For planning purposes only

NHS

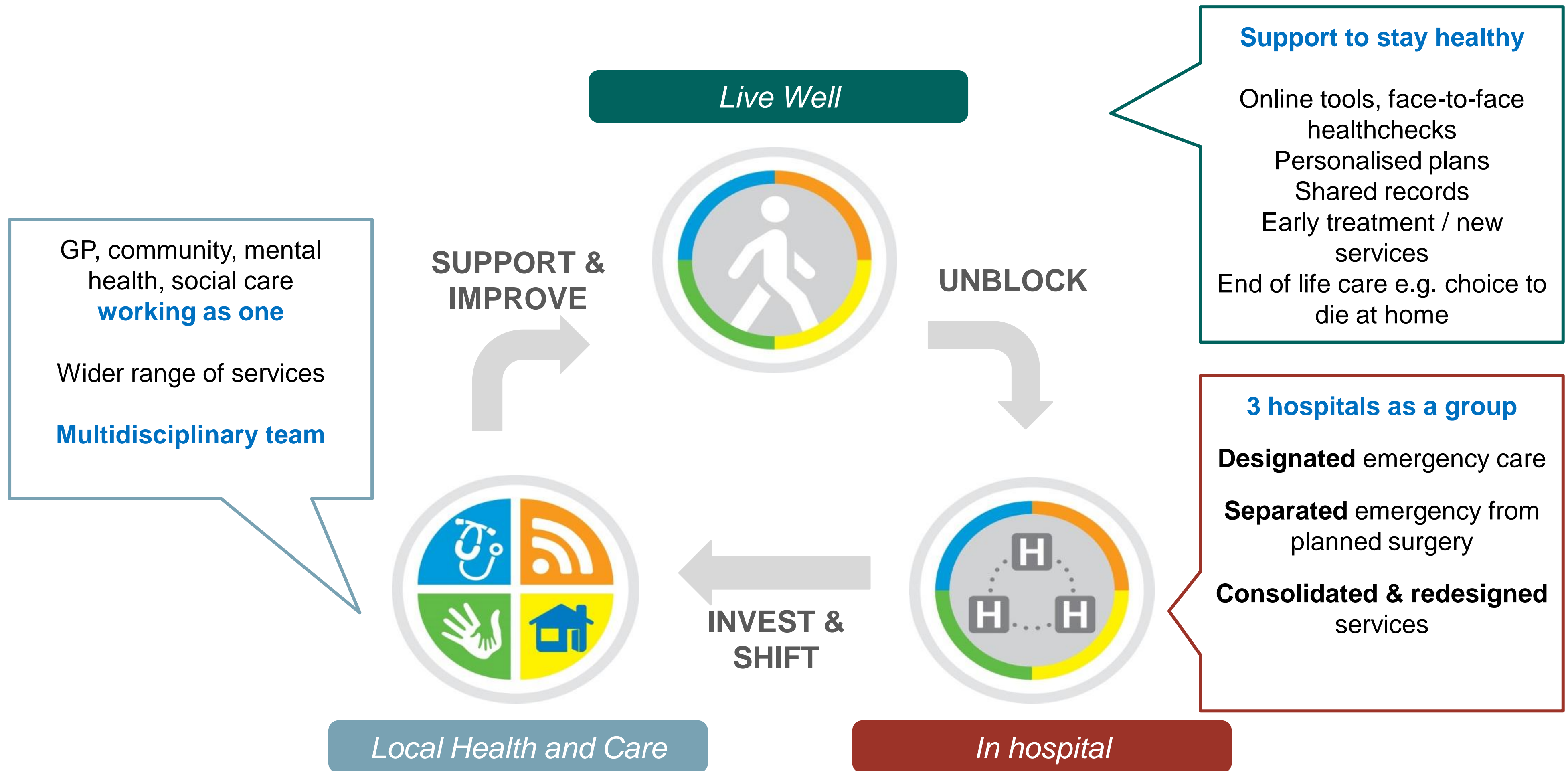
Mid and South Essex Success Regime

A programme to sustain services and improve care

STP – In Hospital Annex

21 October 2016

The Mid and South Essex Success Regime: a system-wide transformation



Acute transformation: emerging narrative

Effective system interventions will be put in place to stop the rise in non-elective admissions

All three hospital sites will still provide services for the majority of local patient visits ...

... including a 24/7 A&E with a selective take; maternity services, selected medical admissions and step down beds, diagnostics and outpatients

In addition, the ESR is considering the development of regional centres of excellence:

- **A specialist emergency centre** will receive life threatening emergencies, and will be able to offer an enhanced service (e.g. higher levels of consultant presence; more rapid access to diagnostics and interventions)
- **Elective surgical centre(s)** will treat patients in dedicated theatres and inpatient facilities to ensure better outcomes and a more reliable and efficient service
- **A system obstetric unit** will be established to deal with high risk deliveries, concentrating experience and expertise
- **A system childrens centre(s)** could be established for inpatient paediatrics

Development of options

The Acute Leadership Group (ALG) has developed high level options for specialty specific model of care e.g. the specialist emergency hospital

- These were presented at the June Clinical Senate and a second time in October

The specialty specific models have been combined into three holistic hospital models ...

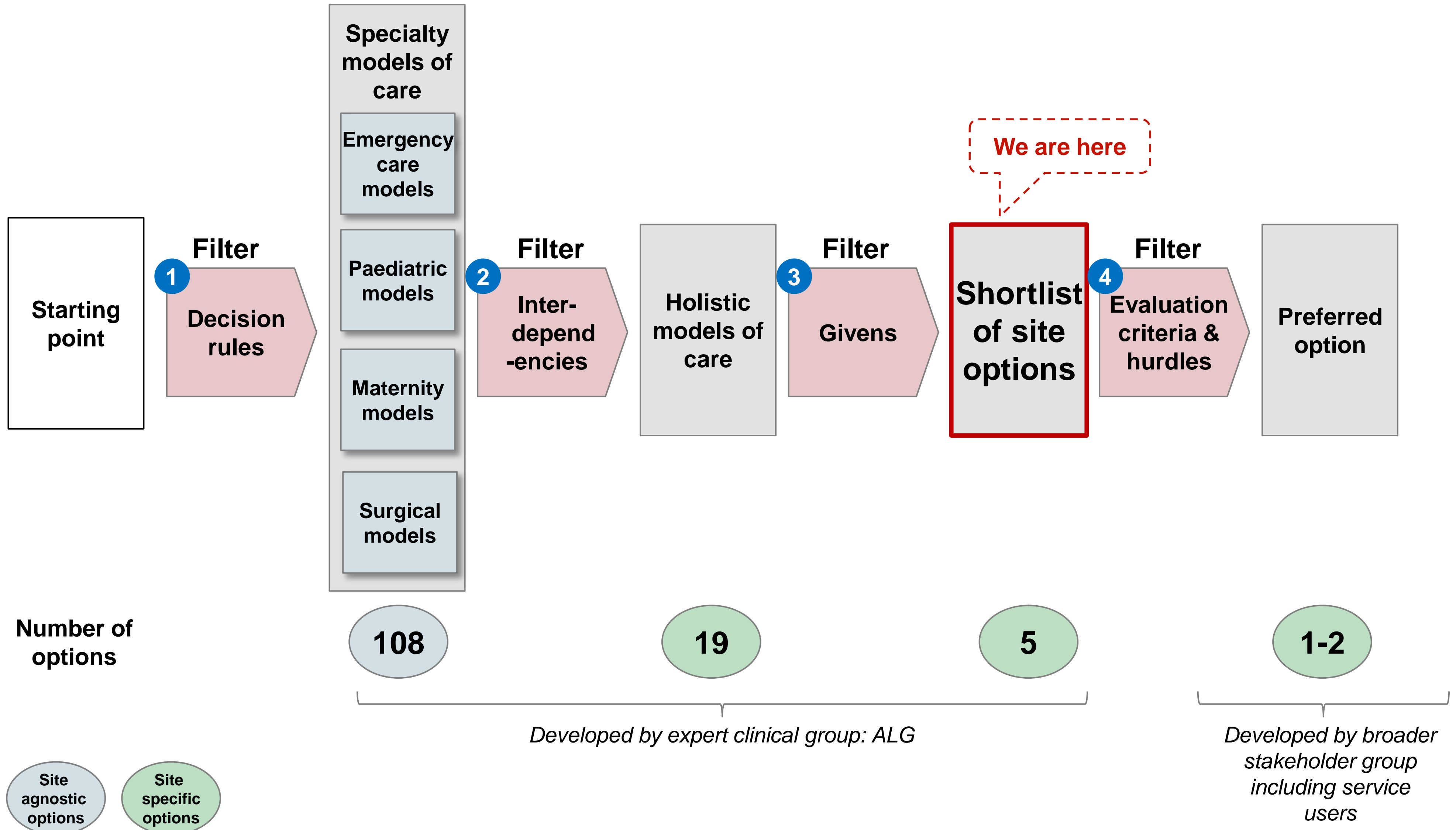
- Red, amber and yellow models – which take in to account service interdependencies, and are site agnostic

... and site specific options have been identified for these holistic models

- There are only a limited number of options due to the *givens*

This section outlines the preliminary options and the process to develop them

Options development process



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Decision rules for reconfiguration

- **A** The needs of the patient come first
- **B** Only do it (i.e. implement a new care model) if it is safe
- **C** Do not change it, if there is no rationale for service change
- **D** Deliver in 2 years: maintain "givens" (high-cost fixed services), no major new builds, use existing infrastructure with refits
- **E** Split elective and non elective work
- **F** Consolidate services where the increased volume will improve outcomes
- **G** Maintain core local services, and links to all sites (local site should be gateway to all hospital services)

Decision rules for redesign also developed

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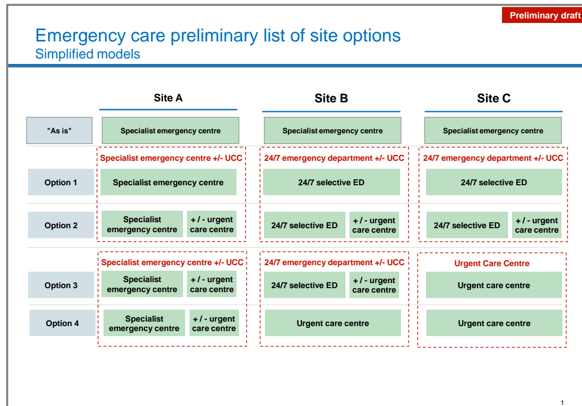
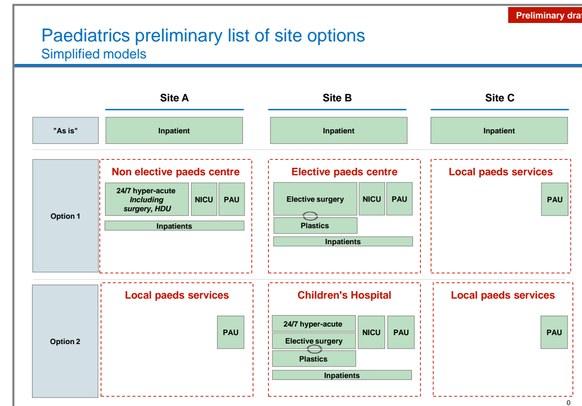
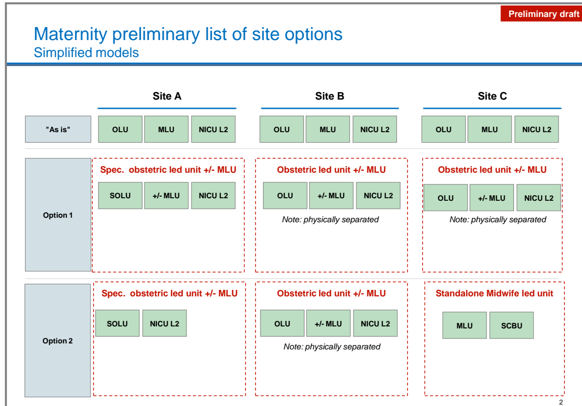
Recap: emerging specialty models from Acute Leadership Meetings

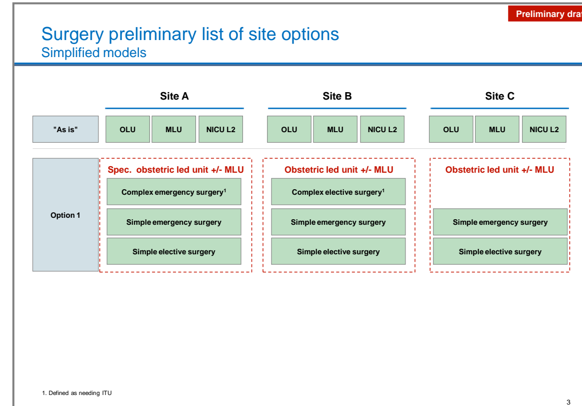
108 options possible for any particular hospital

Models presented at last Clinical Senate









Emergency care: 3 models

1. Specialist emergency hospital
2. 24/7 selective ED
3. UCC

Paediatric: 4 models (see next page)

1. Local paediatric unit
2. Elective only paediatric unit
3. Non elective only paediatric unit
4. *Children's hospital*

Maternity: 3 models

1. Specialist obstetric unit
2. Obstetrician led unit
3. *Standalone midwife led unit*

Elective surgery: 3 models

1. Complex elective surgical centre
2. Complex emergency surgical centre
3. Simple surgical centre only

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Version: 21/8/16

Filter 2: Interdependencies

Option	Interdependency	Strength	Source	Impact for Essex
Emergency care	Willetts recommends whole hospital designation for emergency sites: including specialty and diagnostic support e.g. 24/7	Strong	Willetts[1]	UEC models are starting point for options development
Paediatrics	Each site with ED needs paediatric cover	Weak	ALG	There must be a paediatric presence on each site: AMP/nurse led model
	Willetts definition of emergency centre with specialist services includes specialist paediatric services	Medium	Willetts[1]	Paediatric emergency surgery must be located at the specialist emergency centre
	Burns units must have paediatric medicine and paediatric surgery on the same site – specifically there must be 24 hour cover by a consultant paediatrician who can attend within 30 minutes and does not have responsibilities to other hospital sites	Strong	National Burn Care Standards[2]	There must be general paediatrics medicine / surgery at MEHT
Women's	Specialist obstetric unit co-located with emergency IR, vascular, cardiology	Medium	Clinical Senate	The specialist maternity unit must be located at the specialist emergency centre
Surgery	Complex elective surgery needs IR, critical care, acute medical / surgical cover	Medium	ALG	Complex elective surgery must be located at a site which has a 24/7 A&E
	Willetts definition of emergency centre with specialist services includes emergency vascular surgery	Strong	Willetts[1]	Complex emergency surgery must be located at specialist emergency hospital

Strong	Co-location essential	Medium	Co-location desirable	Weak	Local rationale, no guidance

1. NHS England. Transforming urgent and emergency care services in England. Guidance for commissioners regarding urgent care centres, emergency centres and emergency centres with specialist services 2. National Network for Burn Care. National Burn Care Standards. January 2013

Version: 11/10/16

Three potential service delivery models

Service	Specialist emergency hospital	Emergency hospital with elective	Elective centre with A&E	Givens
Emergency care	• 24/7 A&E: accepts all ambulances - +/- co-located frailty assessment unit, surgical assessment unit, acute medical unit, urgent care centre • Acute inpatient medicine • Specialist services: hyper acute stroke • Emergency inpatient surgery incl. low volumes / overnight • Acute-to-acute step-down beds	• 24/7 selective A&E: accepts daytime and "given" ambulances +/- co-located frailty assessment unit, surgical assessment unit, acute medical unit, urgent care centre • Acute inpatient medicine • Daytime emergency and schedulable non-elective inpatient surgery • Acute-to-acute step-down beds	• 24/7 selective A&E: accepts GP referral and "given" ambulances only +/- co-located frailty assessment unit, surgical assessment unit, acute medical unit, UCC • Acute-to-acute step-down beds	Burns and plastics @ MEHT Cardiothoracic centre @ BTUHFT
Paeds	• Outpatients • Paediatric assessment unit • Inpatients, high dependency unit *Paediatric surgery @ 1 site (tbc)*	• Outpatients • Paediatric assessment unit • Inpatients, high dependency unit	• Outpatients • Paediatric assessment unit (<24hrs) / ambulatory unit	High dependency unit @ MEHT
Women's	• Specialist obstetrician-led maternity unit for high risk births +/- co-located midwife-led unit • Local Neonatal Unit (L2)	• Obstetrician-led maternity unit+/- co-located midwife led unit • Local Neonatal Unit (L2)	• *Option 1* – Obstetrician-led maternity unit >2500 births & Local Neonatal Unit (L2) • *Option 2* – Obstetrician- led maternity unit <2500 births & Special Care Baby Unit (L1) +/- co-located midwife led unit	+/- standalone midwife led units @ community hospital sites
Elective surgery	• Day surgery • Elective surgery by exception only e.g. plastics / cardiothoracics	• Day surgery • Elective surgery (consolidated onto one site on a sub specialty level)	• Day surgery • Elective surgery (consolidated onto one site on a sub specialty level)	Cancer centre @ SUHFT Spec. urology centre @ SUHFT
Critical care	• Full service intensive care unit	• Full service intensive care unit	• Elective surgical intensive care unit	
Other	• Full range of diagnostic and therapeutic services • Outpatients and ambulatory services	• Full range of diagnostic and therapeutic services • Outpatients and ambulatory services	• Selected diagnostic services • Outpatients and ambulatory services	

TBC – ongoing discussions

Version: 26/9/16

Filter 3: considerations for site-specific locations of delivery models

Given	Interdependency	Strength	Source	Impact for Essex
Burns & plastics @ MEHT	Burns units must have (amongst others) the following on the same site: urgent and emergency care, orthopaedic surgery, care of the elderly, radiology, general surgery	Strong	National Burn Care Standards[1]	MEHT must be either specialist emergency centre or emergency centre with elective
	Burns units must have paediatric medicine and paediatric surgery on the same site – specifically there must be 24h cover by a consultant paediatrician who can attend within 30 minutes and does not have responsibilities to other hospital sites	Strong	National Burn Care Standards[1]	There must be general paediatric medicine at MEHT
CTC @ BTUHFT	*CTC – Vascular:* NHS England service specification states that "there needs to be a close relation between vascular services and cardiology / cardiac surgery services and whilst co-location is desirable it is not essential"	Medium	NHS England service spec[2]	BTUHFT must be either specialist emergency centre or emergency centre with elective
	CTC – Emergency Vascular – Emergency IR: CTC and emergency vascular have a shared interdependency for co-location with emergency IR • Local vascular review states 24/7 co-location of emergency vascular with IR is essential (elective vascular can be located at other sites)	Strong	Local vascular review[3]	Co-location of emergency vascular and emergency IR 24/7 services with CTC
	• London Health Programmes says cardiac and IR is absolutely dependent	Strong	London Health Programmes[4]	
	24/7 emergency IR service is likely to require consolidation to 1 site • Currently, not able to provide 24/7 service at any site	Medium	ALG	
Cancer centre	Complex cancer surgery will require intensive care unit. Option to deliver complex cancer surgery at different site to radiotherapy and other medical care	Strong	ALG	ITU @ SUHFT, if complex cancer surgery delivered on site

Strong	Co-location essential	Medium	Co-location desirable	Weak	Local rationale, no guidance

1. National Network for Burn Care. National Burn Care Standards. January 2013 2. NHS England 2013/14 NHS service specification for specialised vascular services 3. *A Vision for Developing the Interventional Radiology Service in Mid and South Essex* – August 2016, *A Vision for Vascular Care in Mid and South Essex* – August 2016
4. London Health Programmes co-dependencies framework.

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Five acute reconfiguration options

Option	BTUHFT	MEHT	SUHFT
1A	H Essex Cardiovascular Centre MS Essex spec. emergency hospital MS Essex specialist obstetric centre	H Essex Plastics & Burns Centre Emergency centre MS Essex elective surgical hospital	H MS Essex Cancer Centre Emergency centre MS Essex elective surgical hospital
1B	H Essex Cardiovascular Centre Emergency centre MS Essex elective surgical hospital	H Essex Plastics & Burns Centre MS Essex spec. emergency hospital MS Essex specialist obstetric centre MS Essex children's centre	H MS Essex Cancer Centre Emergency centre MS Essex elective surgical hospital
1C	H Essex Cardiovascular Centre Emergency centre MS Essex elective surgical hospital	H Essex Plastics & Burns Centre Emergency centre Elective surgical hospital	H MS Essex Cancer Centre MS Essex spec. emergency hospital MS Essex specialist obstetric centre
2A	H Essex Cardiovascular Centre MS Essex spec. emergency hospital MS Essex specialist obstetric centre	H Essex Plastics & Burns Centre Emergency centre MS Essex elective surgical hospital	H MS Essex Cancer Centre Local emergency centre MS Essex elective surgical hospital
2B	H Essex Cardiovascular Centre Emergency centre MS Essex elective surgical hospital	H Essex Plastics & Burns Centre MS Essex spec. emergency hospital MS Essex specialist obstetric centre MS Essex children's centre	H MS Essex Cancer Centre Local emergency centre MS Essex elective surgical hospital

Filter 4: Evaluation against criteria and hurdles

Criteria

Quality, clinical outcomes and patient safety

- Meet national recommendations (e.g. Willetts, Cumberlege) and move towards best practice quality standards (e.g. Royal Colleges), ensure safe staffing levels, safety outcomes, 7 day working for emergency care, optimal patient experience

Sustainable clinical workforce

- Move towards best practice workforce standards and improve training opportunities (e.g. Royal Colleges), improve quality of working life for all staff

Efficiency and productivity

- Deliver services at lower cost where possible

Access

- Maintain appropriate access and choice to services for patients, relatives and workforce

Hurdles

Interdependencies

- Maintain appropriate clinical adjacencies

Capacity

- No new builds

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Filter 4: Capacity modelling

The capacity implications of each acute reconfiguration option are being modelled to inform the options appraisal process

- Minimising capital expenditure on new builds is a key hurdle for options appraisal
- It will also feed into the financial annex of the PCBC, and funding applications to NHS E

This work projects activity growth to 2020/21, based on national assumptions...

- Forecast volumes of spells, bed days and theatre hours in each hospital

... and maps changes in activity between hospitals, based on the future model of care

- e.g. movement of out of hours emergency surgery to specialist emergency centre

This is then translated into an implied capacity requirement for each trust

- In hospital beds, operating theatres, and A&E attendances

Essential requirements to make the model work

> Capability of ongoing operational re-design at each site

- Success of the transformation is predicated upon effective demand and flow management

> Capacity in acute hospitals

- Move services out of hospital where applicable; reduce non elective demand; faster discharge; provision of rehab / neuro rehab in the community; provision of intermediate beds; ...

> Workforce re-design

- Single management across sites with new, combined rotas; rotation of staff; new role development; shuttle services; standardisation of equipment and protocols; consistent pathway re-design; common training and appraisal systems; use of technology and telemedicine; ...

> Sign-posting

- Clear protocols for ambulance re-routing and GP referrals; communication with public on service offering; ...

> Patient and carer transfer service

- Effective transfer system for patient and carer transfer between hospitals, as decreed by ambulance conveyance protocols (to be designed)

> Capital investment

- Repurposing of wards; building new theatres; additional patient transport and ambulance costs; technology and telemedicine

> Shared corporate and non-corporate resource

- IT; non-clinical support; imaging; pathology results; procurement

Illustrative patient pathways (I/IV)

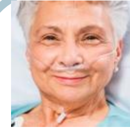
Sue, aged 85, fall, 4pm

Sue slips and falls at home, where she lives alone. She is assessed by the GP service, and referred to the Frailty Assessment Unit

She is assessed in the FAU, who have access to her core clinical details from primary care, and commence IV antibiotics for a chest infection.

The decision is made to keep her in for two days to continue her IV antibiotics, staying in an intermediate care bed.

Discharge planning by the multi-disciplinary team starts from the point of admission, and she is discharged with support after two days



Jill, aged 62, with abdominal pain

Jill experiences severe abdominal pains and vomiting, calls an ambulance

Paramedics make preliminary assessment that surgical intervention may be needed

The ambulance bypasses the closest hospital which is H and takes Jill to the H hospital

Jill is reviewed in the surgical assessment unit and investigations and consultant review completed within 90 minutes... she is taken to theatre same day and operated on

Jill is discharged home within 2 days

Illustrative patient pathways (II/IV)

Tony, 82, slips and falls

Tony is found on the floor, confused

He is taken to **H** where he has a comprehensive geriatric assessment revealing his dehydration and lack of general self care at home

He stays overnight for stabilisation and is set immediately on a pathway for discharge and reablement

He is discharged to community care after 24-48hrs

Andy, aged 53, heart attack, all hours

Andy walks in to **H** with central crushing chest pain

He is assessed on the AMU, and diagnosed with a STEMI. He is stabilised and transferred to the **H** for definitive management

2-3 days later, he is discharged from the **H** hospital, and followed up locally

Illustrative patient pathways (III/IV)

Julie, 32 weeks pregnant, placental abruption

Julie is 32 weeks pregnant and calls an ambulance as she is experiencing vaginal bleeding.

Julie lives closest to the H but is taken to the H or H where there is a L2 neonatal unit

Julie is assessed by an obstetrician and midwife and an emergency caesarean section is performed for placental abruption. Julie's baby is seen immediately following delivery by the paediatric team and her baby is transferred to the neonatal unit for treatment.

Julie and baby recover in hospital and are both discharged home within one week.

Susan, first pregnancy

During Susan's first pregnancy, she wants local care. She attends the H in labour. As per her birth plan, she attends the midwifery led unit

An unexpected complication occurs and she is transferred to the adjacent obstetric led unit

There her labour progresses, requiring instrumental assistance for delivery. She goes home with her baby next day

Illustrative patient pathways (IV/IV)

Charlotte, aged 8, asthma attack, at night

Charlotte has asthma attack at home at night...

... parents bring Charlotte to closest A&E at the **H**

Charlotte is reviewed and stabilised by a paediatric registrar ...

.... and transferred to paediatric assessment unit for monitoring

Charlotte is discharged the next morning after review by paediatric consultant

Emma, aged 2, ALL, daytime

Emma attends GP referral pale, bleeding from gums, fever 2 weeks, and is seen by the Paediatric team.

A blood test FBC shows Hb 6.5, WCC 2.3, Platelets 32 and blood film blast cells. She is diagnosed with ALL and started on antibiotics

She is discussed with Tertiary centre Paediatric Oncology unit. She is transferred to Tertiary centre next day for further treatment and management.