## Make it new: reformism and British public health





Plans are in place to replace Public Health England (PHE) with a National Institute of Health Protection (NIHP), which will be partly modelled on Germany's Robert Koch Institute (RKI).

After months of headlines, the political temptation to remodel PHE is unsurprising. The question is, will this make things better? Considering recent decades and the very different ways in which public health works in other countries should make us cautious. Ad hoc reforms and systems transplantations rarely work. Each national public health system is unique and has evolved over decades to suit the specific country's health system, constitutional structure, and politics. Effective reforms cost money and take time to bear fruit; they also tend to result in a phase of low staff morale and a loss of expertise, which we can ill afford during a pandemic.

Britain is a good example of the fallout of overambitious reformism. Between 1939 and 2003, the internationally renowned ancestor of PHE, the Public Health Laboratory Service (PHLS), presided over an integrated network, which at its height consisted of 69 local, regional, and national laboratories. The PHLS network enabled it to work effectively with local and National Health Service (NHS) authorities, respond flexibly to outbreaks, and bundle and analyse information at its Colindale headquarters. Autonomy also allowed the PHLS to act as an effective advocate for public health interests in Westminster and the NHS.

Having survived post-1970s budget cuts and market experiments, the PHLS was abolished as part of the Labour Government's wider health reforms in 2003. The Health Protection Agency (HPA) was established to integrate forms of health protection, ranging from infectious disease to nuclear and chemical threats. In a blow to surveillance capability, the HPA lab network shrunk to eight regional hubs in addition to the Colindale campus. The remainder of the PHLS network was transferred to the NHS, despite warnings that individual trusts would have little incentive to maintain adequate funding once ring-fenced transition budgets ended in 2005. This move precipitated a loss of investment in laboratories, blurred responsibilities, and a weakening of public health integration between local and national levels.

Substantial budget and personnel cuts after 2008 exacerbated problems. In 2013, the HPA was axed by

the new Conservative government. The public health role of local government was strengthened and HPA infectious disease assets were integrated into PHE, a new Department of Health executive agency designed to pool data and coordinate responses. Visions of managerial efficiency contrasted with insufficient funding. The years between 2015 and 2020 saw substantial cuts to local government and PHE budgets, resulting in a public health system that was performing at a high level but running on fumes, a fact made painfully obvious by COVID-19.1

So how can British public health be reformed? Looking to Germany might not provide all the answers. Although the RKI was reformed with reference to the US Centers for Disease Control and Prevention and Colindale after 1994, it is the child of a very different decentralised health system comprising federal, state, communal, and insurance-based services. During the first wave of the pandemic, the RKI was able to act as a coordinating hub for comparatively well funded local and state facilities, who were autonomous enough to react flexibly to local circumstances. German decision makers' choice incentivise-rather than outsource-testing by commercial operators via insurance reimbursements helped to boost capacity when it was needed. None of these goals are achievable in Britain without much wider health system reform.2

Rather than look abroad, Britain should focus on its own strengths. The PHLS was once a world leader in public health and PHE has outstanding scientists and clinicians. Reintegrating centralised surveillance with ground-level test and trace abilities could be an important first step to strengthening public health performance, but will need investment at all levels.

Any reorganisation should also take account of the technological revolution involving testing and the way data is managed. We now expect test results in hours rather than days. This pace of change continues with the advent of high-throughput PCR and serology platforms capable of measuring hundreds of datapoints in thousands of samples per day. Running this so-called at pace model requires an integrated and immediately updatable platform to enable authorities to link personal data to test data in real time and to work closely with communities in the field. Building such an integrated

Published Online September 3, 2020 https://doi.org/10.1016/ \$2666-5247(20)30143-9 system requires a thought out ethical and community framework and investments throughout public health, including building a chain of specialised containment laboratories.

In addition to sustained funding and new facilities, ministers should also have the courage to give NIHP enough autonomy to act as an effective lobby for public health within the wider health system in the UK. To do so, the new institute must be built on strong clinical and scientific leadership, which will entail picking a director with relevant expertise and resisting the urge to impose external shake ups every decade.

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