

Our Vision for the Future

Welcome to the new Maternity, Children's, Emergency and Critical Care Centre (MCEC)

(Please note this is a working title, and there will be public involvement in choosing a name for the new centre).



- **£250m investment in local health services**
- **Reducing road congestion around the hospital**
- **Brand new patient facilities for top class care**

Briefing document on the changes at
the Royal Bournemouth Hospital site

Information provided by:

The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust
and Poole Hospital NHS Foundation Trust

Guide to the site changes



Aerial view of site, showing MCEC in bottom right (1), pathology hub in top right (3) and the multi-storey car park extension in top left of picture (2)

There are three main building changes:

- 1 The Maternity, Children's, Emergency and Critical Care Centre (MCEC)
- 2 The multi-storey car park extension
- 3 The pathology hub

In addition, the plaza and public areas around the MCEC will change to improve the experience for pedestrians. There will also be road and cycle access improvements. 4

In the long term, a care home to support step down from hospital and rehabilitation is also being considered. 5

There will also be internal changes to existing buildings, including refurbishment of wards, and upgrades to energy, information technology and other infrastructure. In summary it will put our health services at the cutting edge of care, in a once in a generation investment.

There have been over 10,000 hours of NHS staff time put into developing the plans from doctors, nurses, allied health professionals and many others, as well as patients and visitors. This is to ensure designs are future proofed as much as possible, and will improve care for years to come.

The MCEC plans have been on public display at the Royal Bournemouth and Poole hospitals for over a year.

The MCEC - modern patient care



Transforming maternity, children's, emergency and critical care

The main new build extension (the MCEC) is 22,650m². This is the equivalent to 115 tennis courts.

The designs meet modern best practice including:

- Speciality specific guidelines
- Privacy and dignity
- Integration of technology
- Infection control and lessons learned from Covid-19
- Access for all
- Environmental standards and energy efficiency (BREEAM Excellent)



Children's services team discussing the layout of the new unit

Lessons learned from the Covid-19 Pandemic have been incorporated into the designs. This enables greater resilience and ensures the high standard of patient care can be sustained even during major incidents.



“We are delighted that our sector regulator NHS Improvement (NHSI) has now formally agreed that we might progress our plans to merge our two hospital Trusts on 1 October 2020. This follows on from the approval by the Competition and Markets Authority (CMA) earlier this year. This is excellent news as we know that we can serve local people better as the larger, more resilient University Hospitals Dorset NHS Foundation Trust.”

Debbie Fleming Joint Chief Executive

What services are in the new building?

The new **Emergency Department** will be larger than both the existing Emergency Departments at Poole and Royal Bournemouth put together. It will contain dedicated imaging facilities including x-ray and CT scan to enable faster patient diagnosis and care.



“We aspire to provide excellent patient care for all patients of east Dorset in a busy Emergency Trauma Unit. Our staff will be proud to work in a state-of-the-art, evidence-based teaching department that will aim to attract and retain the best staff in the country.”

Dr Lee Gray
Consultant in Emergency Medicine, Poole Hospital

The new **Maternity Unit** will be a brand-new purpose-built department. Staff and local residents have been waiting over 30 years for this. Being on the same site as the Emergency Department, Critical Care, Children's and interventional radiology services will ensure all the emergency and support services are immediately on hand, providing safer care. The delivery ward will have 16 birthing rooms in total, including seven rooms with pools, four standard rooms, two rooms for twin births, one higher dependency room and two specialist bereavement rooms. There will also be two obstetric theatres.



“A new, purpose built maternity unit is what we have all wanted for many years. Bringing the unit onto the major emergency hospital site, will enable seamless care for patients. We have a great team of staff, who are excited about being on the main hospital site to deliver safe, high quality care.”

Mr Daniel Webster
Consultant Obstetrician and Gynaecologist MBChB MRCOG,
Clinical Director for Maternity and Gynaecology

86% of post labour facilities will be single ensuite rooms, with one four-bedded bay for mothers who want more social interaction. There will be a Neonatal Intensive Care, Special Care Baby Unit and Postnatal Care Units.

The midwife-led units will merge and be co-located in the new Maternity Unit. This will reduce the number of ambulance transfers for women in labour between hospital sites. This consolidation of skilled staff better enables high quality care 24/7.

There will be a dedicated antenatal ward and day assessment area, offering both outpatient and inpatient services. This allows rapid access for high risk patients and urgent care.

The **Children's Unit** will be purpose built on the top floor. It includes two higher dependency beds, an Assessment Unit and an Adolescent Area. The unit has predominantly single rooms with space for parents and carers to stay if necessary. It will have safe spaces inside and outside for play and socialising. There will be kitchen facilities for families to use. Being close to the Neonatal and Maternity Unit enables faster patient response times and better cohesion of the team as they are consolidated in one area.

There will be a new dedicated "Gully's Place" suite. An area providing privacy and dignity for patients and their families, especially for end of life care and bereavement support.



“For transition to home care Gully's has been a godsend, enabling parents and families to practice often complex care but with the reassurance of the staff being nearby. They also have the opportunity to live together as an extended family and together find out what works well, or not, before going home.”

Karen Fernley
Sister, Children's Unit



The new **Critical Care Unit**, sometimes called Intensive Care, will have capacity for up to 30 beds. This is seven more than currently provided at Poole and the Royal Bournemouth Hospitals combined. These will have larger areas around the beds for easier access with equipment. There will be more single rooms, including six specialist isolation rooms. This will reduce infection risk and improve the patient and working environments. The department will be located close to both the Emergency Department and theatres allowing rapid patient transfer if required.



“Critical care facilities have been at the frontline in the Covid pandemic. Having a brand new, state-of-the-art unit will help the very sickest patients for years to come. It will also attract and retain staff who want to work in the modern, effective facilities.”

Dr Isabel Smith
Consultant Anaesthetist and Transformation Lead
across RBCH and Poole Hospital

Patient and public benefits

Emergency cases will be focussed on the Royal Bournemouth site with increased consultant and specialist team cover seven days a week. This will reduce numbers of patients transferring between hospitals, put less demand on ambulances and hospital services, and achieve better outcomes for patients.



The new Emergency Department will be easily accessible from our existing helipad

Specialist expertise for inpatient care will be delivered from one hospital with all supporting infrastructure in one location i.e. Critical Care, Haematology, Vascular Surgery and Cardiology. There will be six theatres dedicated to emergencies, with other theatres focussing on complex operations such as major cancer surgery.

Combining into one team in east Dorset gives more resilience and allows for greater sub-specialisation which is proven to improve patient care.

There are isolation rooms included in every department throughout the building. This helps stop the spread of infectious diseases.

There will be a new main entrance to ensure visitors and patients enjoy a sense of arrival at a high quality healthcare facility. This needs to ensure that they are well catered for, have a welcoming and safe place to relax. It will also make it easier to find any necessary support, including Patient Advice.

The plans have better staff rest and wellbeing spaces to support our staff.

Environmental sustainability



RBCH has exceeded its' carbon reduction targets, and has a green flag award

Environment sustainability is key to the building and site plans.

- The MCEC will be constructed to a BREEAM 'excellent' standard (an assessment of a building's environmental, social and economic sustainability performance). This puts it in the top 10% of buildings in the UK. This is ahead of BCP Council's current policy requirement of 'very good'.
- Energy modelling, thermographic surveys, passive design measures and the installation of low / zero carbon technologies to reduce carbon emissions and improve energy efficiencies are all part of the project.
- The building design will also ensure good levels of natural light, with views out for occupants and glare control. Comfort and wellbeing can help improve people's mood and reduce the symptoms of depression. Increasing the level of daylight within the building also reduces the need for artificial lighting.
- Water usage will be optimised, using latest technology to reduce waste.
- Materials used will be responsibly sourced to standards including BES6001, FSC / PEFC, and ISO14001.
- The building design will also incorporate elements for climate change adaptation considering hazards, risks and mitigation from future climate change scenarios.
- Major investment to support sustainable travel are summarised later in this briefing.

Access and travel

Reducing traffic congestion

The hospital operates within one of the most congested conurbations in the UK. This planning application can't solve all the traffic issues, but the NHS is leading the way in promoting alternatives to single occupancy car journeys.

The Trust Sustainable Travel Plan and healthy travel options will provide:

- ▶ **Personal health benefits by more walking and cycling**
- ▶ **Improved air quality for all, by reduced car journeys**
- ▶ **Less carbon, to reduce global warming**
- ▶ **Public transport expansion**
- ▶ **Easy access to the site for emergency vehicles**
- ▶ **Less congestion and reduced stress**
- ▶ **Reduce the need to travel to the hospital at all, by changing how services are delivered**
- ▶ **Reduced cost for sustainable travel to make it even more attractive**

Changing how our services are delivered is part of the Dorset CCG's review of clinical service across Dorset. Practical examples about how this has started, and how it will develop ahead of the 2024 opening of MCEC include:

- The greater use of technology including more video consultations. This has increased hugely in response to Covid-19. The target is one third of the 300,000 hospital outpatient appointments could be delivered in this way on a permanent basis.
- Some "office hours" services are moving off site, so will reduce the journeys to the hospital significantly, especially during rush hour. This includes over 80,000 operations that will move to Poole Hospital.
- Over 60,000 GP requested blood tests have recently moved back into community settings, much closer to where patients live.
- Subject to consultation and approval, community facing services that do not need to be on an acute hospital site can also move, such as outpatient physiotherapy, Orthodontics (dental), and Prosthetics. This could reduce trips to hospital during Monday-Friday "office hours" by more than 100,000 a year.
- Many supporting roles are now carried out by working remotely, enabling a reduction of staff on site. Across Bournemouth and Poole there are regularly 400 staff working from home, (up from 30-40 pre-Covid). Once again these reduce traffic during peak hours.



Clinicians across Dorset have led the way with virtual consultations

Ana Shvets from Pexels

All these improvements are being taken forwards as part of the plans for future working practice in the Trust, and fit in with the environmental and sustainability plan.

Traffic and transport modelling has been undertaken. This shows that hospital traffic during peak network hours would reduce due to the change to more 24/7 services and the travel plan actions.

A future barrier controlled connection to the Wessex Way A338 via Wessex Fields would be of additional benefit, especially for ambulances. However this is not essential for this application. The hospital will continue to be primarily accessed via Deansleigh Road. The hospital remains supportive of developing the barrier controlled junction as this would provide a second route for ambulances, delivery vehicles and staff with permits, which is beneficial for cutting congestion without increasing traffic volumes (as these are vehicles already controlled and permitted on site).

Cutting congestion around the RBH site will be achieved by:

- 1 Changes in service delivery**
- 2 Promotion of healthy and sustainable travel like cycling**
- 3 Services moving closer to patient's home**
- 4 Increased use of technology**
- 5 Work from home for staff where this is possible**
- 6 Over £1m of direct investment from the NHS into bus services, cycle lanes and staff changing facilities, if the overall scheme gains approval.**

Buses, taxis and drop off areas

There will be an improved road layout with improved cycle access, priority for pedestrians and those arriving and leaving by bus. Drop off areas and the taxi rank will be better located.

An express bus between Royal Bournemouth and Poole hospitals will be set up, ahead of the transfer of services between sites. This would be open for staff and public travelling between sites. Working with the Council, Bournemouth University and other partners to design and procure this service and improving other routes will be a high priority.

Bus travel between sites is expected to be more reliable and quicker than driving and parking. It will also be cheaper and produce less carbon. Additionally, Wi-Fi on the bus will allow better use of time for work or leisure, than car travel.



The front of the hospital will have better access to the bus hub and bike park facilities

This will be a major investment by the NHS. Evidence of local success is Bournemouth University, who have successfully grown bus routes on its “Uni bus” service. The Trust will also work with the Council to support the Transforming Cities Fund project.

The NHS is also improving transport for patients. The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust has a very successful patient taxi service, which provides a door to door service for over 500 patients a month. This involves ‘ride sharing’ for up to a quarter of these journeys, reducing congestion and the carbon footprint.

Drop off zones around the many entrance points to the hospital will ensure ease of access for frail, disabled and other patients and visitors whilst the driver parks (or leaves the site). The taxi rank will be relocated nearer the main entrance, also improving access.

Active travel



Increasing cycle paths on site and improving pedestrian access and safety

Existing facilities on the Bournemouth site consist of 10 locations with shower and change facilities including lockers and a free towel service. 440 cycle storage spaces, cycle repair tools, loan bikes (including electric), access to Beryl bikes, salary sacrifice and “try before you buy” schemes.

Proposed additional facilities within this application, besides the increase in bike storage, include new shower areas and 300 new locker spaces as well as new loan bikes and maintenance. A dedicated Transport and Travel Manager has been appointed

Total investment towards improving facilities for active travel exceeds £1m of NHS funds. This is a massive contribution to sustainable and active travel by a public organisation using public funds. The Trust already has a high percentage of staff travelling sustainably. This extra commitment will put the hospital at the forefront of organisations locally, which show demonstrable support for active and sustainable travel.

The additional sustainable travel benefits can only be funded if planning permission is agreed, and the projects proceed. The details of each of these schemes will be developed within the reserved matters applications and ahead of the 2024 MCEC opening.



Increase in staff cycle parking and facilities such as showers and lockers

Changing the pattern of car use

Whilst all efforts are being made to encourage sustainable travel, some patients, visitors and staff will still need to arrive by car. Disabled, frail, and vulnerable patients and visitors need to have good access, if they have to attend the hospital.

Many staff, especially staff with specialist skills, often have careers across Dorset, Hampshire and Wiltshire. To attract and retain the best staff having the ability to get to and from the hospital is critical. For some this does mean the ability to drive. This is especially the case for staff working 12 hour shifts, overnight, or on call. Therefore a realistic number of car parking spaces are required.

The loss of over 400 surface car parking spaces for the MCEC and plaza areas is re-provided in the multi-storey car park extension.

Originally a second multi-storey car park was planned to be built near the new entrance, but based on Council Officer feedback the plans have been changed to provide a new combined staff and visitor multi-storey car park near the back of the hospital. The design and positioning of the car park will be to reduce the visual impact from both the hospital and the Wessex Way.

There will be an increase in electric charging points to support the move to electric cars. A staff incentive scheme also exists to encourage a shift to electric cars.

The changes in the type of services on site, and the move of activity to community settings, Poole and Christchurch hospitals and online appointments, means the pattern of car park use will vary, with less Monday-Friday daytime patient journeys expected. Overall the same number of patient and visitor car parking spaces will be maintained as a minimum, and will be adjusted upwards if required.



Front view of the extension to the multi-storey car park

The Travel Plan will reduce staff making single car occupancy vehicle trips to/from the site. The targets are another 1% walking, 2% cycling, 6% travelling by public transport and car sharing rising by 4%. These targets correlate with the measures and initiatives proposed for each mode of travel. The shift to sustainable modes would result in a 13 percentage point reduction in single car occupancy trips made by staff during peak hours. This will reduce congestion and queues around the hospital site. In addition the Trust is investing heavily in the equipment and systems to support off site/home working, so we can achieve, or exceed, this stretching target.

The new clinical services coming into the MCEC will be operating 24 hours a day, 7 days a week, and are more staff intensive; therefore there will be more staff on site. However these staff will predominantly be working different patterns to the elective and outpatient services that are moving off site. The emergency, critical care, inpatient maternity and inpatient children's services will be:

- Working seven days a week, 24 hours a day, so the extra staff are more spread out over the full week
- On shifts with different start and finish times, mainly 7am and 7pm, so less travel during peak hours.

As a result peak hour travel by car is predicted to reduce. Some staff and patients will be using the shuttle bus from Poole Hospital.

The longer shifts (more 12 hour shifts than the current 5 days, 7.5 hours) means less journeys, especially during peak hours. However it does mean more car parking is required because when staff are on site they are staying for longer. Therefore there is a net increase in 443 spaces for staff and volunteers planned. The exact balance in use of total car park spaces between patients/visitors and staff/volunteers will be under constant review to ensure patients can park.

There is already a rigorous staff car parking permit scheme in place. Staff already have to pay to park, on average over £30 per month. The exact amount depends on salary. Many staff if they live within three miles of the hospital, or on a bus route, are very unlikely to be considered for a permit, even if they wish to pay. Through this control mechanism the number of staff car parking spaces is already controlled very tightly. This gives confidence that any necessary changes to staff parking numbers can be regularly made to keep the site functioning and patients able to park.

The multi-storey car park extension will be higher than the existing car park, but is set further back from the A338 Wessex Way, behind a thicker tree belt. Therefore this is less visible from the road. For the detailed planning application the exact external materials and designs will be agreed to ensure an appropriate exterior.



Rear view of multi-storey car park from A338, based on proposed design



Purpose built pathology laboratory in close proximity to the hospital - also a centre for research

Pathology hub

This service provides the laboratory test results for patients. Covid-19 has demonstrated the importance of modern, flexible testing capacity. A new purpose-designed laboratory hub for Dorset is proposed to be located on a corner part of the Wessex Fields site. This is next to the hospital campus, and discretely accessed off Deansleigh Road. The location gives maximum flexibility for the masterplanning for the rest of Wessex Fields.

There is also a major investment in Information Technology (IT), to digitise laboratory samples. This reduces transport requirements. It also allows quicker results, and more opportunity for research. Moreover, this facility would have the potential to accommodate over 100 jobs, in line with planning use of this land. The larger unit will help attract more research opportunities and staff, by being in a modern, purpose built accommodation.

The exact service road layout will be agreed with BCP Council, to future proof this with Wessex Fields, as the pathology use is mainly just delivery vehicles and disabled staff access.



Pathology's Biochemistry team, in the frontline for diagnosis, including Covid-19 testing



Aerial view of the multi-storey car park extension - set back behind the tree belt

This outline planning application looks to the future needs of the hospital as a whole, and the population we serve. In addition to creating a patient environment fit for the next generation, this development delivers many other far reaching benefits for the local population.

These benefits also include a **Nursing home** - providing up to 100 bed spaces on an under-used, pleasant part of the hospital campus over-looking the lake. This facility would provide step down and long-term care for patients, which is better away from busy acute wards. This also helps to free-up bed spaces within the main hospital buildings. This is a longer term development, and therefore there are no images associated with it.

Boosting the local economy

The benefit to the local economy of investing in construction is very large. A recent report from CBI and Oxford Economics shows that currently every £1 spent on UK construction creates £2.92 of value to the UK. This scheme will provide over 400 jobs in construction. Therefore from late 2020 through to 2024 (and beyond) the construction work will help boost the local economy. This will help local recovery from Covid economically, as well as providing a better NHS.

Other investments in our local NHS

The comprehensive Clinical Services Review (CSR) undertaken for the whole of the Dorset resulted in plans to develop a major Emergency Care site at Bournemouth.

Alongside this is the development of a major Planned Care site at **Poole Hospital**. This includes significant new operating theatres, and major refurbishments of wards, theatres, and other facilities. There will also be the creation of a large community hub.

Likewise, further changes at **Christchurch Hospital** are planned; including the charity funded new Macmillan Unit. A public consultation in early 2020 also set out options to create a senior living community, with affordable shared ownership housing.

For more information about Poole and Christchurch developments please visit our website.

The CSR objectives also involve some services being relocated to community settings, such as in patients' homes, reducing the demand for services on both hospital sites. The CSR also includes improvements in mental health, GP and community services, greater integration with social care, and "prevention at scale" to improve public health.

This change in the way services are provided will be beneficial to the public, saving lives and delivering better care in better facilities. It will future proof provision of care for the expanding population of Dorset.

Over £250m will be invested. This is the largest commitment of funding in Dorset's history. This represents a once in a generation investment towards future healthcare provision for the whole of the Dorset and New Forest area.

The funding can only be accessed if planning approval is granted. The computer generated images used in this document are for the outline planning application to illustrate the proposal. These will be developed and refined through the detailed planning stage known as 'reserved matters'.

The proposed timeline would be for enabling works to start in 2021, and the MCEC to complete in 2024. The overall programme of works across all three hospitals will complete by 2026.

Summary

This proposal will achieve:

- ✓ **A new Emergency Department, larger than both existing units put together**
- ✓ **A much needed purpose built Maternity Unit for pregnancy and birthing care, including two theatres, antenatal, neonatal and postnatal services**
- ✓ **A new Children's Unit**
- ✓ **A new Critical Care Unit with capacity for 30 beds**
- ✓ **Improved cycle access and increased bike parking facilities**
- ✓ **Improved access for pedestrians and public transport users**
- ✓ **Fits within the wider clinical service changes that will improve care, save lives and ensure services are fit for the future**

The funding and significant benefits that the development would bring are dependent on the planning application being granted.

For further information

Visit: **www.rbch.nhs.uk** and look at
The Future of Our Hospitals pages

Email: **communications@rbch.nhs.uk**