

This paper aims to provide Commissioners with an overview of some of the main areas arising from the Covid-19 crisis during the last few months. It highlights a summary of some key issues and early findings based upon available information in the following 6 areas:

1. Contingency preparations/modelling
2. Lockdown
3. Test and Trace
4. The NHS and Social Care
5. Health Inequality
6. Communications

The paper acknowledges the uncertainty of some information, lack of robust evidence and the changing circumstances presented as Covid-19 unfolds. It tries to avoid over use of hindsight to criticise decisions made by those who faced (and still face) uncertainty as to the correct course of action and for which 'the science' does not always provide a clear way forward.

The opportunity is taken to provide a brief insight into how these issues may impact on the future, but in the main, this short paper reflects on experience to date which-taken with wider evidence - will be used to inform the Bevan Commission's future thinking, actions and next steps.

1. Contingency preparations/modelling and predictive risk

The temptation to judge decisions previously made, or not made, based on hindsight are particularly strong with regard both to the adequacy of contingency preparations for a new infections and the modelling that took place (and is still taking place) with regard to Covid-19. However, it appears reasonable to conclude that the UK (including Wales) had not taken on board sufficient lessons from exercises that had taken place that tested readiness in response to a pandemic.

Sufficient investment in contingency preparations including modelling of future potential pandemic risks and personal protective equipment (PPE) stocks were not made. The main reason for this was most likely the financial pressures on operational services brought about by austerity which, in light of other 'more urgent demands', would have likely been challenged and at the expense of 'the here and now'. It is not apparent there was much in the way of pressure from Government, NHS managers or clinicians to make such investments; which would have required associated trade-offs. One doubts that infection control contingency stocks were high up on the risk registers of many NHS organisations (if they were on them at all) and will need to be included into any review and reflection.

It is also clear that testing capacity was inadequate and (unfortunately) that the time scale to significantly ramp up testing has been much longer than was required. The degree to which the highly centralised model adopted in the UK has contributed to this still remains a question, especially when contrasted with the capacity that Germany (which operates a very different model) has enjoyed.

It is also not clear what, if any, consideration was given to contingency arrangements for the care sector, which has clearly suffered for not being part of the NHS, both in terms of formal planning and access to PPE, testing etc as well as wider perceived advantages.

In the case of PPE, there has been a harsh lesson on the reliance on overseas manufacturers at a time of a global pandemic. Future contingency planning should take this on board. The same issue applies to the dependence on disposable (typically plastic based) PPE instead of renewable items that could be manufactured locally and be much more environmentally friendly without an over reliance on disposable items. For security of supply there is a balance to be had in ensuring both sources are available.

The lessons on modelling are equally harsh, if more difficult to rectify. Over-optimism kills, as does being over-cautious. The former, however is considerably more visible than the latter; which relates to the impact of the long term effects of isolation, economic hardship and non Covid-19 illness that are linked to lockdown and the restriction of NHS services. However, it is not necessarily clear at the point the model is produced that it falls into either camp. The politically explosive report produced by Imperial College London on 16th March 2020 that warned of a possible

500,000 deaths if lockdown measures were not put into place is a case in point. Perhaps the main point is to remember that models are just that, models, providing an indication of the most likely impact based upon available data. Modelling is heavily reliant on data and a 'new' virus – such as Covid-19 - creates particular problems in that regard. We wish 'the science' to provide certainty....which turns out not to be possible. Like quantum mechanics we only have probabilities.

With regards to the NHS, the ability of hospitals to use modelling, for example, to help assess the likely impact to inform other measures such as critical care capacity (and amend staffing patterns to service that capacity) has been highlighted. This was reinforced where new manufacturers were able to produce the required equipment in a relatively short time, such that companies were complaining that they could produce equipment at a quicker rate than the system could accept it.

Likewise new facilities (the so called Nightingales in England and Field Hospitals in Wales) have been commissioned in a timescale that rivalled the building of new hospitals in China. They have provided a security blanket of extra capacity that in part can be seen as a reaction to the undue optimism of contingency arrangements prior to Covid-19. Perhaps the most appropriate response lies between the two extremes, although it is easy to make that point when Covid-19 admissions and death rates have been falling for almost two months.

The NHS has also seen a reduction in non Covid-19 workload and a freeing up of beds that was simply unimaginable even six months ago. Likewise, the switch to telephone and video consultations in both primary and secondary care. Thus, there are areas of capacity that were released at a much faster rate than would previously be considered possible leaving some staff with much more time on their hands and with others in considerable demand. The importance here is on holding onto the gains made.

The Future:

Modelling has an important role to play as we start the journey out of lockdown but in a world where Covid-19 remains and may well remerge in subsequent waves. That modelling goes well beyond predicting future infection rates as Covid-19 as the lockdown has impacted upon just about every aspect of society and we will need some infrastructure or basis from which to address this level of complexity. In healthcare there are questions such as; how has this impacted non Covid-19 health conditions? what capacity would be required to tackle the ever growing waiting lists? what are the capacity constraints created by social distancing at 2metres, and the relationship between capacity and staffing levels? However, recent experience reminds us that the outputs of modelling are not 'a single version of the truth' but part of a wider toolkit of gathering information to inform decisions and manage risk.

With regard to contingency arrangements it goes without saying that preparations have to be made for a subsequent re-emergence of Covid-19 and that this has long term implications for everything from PPE, to testing and tracking capacity, to ITU equipment. This will need to include the ability to source considerably more items domestically even though that may be more costly to do so.

2. Lockdown

The original decision to impose lockdown and the subsequent deliberations about how and when to ease have tended to be justified in relation to the R number. The R (standing for Reproductive Rate) number is the calculation of the number of transmissions of a virus in a community. Initial reports of Covid-19 noted that its R number was significantly higher than influenza - R3 being often quoted - which means that, left unchecked, on average an infected person would infect three other people, hence the high growth rate of infections. Most people have little difficulty grasping this and it helped with the high level of public compliance seen to the lockdown measures – not just in the UK but in much of the world.

Unfortunately, if one digs a little deeper the simplicity and power of the R message starts to erode. The R number is an average and averages can hide a lot of variation. There are differences in R rates between, and within, communities. The R rate will most likely be higher in a care home or hospital than in your local garden centre. Getting infected with Covid-19 can mean no symptoms or some temporary discomfort for most, but for a minority of people it can kill them. Risk is not evenly distributed. In fact it is the opposite. Risk is granular.

It is worth recalling the original justification given to imposing lockdown. It was to 'flatten the curve and ensure the NHS wasn't overwhelmed'. Both objectives were achieved some time ago. Lockdown wasn't imposed to eradicate the virus and whilst continuing the lockdown might see the virus disappear the time it would take (if it happened at all) creates its own problems - to the economy, to mental health, to what it means to be living in a 'free country'.

The rate at which the lockdown is eased and whether it should be different in different communities is at root a series of judgement calls where 'the science' is an imperfect guide – both in terms of identifying what the current position is and on what should be the 'right' course of action. For the most part figures on infections are educated guesses based on extrapolating infection rates from those tested to the general population. As the 'tested' cohort grows larger, certainty increases but this is not the same thing as 'being certain'.

Devolution has brought different decisions with regard to easing lockdown and this has created a degree of cynicism from the public as to how much 'science' lies behind the different lockdown regimes. Even the 'two metre' rule for social distancing does not survive close inspection. Different countries have adopted different guidance for social distancing. The World Health Organisation recommends a 1

metre 'rule', and the likes of Germany, Poland and Netherlands have gone for 1.5metres. What distance a country adopts is in reality another judgement call. Human beings like easily understandable messages and round numbers (which is one reason the advice is to keep two metres apart and not six and a half feet). Although risk goes up if you reduce the distance from two to one metre the actual risk increase is small and in reality risk is impacted by multiple factors such as whether one is outdoors, indoors, length of time in close proximity, air ventilation, etc.

Moreover, the decision as to whether it's one or two metres is not an inconsequential one as it has a significant impact on schools, workplaces, restaurants etc in terms of their ability to function (and in some cases whether they have any hope of being run profitably). However, as with other aspects of the lockdown, whilst the decision to impose a rule was relatively easily made, whether one should modify or drop it and if so, how, is much more complex. Politicians appear to have trapped themselves with the certainty (and frequency) they expressed these public health mantras.

The risk of infection is not just a function of distance but also of things such as the time you are face to face (risk drops if you are side to side and drops again if you are back to back) and whether you are indoors or out. Still, the simple messages that have accompanied lockdown help because they are 'heuristically based rules' - they allow us all to apply mental shortcuts – such as 'I need to keep a distance from other people' - that is much more often helpful to maintaining our own and other people's health, than unhelpful.

Mask wearing essentially mirrors this. Whilst there is not incontrovertible evidence that mask wearing reduces infection, the public appeared to more readily grasp the precautionary principle it embodies, (it costs little, it may work and should it do so, the benefits are high) than 'the scientists' - or at least some of them. The UK government position has moved in a few weeks from 'there is evidence they work and we don't recommend them' to fining people who aren't wearing one on public transport in England.

What are the lessons we should take from lockdown? Hindsight allows us to question whether lockdown in the UK should have taken place earlier. Contact tracking was abandoned because the numbers with suspected infection quickly outstripped the infrastructure the UK had in place to deal with it. This was not just a case of being underprepared, it would also appear to be the case that the rapidity with which Covid-19 would become established was underestimated - with consequences for when the lockdown was imposed. As Covid-19 was not indigenous to the UK, borders were an obvious point of control but we are only now (in June 2020) seeing stricter measures. The suspicion is that root cause of this (inaction) has much less to do with scientific advice than the inadequacies of the UK's testing, tracking and tracing capacity (also see testing section).

Notwithstanding that, it is unlikely that the decision would be made again to allow the Cheltenham Festival to go ahead or to only cancel the Wales v Scotland rugby international at Cardiff on the Friday 13 March 2020 prior to the Saturday match, when most of the Scottish fans were already in Wales. We can only speculate if earlier lockdown would have made a large difference. We do know that high population density and places that are significant travel hubs carry a much greater risk of infection gaining hold than rural areas. The UK has a population density of 727 people per square mile whilst as a point of comparison France's is 309 and Germany's 623. Heathrow is one of the busiest international transport hubs in the world with 80.9m people travelling through it in 2019. As an island the UK was (in theory) in a better position to control access (and manage visitors). That opportunity was not taken, which is one reason the recent imposition of a 14 day quarantine on visitors (and returning holiday makers) to the UK has been greeted with a degree of perplexity. If this is worth doing why was it not imposed at the outset of Covid-19 in the UK or even earlier? The explanation offered - that it was not worth doing when the virus was well established in the UK - begs the question as to its potential value when the infection was in its infancy. One suspects that the real reason has a great deal more to do with the extremely limited capacity that existed earlier in the year to undertake testing and tracing of anyone coming into the UK. (This subject is covered in more detail in 'Testing' section of this paper).

The Future:

Whatever the controversies about when (or even if) lockdown should have occurred, we can say that lockdown itself is a blunt instrument which imposes significant costs as well as benefits. Its utility has now almost ended. We have passed the initial crisis. We now have to learn to live with Covid-19 until an effective vaccine has been developed and administered. The key to doing so lies in having a sophisticated testing, tracking and tracing system that can spot new infections and contain them before they gain much traction. If Wales has to re-impose lockdown it will most likely be because we have failed to put into place an effective 'detective' mechanism for plotting and containing new infections. Given that, the learning from (the often painful) experience in testing and tracking Covid-19 is particularly important and is covered in the next section.

3. Test and Trace

Test and Trace (TnT) is an established method for controlling the transmission of diseases, previously employed to combat outbreaks, such as MERS and Ebola. Countries deemed to have been successful in controlling infection and death rates of the novel coronavirus (SARS-coV-2), such as South Korea and Germany, have made TnT a cornerstone of their national response. Likewise, the UK government attempted to implement this strategy in March 2020, before it was abandoned due to an insufficient testing capacity in light of infection rate forecasts at the time. As of the

1st June 2020, all four UK nations have now reinstated conventional TnT, as they endeavour to supplement this with a digital tracing app.

The early adoption of TnT as part of the UK coronavirus response aligned with the advice issued by the World Health Organisation, which emphasised that isolation, testing and tracking were critical to virus suppression. Only 3,500 contacts had been traced before the strategy was side-lined, when it became apparent the UK testing capacity would be unable to keep pace with the infection rate rising via community transmissions.

A common practice among nations that has avoided the mortality levels and prolonged economic turmoil that the UK has suffered has been the early and persistent application of TnT. This includes Germany, Singapore, New Zealand, Australia and South Korea. A chief benefit of this approach, relative to that of the UK's, is that asymptomatic individuals can be identified and isolated rather than relying on the existence of symptoms. Why the testing infrastructure in the UK was so inadequate is one of the obvious questions that will be asked in any inquiry into how the UK (and devolved governments) has handled the Covid-19 crisis. There will be a number of causes from the way laboratory capacity is structured in the UK, to a failure to heed the lessons delivered by the 2002 Severe Acute Respiratory Syndrome (SARS) and the 2012 Middle East Respiratory Syndrome (MERS) outbreaks in terms of the importance of TnT.

Wales has similarly been unable to contemplate operating a persistent TnT strategy, suffering from an insufficient testing capacity from the near outset. Missed testing targets have characterised the lockdown period in Wales. A 5,000 daily tests target to be achieved by mid-April 2020 was comfortably undershot by 3,700 at the time the target was retracted. The Welsh Government attributed this to stagnant international supply chains, in the scramble for testing equipment and chemical reagents. Even then, like much of the UK, the actual number of tests used was far exceeded by the capacity figure. The gap in testing capacity and utility has been argued to result from poor communication to the public on who can get tested, and poor access to testing centres, which have often been put in remote locations. The general approach (until only recently) has been to only test key workers and those with clear symptoms of the illness. The Welsh health minister, Vaughan Gething, all but confirmed this, stating that effective lockdown measures meant Wales did not require 5,000 daily tests, contrary to their previous targets. However, as Wales garnered the highest number of cases per capita between Scotland, Northern Ireland and all regions across England, it is apparent that utilising maximum testing capacity, or compiling resources toward a TnT infrastructure, would have disproportionately aided Wales in the fight to control the novel coronavirus.

Whilst TnT has resumed in all four UK nations, there remains a legacy of issues ready to hinder current and future efforts to successfully implement it. The amount of testing required remains one of them. Australia and South Korea have pinpointed that 52-64 tests are needed for each TnT case. Given that the UK government has

stated it wishes to process 10,000 cases a day, they will need to at least triple the current number of tests for this to become a reality, whilst at the same time operating an effective TnT programme. Wales has ramped up daily testing to ~9,500 as of 7th June 2020, though working off a 52 test per case threshold this would only amount to 182 cases per day. This represents a slightly greater proportion of cases per capita than England. Although, Wales is still processing just over a third of its daily testing capacity, meaning case numbers are likely to be far lower. The above also illustrates that the numbers relating to testing can cause a great deal of confusion as to what is the actual situation and how many people have actually had Covid-19 (at the present time that number can only be a guesstimate).

Beyond testing, TnT requires an agile network of participants to interview case patients and identify who they have recently been in contact with. Wales has a target of recruiting 1,000 contact tracers. UK wide there are clearly issues that need resolving with some contact tracers stating that they have been left with no one to contact, days after starting work. This lack of preparedness was mirrored by the UK government stating that it would not be “world-class” until at least September 2020. Given the problems that Wales has had to date in this area it seems unlikely that its position is better.

The employment of a centralised system itself has been criticised, in lieu of involving local authorities, primary care clusters and regional public health experts from the outset. The success of TnT in Germany has been partly attributed to the emphasis on local-level response, with the national health minister explaining that federal mechanisms were worked through to put in place 400 communities responsible for TnT.

Another challenge to effectively implementing TnT in the UK, is the speed at which test results are returned. Experts have warned that a delay greater than 48 hours, from sample collection to reporting results, may render TnT redundant. The Department of Health and Social Care (DHSC) had originally indicated that 95% of tests are processed within 48 hours, though it has been raised that average waiting time for pillar-2 tests, the backbone of the contract tracing system, has not been separately published. The response time of pillar-2 tests is likely to have a profound impact on the efficacy of TnT. A recent critique of the UK TnT strategy also argued that over 75% of swabs are being sent to private sector firms that use complicated supply chains, and that this could be streamlined if a localised approach was prioritised. Scientific advisors to the Welsh government have recognised the importance of a 24-hour test result turnaround, arguing that the localised approach to TnT in Wales will ensure that the percentage of tests returned within 24 hours will support this. However, as of 7th June 2020, less than two-thirds of tests were returned within 24 hours, with percentages dropping significantly in settings outside of hospitals (pillar 1), such as drive-through centres (58.6%) and designated testing units (48.2%).

The UK government has stressed that a digital mobile app will form part of the TnT strategy going forward, as is common other economically developed countries. The modelling of a recent study has underscored the critical role that apps can play in suppressing the virus. The authors found that solely isolating symptomatic individuals was unlikely to contain the epidemic given the rapid transmission of SARS-coV-2, along with the transmission by pre-symptomatic individuals. The results of their modelling indicated that an app that immediately notifies contact cases, if downloaded by a significant proportion of the population and combined with social distancing measures, would be effective in controlling the novel coronavirus.

However, since its first announcement, the role of an app as part of a TnT strategy has been downplayed by UK government(s). The NHSX app, currently in trial on the Isle of Wight, has been hit by delays and difficulties related to Bluetooth contact tracing. Indeed, the accuracy of Bluetooth as a proximity contact-tracer has already been flagged by multiple countries. Set the parameters of contact too loosely and only a few people are notified, set them too strictly and thousands of people are notified under circumstances where transmission is highly unlikely to have occurred in the first place. The NHSX app is due to roll out in late June 2020 for use in Wales and England. Even if it works as hoped, the take-up of the app needs to be at around 60% of the population if it to be truly effective.

The Future

Putting in place an effective infrastructure of TnT is critical if the UK is to tackle Covid-19 without recourse to blunt measures such as national lockdowns. To date this has been one of the problematic areas – with Wales being no exception – and has not inspired confidence that either Ministers nor Public Health Wales have got properly to grips with the challenge. This was not helped when the CEO of Public Health Wales told the Senedd’s Health, Social and Sport Committee that she ‘was not familiar with that trajectory’ relating to the Welsh Government’s original testing target of 9,000 cases by the end of April and did not recognise that number.

Welsh Government published its ‘Trace Test Protect’ strategy on the 13th May 2020, however whilst it states the ambition, it lacks much in the way of detail as to what the actual plan is to achieve them. There remain too many unknowns in the still developing TnT strategy in both Wales and the UK as a whole to be confident that this crucial pillar of being able to re-open society and also prevent a second epidemic will actually deliver what is required.

4. The NHS and Social Care

The NHS

It has already been noted that the NHS made remarkable changes in its capacity and operating procedures in a very short time period. Almost the entire focus of the

NHS quickly reoriented to being on the Covid-19 pandemic...and it shows. The early lessons include an ability to respond quickly to things that were previously either in the 'too hard tray' with barriers such as systems/procurement/people/ permission/ priority, or were scheduled to take many years - the near overnight change to telephone/video consultations in primary and secondary care being the most striking example. Others include extremely rapid changes to ITU capacity, moving staff around, remote working for administrative staff and a realisation of a fair amount of testing and routine patient follow ups were of little value and could be safely forgone. The flip side of this has been a worrying drop in people presenting with non Covid-19 illnesses and symptoms, the extent of which cannot be explained away as trivial. There is a growing concern that a tsunami of pent up demand and avoidable deaths and morbidity lie in the future. These will threaten to overwhelm the NHS more assuredly than anything Covid-19 threatened.

At the same time, those expecting the NHS to release its spare capacity quickly are likely to be disappointed. It is more likely to be a gradual process, partly because the centre does not want services to ramp back up, just in case a second Covid-19 wave emerges. However, it is important to realise that the NHS will now operate at significantly reduced capacity for months - perhaps years to come. There are two main reasons for this:

One is that the NHS is now in a new era in which infection control measures assume much greater significance. Operating a health system in the midst of a pandemic requires ways of working which will impact very differently on specific services. For example, activities which have previously been able to maintain high activity levels – such as endoscopy – will find their models severely challenged by the need for more regular “deep cleaning” or donning and doffing personal protective equipment after each patient. The two metre social distancing ‘rule’ also has major implications for traditionally high footfall areas like hospitals that negatively impact on capacity.

The second reason is staffing. Covid-19 has obscured the staffing problems of the NHS, but they are still there. A lot of frontline workers are tired...and owed leave. Some will be traumatised. Sickness rates have been very high (at least in England where they are available, which is not the case in Wales) and they are likely to remain high, in part due to shielding. Training has also been severely disrupted.

There is also the question as to whether overall staff have been energised by the Covid-19 experience, or counter-wise, are more likely to decide to leave the NHS (and care sector). The same deliberation also applies to potential recruits to both NHS and social care. If there is an increased interest in joining either sector that enthusiasm needs to be grasped and training places provided. That will require a fleetness of response that historically has not existed. Those currently employed appear to have enjoyed the absence of targets and the relief from financial concerns. Both are likely to be a temporary phenomenon, although the utility of former (at a minimum) should be seriously examined before any decision is made for their re-imposition.

The Future:

The above makes the relationship between the NHS and the care sector more important than ever. The care sector - alongside NHS primary and community care - holds the key to ensuring the hospital sector can get on and do only what it can do. The rest needs to be undertaken outside of hospitals. That message has been around for years prior to Covid-19 and until then was mostly the subject of a lot more lip service than action. That has to change.

Primary Care will need to be much more actively engaged in that planning than has been the case – especially during the period of the Covid-19 crisis, where NHS Wales has tended to be undertaking its planning through the lens of acute care.

This will necessitate an integrated vision and models of working across health and social care and with wider community services. This includes a range of services; from rehabilitation for patients who are now recovering from Covid-19, to the better management of conditions in communities, to reduce demand for both elective and unscheduled care and ensuring A&E attendances do not simply climb back to their previous levels, with ambulances queuing outside hospitals.

Care Homes

There are stark differences in the way UK governments plan and manage the two component parts of the health and care system and perhaps, inevitably, how they have dealt with Covid-19. The core problem in a pandemic however remains the same; how to deal with Covid-19 and how to protect those using and providing the services. In the case of the NHS, actions have been subject of central directives designed to protect (and increase) capacity and to provide equipment, testing and PPE. This has not always been successful, as the concerns over shortages of PPE expressed by some front line staff and the likes of RCP Cymru in their evidence session to the Health, Social and Sport Committee (4.6.2020) demonstrate - but the intent and mechanism for delivery (such as central procurement) have been clear enough. The same cannot be said for social care.

The social care sector has suffered from being made up of many private providers, alongside local government run facilities. These owners were largely left to deal with the crisis themselves, including sourcing PPE as best they could, competing with the colossus that is the NHS for a scarce resource.

Patients were discharged from NHS hospitals to care homes without prior testing which led to high risk to staff and clients and many unnecessary deaths. This is perhaps best exemplified by the fact that until 12th March Public Health England's

position was that it was ‘very unlikely’ that residents in care homes would become infected.

The Future:

The Bevan Commission has previously observed on many occasions, that social care is the ‘poor relation’ compared to the NHS – in everything from the esteem the sectors were historically held in by the public, through to the terms and conditions of staff, to the public funding made into the two sectors. Through this crisis, the public have gained a greater insight to the problem and a new appreciation of the work of the care sector and care staff (many on, or little more than, the minimum wage).

We need to redress this balance to secure a sustainable health and care system for Wales in the future and difficult decisions will need to be taken against the critical economic backdrop.

5. Health Inequality

The risk to individuals from Covid 19 is far from uniform. In fact, it is highly granular. The same applies to the economic impact of Covid-19 on people’s wealth, jobs and ultimately their general health (regardless of whether they get Covid-19). The truth is that Covid-19 is not impacting all sections of society equally. Both the incidence and effect of Covid-19 is distributed unequally across those with different levels of material and social deprivation. As a general rule, those who can least afford it (both physically and economically) are hardest hit by Covid-19. On the positive side Covid-19 is highlighting this long standing issue and making it harder to ignore.

Some groups are at much higher risk of catching and dying from Covid-19 than others, primarily due to age, gender, comorbidities, ethnicity and socio economic deprivation. Britain’s ethnic minorities are more at risk. For example, controlling for age, poverty and other factors, people of Bangladeshi origin diagnosed with Covid-19 are twice as likely to die of it as others and those of Pakistani origin, 1.4 times more likely. The mortality rate amongst NHS and care workers has been significantly higher amongst the BAME personnel than the percentage they make up of the overall workforce. The Public Health England review as to why Covid-19 has had a disproportionate effect on people from ethnic minorities was poorly received – in part because it appeared to ignore the responses from the more than 1,000 organisations and individuals who supplied evidence for the review and partly from the absence of any action plan.

The measures being taken in response to Covid-19 will most likely make health inequalities worse. Figures from the Sutton Trust show pupils from middle class homes are twice as likely as those from working class homes to take part in online lessons (30% versus 16%). Over half of primary (51%) and secondary (57%) pupils

at private schools have accessed online lessons daily, which is more than twice as likely as those at state schools.

Thus, although disruption to schooling is nationwide, it is not equal in its impact. Overall, private schools have been much better organised in continuing education on a virtual basis. Some state schools have emulated them but many – especially those servicing the most deprived neighbourhoods have all but abandoned providing education.

The long term negative consequences for the children impacted this way could be very significant.

The long term reduction in NHS capacity will also have a very unequal impact. Those who can afford to may well turn to private healthcare for treatment. Most will be unable to afford such an option and the grim economic outlook will see many facing an uncertain future in terms of work.

The lockdown has also created new forms of inequality. Some sectors have stayed open (and even be recruiting staff) while others have shut down. Whilst some will hopefully bounce back quickly there are whole sectors – such as tourism, cafes, restaurants and pubs - that face a very uncertain future. Some people can work from home whilst others cannot and often it is the poorest paid workers who face the greatest disruption and have the worst benefits (some such as those who were employed in the ‘gig’ economy and the self-employed have been particularly hard hit). What this means for health - including mental health - will only become fully apparent over time but it is likely to be significant.

The Future:

It is clear that Covid-19 has the potential to make inequality – including health inequalities - considerably worse. Unless there are very deliberate policies to tackle the issues highlighted above, those dangers (which are already having an impact) will materialise. Tackling these inequalities needs to be an explicit part of Wales’ recovery plan.

6. Communications

The Covid-19 pandemic has been played out to a world-wide audience via 24/7 news and social media. As a consequence, it has elevated the importance of communications, however, the law of marginal returns also applies. The amount of reporting shows no sign of reducing and daily briefings continue but the initial clarity and impact of government messaging has diminished over time – along with the consensus on which action to take by the four devolved governments.

The decision to impose lockdown was accompanied by an easily understood maxim of ‘Stay at Home, Save Lives, Protect the NHS’. This was simple, clear and conveyed the sense that the country was in a crisis. Unfortunately, it is very difficult

to encapsulate the complexity of the judgements and processes that accompanies the easing of lockdown in such simple messaging. This, alongside problems of the government's own making - such as the Dominic Cummings affair - have eroded confidence in government(s). The furore over the actions of Dominic Cummings, Professor Neil Ferguson and Dr Catherine Calderwood (Deputy CMO of Scotland), with regard to whether or not they obeyed the rules set out for the public (and their part in deciding/promoting them), provides a stark demonstration of the importance of consistency between words and actions. It is no longer sufficient or acceptable to expect the public to 'Do as I say, not as I do'.

This is part of a wider problem (although the above is self-inflicted) for government(s) in relation to communications on Covid-19. When faced with a crisis, leaders wish to gain the confidence of the public – which is aided by projecting certainty. Arguably, this is an appropriate early response to avoid panic and despair, but can quickly lead to a loss of confidence as policies, originally confidently articulated as being “the solution”, are seen to fail, or no longer be appropriate. This was aggravated by the early decision to justify those decisions as being ‘led by the science’. Initially this was extremely effective (also served to shut down debate on the basis that ‘if the decision is dictated by the science who can question it?’). However it has quickly become apparent that far from being one version of ‘the truth’ that ‘the science’ is often unsure, requires interpretation and still leaves key questions unresolved. It also leaves an on-going requirement to make trade-offs based on judgements untouched.

The point was reached some time ago, when all leaders needed to admit that they – and we - are working in an uncertain environment. As a result, policies are based on partial knowledge and that inevitably, as we learn more, some will be found to be sub-optimal and may even need to be reversed. It would help matters considerably if politicians would stop pretending that all of their decisions have been the right ones and likewise that the media were not so ready to lambast any leader prepared to say so. This may be a forlorn hope.

The Future

To help move forward we must ensure we have more consistent, open and easily accessible information. This needs to be tailored to meet the needs of both professionals and the public. Reporting needs to be sound, reliable, timely and as necessary tailored to different needs.

To reiterate, the message, ‘STAY HOME, SAVE LIVES, PROTECT THE NHS’, was easy to understand. Getting out of lockdown does not lend itself to such bold messaging. In its place what is required is considered judgement; not just by politicians but from every one of us. To aid that judgement good quality, timely information is essential...and a much more nuanced understanding of relative risk versus benefits.