WINTER AHIMI

HOW WILL PATHOLOGY AND HEALTHCARE SERVICES COPE OVER THE COMING MONTHS?

his time last year, COVID cases were about to soar. Driven by the arrival of the Omicron variant, which was first identified in the UK at the end of November, cases recorded peaked in England at 234,873 on 4 January- the highest since the pandemic began.

For context, the seven-day average at the end of August this year was 3554 nearly one hundred times lower than last winter's peak.

The NHS was under intense pressure. Ambulance emergency response times were nearly double that of previous winters, as were long waits at A&E departments, while staff sickness absence levels were also higher than usual.

Thankfully, the vaccination campaign meant that last winter fewer English NHS hospital beds were occupied by



patients with a confirmed case of COVID-19 than the previous winter (although they still occupied up to 15% of acute beds). This year's booster campaign is underway across the UK (see box on p.19), but what will happen in the coming months is unknown.

As we face an uncertain winter, we asked a range of scientists how pathology and healthcare services will cope. Here's what they said.

66

"We should use this time to recharge our batteries and prepare for the days when the outlook may not be so cheerful"

DR ELAINE CLOUTMAN-GREEN

Consultant Clinical Scientist, Great Ormond Street Hospital

"As Game of Thrones says, 'Winter is coming' and, sadly, I see winter with the same amount of dread as that series presents. The data from Australia indicate that we might have a difficult time with the number of influenza cases we might see and the jury is still out about whether 'COVID information fatigue' will impact vaccination uptake for flu, SARS-CoV-2 or both. Combined with the level of waiting list catch-up activity needed, I think we need to brace for a difficult time, in terms of an over-stretched diagnostic and healthcare system. That said, the sun is still shining and we should use this time to recharge our batteries and prepare for when the days shorten and the outlook may not be so cheerful."

SHERI SCOTT

Senior Lecturer in Biomedical Science, Nottingham Trent University

"The winter months are going to be challenging. Apprenticeship student numbers are high and my sustainability advocacy (see p.34) has grown legs. I feel the training burden for pathology will be demanding with workload increases and the uncertainty of staff wellbeing. This said, it has never been more important to shore up the skills of the workforce of tomorrow and consider sustainability in current practice."

NICKY HOLLOWOOD

POCT Manager, Harrogate and District NHS Foundation Trust

"POCT will no doubt be busy over the winter, but the big question is whether we will see a flu season materialise and if there will be a clinical need to establish rapid flu testing. Hopefully we will continue to see COVID-19 playing a less dominant role in healthcare and start to see growth and development of diagnostics services, particularly in the community."

CAROLINE FILLMORE

Biomedical scientist, Regional Virology Laboratory, Belfast

"In virology, there is a bit of uncertainty as although the COVID pandemic seems over for everyone else, we are now wondering what will happen next. Will there be much flu this year and will COVID have a resurgence? Our hospitals are still feeling the pressures so there is a worry that a bad winter with flu will be difficult to cope with. With so much change in the government, things are very unsure in the NHS, but pathology services will still strive to meet the top standards, as the staff are amazing."

MALCOLM ROBINSON

Founder, Harvey's Gang

"I believe that this winter may hold our greatest challenge to date. Why? The pathology morale is so low that we may have run out of goodwill. Our phenomenal teams responded beyond expectations through COVID times, but without recognition, pay increases and with the energy/fuel crisis, the staffing crisis and retirement, I fear for our teams. However, I have noted that Harvey's Gang tours are restarting and that is helping our teams, but won't solve the pay issues."

AZUMA KALU

Laboratory Manager (Specialised Clinical Chemistry & Toxicology), Sheffield Teaching Hospitals NHS Foundation Trust

"The toxicology service at Sheffield Teaching Hospitals NHS Foundation Trust receives and analyses the highest number of cases during the winter. Some of the cases are elderly people, homeless people and drug users who may have been found dead and these cases are referred to us by the coroners. With the energy crisis, this winter is forecasted to be difficult, so we are preparing for a potential increase in cases. We are hopeful that the combination of winter seasonal flu and COVID will have minimal effect on our workforce to enable us manage the forecasted increase in workload this winter."

DR DAVID RICKETTS

Head of Laboratory Process Improvement, Health Services Laboratories

"ISO 22367 has a section on staff wellbeing as a risk to be managed. Given the pressures on the service, the emotional drain caused by inflation and fuel costs and the risk of a spike in viral cases, this aspect of risk management needs careful consideration, as well as managing the potential of increased sickness absence. Winter is coming and we have more potential challenges than last winter, which was tough enough."

MARTYN HICKS

Regional Pathology Apprenticeship and Educational Lead (South West England), NHS England South West

"Ensuring timely turnaround of laboratory diagnostic results is key to ensure biomedical scientists do their bit. But many labs are struggling with recruitment and retention, as has been widely reported. Laboratories are increasingly looking at new ways of working to ease these pressures and the STP route is one way to ease the strain on clinical staff and has been successful where implemented. Apprenticeship routes, which are also to expand and provide a continued source of workforce to help assist with the shortfall from degree routes into the profession and



COVID BOOSTER JABS

Millions of people across the UK are being invited for their autumn COVID booster jabs, with care-home residents among the first to receive them.

Those who are eligible are being urged to protect themselves from serious illness by getting vaccines.

Moderna's recently approved "bivalent" vaccine will be used, however, there is not enough of this vaccine for everyone invited.

Those who are eligible for the booster are adults aged 50 and over; people aged five to 49 with health conditions that put them at higher risk (including pregnant women), carehome staff, frontline health and social care workers, carers aged 16 to 49 and household contacts of people with weakened immune systems. The most vulnerable are being prioritised first.

Wales started offering COVID boosters in August, while Northern Ireland followed in mid-September.

In Scotland, care-home residents were offered COVID boosters in early September, followed by health and social care workers.

England's autumn booster campaign also started in September, with 1.6 million care-home residents, staff and housebound people the first to receive their top-up COVID jab.

From this month, the NHS is also rolling out this year's flu vaccine, with eligible people able to get their flu and COVID jab at the same time, depending on local system arrangements.

appeal to a wider demographic, are increasingly popular. It's important to ensure new models of workforce delivery are continually explored to guarantee a sustainable flow of people into the profession. There are a lot of positives from the many initiatives seen across the laboratory networks, but it is currently not enough to expand and bolster what is really needed. I've asked many labs the same question: 'What is the major issue holding back training?" The answer is always the same - 'backfilling trainer time'. It requires financial input to support those in post delivering the training as laboratories are struggling to cover all the bases with the current financial thresholds."

ABI GILES

Specialist Biomedical Scientist, Royal Bolton Hospital

"I think this will be another challenging year for the health service as a whole. We don't know what the new government's direction is for the health service and the increased physical and mental stresses from the cost-of-living situation will no doubt impact service users. As a biomedical scientist within a hospital in an area that already suffers from economic disadvantage, the impact could be quite severe."

NIGEL BROWN

Consultant Clinical Scientist, Toxicology, Wansbeck General Hospital

"I fear increased hospital admissions due to hypothermia and malnutrition, particularly in the elderly. The effects of this will be compounded by lack of space in resources in care homes and respite care. I hope I'm wrong. On the lab side, I expect at least one more new illicit drug to appear – there is never a dull moment in toxicology! I hope the new prime minister will announce major funding for training in the NHS over a



Be where patients need you most

Make patient-side testing the nexus of care hospital-wide with the epoc Blood Analysis System

Patient-side testing is about more than a location. It's about staying focused on the patient. The system connects the entire team, so it doesn't matter if the laboratory staff and caregivers work in different parts of the hospital. Empowered by the epoc® Blood Analysis System, they stand together to advance care delivery.

siemens-healthineers.co.uk/epocnxs



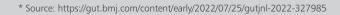
Faecal Immunochemical Testing (FIT)

A framework of recommendations for maximising the benefits of FIT

Based on evidence, updated recommendations for FIT by the Association of Coloproctology of Great Britain and Ireland and the British Society of Gastroenterology (BSG) (2022), offer guidelines for identifying patients requiring further investigation for bowel disease*

- FIT to stratify patients younger than 50 years with bowel symptoms suspicious of CRC
- FIT to be used as triage tool for further colorectal investigation at primary care level
- FIT threshold of fHb \geq 10 μ g Hb/g for urgent referral for CRC investigation
- Safety-netting for symptomatic patients if fHb <10μg Hb/g
- FIT to be used for people with iron deficiency anaemia within primary care
- Counselling to encourage completion of FIT tests
- Clinicians to actively prevent discrimination at any stage of the diagnostic pathway as symptomatic FIT

Alpha Laboratories provides a complete FIT service solution including patient packs for sample collection and return logistics. The automated HM-JACKarc analysis platform is widely recommended and ensures excellent sensitivity and specificity. Please contact us to discuss your requirements.



T: 023 8048 3000 E: digestivedx@alphalabs.co.uk







10-year period to get a new generation into all the professions. But I'm not holding my breath."

EILEEN KELLY

Medical Scientist. Royal Children's Hospital, Melbourne, Australia

"In Australia, as we leave winter behind us, I will not miss the respiratory syncytial virus, which took a toll on the children who had not met the virus during lockdown. We will get back the ICU beds we need for all the delayed surgeries - delays made worse by staff having to isolate due to COVID. Now maybe we can recover and make pathology even better... with a little help from extra funding and contingency planning for the future."

PROFESSOR ADRIAN ESTERMAN

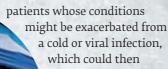
Chair, Biostatistics and Epidemiology, University of South Australia

"A recent editorial from the BMJ pointed out that 'the NHS is not living with COVID, it's dying from it'. Unfortunately, politicians no longer listen to public health advice, and with winter approaching for the UK, I am expecting case numbers, hospitalisations and deaths from COVID-19 to go up, even without a new subvariant or variant. Sad to say, Australia is going the UK route and removing all public health measures. At least we have summer to look forward to."

TAHMINA HUSSAIN

Lecturer in Biomedical Science, **University of Salford**

"The cost-of-living crisis is going to be a worry and the winter months will be difficult, especially for those



potentially result in a surge of hospital admissions. This will have an impact on the healthcare facilities and pathology services."

BAMIDELE FARINRE

Lead Biomedical Scientist, Halogene, I-HUB,

"There is a need for urgent (66 preparation to mitigate the risks of a particularly challenging winter. This will include developing effective policies to maximise population participation in essential control measures, such as physical distancing, wearing face coverings in settings where physical distancing is not possible and regular hand and respiratory hygiene, among others."

RICK LOVIE

Network Deputy Quality Manager, York Teaching Hospital NHS Foundation Trust

"Recently I have had the privilege of working with the microbiology team. The challenges the team are experiencing can seem daunting, especially with COVID, winter flu and relocation of services. I have learnt a lot i n my time with the team and have been inspired by the dedication they display. Therefore, I hope, regardless of where we all find ourselves over the winter months. that we can work with their same resilience and professionalism."

DR CHRIS MOORE

Programme Leader, BSc Biomedical Science, UWE, Bristol

"An issue the service faces in the coming winter months is simply capacity. It is already deeply embroiled in

"I hope the new prime minister will announce major funding for training in the NHS over a 10-year period to get a new generation into all the professions. But I'm not holding my breath."



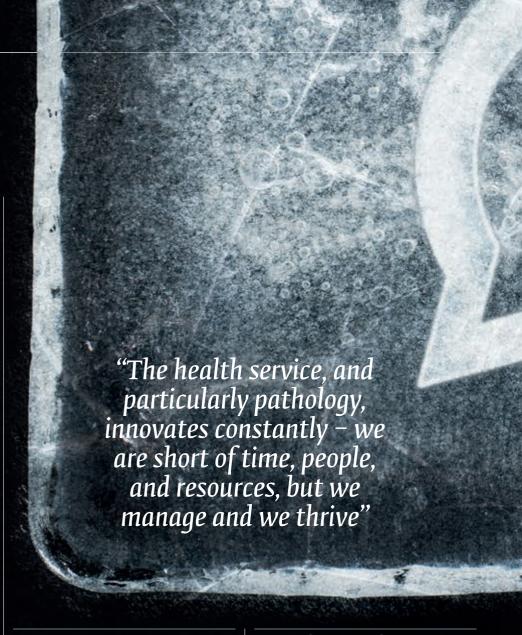
SCIENCE Cover feature

trying to keep up with the backlog from the last few years and will now have the 'usual' winter escalation to cope with. But labs have finite equipment, and finite space within which to have the people doing the work to operate in. You can't simply employ 10 more biomedical scientists to help because they won't have the kit to process the specimens or the physical space to move about in. On top of that, the workforce remains understaffed due to the severe limitation on portfolio training roles for undergraduate and graduate students on accredited courses. It's going to be tough in the coming months. The service will need major influxes of finances and resource to cope and to grow. I think the public often forgets the crucial role that middle piece plays - without effective and efficient diagnostics, people will remain untreated at home or in hospital beds."

IAN DAVIES

Healthcare Science Course Leader, Staffordshire University

"I've no doubt that this winter will bring many challenges to pathology teams, with unprecedented demand together with seasonal clinical and workforce pressures. That said, I'm sure that the agility and resolve that the workforce demonstrated during COVID will provide the drive to tackle these challenges in ways we haven't seen before, for example through wider integration with clinical teams, developing innovative solutions and driving system changes to improve workflow. Most importantly, especially with concerns related to the cost of living and current events, we need to remember the lessons learnt during COVID - looking after ourselves, our colleagues and our teams, placing wellbeing at the top of our agenda, and remembering that our care for our patients is dependent upon our care for each other and ourselves."



MARTIN MALEY

Senior Lecturer in Biomedical Science University of Sunderland

"From a university perspective, we continue to see evidence of a squeeze on staffing in the NHS, which impacts student and trainee grades. There are fewer placements available, mainly because NHS pathology labs need to have the staff available to mentor the students. This means there will be fewer graduates with lab placement experience. Applied biomedical placements remain unpaid, which also means that we did struggle somewhat to get students to apply for these in a time when there is a cost-of-living crisis. When talking to NHS colleagues about supporting university lab days, there is also ongoing evidence of problems sourcing equipment and reagents in a timely fashion."

MATT GRIFFITHS

Principal Lecturer in Cellular Pathology, Nottingham Trent University

"The health service, and particularly pathology, innovates constantly – we are short of time, people, and resources, but we manage and we thrive. We find new ways of working: faster, better, cheaper; we change our processes; we react to the research. We work as a team, supporting each and we know how many procedures depend on our results – we are integral to the health service. As a team, we step up to these challenges to give patients the best care."

ZOE ANDREWS

Trainee Biomedical Scientist, Microbiology, States of Guernsey



"I think the winter months hold uncertainty for pathology. We know



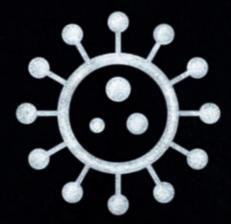
flu season is upon us, so our microbiology department will have a larger workload, but we also need to be present for staff at a human level throughout the winter months to ensure their wellbeing."

JONATHAN M EVANS

Lead Biomedical Scientist/Operational Manager, Wales Specialist **Virology Centre**

"This winter could easily be the most challenging the NHS has ever faced. With numerous vacancies across the service and staff still recovering from the pandemic, it is going to be a tough winter. From a virology viewpoint, Australia has just had its worst flu season in five years, which could foreshadow what we're about to experience. Also, COVID is definitely still here, so it's going to be busy in our labs. I wish everyone in the NHS the strength to get through it."

"As a team, we step up to these challenges to give patients the best care"



RICHARD WARDLE

Pathology Manager, South Yorkshire and Bassetlaw Pathology

"With COVID still a real threat, not only to patients but to our staff, we will have to dig deep to ensure we maintain the quality services the NHS has become accustomed to from pathology. Whilst we should never take it for granted, one thing the last couple of years have shown everybody outside pathology, something we already knew from the inside, is that our services are renowned for their resilience. Pathology personnel are something else and that is what will see us through to the Spring."

CARMELA DUFFY

Virology Discipline Manager, Royal Victoria Hospital, Belfast

"I believe the laboratory workload will continue to grow and evolve over winter. Diagnostic planning for winter 2022-23 must take into account concurrent SARS-CoV-2 and influenza activity. Normal epidemiological cycles of winter viruses continue to be disrupted with RSV circulating in July. Many of the skills we developed through COVID will be tested again. These skills of adaptability, responsiveness and resourcefulness will allow us to meet the needs of our patients even in the challenging winter ahead."

EMMA VICTORY

Team Lead, UKHSA Malaria Reference Lab & LSHTM Diagnostic Parasitology Lab

"I expect we will see the same challenges as last year - more COVID infections, more stress, more staff shortages... One of the positive outcomes from the pandemic has been increased compassion and greater connection between teams and colleagues. It is important to acknowledge workplace stress and offer practical solutions to support staff wellbeing - not just

NHS ACTION

NHS England's core objectives and actions are to increase capacity and resilience.

- Prepare for variants of **COVID-19 and respiratory** challenges, including an integrated COVID-19 and flu vaccination programme
- Increase capacity outside acute trusts, including the scaling up of additional roles in primary care and releasing annual funding to support mental health through the winter
- Increase resilience in NHS 111 and 999 services. through increasing the number of call handlers
- Target Category 2 response times and ambulance handover delays, including improved utilisation of urgent community response and rapid response services, the new digital intelligent routing platform, and direct support to the most challenged trusts
- Reduce crowding in A&E departments and target the longest waits in ED by improving use of the NHS directory of services, and increasing provision of same day emergency care and acute frailty services
- Reduce hospital occupancy, through increasing capacity by the equivalent of at least 7000 general and acute beds
- Ensure timely discharge, across acute, mental health, and community settings
- Provide better support for people at home, including the scaling up of virtual wards and support for High Intensity Users with complex needs.

resilience training. We need to lean into the positive changes and continue to care for each other as well as service users."

CHERIE BECKETT

Acting Senior Biomedical Scientist, Microbiology, The Princess Alexandra **Hospital NHS Trust**

"The demands on the healthcare service are traditionally amplified during the winter months, but this year, as in recent years, what one typical time of year used to indicate, is less so the case. 'Seasonal' viruses such as influenza, RSV and norovirus, have been seen throughout the year, but I would still imagine will peak in the winter months and perhaps COVID-19 too. With the cost of living and energy prices rocketing, it is saddening to think that the healthcare system may see more cases of illnesses associated with a reduced food intake and hypothermia. Pathology sample numbers will increase, but the foundation on which COVID-19 high-throughput laboratory testing and point-of-care testing has been stepped up hopefully means that for some tests (notably respiratory viruses), workload might be more manageable in some ways."

MARTINE JENSEN

Higher Specialist Biomedical Scientist, Hull University Teaching Hospitals NHS Trust

"The upcoming winter months will be challenging, as being post-COVID the winter viruses may be difficult to predict. But what COVID has taught us is that pathology can handle anything and I am sure that whatever is coming our teams have the ability to overcome it."

DR MARK HAJJAWI

Head Biomedical Scientist (Specialist Services), SHYPS



"The summer of 2022 has been a mixed period for the specialist diagnostics service I lead. The post-COVID-19 catch-up has led to a record high workload as the NHS strives to clear the backlog. Even with this high workload, we have had a sense of normality we have not seen for a couple of years: grant applications have been written, clinical audits conducted, and improvement projects completed. Summer is now over and once again the dark spectre of winter respiratory viruses is upon us. The cancer catch-up must continue despite the predicted spread of respiratory viruses through the population and the workforce; this will result in significant strain on the service. NHS staff will also face an unprecedented assault from inflation and the increasing cost of living. We will all be squeezed at work, and at home, to do more with less. As biomedical scientists, we will deliver excellent clinical care for patients, as we always do, with creativity and tenacity, perhaps doing our brightest work of the year in the darkness of winter."

DR GUY ORCHARD

Consultant Biomedical Scientist, Operations Manager, Tissue Sciences Head of Education, St. John's Dermatopathology, Viapath

"We are going through a bumpy time, and it looks set to continue for the next few months. We have supply chain issues, partly as a result of the ongoing fallout from Brexit, but also the effects of the war in Ukraine. A case in point is the ongoing national shortage of paraffin wax, which is causing severe headaches for histopathology managers. Coupled with this is the ongoing catch up with our cancer work that we're still working through as a consequence of the COVID pandemic. There is also a national shortage of qualified biomedical scientists that are now required to engage in more complex working environments. All of these factors have developed and expanded quite swiftly making the

process of providing services difficult to deliver. I would predict that pathology services will be working under even greater winter pressures than normal this year. I would love to offer some positive words, but the next few months look pretty challenging to me. In effect, most of these changes are not easy to control or predict and as such the focus should be on managing what we can control."

ASHLEY BALLARD

Senior Biomedical Scientist, Cellular Pathology, University Hospitals Dorset NHS Foundation Trust

"With a background of high energy prices eroding budgets, ongoing staff shortages, record waiting lists and the looming possibility of strike action, this winter looks like it could be one of the most challenging in recent memory for the NHS. Traditionally, cellular pathology would not be significantly impacted by the normal winter pressures. Although more staff would be sick during this period, there would not be huge seasonal variations in workload. However. with the drive to reduce elective waiting lists post-COVID, cellular pathology is now facing a huge surge in workload. Combined with normal winter sickness and increasing levels of staff burnout in what is still a very manual discipline, we potentially face a perfect storm this winter in cellular pathology. We are already starting to see the first signs of this with laboratory backlogs becoming more frequent and turnaround times increasingly more protracted. However, despite all the doom and gloom there is hope on the horizon. There are ongoing projects to improve cellular pathology services, with initiatives such as digital

pathology, advanced roles for staff, and equipment modernisation hopefully helping to boost productivity. So, while winter could be dark and desperate, we are hopefully facing a brighter spring."

DAN SMITH

Haematology Manager, Oxford University Hospitals

This winter will be a difficult one for pathology. While hoping COVID levels do not approach those seen in 2020 and 2021, there is an expectation of an increase in COVID and other respiratory infections leading to an increase in testing. The traditional pressures of increased winter illness will happen. Haematology and chemistry colleagues will be supporting very busy services in A&E and other acute access areas. Initiatives to expand access to primary care will create increased demand at non-traditional times with phlebotomy increasingly available at weekends. A network of community diagnostic centres is coming online and, while the main focus is radiology, most will provide more open-access phlebotomy to support additional access after the last two years of disruption. Elective waiting lists are at record levels and the NHS nationally is signed up to try to eliminate all waits of more than 18 months by March 2023 (a long way from the previous 18-week standard). This is going to lead to competing priorities between elective and acute cases and pathology under pressure to support both simultaneously."

MADIHAH ABBAS

Specialist Biochemistry Team Manager, The Christie Pathology Partnership



"The biggest challenge in winter for the NHS will be maintaining a "We will
deliver
excellent
clinical care
for patients,
as we always
do, with
creativity
and tenacity,
perhaps doing
our brightest
work of the
year in the
darkness
of winter"





"As a workforce we will need to adapt by strengthening compassion and the inclusive culture and looking at new ways of working"





robust service that can cater to demanding turnaround times within emergency departments in health and social care trusts, with an expected rise of potential COVID/flu A/B cases and increased general activity. There is also a lack of experienced biomedical scientist staff who can fulfil advanced roles. As a workforce we will need to adapt by strengthening the compassionate and inclusive culture and looking at new ways of working alongside investing more within our immediate workforce to ensure they are equipped with the necessary skills to facilitate our journey through winter."

DAVID WESTRIP

Senior Biomedical Scientist and Training Manager, Microbiology, **East Kent University Hospitals NHS Foundation Trust**

"Microbiology departments this winter bring a degree of uncertainty as we adapt to fluctuating demands whilst continuing to provide an effective, patient-focused service. The legacy of SARS-CoV-2 and the pandemic response means we are still reacting to changing patterns of traditionally seasonal pathogens; winter pressures seem to come earlier each year and who knows what

new demands flu will make on already very busy laboratories. All this on a pretence of returning to business as usual. Staff originally taken on in fixed-term positions to support the COVID testing, having acquired useful skills and training, are now reaching the end of these contracts. Losing these staff now as additional funding dries up may prove to be short-sighted in the long term."

NICKI LAWRENCE

Principal Biomedical Scientist Advanced Practitioner in Morphology, Haematology, University Hospital of North Midlands NHS Trust

"The winter months ahead will continue to be a challenging time for pathology and the NHS as we continue to face winter pressures from seasonal flu and the lasting effects of COVID-19. From a personal perspective, my winter will be spent continuing to provide our usual high-quality service in haematology, whilst also focusing on service development again, which I feel took a hit while we battled through the pandemic."

COLIN MUDD

Higher Specialist Biomedical Scientist, Nottingham University Hospitals NHS Trust

"From a personal perspective, I feel rather uneasy, and certainly apprehensive. It is one of those occasions when I would prefer to be wrong and the wisdom of hindsight shows that my fears were unfounded. That is to say I am concerned that staffing will not markedly improve and that the pressures on our hospitals and all those businesses that provide us with vital supplies will not ease. That's on the negative side. On a positive side, we have shown what we are capable of doing - being a tremendous contributor to the health of the nation. and, by working effectively together, if needs be... we can do it again..."