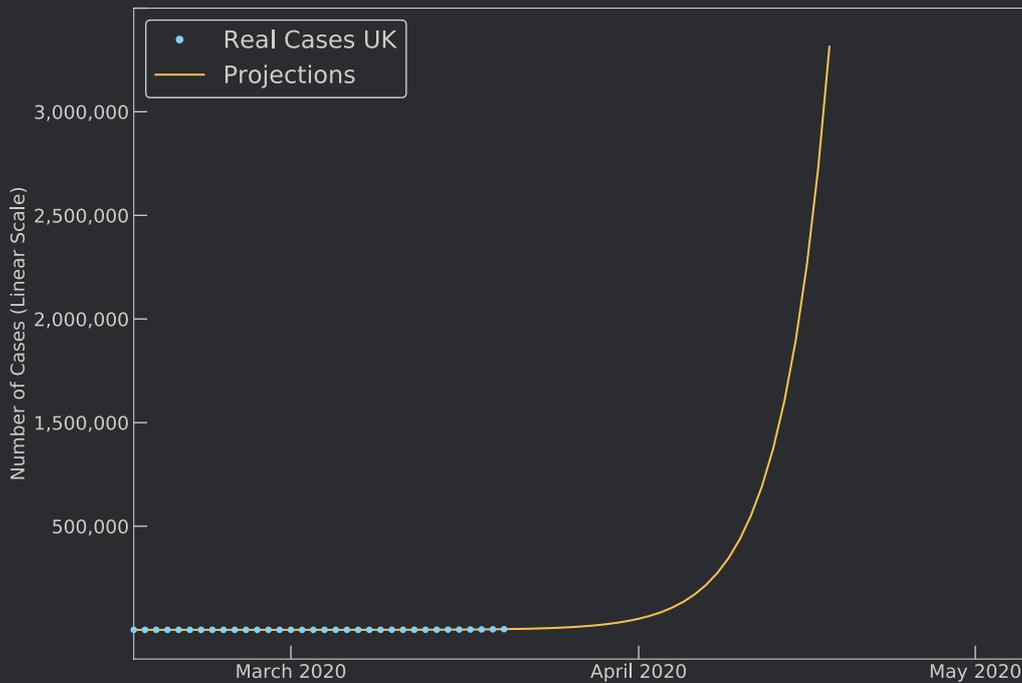1   The Guardian 'UK Coronavirus crisis 'to last until Spring 2021 and could see 7.9million hospitalised. 2020. See here :https://www.theguardian.com/world/2020/mar/15/uk-coronavirus-crisis-to-last-until-spring-2021-and-could-see-79m-hospitalised

Graphs 1 and 2: Logarithmically and linearly scaled plots of the estimated number of people infected over time, extrapolated from current trends. Dotted line: Number of infections in the UK. Solid line: Extrapolation of the infections using exponential growth.
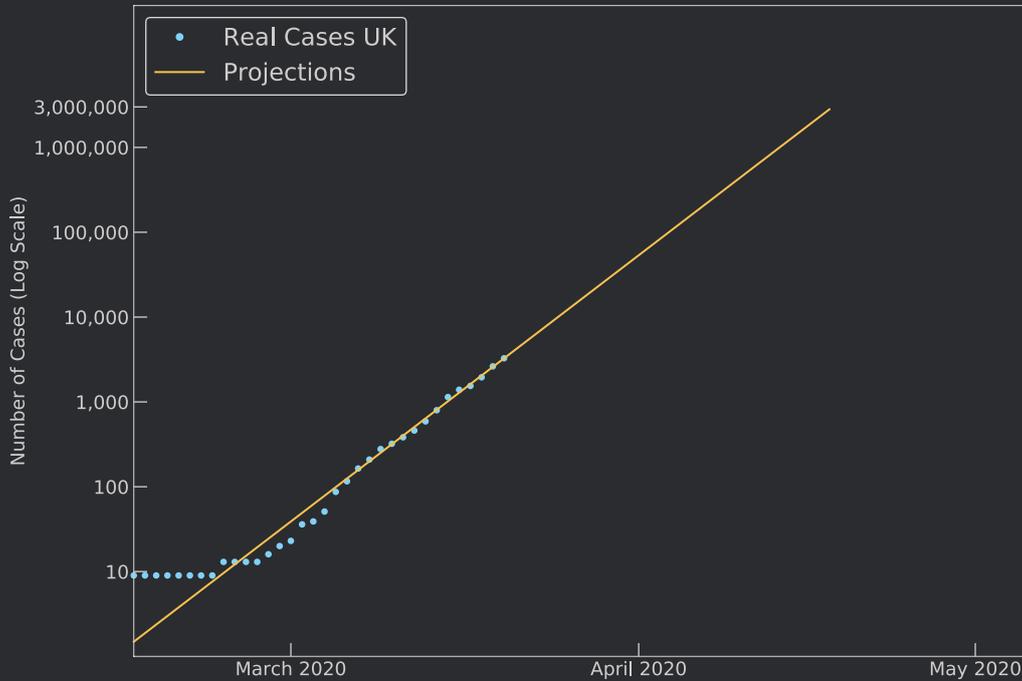
Graph 1: Logarithmic plot

Graph 2: Linear plot

Graphs made using data collated on Worldometer:
https://www.worldometers.info/coronavirus/country/uk/, including UK government data: https://www.gov.uk/guidance/coronavirus-covid-19-information-for-the-public

The only way to prevent these numbers climbing even higher will be through significant social distancing measures. A recent analysis by Imperial College suggests that these measures will need to be in place for between 12 and 18 months[2] One of the key places social distancing still poses a challenge is supermarket shopping. To make sure these measures are effective, an increasing amount of our day-to-day goods will need to be delivered as opposed to bought in-store. This poses significant problems in terms of logistics and demand. Already, supermarket delivery systems are overwhelmed. Websites have crashed due to high online traffic levels, while delivery slots are booked up until late-April. Panic buying means that most stores are out of basic goods, and food banks are already closing due to overdemand.

At particular risk of running out of essential goods are those with mobility problems - the elderly, sick and those with disabilities. This system is failing us in two key ways:

1.   It disrupts social distancing measures by compelling people to use supermarkets
2.   It fails to meet the needs of society's most vulnerable and/or most isolated

In short, by themselves supermarkets are neither capable of meeting the demand nor should they have to. The state needs to step in. Food policy experts at the University of London have written a letter to the government stating food planning is in crisis and that a rationing system should be implemented immediately[3] We propose a comprehensive central planning system to distribute basic essentials via a fair and efficient delivery system. The system would be aimed at providing day-to-day essential items for those who

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2   NM Ferguson et al. 'Impact of non-pharmaceutical interventions (NPIs) to reduce COVID 19 mortality and healthcare demand'. Imperial College COVID 19 Response Team. See here: https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-NPI-modelling-16-03-2020.pdf

3   See here: https://www.city.ac.uk/__data/assets/pdf_file/0009/523854/PM-Letter-TL-TJM-EPM-final-20-03-20.pdf

are housebound, either due to disabilities and long-term illness or who are self-isolating due to the virus. This would involve:

Governmental repurposing of supermarket inventories and supply chains

Government needs to centralise the distribution of basic goods. This will involve partially and temporarily taking over the inventories and supply chains of supermarkets, so that basic essentials like hygiene products, basic food items and toilet roll can be allocated and rationed in a systematic manner.

This would only need to be partial because other, more 'luxury' items should still be purchased and sold by supermarkets. For the time being, this is preferable to simply nationalising supermarkets, which would require a far more complex, time-consuming and expensive overhaul of our present infrastructure.

State coordination of storage spaces

The system would make use of empty space across the country for storage. Factories, warehouses, theatres and shops closed due to the virus will be used for centrally storing the goods. Smaller local shops, theatres etc. could be used as local supply hubs, where goods can be sorted into 'essentials packs', which couriers pick up and deliver to people's homes. Because these spaces are already unoccupied - for economic or health reasons - this would be free of cost, except for the wages of workers packing the goods.

'Essentials packs'

At the local supply hubs, a team of paid workers/volunteers will

sort items into packages personalized to meet people's orders. These workers might include laid off shop workers such as shelf stackers and customer service and those who previously worked in food banks. These personalized packages will contain a range of day-to-day items, including basic food ingredients, toilet paper, paracetamol and hygiene products. At first, these items should be sent out to as many households as possible - taking the necessary precautions of not coming into close proximity with potentially infected and/or self-isolating individuals. After this initial, mass hit, a review can be carried out to see if households require future packs or if the pack has unused[4].

The median weekly cost of basic food essentials per UK household is around £12, so the food included in 'essentials packages' should approximate this figure[5]. On Autonomy's estimate, basic hygiene and pharmaceutical products would cost around £6.50. The average cost of a package per household each week would be £18.50, which should be provided free of charge to every household by the state. By these figures, the total weekly cost for basic food and essentials would be roughly £510 million per week.

These spaces will, in some instances, overlap with repurposed restaurant kitchens that could be used for food delivery: meal deliveries and 'essentials packs' can easily be transported together. See the contingency plan for the hospitality industry below.

<u>Contract communications services</u>

To make the system efficient and consistent we will need experienced delivery workers. There are approximately 120,000 postal workers for Royal Mail, 90,000 of which deliver packages door-to-

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4   See Section 5 on how a digitised system might allow for an 'opt out' option.

5   J Portes et al. 'Social Prosperity for the Future: A Proposal for Universal Basic Services'. Social Propsperity Network. 2017. See here: https://discovery.ucl.ac.uk/id/eprint/10080175/1/universal_basic_services_-_the_institute_for_global_prosperity_.pdf

door. The CWU has already proposed that postal workers function as an additional emergency service, providing care and logistical support for the community6. One function of this could be acting as an 'essentials' delivery service. Some of these workers will also be required for basic logistical operations, manning the phones, sorting the parcels and so on.

Aside from being a trusted and familiar national service, Royal Mail are the only postal service that connects every address in the country. A key benefit of using their staff is that they already know their communities, are likely trusted by local residents and know the geography of particular areas. Another benefit is that the Royal Mail has around 48,000 vehicles across the country, which can be used to deliver goods and also bring basic goods from supermarkets to supply hubs.

Using the common Operational Pay Grade (OPG) of Royal Mail Letters, we propose paying every worker the company's maximum basic national weekly pay rate for Inner London: £553. Assuming we were to use all of Royal Mail's delivery staff, the overall cost works out at around £66 million per week.

Because some Royal Mail workers will at any given moment be self-isolating, it is worth emphasising that there are other groups of workers we can readily draw on. BT has a large workforce and fleet of vehicles that this system could employ if necessary. There are 26,000 field engineers in BT Openreach with vans covering the national UK network. If the number of workers and vehicles supplied by Royal Mail and BT turn out to be insufficient, then another option would be employing the couriers of companies like DPD and Hermes. Again, this would mean steady, public-sector work for people who might otherwise be out of a job in this crisis period.

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6   See here: https://postandparcel.info/120062/news/parcel/cwu-postal-workers-can-play-a-crucial-role-in-keeping-this-country-connected/

The system also needs to take into account that not everyone in a particular community will have a home. Charities like Shelter will be necessary to help coordinate rough sleeper delivery services, which will take basic essentials and hot meals to the homeless.

Build a central logistics system

To organise deliveries and distribute goods fairly will require a sophisticated central logistics and delivery system, including an online app and phone service that people can use to place orders. Orders will be personalised to suit people's ongoing needs.

A standard pack for everyone would not work because it would fail to take into account differences in family size, whether some people have particular health conditions which rely on more of a certain good etc. This would run on a simple digital inventory with data for how much each household has had of a particular good each week; first, to prevent hoarding; second; to prevent account-ing errors and mistakes on the part of the delivery service. In a general sense, this will also help achieve the most optimal allo-cation of goods and services throughout the crisis period: there could be, for example, an option to 'opt out' of the scheme if an individual feels that they do not require the service. Knowing how much a particular street or borough need a particular good each week means we can easily optimise supply. It also means that pre-planning stocks for the coming days and weeks would be easy to achieve.

Such a digitised system would take a little longer to develop - and utilising the more analogue, ready-to-hand logistics network of Royal Mail is the immediate priority. Nonetheless such a system should be a short-medium term aim for any Essentials Delivery Service.

Overall cost

If we add the cost of basic essentials to the cost of wages such a system works out at an overall cost of around £576 million a week or roughly £29 billion a year. A Basic Essentials Service, by these estimates, would be fairly low-cost, at least relative to other government spending: health care spending represents £162 billion a year, welfare £126 billion and Defense £50 billion. Depending on the severity of the crisis, we might also not expect these services to be necessary for the entirety of 2020.

Support and Repurposing in the Hospitality Sector

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The hospitality industry in Italy will have lost 9 billion euros by the end of 2020 [7]. Even without the forced closures the Italian government is imposing, cafes and restaurants will be the services most deeply impacted by social distancing measures - measures that are now being implemented here in the UK. The recent analysis by Imperial College suggests that these measures will need to be in place for between 12 and 18 months [8]: We need a comprehensive plan for those working in these industries that goes beyond the loans to small businesses currently offered by government.

The hospitality sector employs 1.7 million people in the UK, 5% of total employment [9]. According to the TUC's analysis, 22% of food and accommodation workers are on zero-hour contracts [10]. Many of them have already seen their hours cut or have been laid off altogether.

We propose that these restaurants are temporarily taken under

7   Federazione Italiana Pubblici Esercizi: https://www.fipe.it/comunicazione/note-per-la-stampa/item/6919-coronavirus-la-ristorazione-e-il-settore-piu-colpito-dagli-effetti-del-covid-19-con-perdite-stimate-per-la-fine-del-2020-in-8-miliardi-di-euro.html

8   NM Ferguson et al. 'Impact of non-pharmaceutical interventions (NPIs) to reduce COVID 19 mortality and healthcare demand'. Imperial College COVID 19 Response Team. See:https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-NPI-modelling-16-03-2020.pdf

9   Source: ONS. https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/employmentbyindustryemp13

10   TUC, 2019. See: https://www.tuc.org.uk/blogs/zero-hours-contracts-are-still-rife-its-time-give-all-workers-rights-they-deserve

government control and repurposed - working with existing staff - to respond to the needs of a quarantined population.

Already embedded in towns and communities, they would become part of a comprehensive system aimed at providing warm meals on a daily basis plus essential items for those who are housebound, either due to previous disabilities and long-term illness or are self-isolating due to the virus. The objective of the program would be to carry on paying out salaries to the employees of individual food businesses and allow workers to run establishments independently: it would effectively act as an 'employer of last resort' for a certain amount of staff who work in these industries.

Modifying menus and roles

The menus of restaurants would need to undergo changes to respond to the new necessities of an isolating population; these meals would be at a fixed, low price.
Roles and tasks for non-cooking staff would also need to change. These would shift from serving customers in person to coordinating dispatch and delivery with the Royal Mail workforce in the Essentials Service (detailed above).

To make the best use of available space, the seating areas in restaurants could be used for storing goods, organising meals and providing space for delivery workers to pick up orders. restaurants will also have to change during the current crisis.