



6 Airedale's new A&E provides 'best possible environment'



7 Largest single-site cancer treatment centre in Europe opens

news, views and information from ProCure21+

plusnews

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top External view of the entrance atrium of the new Women and Children's Unit at North Middlesex



right A birthing room with pool in the midwife-led unit

"Fantastic building to unreal timescale" with ProCure21+

Framework delivers clinical strategy with partnership working and modular construction

November 2013 saw the North Middlesex University Hospital NHS Trust open the doors of its new Women and Children's Unit, part of an £80m ProCure21+ scheme to deliver integrated healthcare to the people of North London.

The scheme comprised an extended A&E department including acute adult and paediatric inpatient services, plus a £22m state-of-the-art maternity unit, comprising midwife-led and consultant-led units,

a neonatal intensive care unit and women's inpatient and outpatient facilities. "This is a fantastic building that will see mothers giving birth in a wonderful, warm and caring environment," said the Trust's consultant midwife Fiona Laird. "It's a great place for staff to work and a great place for women and their partners to come and share the joy of birthing."

The scheme, which was delivered by ProCure21+ Principal Supply

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ProCure21+ launches **new EIR tool** to help NHS clients specify BIM requirements efficiently and clearly • ProCure22 – the **upcoming framework** is in development • **Airedale A&E** provides "first-class working facilities" • ProCure21+ **defect monitoring system** introduced • £12m **cancer treatment centre** at The Christie "**transforms**" treatment • NHSBSA gets **flexibility of refurb** with ProCure21+ • FAQs: No defects at completion: **why**, and what are the **risks**?





top Externally, the new modular-construction Women & Children's Centre matches the rendered façade of existing hospital buildings

above One of 20 cots in the new special care baby unit at North Middlesex Hospital

video



Catherine Barns, Trust senior projects manager, **John Bolton**, Kier Health contracts manager, and **Lewis Parker**, Kier Health senior framework manager, discuss the use of ProCure21+ at North Middlesex University Hospital NHS Trust

Watch the video on the ProCure21+ website

Chain Partner (PSCP) Kier Health, was a key element in the Barnet, Enfield and Haringey (BEH)

Clinical Strategy to transform acute healthcare services in North London, integrating clinical services between North Middlesex University Hospital, Chase Farm Hospital and Barnet Hospital. Chase Farm Hospital had previously provided maternity facilities to all three of the boroughs; its closure as part of the BEH strategy necessitated the extension of maternity facilities at the North Middlesex Hospital site. Accordingly, the new Women and Children's Unit is planned and specified to handle an additional 2,500 births each year.

Raft of services provided

The new facility provides an impressive raft of services, including a midwife-led birthing unit housing a four-bed bay induction suite and eight birthing rooms, four of which feature birthing pools and support facilities such as milk express room, nappy changing facilities and a milk kitchen. The consultant-led birthing unit includes a 17-bed delivery suite, three twin birthing rooms and four high-dependency birthing rooms. The unit also houses two maternity operating theatres and support facilities including a four-bed recovery ward. The neonatal unit is a 20-cot special care baby unit specified to tertiary care standards, with six high-dependency / intensive care cots and three mother-and-baby rooms. The building's new maternity outpatient department includes 10 antenatal consultation rooms, eight ultrasound

rooms, eight gynaecology rooms, two colposcopy suites, and a six-bed maternity day unit.

The scheme was delivered in an extremely challenging timescale of just 52 weeks. To meet timescales and both reduce and manage programme risk, the PSCP specified a modular build solution, provided by supply chain member Yorkon, part of the Portakabin Group. The resulting facility is currently the largest healthcare modular build in the UK, with 152 steel-framed modules up to 18m long and weighing up to 18.5 tonnes. One of the key challenges, says Kier Health contracts manager John Bolton, was transport: the units were built in North Yorkshire, and careful planning was necessary to bring the modules to site, in some cases with police escort. "The modules were craned into position at the rate of 8-10 per day, with doors, windows, first-fix electrics, HVAC ducting, plumbing and a high-performance concrete floor pre-installed," he says.

"The modular solution proved to be very much the right decision. We were able to reduce the overall programme time by up to 12 weeks and manage disruption to live clinical facilities," says the Trust's senior projects manager Catherine Barns. "We were also able to open the new unit before winter pressures began to impact on the hospital as a whole."

Reflection of existing facilities

Externally, the modular unit reflects the design and appearance of adjacent facilities, with rendered façades, ribbon glazing around the first-floor perimeter, and a large atrium entrance over two storeys with internal light-wells providing further natural daylight to the interior.

ProCure21+ was a major enabler of the project: "It would have been very difficult for us *not* to use the ProCure21+ framework," says Catherine Barns. "There just wasn't any way that we could have got the facility up and running in such short timescales, without the support and guidance of the framework." She singles out the quality and frequency of communication, facilitated by the framework and the NEC3 contracting documentation: "With the modular solution making up so much of the programme, we were very reliant on our supply chain to deliver exactly as agreed. We had an excellent communications network in place between the Trust, Kier and Yorkon, which was set up to highlight any difficulties ahead of time, and enable a quick response to any hitches."

ProCure21+ value for money

Kier senior framework manager Lewis Parker says that ProCure21+ was fundamental to the provision of value for money. "We fixed areas such as the bedhead services, and repeated those across the scheme, so we're getting efficiencies out of the design that manifest in the price, and overall deliver really good value for money."

The new Women and Children's Unit gives improved clinical adjacencies between the unit and the hospital, via a tunnel known by the Trust as "the umbilical cord". The scheme achieved a BREEM 'Excellent' rating for sustainability, and integrates a number of features including a green sedum roof to part of its first floor, photovoltaic panels above its plant room, and an energy-efficient combined heat and power (CHP) system.

Trust director of environment and joint project director Kevin Howell comments that off-site construction had given the scheme "greater certainty and a substantial reduction in risk." He adds: "Timescales were extremely challenging, but the project was delivered on time. The partnership between stakeholders, Kier and Yorkon worked well."

The first baby was delivered at the Women and Children's Unit on 21st November 2013 – just 367 days after work commenced on-site. "The project really pushed the boundaries of off-site construction," says Catherine Barns. "Using ProCure21+ and the modular solution, we were able to deliver a fantastic building, on time and to an unreal timescale, which was a tremendous achievement for the Trust, Kier and Yorkon." +

Scheme Barnet, Enfield and Haringey Clinical Strategy: Women & Children's Unit

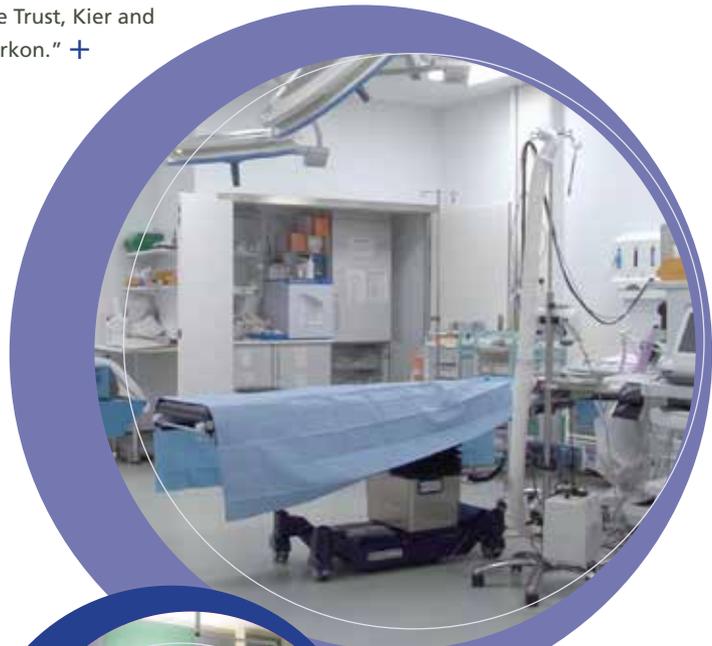
Trust North Middlesex University Hospital NHS Trust

PSCP Kier Health

Date of completion November 2013

Facilities include

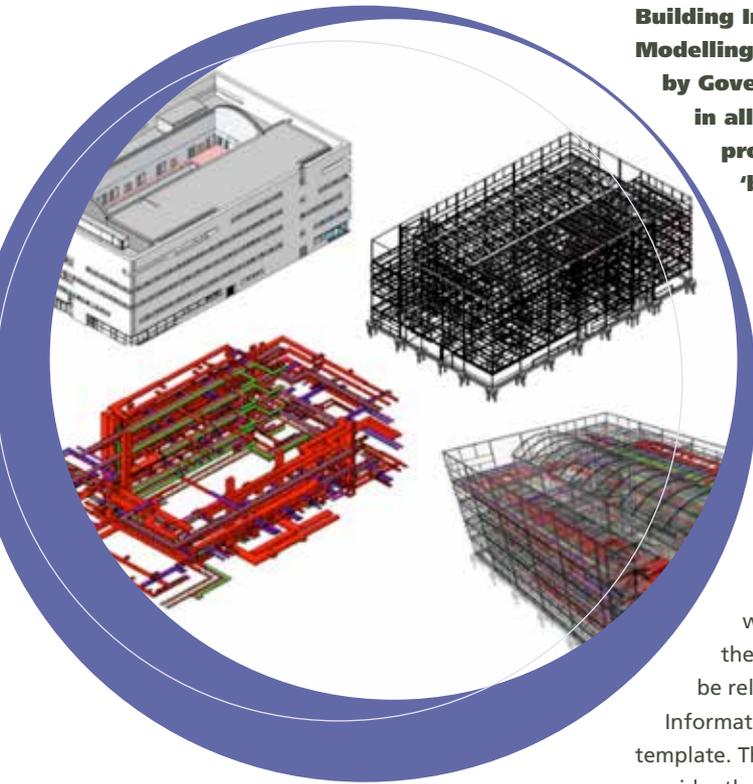
Midwife- and consultant-led units, two maternity operating theatres, special care baby unit, maternity outpatient facilities



Top
One of two maternity operating theatres within the consultant-led unit
Left A birthing room in the consultant-led unit

The benefits of keeping BIM simple

ProCure21+ development manager Julian Colaco on a new tool to help NHS clients specify BIM requirements efficiently and clearly



above A set of BIM models for a single building, showing external views, M&E and infrastructure

Building Information Modelling (BIM) – mandated by Government for use in all public sector projects – has become ‘business as usual’ for the ProCure21+ Principal Supply Chain Partners (PSCPs) and supply chains.

But how can NHS clients get the best from it? In a drive to ‘keep BIM simple’, and in preparation for the ProCure22 framework in which BIM will be fully embedded, the ProCure21+ team will be releasing a new Employers’ Information Requirements (EIR) template. This helps NHS clients consider the benefits of BIM at an early stage – and to specify what, exactly, they want to get out of it.

The EIR works in conjunction with the ProCure21+ BIM Benefits Matrix, which sets out 10 of the most significant benefits that BIM can provide on a ProCure21+ scheme. “So for instance, if a client wants to use BIM for visualising the layout of a building and its clinical adjacencies, the Benefits Matrix will tell them what benefits this will achieve and gives them the ability to

contractually require that benefit,” explains ProCure21+ development manager Julian Colaco. “The EIR then helps them to specify the detail of exactly what they want – to ask the right questions, and to understand their role as a client, without them having to get involved in the detail.”

For instance, taking the example of visualisation, the Benefits Matrix indicates that using a BIM-enabled 3D model of the building is faster, easier and more cost-effective than constructing a full-scale mock-up as done previously. A model represents exact geometric relationships, so stakeholder meetings are shorter and have less impact on business-as-usual; alterations can be made live in real-time during stakeholder engagement; all contract documentation is premised on a single, agreed model and is therefore more accurate and timely; and clashes are easier to detect, track and rectify.

Exact requirements

Working from the Benefits Matrix, the EIR document helps NHS clients to specify their exact requirements for visualisation, including how a model will be built, what software will be used, how it will be shared (and how often), and other stipulations. “This then becomes part

The benefits of keeping BIM simple

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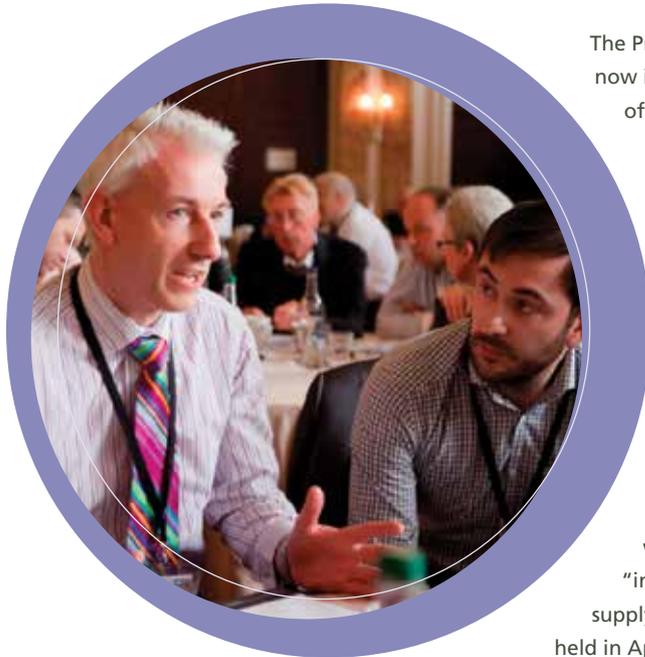
of the Works Information Template in the NEC Option C contract – and therefore a contractual requirement for the supply chain to deliver,” says Colaco.

The EIR also helps the ProCure21+ supply chain by defining the specification early in the scheme and thereby avoiding unnecessary work. “For instance, if a client doesn’t want whole life costing asset data –

in other words, if they don’t want to run their building in the operational phase using BIM – the PSCP can avoid spending time developing this,” says Colaco.

BIM Level 2 will be a core element of the forthcoming ProCure22 framework, and NHS clients are strongly encouraged to develop inhouse familiarity and skills in BIM processes and practice as soon as

possible. “The supply chain is well acquainted with the benefits of BIM, but NHS clients are less so,” says Colaco. “Public money spent on a scheme is increasingly expected to achieve certain standards, and BIM Level 2 is one of those. In releasing the EIR document, and simplifying BIM for easier use, we’re helping the NHS to be BIM-compliant and get the benefits, but without having to be BIM experts.” +



This autumn, the Parliamentary Under-Secretary of State for Health Doctor Dan Poulter approved the further development of the forthcoming ProCure22 framework.

The ProCure21+ team is now in the early stages of scoping the new framework, and it is envisaged that four consultation events, spread across the country, will be hosted for health and social care clients during March 2015, with a successive “industry day” for supply chain members held in April. Invitations will be issued in February.

The anticipated development process will see an OJEU notice posted in May/June 2015, initiating a full competitive tender process which will be completed by the early summer of 2016. The new framework will be launched in October 2016.

Further details of the scope of the new framework will be available in the next ProCure21+ PlusNews newsletter, due for publication in February/March 2015.

ProCure22: the next stage of evolution needs your input

ProCure21+ development manager Julian Colaco comments that input is welcomed from all supply chain members and NHS clients: to have an input, please get in touch using the email address p21helpdesk@dh.gsi.gov.uk. +

“Best possible environment” at Airedale’s new A&E

The new £4.89m Accident and Emergency department at Airedale Hospital was handed over to the Trust in November, providing the “best possible environment to care for our patients,” according to emergency medicine consultant Dr Meg Crossley of Airedale NHS Foundation Trust.

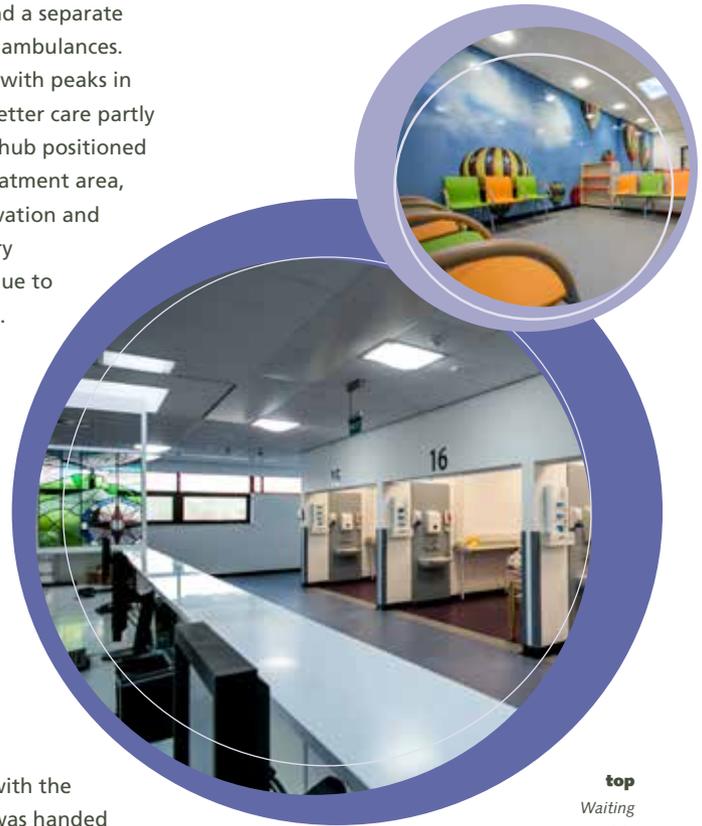
PSCP Willmott Dixon worked with the Trust from planning to delivery, using the ProCure21+ framework because – in the words of regional health manager Matthew Wall – the framework delivers results “quicker than OJEU, and it comes with an experienced supply chain.”

The new A&E, which extended and upgraded the existing provision built originally in the 1960s, forms part of the Trust’s strategic development plan to 2016. The existing A&E department had a footfall of over 55,000 patients each year, and “staff struggled daily to find room to see and treat patients,” says Matthew Wall.

The new 1,552m² facility includes separate adult and children’s waiting

areas, a quiet room and a separate screened entrance for ambulances. It is equipped to cope with peaks in demand and deliver better care partly by means of a central hub positioned at the heart of the treatment area, enabling better observation and preventing unnecessary inpatient admissions due to more timely responses. Privacy is maintained with curtains, and by windows with integral blinds. Technology at the bedside enables staff to view X-rays and blood test results more easily, also helping speedy patient care.

Dr Meg Crossley describes herself as “absolutely thrilled” with the new department. “It was handed over defect-free, on time and on budget with a very high quality finish to provide a modern environment with first-class working facilities.” +



top
Waiting area at Airedale Hospital A&E

above Treatment bays and administration facilities

ProCure21 and ProCure21+ projects completed: September – November 2014

Trust	Project title	PSCP	Completion date	GMP £m
Mid Staffordshire NHS Foundation Trust	Endoscopy and Central Decontamination Unit	Galliford Try HPS	3 October 2014	3.77
Greater Manchester West Mental Health NHS Foundation Trust	Additional medium secure beds	Integrated Health Projects	13 October 2014	5.2
Northumberland, Tyne and Wear NHS Foundation Trust	Minor Works contract	Laing O'Rourke	16 October 2014	10.5
Cambridge University Hospitals NHS Foundation Trust	Task Year 1	Galliford Try hps	27 October 2014	2
Great Ormond Street Hospital for Children NHS Foundation Trust	Southwood Imaging Suite	Balfour Beatty Group	5 November 2014	2.83
Hertfordshire Partnership NHS Foundation Trust	Mother & Baby Unit, Kingsley Green	Interserve Construction Ltd	17 November 2014	0.95

The Christie's new cancer centre "transforms" care using ProCure21+

New facility integrates treatment and care pathways

The Christie NHS Foundation Trust – the largest single-site cancer treatment centre in Europe – has opened its new Palatine Treatment Centre. The

£12m facility for teenage and young adult cancer patients, and haematology and transplant patients, was planned, designed and constructed by PSCP Interserve Construction using ProCure21+. The centre has "transformed" treatment and care for these

patients, according to director of the haematology and transplant unit, Dr Mike Dennis: "We now have a first-class environment that reflects our ambition to deliver more transplants and enable our patients to feel even more comfortable and cared-for."

Because around 30% of young cancer patients at The Christie have blood-related cancers such as leukaemia and lymphoma, the centre relocates the hospital's existing young oncology unit and haematology/transplant unit into a single purpose-built centre of 3,352m² floor area. The unit has outpatient facilities on its ground floor, 31 specialist inpatient rooms on the first floor, and improvements to existing facilities on the second floor, including a gym, music room and relaxation area, rehabilitation, support services and relatives' accommodation.

Construction challenge

PSCP Interserve faced several challenges during the planning and construction phase, including the requirement to work above a live clinical unit while maintaining access to lower-floor offices; issues were resolved with weekly meetings that focused on a traffic-light indicator system to avoid disruption to patients. To add to these challenges, the planning stage discovered that a section of the existing lower-storey



above The exterior of The Christie's new Palatine Treatment Centre
right Reception desk inside the building





building was incapable of sustaining the load of the new building. Interserve engineers designed a special 9.5m cantilever spanning the top of the existing building, using the largest stock steel beam available with a depth of 1m.

The site was awarded a Silver Considerate Constructors' accolade, and achieved a BREEAM 'Very Good' rating in line with its status as a part-refurbishment project.

ProCure21+ detailed control

The Christie's project manager Derek Cox praised the role played by ProCure21+ in the delivery of the new centre. "We've been using ProCure21 and ProCure21+ over a number of years, and it has helped us to deliver some absolutely top-class projects. We appreciate the excellent cost control and accuracy of projected outcomes that the framework enables, and the detailed control of any arising issues using the Early Warnings mechanism."

Part of the new facility is a dedicated gym for the exclusive use



top The planned new Proton Beam Therapy unit at The Christie – PSCP Interserve is due to begin work in 2016

above A specialist patient bedroom on the first floor of the new Palatine Treatment Centre

of teenage and young adult patients. The gym was opened by footballers from The Christie's official charity partner Manchester United. Said Wayne Rooney: "I know the former teenage cancer unit at The Christie provided fantastic care, but this new unit is absolutely superb."

Interserve continues to maintain a presence onsite at The Christie, having been awarded a contract to design and construct a state-of-the-art Proton Beam Therapy specialist radiotherapy unit for cancer patients, improving patient outcomes, reducing

unwanted side-effects from treatment and eliminating the need for patients to travel abroad to receive treatment. Work is scheduled to start on-site in 2016, completing in 2018, and again will be carried out under the ProCure21+ framework using full Level 2 BIM for maximum efficiency and accuracy in the planning, design and construction phases. +

Framework introduces aftercare monitoring system

To ensure high standards of aftercare, the ProCure21+ team has extended Monthly Monitoring (MMS) into the post-construction stage. The MMS system will see the ProCure21+ team monitoring the first year of a scheme's post-handover two-year defect liability period. Development manager Julian Colaco explains the thinking behind the change: "At handover, a building should be delivered defect-free, but of course any defects may take a while to emerge. So we use the Monthly Monitoring System to track latent defects and their management through a whole year's seasonal cycle."

The MMS uses a traffic-light system, and builds on the contractual requirement for the PSCP to address defects within two weeks of their notification. If the PSCP mobilises a response within two weeks of notification, and an agreement is



put in place to remedy the defect in line with client expectations, this can be registered as green; however, if the two-week period is exceeded it should be registered as amber, and if, at the next month's report, the defect is not addressed or rectified, it will automatically progress to red and the

system will notify increasingly senior members of the supply chain to mobilise a swift response. The NHS client is able to view all MMS reports provided by the PSCP.

Good management of aftercare

The aim of the MMS is to encourage good management of post-completion aftercare, both by the NHS client and by the PSCP. It also tracks handover of operational and maintenance manuals and training, upload of information to the ProCure21+ ProjectShare resource, KPI performance and agreement of financial accounts. "If all these things are managed well, we'll increase overall client satisfaction," says Colaco. +

For more information on defect liability, see this month's FAQs on page 10.



NHSBSA gets flexibility of refurb with ProCure21+

The NHS Business Services Authority (NHSBSA) has taken handover of Bridge House in Newcastle, newly refurbished under ProCure21+ by PSCP IHP. The BSA, which handles administrative services for the NHS including prescriptions, dental service payments, NHS

pensions and the NHS Injury Benefit Scheme. IHP ProCure21+ framework manager Paul Bishop remarked that the framework gave the scheme some flexibility: "Client requirements were necessarily flexible in the early days, and ProCure21+ meant we could continue to work together to develop requirements in the knowledge that there were no hidden issues." +



FAQs

DH senior policy & performance manager
Cliff Jones answers your ProCure21+ questions

What does it mean to say "no defects at completion" on ProCure21+ projects?

This means that there should not be any outstanding defects at the completion date on a ProCure21+ project. Defects include:

- defective design/materials/workmanship;
- any items included on what are referred to as "snagging lists";
- failure to provide copies of as-built drawings, warranties, operating manuals etc.

It is important to note that a failure to address those items that are required to be included in the Health and Safety File may leave the parties at risk of challenge for a failure to comply with the requirements of the Construction (Design and Management) Regulations 2007.

Why is this requirement included in the Works Information?

The rectification of defects after completion can disrupt the provision of healthcare within the NHS facilities affected, the degree of which is dependent on the type of healthcare services being provided within them. Any disruption to the provision of healthcare services not only inconveniences patients but may also result in an NHS client losing income for the clinical activities affected.

There is no provision in the NEC3 ECC for the rectification of defects

identified prior to completion to be rectified after the facility has been handed over and occupied.

The ProCure21+ framework requires that the PSCP certifies there are no defects in work offered up for handover (see ProCure21+ Pro Forma 16) or completion. See also Additional Condition of Contract Z19 amending NEC3 ECC clause 43.2.

It is essential that PSCPs are aware that the work to be done by completion is stated in Works Information 6.2(ii) and includes:

- Construction of the building and its services;
- External work;
- Commissioning of Plant and other installed equipment;
- Handover of maintenance and operation manuals and supplier's/ manufacturer's guarantees and warranties
- Operator training;
- Security systems proving and certification;
- Interior decorations and furnishings;
- Handover.

Handover requires the PSCP to rectify defects notified on inspections by the supervisor prior to the PSCP presenting the works for handover acceptance. Priority would be given to rectification of defects that could affect security of the scheme in use, or require access to patient-occupied areas.

In the event that an NHS client offers to accept their facility and occupy it with defects outstanding at completion,

a PSCP should ensure that the NHS client is made fully aware of the potential impact of any remedial works, undertaken thereafter, on the delivery of healthcare services.

It is also important for a PSCP to identify costs or other impact on the NHS client of any such proposal. This will enable the NHS client and PSCP to make an informed decision as to whether to leave any defects outstanding for rectification until after completion.

What are the risks to a PSCP if they do not achieve this state?

The risks to which PSCPs expose themselves may include:

- Imposition of delay damages where they are provided for in the contract.
- Recovery of indirect and consequential costs that are incurred by the NHS client in respect of providing access to occupied areas to complete any investigations or remedial works. Such costs may include:
 - o charges incurred as a result of not being able to decant other facilities;
 - o costs associated with suspending or transferring the delivery of healthcare;
 - o additional escort costs incurred for operatives, patients, etc to provide access to the PSCP for remedial works to be undertaken in respect of facilities. +