

THE Pulse

Issue 96
August 2020

In this edition:

Thank you for your support
Life at NNUH
Preparing for the pandemic
Restoring our services
Building for the future



**Norfolk and Norwich
University Hospitals**
NHS Foundation Trust

Food and drink

Feast@: West Atrium Level 1, open daily 7am - 1am

Feast@ the Deli: West Atrium Level 1, open Monday – Friday, 7am-3pm

Feast@ Café Bar: Outpatients East, open Monday - Friday, 7.30am - 4.30pm

Coffee House: Plaza (West), open Monday - Friday, 7am - 6.30pm; Saturday, 9am - 4.30pm; Sunday, 9am - 3.30pm

Little Costa: Outpatients West, open Monday - Friday, 7am – 5.30pm

The Pod: Plaza East, open Monday – Friday, 7am - 8pm; Saturday, 9am - 6pm.

Shopping

WRVS: East Atrium, open Monday – Friday, 8am - 8pm; weekends, 10am - 6pm

WH Smith, M&S Food: Plaza (West), open Monday – Friday, 7am - 7pm; Saturday, 9am - 5pm; Sunday, 9am - 4pm

The Stock Shop: West Atrium Level 2, open Monday – Friday, 9am - 5pm; Saturday, 10am - 3.30pm.

Services

Cash machines: East Atrium, Level 2, WHSmith and the Main Restaurant

Lost property: Call 01603 286803 or ext 2803

Patient Advice and Liaison Service (PALS): For confidential help and advice call 01603 289036

Chapel: Open to all. For details of services or to contact the Chaplains call ext. 3470 Cromer Hospital, Call 01603 646200

Hospital Radio Norwich: To request a song or a bedside visit, call 01603 454585 or from your Hospedia bedside unit dial *800.

Contact us:

The Pulse Editorial team: call 01603 289821 ext. 5821, email Communications@nnuh.nhs.uk.

The Pulse is funded entirely from charitable donations: N&N Hospitals Charity, registered charity number 1048170

Norfolk and Norwich University Hospital
Colney Lane, Norwich, Norfolk, NR4 7UY
Tel: 01603 286286; Website: nnuh.nhs.uk

Cromer Hospital, Mill Road, Cromer,
NR27 0BQ
Tel: 01263 513571.

Please note that all opening times are currently subject to change.



Letters and Social media

@NNUH



“ My visit today was managed from start to finish with such great care, kindness and efficiency. Heroes still, and always.

DW

I did not have an issue coming into the hospital during the pandemic and the staff were brilliant. It was reassuring being at the top of the hospital [elective wards on Level 4 Centre Block].

JG, who had an operation in June after elective surgery was restarted

NNUH has seen its fair share of challenges over the years but Covid-19 is top of the scale. You've all always been amazing and it's about time this was recognised. Thank you so much for all you do and stay safe all of you.

JN

Wow, amazing people in an amazing hospital, so proud of all our NHS staff.

RE

Thanks, you're all doing a fantastic job, where would we all be without you all?

SS

Thank you just doesn't seem enough, you are all wonderful people and are doing an absolutely amazing job, the sooner this horrible virus has gone the better for everyone, and hopefully all you NHS staff will get a well-earned break.

MP

We all admire and feel very grateful for all the work you are doing in a dedicated and caring way, putting your lives on the line to keep us safe.

LO



KD wrote a letter to every ward and department in the hospital, which were shared with each team - pictured above.

We say 'thank you' too



The 72nd birthday of the NHS on Sunday 5 July saw the public thanking the NHS and everyone who helped us respond to the pandemic.

We added our own thanks to all those who supported us, including the public, our NHS and social care partners and our colleagues on Norwich Research Park.

Scan this code to watch a message from 20 members of staff, including nurses, allied health professionals, midwives, doctors and the Executive team.



We Care Together - a record of our times

We're one of the region's healthcare providers who contributed to "We Care Together", a record of how Covid-19 impacted health and social care staff, compiled by the Norfolk and Waveney Health and Care Partnership.

Here's what some of our staff said:



Rebecca, Consultant: **"I think dealing with Covid-19 taught me a lot about how resilient we can be, despite the fact that we may be going through a worldwide crisis and also in personal crises and how we come to work trying to be positive and have a smile on our faces and overall, just be kind."**

Sonnet, Staff Nurse: **"When I sit in my room and listen to the news, it can sound really scary. But coming back to work – it is really happy because we feel really relaxed, but careful and cautious. It is still scary (back home in India) but when my relatives talk to me they feel relief and I don't want to make them scared. It is very difficult for them to adjust but things seem to be ok at the moment."**

Emmie, Healthcare Practitioner: **"The exciting thing was seeing how wards got together from different departments, training and up-skilling other members of staff and giving others the confidence to see where they can support during this crisis. It hasn't been easy for me personally, it has been really tough. I come from a background with two of my siblings and mother having sickle-cell anaemia, so they are at high risk. So, I haven't seen them in the last three-four months and it has been really, really hard."**

You can read more stories on the project's Instagram page (www.instagram.com/wecaretogethernw/) and look out for exhibitions across the region.

Thank you to all our Volunteers

When the pandemic struck in March, we had to say a temporary goodbye to most of our 700 Volunteers, who support staff and patients throughout the hospital.

"We needed to restrict the number of people in the hospital and, as many of our Volunteers are either over 70 or have underlying health conditions, protecting them was our priority," said Sally Dyson, Voluntary Services Manager.

Some Volunteer Drivers did remain to perform vital services, such as delivering prescriptions to patients in the community.

"It was really rewarding to see how grateful people were to get their medicines," said Volunteer Driver David Knights. "Some of our oldest patients told me they wouldn't have been able to get their medicines if it wasn't for us." Now that the hospital is returning

to normal and we can once again offer a safer environment, we will soon be welcoming some of our Volunteers back – and would also love to hear from you if you'd like to join us. In addition to training, every Volunteer will have a personal risk assessment. Roles include working in reception areas, driving, and helping patients to complete forms over the phone.

If you're interested, please email Voluntary Services on Volunteers@nnuh.nhs.uk or call 01603 286060.



It seems a long time since I wrote my last column for the Pulse magazine - so much has happened since February.



It was great news in May that we were removed from special measures. Teams worked hard and made sustained and significant quality improvements in patient care which were recognised by the CQC and I am so proud of everyone here for this achievement. We are focusing on getting to "Good" next year and, as our Quality Strategy says, are working towards an "Outstanding" rating in 2023.

Of course the most significant change we've all encountered in the last few months has been Covid-19 and its impact on our community, our staff and all our lives.

You'll see throughout the pages of this edition what life at NNUH was like in the time of Covid, with story after story of our staff delivering fantastic care in tough circumstances. Everyone has worked very hard, and I would like to give them my personal thanks.

We are still caring for a small number of patients who had Covid and are now on the road to recovery, but even though the numbers are much reduced, evidence points to the likelihood of a second peak and we know we need to be prepared for more potential cases in the autumn and winter, and how we live and work with Covid in the longer term into next year.

We're beginning to resume and restart a range of clinical work, albeit not at the same levels yet as previously as it's crucially important to keep our staff and patients safe by sticking to social distancing and appropriate infection prevention and control measures.

I would like to thank you for all your support at this time, and our amazing staff who give dedicated, high quality care at our hospitals every day.

**Sam Higginson,
Chief Executive, NNUH**

Thank you everyone for all your support

The support we received throughout the height of the pandemic from members of the public and businesses helped staff come through a very challenging time.



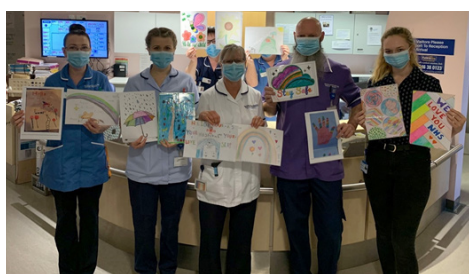
"Knowing they were appreciated made such a difference to everyone, whether it was through the weekly 'Clap for Carers', the many hundreds of letters and pictures expressing thanks, the thoughtful gifts or the inspiring efforts people made to raise funds for our Hospitals Charity while under lockdown," said Louise Cook, Head of Fundraising. These are some of the ways you supported us:

Clap for Carers:

As well as huge support from people standing outside their homes clapping, banging pots and playing musical instruments, the police, fire brigade, East Anglian Air Ambulance and Konnect buses all visited us in the Plaza.

Messages and pictures:

We received hundreds of cards, letters and pictures expressing thanks and support – all were shared and really boosted morale.



Gifts for staff:

Gifts from the public and local businesses included Thai restaurants providing free meals for staff on Thursday evenings, 10,000 Easter eggs, coffee, flowers, toiletries, cakes, healthy snacks and chocolate – even signed shirts for each ward from Norwich City Football Club. Free online yoga and boxing classes were also offered to help staff.



Virtual raffle:

The football world is raising funds for our Acute Oncology Service, with former England footballer Joe Cole and BT Sport presenter and Norfolk-born Jake Humphrey among those backing the appeal.

Teams donated prizes as part of a campaign led by David Giess, who worked in the football industry, in memory of his wife, Anne, who was treated here for ovarian cancer.

Support from our partners on Norwich Research Park:

Colleagues from across Norwich Research Park supported us in a wide range of ways, including UEA providing accommodation for staff who needed to isolate between shifts to keep their family safe, parking spaces, help with training and making supplies of hand sanitiser. More than 170 scientists volunteered to help us with staff testing, using laboratories at the Bob Champion Research and Education building.

Responding to appeals:

We were overwhelmed by the response from the public to help patients and their loved ones feel closer by knitting or crocheting pairs of hearts, making face coverings for staff to wear when travelling to and from work on public transport, and sewing bags so they could safely carry their uniforms home.

Raising funds for the Hospitals Charity:

The lockdown didn't deter our supporters from raising much-needed funds for our Hospitals Charity, with many finding imaginative ways to do so.

Seven-year-old Ethan raised £510 by completing a bike ride, walk and skip, while nine-year-old Phoebe climbed 1,300 flights of stairs in a week.

When the VE Day celebrations at Buckingham Palace were cancelled, 96-year-old army veteran Brian Garrad raised more than £2,000 by walking 10 miles in 70 laps of his daughter's garden.

Staff at Swaffham-based travel company "One Traveller" completed a virtual 105-mile charity walk, raising more than £5,000 for our Neonatal Intensive Care Unit, and Sue Gresham raised more than £2,500 by completing a 125-mile virtual walk with her husband while shielding at home in 48 days.

Taking inspiration from "Star Wars", Rob Sears and Loren Taylor of "Focus 4 Fitness" launched "The Empire Strides Back" challenge on 4 May to complete a marathon distance by the end of the month, raising £5,000.



What your support means to us



"Everyone I work with is so grateful that the public are showing their appreciation for what we do. I felt very emotional when the first clap for carers happened. I was still at home that week and I stood outside clapping for all the other carers – and everyone working across the community."

Thinking about it now still makes the hairs stand up, I can feel my skin tingling. It's really lovely to hear and feel that appreciation. But at the end of the day when we go back inside we all feel like we're just doing what we've always done. And people have been so generous with their gifts and donations. It's been so nice that people are recognising the work the NHS does."

Jennie Smith, Operating Department Practitioner in the Intensive Care Unit



"In my 26-year career, I've never felt so appreciated by the public. I hope this positive feeling will remain strong once this outbreak is over and people will continue to value the efforts and sacrifices that all NHS workers do every day."

Jo Trundell, Matron



"During this this period, we've had a thousand shower gels, hand creams, healthy drinks and coffee machines come here for all our frontline staff. These are small gestures that generate the biggest smiles."

Lisa Stokes, Deputy Sister



"I never felt so much appreciation from the public in my whole nursing career. I remember at the beginning of the lockdown it was challenging to get food, so I went to one of the supermarkets who has a dedicated NHS hour and the manager welcomed me at the front of the store with flowers. It was a wonderful gesture and such a big morale boost after working a long shift on the ward."

Mel Griggs, Sister



"I am truly humbled by the overwhelming generosity we have received from thousands of people. The donations to us have been awe-inspiring, with so many practical goods and services to help us through these difficult times. We have felt the

love from the community every step of the way as we have tackled the challenges posed by the pandemic."

Prof Nancy Fontaine, Chief Nurse



"On behalf of the Trust, I want to say a massive thank you to everyone who has helped us through this difficult time and pay tribute to the extraordinary levels of support we have received from the wider community across Norfolk and further afield. We remain united and resilient with the support

of all those who were ready to help us tackle the hardest and longest-lasting challenge that has confronted the NHS in its history."

David White, Chairman.

Please keep supporting us

We still need your support and there are lots of ways you can help us, including shopping with Amazon Smile (smile.amazon.co.uk) who will make a donation for every purchase you make if you select us as your chosen charity, leaving a gift in your will or doing something to raise money.

Every penny is spent on our hospitals to make a difference to patients, staff and visitors.

**Find out more on the
Norfolk & Norwich
Hospitals Charity website
(nnuh.org.uk)**

N&N
Norfolk & Norwich
Hospitals Charity



Expert view: Dr Samir Dervisevic, Consultant Virologist and Clinical Lead for Virology

Our Specialist Virology Centre, part of the Microbiology Department and a broader network called the Eastern Pathology Alliance, is primarily responsible for testing patients' samples for evidence of viral infections, providing clinical expertise and guidance to clinicians. The team covers Norfolk's three acute hospitals and around 125 GP surgeries in Norfolk and Waveney. Since the outbreak began the team has focused almost completely on Covid-19 testing, working from 6am to midnight, seven days a week, to ensure that samples from the public, patients and key workers – currently around 900 a day – are tested within 24 hours. Virology is also involved in several research studies aiming to understand the epidemiology of the SARS CoV-2 virus to help control its spread and contribute to vaccine development.

"When the first cases started appearing in the UK in late January, we began closely collaborating with the scientific institutions across Norwich Research Park (NRP) on diagnostic work and research projects.

"We'd closely followed progress of the virus in China, very aware it had global pandemic potential, and worked hard to ensure we could help all three Norfolk Trusts when the outbreak inevitably arrived.

"Initially, all testing was centralised by Public Health England but in February our SARS CoV-2 testing technology was finally validated and we were given the green light to begin testing ourselves. The pressure to get results as fast as possible was huge and testing locally meant we halved the time it took. Our colleagues in Cytology and Bob Champion Research and Education (BCRE) shared the testing burden. Bacteriology staff and volunteers from the Earlham Institute and NRP also helped with diagnostic work.



Dr Samir Dervisevic, Consultant Virologist and Clinical Lead for Virology (third from right) with Virology team colleagues.

How we become infected

"We very quickly learned about the infectious potential of this emerging virus. Knowing how a virus is transmitted is crucial to controlling its spread and the studies published in the spring indicated that people are at least as infectious 48 hours before showing symptoms as they are once they begin to feel unwell. Furthermore, according to experiments in monkey cells, individuals are unlikely to spread the virus if more than eight days have passed since their symptoms began.

"The route of transmission is also extremely important, and we now know that exhaled droplets are the main way the disease is spread, so even talking can facilitate transmission. The most easily infected cells are in the nasal cavity – that's where we catch it. The virus gets a foothold then spreads down the respiratory tract to the lungs.

"It infects us by using the viral Spike protein to attach to the ACE2 human receptors, which are present throughout our body but abundant in the lungs, and invades our cells. Crucially, these receptors are also in the lining of our blood vessels, which is how the virus can cause complications.

"Two teams of researchers have reported that another human protein, NRP1, also aids invasion - important knowledge for developing treatments and vaccines.

Understanding the virus

"To understand the origins of the UK outbreak, local Virologists are helping provide biological material to the Quadram Institute research team, part of the Covid-19 Genomic UK (COG- UK) , a consortium working on the large-scale genome sequencing of the virus. This has enabled us to learn more about the spread of the virus, and we discovered that it has jumped to the UK more than 1,300 times, mostly from France and Spain.

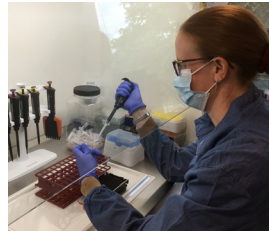
"We're also part of the UK Clinical Characterisation Protocol (CCP-ISARIC) designed to collect data on patients with severe or potentially severe infections to build our understanding of how the virus manifests itself. Thanks to our Research Nurses, we've collected samples from 460 patients.

"Finally, our Virology team has been working with scientists at the BCRE and UEA to characterise the SARS CoV-2.

Fighting the virus

"A huge amount of time and resources are focused on finding an effective treatment and so far one drug, dexamethasone, has proven effective. However, there are at least 15 vaccines currently at different stages of clinical trials, and this is the most promising way to halt the global spread. I'm very hopeful that we'll see positive results much faster than the 18 months it normally takes to develop a vaccine.

"We hope to be part of some of these clinical trials, when volunteers are given two doses of the vaccine and their antibodies are measured. The body produces different types but only 'neutralising' antibodies provide immunity by blocking the Spike protein the virus uses to invade our cells. The vaccine is supposed to elicit neutralising antibodies.



"Current routine antibody testing tells us whether someone has had Covid-19 infection, but not if they developed immunity. Generally, the studies show that patients who've had moderate and severe infections test positive for antibodies and around 10% who've had a very mild infection may not produce detectable antibodies.

"It's useful as it shows how many people have developed Covid-19 infection. Currently, prevalence is relatively low.

Spread of the disease in the body

"Covid-19 is principally a respiratory disease and has many similar symptoms to other respiratory viruses, which is why some people mistakenly believe they've had it. However, while the virus is mostly found in the lungs, in many patients it spreads to the kidneys, liver, heart and brain. It can invade blood vessel cells and cause a clot formation and damage to organs, including stroke symptoms.

"A number of medical conditions, such as diabetes, raise the risk of serious illness and death – and on a global level around 20% of the population has at least one underlying condition. A team from the London School of Hygiene and Tropical Medicine estimated that 1.7 billion people worldwide have an elevated risk of severe illness.

What may lie ahead

"In Norfolk we're fortunate to have missed the worst of the pandemic, but cannot relax because our herd immunity is relatively lower. It's somewhat difficult to predict what may happen as several factors need to be taken into consideration. However, if we successfully develop a vaccine it will be a game changer.

"Learning from examples has provided some hints. For instance, in France scientists at the Pasteur Institute showed that the lockdown reduced the spread by 77%. In mid-May the infection rate was roughly 5%, well short of the two-thirds needed for herd immunity, meaning current herd immunity could not prevent virus resurgence.

"In the UK, up to 20% have evidence of antibodies so we need to be cautious. Clusters are most likely where people gather in close proximity. **Studies show that 41% of people who transmit the disease don't have symptoms, so good hygiene, social distancing and masks are tools we must use to fight the spread.** The Test and Trace system is also crucial as it enables us to target pockets of infection. Together we can, and ultimately we will, control this virus."

At the forefront of Covid-19 research

We're proud to be playing our part in vital research to help improve care for patients seriously ill with Covid-19.

We're involved in 16 clinical trials and research studies, the biggest being RECOVERY (Randomised Evaluation of Covid-19 Therapy), which is testing existing drugs to see if they are an effective treatment.

More than 50 of our patients have enrolled onto the study, which is run by researchers in Oxford and is funded by the National Institute for Health Research (NIHR). The first significant results found that the steroid dexamethasone cut the risk of death by a third for patients on ventilators and a fifth for patients on oxygen.



Dr Eleanor Mishra, Respiratory Consultant, said: "We're proud to be playing our part in this significant study. The use of low-dose dexamethasone will reduce mortality worldwide, as this is a cheap and readily available drug. It's now available here for treating patients on oxygen or who require ventilation."

As part of the trial, we've permission to treat patients with plasma from people who have recovered from the disease. We're also one of the country's top recruiters to the GenOMICC study (Genetics Of Mortality In Critical Care), which is being co-ordinated by the University of Edinburgh and looking to find the genes that cause susceptibility. Georgina Randell, Critical Care Research Sister, said: "Even though relatives are aware that this study will not directly benefit their loved ones at this very difficult time, we have had an incredibly positive response. They are keen to help find what causes some people to become more ill than others. They want to help find the gene."

Supporting patients and relatives throughout the pandemic

Giving patients and their loved ones the support they needed during the height of the pandemic was one of our key priorities. These are some of the services that helped them keep in touch – and are still available now.

Virtual Visiting

Our Virtual Visiting means our patients can keep in contact with their family and friends using iPads – many generously donated to us.

The Relatives' Liaison team

We launched this important new service in April, with the team acting as a link between patients' relatives and ward staff by keeping in daily contact with them to provide reassurance and peace of mind when they couldn't visit and offer pastoral support.

"We knew that so many people in our community were anxious and worried, unable to visit loved ones, and with this service we reassured people that those closest to them were being well cared for," said Stuart Callow, who leads the team.



The Relatives' Liaison team: from left to right, Judith Gowlett, Laura White, Maxine Corder (seated), Stuart Callow and Annette Liddiment.

Best wishes service from PALS

It's easy to leave messages for anyone you care about who's in hospital, because the PALS (Patient Advice and Liaison Service) team is here seven-day-a-week to ensure they receive best wishes from relatives and friends, which they can leave on our website or email to pals@nnuh.nhs.uk. Since the lockdown began on 23 March, more than 300 patients have been cheered up by messages sent in this way.

Would you like to join our Carers' Forum?

We want to understand how we can better support the people who care for our patients, so we've relaunched our Carers' Forum, which meets every two months to discuss ideas and give feedback on what we're doing well, ways we could improve and new initiatives, such as the Carer's Passport we launched in 2018.

If you're a carer and would like to join us, we'd love to hear from you - please email Patient.Experience@nnuh.nhs.uk

Meetings last around an hour and a half, with the option of being there in person or virtually.

If you're not able to commit to this, please do still get in touch if you're happy to join our wider group giving feedback on our written communications and ideas.

Positive feedback from patients

During the Covid-19 outbreak, feedback from patients, their families and carers was more important than ever and helped ensure that we kept delivering the best possible care in difficult times.

"Families who contacted our Relatives' Liaison team appreciated and valued the service they provided when they couldn't visit," said Ruby Allen, Patient Engagement and Experience Facilitator.



"They described the team's service as **'brilliant'** and **'a lovely idea'** and said the support they received from us has been **'really reassuring'** and that they felt **'very much better thanks to the information received'**.

"Many families who expressed gratitude for this service said they benefited from **'talking to someone about normal things'** which has helped those who, at times, felt 'cut off at home' during the lockdown."



Happy to welcome visitors back again

We're happy to welcome visitors back to our hospital, although restrictions are in place to keep everyone safe.

"We're delighted that we're in a position to enable our patients to see their loved ones while in hospital, it's of huge benefit to their wellbeing," said Sarah Higson, Lead for Patient Engagement and Experience.



"Of course, we will continue to put safety first by adhering to strict infection control protocols and ensuring that we maintain social distancing. We also strongly encourage people to keep in touch using their own phones, our Virtual Visiting service, PALS messages and via the Relatives' Liaison team where possible."

To keep everyone safe, all visits last a maximum of one hour and must be booked 24 hours in advance via the ward, with one visitor per patient (preferably the same person each time). Patients on Covid and surgical wards cannot receive visitors, but there are also exceptions when visiting can take place outside these restrictions.

These special circumstances include where patients are receiving end-of-life care or deteriorating, those with a mental health issue such as dementia, a learning disability or autism, parents with babies in the Neonatal Intensive Care Unit (NICU), parents or appropriate adults visiting their child and birth partners during a birth and on ante and post natal wards."

All visitors are asked to wear a face covering inside the building, to wash or sanitise their hands on entering and leaving, and to go directly to and from the ward – and of course we ask people not to visit if they have any Covid-19 symptoms or have been contacted to self-isolate via Test and Trace.

To make an appointment, call the ward directly from the list of telephone numbers on the hospital website (www.nnuh.nhs.uk) or through our Switchboard on 01603 286286.

Some staff were separated from their loved ones

Many staff continued working throughout the pandemic even though it meant being separated from their loved ones, who were isolating or had Covid-19 symptoms.

They stayed away from home in hospital accommodation, hotels or, like Physiotherapists Sarah Walkeden and Chloe Ranger, in student rooms at the University of East Anglia.

"I spent two weeks at UEA when my daughter spiked a temperature and subsequently tested positive for Covid-19," said Sarah.

"By moving out I could avoid the household isolation and keep working during a crucial period. It was very odd timing, because as I was leaving home to move in to the UEA accommodation it coincided with everyone being out on their doorsteps clapping for the NHS."

When Sarah returned home she was greeted by her children, six-year-old Eve and two-year-old Martha, who had been cared for by her husband Mike.

"Without the support of my husband, I couldn't have continued to work," she said.

"I was hoping for a nice quiet family night in, but when I returned home the girls had set up a festival in the garden for all their soft toys complete with camping in the garden, so I had to wait another night to be reunited with my own bed!"

Chloe moved out of her family home as her father suffers from diabetes and is considered at risk due to recent surgery. "I stayed at UEA for almost two months, unable to see my family," she said. "It was extremely tough.

"In April my partner Alistair, who works at NNUH and also stayed at UEA as his dad is waiting for heart surgery, and I moved into a private accommodation, which a lady has kindly offered us free for the first two months.

"We might end up staying there until September but I can't wait to give my family a hug, this would be the best ever present from 2020."



Sarah Walkeden and her children Eve and Martha are reunited.

How we prepared ourselves for the pandemic

From the beginning of the pandemic, we worked quickly to ensure we were well prepared should we receive a surge of patients with Covid-19.

In total 1,644 clinical staff volunteered for Critical Care training, ready to support colleagues treating the very sickest patients if needed. "It was fantastic how many staff offered to help, putting themselves at potential risk," said Diane Rowland, Critical Care Nurse Educator. "In all, 50 staff were redeployed who, after initial training, shadowed their Critical Care colleagues, who were incredibly supportive, before covering for staff who were sick or isolating."

They included Ophthalmology doctors Chrishan Gunasekera, Matt Schneiders, Toby Al-Mugheiry and Sofia Habib, who were also able to continue supporting their Eye Clinic patients by using telemedicine technology. "We could see pictures of a patient's eye and examine them remotely, allowing them to receive an opinion from us while we worked in intensive care," said Chrishan.

Other staff whose normal roles were suspended due to the pandemic contributed too, including the Audiology team, who took on duties including organising Critical Care training and collating data from our research trials. The Endoscopy team also helped by supporting staff and patients on both Covid and non-Covid wards and assisting the swabbing team at the drive-through-centre at Centrum.

In all, 215 staff undertook our ward refresher training, with many more accessing the online videos, so they were ready to support colleagues.

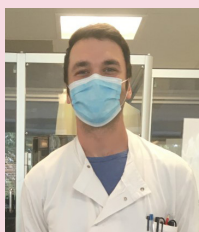


Chrishan Gunasekera, Toby Al-Mugheiry, Matt Schneiders and Sofia Habib.

A laboratory perspective

Our Microbiology Department responded rapidly to Covid-19 to meet the challenge of analysing and providing results of tests for staff, patients and the public from across Norfolk and Waveney. Joshua Caitens-Smith, a Medical Laboratory Assistant, describes what it's like working for the team:

"When it was announced that a novel virus was emerging in a small rural province halfway around the world, the atmosphere in the laboratory was full of speculation. We were concerned, but most importantly, we were determined. Determined to do our very best to provide our services to those in need."



"I watched something incredible happen when SARS-CoV-2 made its way to our shores. I saw every one of my colleagues put themselves forward to help in any way they could. Everybody started coming to work earlier, and leaving later. Volunteers from across the Norwich Research Park offered their expertise. The Clinical Virologists worked around the clock to ensure we were kept up to date with developments. Our Microbiology management team channelled our full potential. Every single person has given their all these last few months, and none of us are showing any sign of stopping."

"If I am proud of anything in my job, it is the people-focused attitude of all levels, and the respect, dedication and expertise shown day in and day out by everyone. We will continue to provide an exemplary service during these uncertain times, and continue to do it with a smile."

Responding to our call

The "Norfolk Needs You" campaign to encourage people to take up frontline healthcare roles received a huge response, with more than 200 health professionals joining us. Former staff also returned following our "Bring Back Staff" campaign, and 200 existing staff joined our Nurse Bank to take on extra shifts.

We fast-tracked 92 medical students onto our Staff Bank, recruited additional Pharmacy staff and Biomedical Scientists and employed 155 student nurses, 30 student midwives and a number of allied health professional students for paid placements. In addition, 23 first-year student nurses registered with the Nurse Bank as Healthcare Assistants, and a new post, the Covid Care Support Worker, was launched and received 80 applications.

"Our refresher course for staff returning to the NHS was a great example of collaboration with UEA, who provided the venues and some of the training," said Jude Ditton, Practice Development Nurse. "It demonstrated courage to come forward in such challenging times."

Lauren Brown, Clinical Lead for Nurse Bank, added: "Many who joined had been nurses, healthcare assistants or paramedics, and we were also delighted to welcome health sciences lecturers from the UEA. I'm happy to say that many are staying with us. After training, they looked after both Covid and non-Covid patients. The difference they made was massive, and we're very grateful to them."

Delivering compassionate care

Our teams approached the pandemic with togetherness and compassion in the most challenging circumstances, with personal protective equipment changing how we work and making communication harder.

Staff in the Critical Care Complex treated an unprecedented number of patients with acute respiratory problems, some needing ventilation. They created two Intensive Care Units and two High Dependency Units as part of the rezoning of the hospital to isolate patients with Covid-19 from those with non-Covid illnesses and injuries. In addition, the Critical Care Outreach team took additional care to patients on the wards.

Deborah Easby, Critical Care Consultant, said one of the biggest challenges was not having relatives at their loved-one's bedside. "When it comes to the point where I can no longer save a patient, what I can do is be very kind and understanding and take time with relatives to explain things and help them come to terms with it," she said. "It's very hard when that can't be done face to face."

Rehabilitation is also a crucial part of care and Physiotherapist Toni Bladon added: "These patients are the most vulnerable they're ever going to be and we can make a huge difference. Someone's physical function is key to who they are as a person. The earlier we can start their rehabilitation, the better their recovery and that is where we can make the biggest difference."



Critical Care Nurse Charley Harris.



The Critical Care team worked hard throughout the pandemic.

Support from Serco helped keep the hospital running

Throughout the pandemic, our 730-strong Serco team continued to provide essential non-medical services such as domestic, portering, waste disposal, laundry and security.

John Thirlwell, Wastes team Porter, said: "Segregating the Covid waste and keeping everything safe was so important to everything else happening in the building."

Some of the kitchen and restaurant team moved into a temporary area for staff working in non-Covid areas, with other facilities for staff treating patients with Covid-19 to ensure that everyone was well fed and kept safe. "Everything quickly changed and nothing was familiar, it was very scary," said Mandy Punt, Restaurant Assistant.

Ward Caterer Lynne Green, who worked in areas with Covid patients, said: "We quickly switched to disposable items and changed our routines. There was a real sense of teamwork. Everyone is proud of their job and being part of the NHS family."

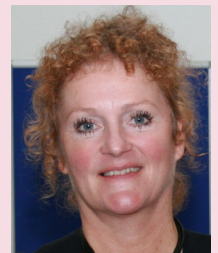
Elizabeta Faria, from the Domestic Cleaning team, added: "We quickly took large numbers of additional staff to assist with the huge increase requirements of ward area deep cleans and the continuous need for touch point cleaning."

Porters Brian Scurfield and Philip Gray also worked

throughout the pandemic. "The conversation and smile during patients' bed travel across the building took on a new additional meaning as they weren't able to see their families and loved ones," said Brian. Philip added: "Our NNUH was still the same building but somehow so hugely different, as ever we are very proud to be part of the hospital team."

The Estates team helped keep the building safe for staff and patients, engineers from UEA joined as volunteers and security remained paramount. "With many new changes facing us, the team have adapted to the daily challenges and have been exceptional," said Gary Hornagold, Security Officer.

"We're always proud of our work and never more so than now," said Velda Ismay, Serco Contract Director, (pictured above). **"Our team has demonstrated a commitment to working in partnership - NNUH has been a truly amazing place due to everyone working together to ensure we had the best possible environment to care for our patients during an extremely challenging period."**



We're bringing back our services - and offering new ones

Now that the peak of the pandemic is over, we're resuming services that were suspended in March – everything but emergency and urgent care and cancer treatments – as well as doing some a bit differently and launching new ones. Here are some of the services that we're pleased to be providing again:

Endoscopy

Endoscopy, based at the Quadram Institute, is one of the outpatient services that has restarted, after being closed to all but urgent inpatient cases during the pandemic.

"We went from seeing 125 patients a day to running an emergency service only,"

said Lead Nurse Tracy McDonnell.



Tracy McDonnell, Lead Nurse, and Sarah Crawley, Nursing Assistant.

"When the team was disbanded, most of us supported staff in other parts of the hospital, so it's good to be back together and able to care for our patients again."

As with all other areas, huge effort has been made to ensure that not only are patients seen as quickly as possible, but also that they are seen safely.

"We've gone to great lengths to ensure that our patients can be confident that they're safe here, contacting them 10 days ahead of their appointment to discuss self-isolation and swabbing them 48 hours prior to arrival," said Tracy.

"We also ask people to come to their appointment alone and not to arrive ahead of time to avoid having to wait, and to wear a face covering.

"When they arrive, we take their temperature and check they have no symptoms, and we've introduced a one-way system to provide a safe pathway through the building.

"Due to the measures put in place for Covid, to maintain safety we have restricted the number of procedures we can carry out but hopefully this will gradually increase.

"One big positive is that we've changed the way we work as a result of the outbreak, and now need to see fewer patients who have been referred to us by their GPs as we can give them a test to do at home instead – we're anticipating that this will soon be the case for routine bowel cancer screenings as well."

Elective surgery

Even during the peak of the pandemic, our elective theatres continued to provide vital services such as cancer surgery and, at the end of June, more types of surgery resumed.

"We ask elective patients to self-isolate for 14 days before their operation," said Joel Fiddy, Theatres Governance Facilitator. "They also need to have a negative Covid-19 swab before being admitted to hospital within 72 hours of their surgery.

"This is the same for family members - if a child is having an operation, one parent can accompany them to theatre but all the family has to self-isolate for two weeks prior to surgery. These measures are all to minimise the risk for patients and our staff.

"On the day of their surgery, everyone the patient comes into contact with has been screened for Coronavirus symptoms and had their temperature taken. Patients have given positive feedback about these new measures, as we make sure they and their families are kept informed about what will happen when they'll come to the hospital."



James Noble, Lisa Smith and Joel Fiddy.

As the amount of elective surgery increases, staff who'd been shielding are also returning. Deputy Team Leaders Karen Basham and Nicola Pow have been working from home and are looking forward to coming back.

"During lockdown we supported others who, like us, had to work remotely to make sure nobody felt isolated," said Nicola. "We helped colleagues completing risk assessments, mandatory training and supported their wellbeing. Some people even felt guilty about not being on the frontline with their colleagues, so it was important to maintain regular contact."

"Our work is now focused on making sure everyone who returns is aware of what's changed during these months," added Karen. "This includes a re-orientation induction tailored to their needs, with an update on the latest processes and new precautionary procedures."

Doing things differently - outpatients appointments

Anyone needing an outpatient appointment is likely to see a big difference now, with “virtual” appointments via webcam - the only way patients could be seen during the pandemic - increasingly the norm.

Now, around half of all patients are seen this way, enabling them to stay at home but still speak to – and see – their clinician.

New services - Complex Health Hub

The pandemic hasn't stopped us from developing new services for patients, and one of the most ground-breaking of these is our new Complex Health Hub, which ensures patients with complex needs receive all the support they require through a single point of contact.

“We're the first acute hospital in the country to adopt this model, which has been developed by using the experience and knowledge of our specialist staff across the Trust to really think about how to provide the best possible service for patients,” said Kim Goodby, Associate Director for Complex Health and Safeguarding.

“The Hub means each patient receives the combination of specialist care that's right for them. We can treat each person as a ‘whole’, caring for their mental health, social and cognitive needs on an equal basis to their physical health. By doing this we aim to improve their experience of receiving care at NNUH and lead to better health and wellbeing outcomes for the patient, their carers and our staff.”



Tristan Johnson (Named Nurse for Safeguarding Adults), Kim Goodby, (AD for Complex Health and Safeguarding), Steve Pickett (Substance Misuse Nurse), Nic Smith (Learning Disability Lead Nurse), Tina Chuma (Named Nurse for Safeguarding Children), Sara Fisher (Named Midwife for Safeguarding), Liz Yaxley (Dementia Lead), Gemma Lawrence (Mental Health Ops Manager) and Sara Shorten (MCA & DOLS Matron).

Delivering maternity services during the pandemic

One thing a pandemic doesn't stop is babies being born, so our Midwifery team introduced new ways of working to ensure that new and expectant parents were safe and fully supported.

“We worked with the local Maternity Voices Partnership to help keep parents-to-be updated, reassure them about their care and answer any questions,” said Emma Hardwick, Divisional Midwifery Director.

They used a series of Facebook Live Q&A sessions to offer additional support and advice – more than 150 virtually attended the first event, with 200 comments and over 2,500 views of the video.

“These events are the result of really fantastic work enabling us as NNUH midwives and maternity services to have conversations with women on the things that really matter to them,” said Emma. “We can see from the response how helpful this has been and look forward to co-producing future events with our colleagues at Norwich MVP.”

Other changes were as a result of needing to wear personal protective equipment – one of the biggest challenges faced by Midwife Penny Drewy. “Wearing the masks really showed me how much of my communication is non-verbal,” she said.

“I really hope that the women and their families can see me smiling behind my mask!”

Ruth Todd, Community Midwife, and her colleagues also faced challenges.

“We were constantly on a level of high alert dealing with fear of the virus and keeping safety at highest priority,” she said.

“We had to make changes to our working practices at very short notice including moving clinics when GP surgeries closed, informing families what their care would look like and keeping all staff supported and updated with new guidelines.

“Sometimes, understandably, women were anxious about not having a support person with them, not having someone to care for their other children and about attending clinics or hospital. We did our best to reassure them and advise them that we were doing our utmost to keep them safe.”



Penny Drewy, Midwife.

Building for our future - £25m investment

We're investing in our future with a £25 million building programme that will provide state-of-the-art facilities for our patients and staff.

"These are all landmark developments for our patients," said Chris Cobb, Chief Operating Officer. "It's about having the best facilities and cementing our status as a major healthcare facility for the region. We'll have cutting-edge equipment and facilities across a number of specialties, in keeping with our strategy to develop more complex and specialised medicine."

Isolation unit

Our £4million specialist isolation unit for patients with infectious diseases will provide nine negative pressure beds (which prevent cross-contamination) for very sick patients with Covid-19 or other viral infections – one of only eight in the UK. Two of the rooms will also have intensive care capabilities. The unit should be ready in September and forms part of our preparations for any second wave.

New ward block

Our new 100-bed ward block will be ready in August.

AMU (I): On Level one, our new Acute Medical Unit (I) will have four six-bed bays, each with its own bathroom, and eight side rooms.

AMU Matron Marie Hodge said: **"We've kept patients very much at the front of our minds including, for example, USB portals beside each bed, light and spacious bays and a design that allows us to observe patients without being obtrusive."**

Neuroscience: The newly-named Ingham Ward will open on level two in August. Again patients' experience



has been in the forefront of the team's mind when designing the 33 bed unit, which will include four six-bed bays, a specialist bariatric two-bed bay, side rooms, a therapy gym and a cognitive assessment area. Neuroscience Matron Kate Holvey, who worked in collaboration with her clinical colleagues and the construction team, said: **"It's absolutely amazing. It is everything we wanted."**

The Intwood High Dependency Unit: The new unit will be on the third floor, providing accommodation for 25 patients. Project manager Steve McIntosh, said: "Despite rain, high winds, storms and a global pandemic we have delivered a £13-£14m development in just 15 months."

Interventional Radiology Unit (IRU)

Our new £7m IRU is due to admit patients this autumn and is the first unit in the country to house two Siemens Artis Pheno C-Arm robots, which will quadruple the number of interventional suites, placing us among the biggest centres in the UK for interventional radiology and transforming us into a national beacon of excellence and a regional training centre.

They will also help us meet increasing demand by completing more day case work, reducing waiting times and offering new services.

The IRU will include four large treatment rooms, a 16-bed recovery unit and an anaesthetic room.



Transforming our care with digital innovations

We're not just investing in our buildings but in our IT as well, with a digital transformation programme.

New **laptops and software** have enabled clinicians to stay in touch with patients during the pandemic by holding **virtual clinics**, as well as enabling staff who are shielding, self-isolating or who don't need to be in the office to work from home.

We've also installed **new computers** (pictured) help to monitor patients in intensive care – they hold their full medical records and can be viewed immediately by any clinician who needs to see them.

Our **e-Observation tool** will automatically calculate a patient's NEWS2 score, which is based on factors such as blood pressure, temperature and pulse rate, saving time and alerting staff as soon as a patient starts to deteriorate.

Clinical Messaging will enable clinicians to send messages, images and videos to each other securely, which will improve patient care by speeding up clinical decision-making.

Another key project is the transfer of paper patient notes onto an **Electronic Document Management System**, which will see an end to bundles of notes and enable all patient records to be accessed with the click of a mouse.



Staying safe during Covid

Now that the lockdown has eased and we're enjoying more freedom, it's important to keep ourselves and others as safe as we can – as well as continue to protect the NHS – by observing Government guidance.



"As long as you're not self-isolating, there's no need to be afraid to go out, but we must all be sensible and adhere to the guidelines," said Claire Williams, Consultant Virologist. **"Masks and face coverings are a good way to reduce the spread of droplets, which are known to cause infection, but they are not a substitute for social distancing."**

"Good hygiene around coughing and sneezing is important too, using a tissue or, if that's not possible, the crook of your arm. Washing your hands with soap for at least 20 seconds or using hand gel is also vital – as well as getting into the habit of doing it more often," said Emma Meader, Clinical Scientist. "It helps prevent transmission from surfaces, another major cause of infection."

The Government's Test and Trace system is key to identifying local outbreaks and targeting action to prevent them from growing – so leaving your name and phone number when visiting places such as cafes, restaurants and pubs and isolating for 14 days should you be contacted will help keep everyone safer. And, if you experience symptoms yourself, stay at home and get a test as soon as you can.

What are the symptoms?

A high temperature | A new, continuous cough | A loss of or changes to your sense of taste or smell.

Looking after your wellbeing

It is normal to feel anxious, emotional or stressed in the current situation, and it's important to look after your mental and physical wellbeing. Here are some tips:

- Take care of your basic needs – stay hydrated, eat sufficient and healthy food and avoid too much alcohol.
- Physical activity releases chemicals in the brain which naturally boost mood. Try walking, jogging, yoga or home workouts.
- Allow time for relaxation and hobbies.
- Stay connected with your loved ones online.
- Sleeping too much or too little can affect your mood and energy levels. Limit your screen time before bed, do something relaxing and set an alarm for the morning.
- Try breathing exercises to help calm a racing mind.
- Acknowledge the good things in your life to help reduce constantly focusing on the negative; even recognising the small things like a smile from a stranger or a kind word.
- Try to limit how much you access news reports - the constant stream can cause anyone to feel worried.
- Mindfulness - the ability to turn your attention to the present moment and be fully engaged with whatever you're doing – can be helpful.
- Breathing exercises help regulate your carbon dioxide levels and send messages to your brain that you are safe. Try breathing in through your nose for four seconds, holding for two seconds, and breathing out of your mouth for six seconds. Repeat for three or four minutes.
- Recognise that stress, anxiety or feeling overwhelmed can have an impact on how you make sense of things or process information – be kind to yourself and patient with others.
- Talk to others about how you're feeling, they may be feeling the same way.



Work begins on new cancer centre

A turf cutting ceremony in early July marked the start of work on our state-of-the-art cancer care and support centre at Cromer.

Norwich-based firm Pentaco Construction Ltd won the contract for the build, which will see the refurbishment and extension of the Davison Unit, a disused ward at the hospital. The North Norfolk Macmillan Centre is being built in partnership between Macmillan Cancer Support, NNUH and the Norfolk & Norwich Hospitals Charity.

In the latest local cancer strategy, potential demand for cancer services in the Trust was forecast to increase by more than 200 per cent over 10 years. Currently most people from the Cromer area have to travel to Norwich, and the new centre will enable more people to access cancer treatment and support closer to home.

The work is expected to take about a year and will include:

- Six chemotherapy treatment chairs, with the capacity to treat up to 36 patients a day
- Three clinic rooms and two minor procedure rooms, creating an additional 10,000 outpatient appointments annually and space for new cancer diagnostics, including prostate biopsy
- A Macmillan cancer information and support centre
- More space in the main hospital building to deliver an extra 600 surgical procedures in dermatology, urology, vascular surgery and pain management.



Pictured: Staff joined representatives from Macmillan and contractor Pentaco in a socially-distanced event to formally mark the start of work. Front centre: David White, Chairman and Jo Haywood, Chair of North Norfolk Macmillan Fundraising Committee.

New orthopaedic service



The orthopaedic surgery team are providing a new service for hand and foot surgery.

A new service for hand and foot surgery has been set up at Cromer, part of a plan to boost treatments for patients as services get back on track following the Covid-19 pandemic.

Patients are receiving day case treatment in the Muriel Thoms Day Procedure Unit, with injections of local anaesthetic to numb the area and avoid the need for a general anaesthetic.

Matt Keeling, Deputy Divisional Operations Director for Surgery, said: "There has been a fantastic team effort to launch this new orthopaedic surgery service at Cromer. It's proving popular with our patients, who receive the best of both worlds: a friendly local service plus expert care from surgeons and anaesthetists visiting from Norwich."

Before surgery, patients must self-isolate for two weeks and test negative for Covid-19. The surgery is delivered by a dedicated team, who only work in non-Covid areas, and extra hygiene measures have been introduced along with social distancing.

Sheila bids farewell after 46 years

When Sheila Ginty, Tissue Viability Sister, started training in 1974, she never imagined that she'd become known for "Ginty's Goggles" a virtual training tool where staff wear goggles to receive training in the best ways to assess skin and help avoid pressure ulcers.



Technology isn't the only change Sheila has seen during her career, which started with a pre-nursing course at Wisbech College in 1972. Employment as a nurse followed at the old N&N Hospital site before a stint in the Royal Free Hospital, gaining skills in infectious diseases and looking after the first patient, in London, with MRSA in the early 1980s. Sheila has also been a staff governor for 12 years, liaising with staff across the organisation. "I've seen lots of improvements over the years and it's pleasing to see quality is still high on the agenda," she said. "In my view, ward sisters used to have much more autonomy than they do today and we didn't question authority to the same extent. I remember coming to work on an early shift and being told to go back to the nurses' home and come back to cover shortages on the night shift."

"During my career, I specialised in surgery and that's where I've seen some of the most dramatic changes, with modern techniques and drugs meaning patients are encouraged to get out of bed earlier and manage to leave hospital much sooner."

Sheila is going to be busy in her retirement, planning a wedding next year with fiancé Andy. They knew each other in the 1970s and met up unexpectedly, more recently, in the hospital when he was visiting a relative. The couple plan to travel next year and are concentrating on their house and garden until then.