Content

Department Name: Integrated and Urgent Care

Process Name: Somerset Stroke Hyperacute Ideal Pathway

Change History:

Version	Draft	Date	Author	Comments
0.1	Yes	02/03/2022	Clare Bennett	Meeting 01/03/2022
0.2	Yes	09/03/2022	Clare Bennett	Post meeting amends 09/03/2022
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1.1	Yes	24/06/2022	Clare Bennett	Post meeting 23/06/2022
1.2	Yes	09/08/2022	Clare Bennett	Post meeting 09/08/2022

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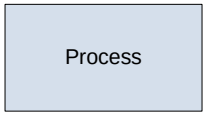
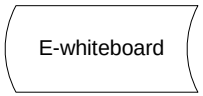
Legend

Symbol used to Indicate the start or end of a process

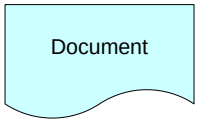


Symbol used to indicate an event, task or action

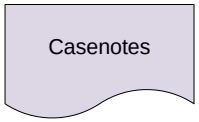
Symbol used to indicate whiteboard actions



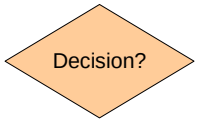
Symbol used to indicate e-whiteboard actions



Symbol used to indicate paper documents and proforma activity **excluding** patient Case Notes



Symbol used to indicate Case Note activity



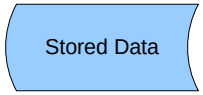
Symbol used to indicate a decision point. The question is shown in the icon and there will be two options

Symbol used to indicate a choice as to which path to take. There can be multiple outputs.

Symbol used to indicate a point whereby all output paths should be actioned.

Symbol used to illustrate **Diary/Whiteboard Updates**, labelled accordingly i.e
Admission Diary = AD
Receptionist Diary = RD
Transfers Whiteboard = TW
Patient Whiteboard = WB

Symbol used to Indicate the start or end of a process



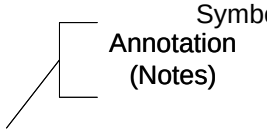
Symbol used to indicate a system where data is captured inc. emails

Symbol used to indicate a reporting point i.e. system generated reports or escalation points to management etc.

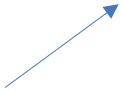
Symbol used to indicate a link **to** another map

Symbol used to indicate a link **from** another map

Symbol used to illustrate link to **maps** within other Visio documents



Symbol used to include a comment or additional information



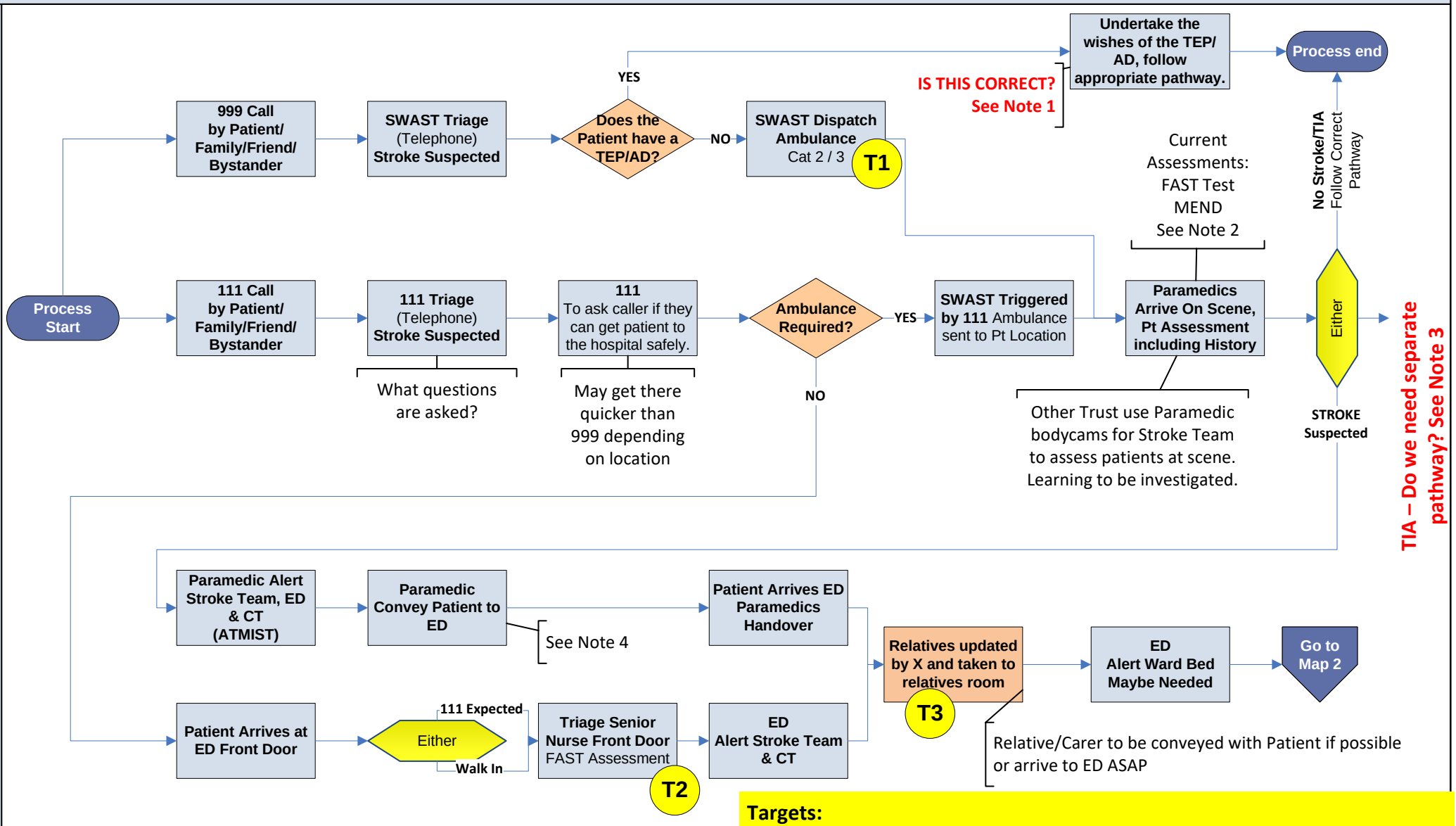
One-way arrow used to show sequence of events and what is produced by an event.

Symbol used to illustrate multiple **issues, n**umbered accordingly

Symbol used to illustrate multiple **ideas, n**umbered accordingly

Somerset Stroke Hyperacute Service – Map No 1 – Ideal Pathway

Integrated and Urgent Care



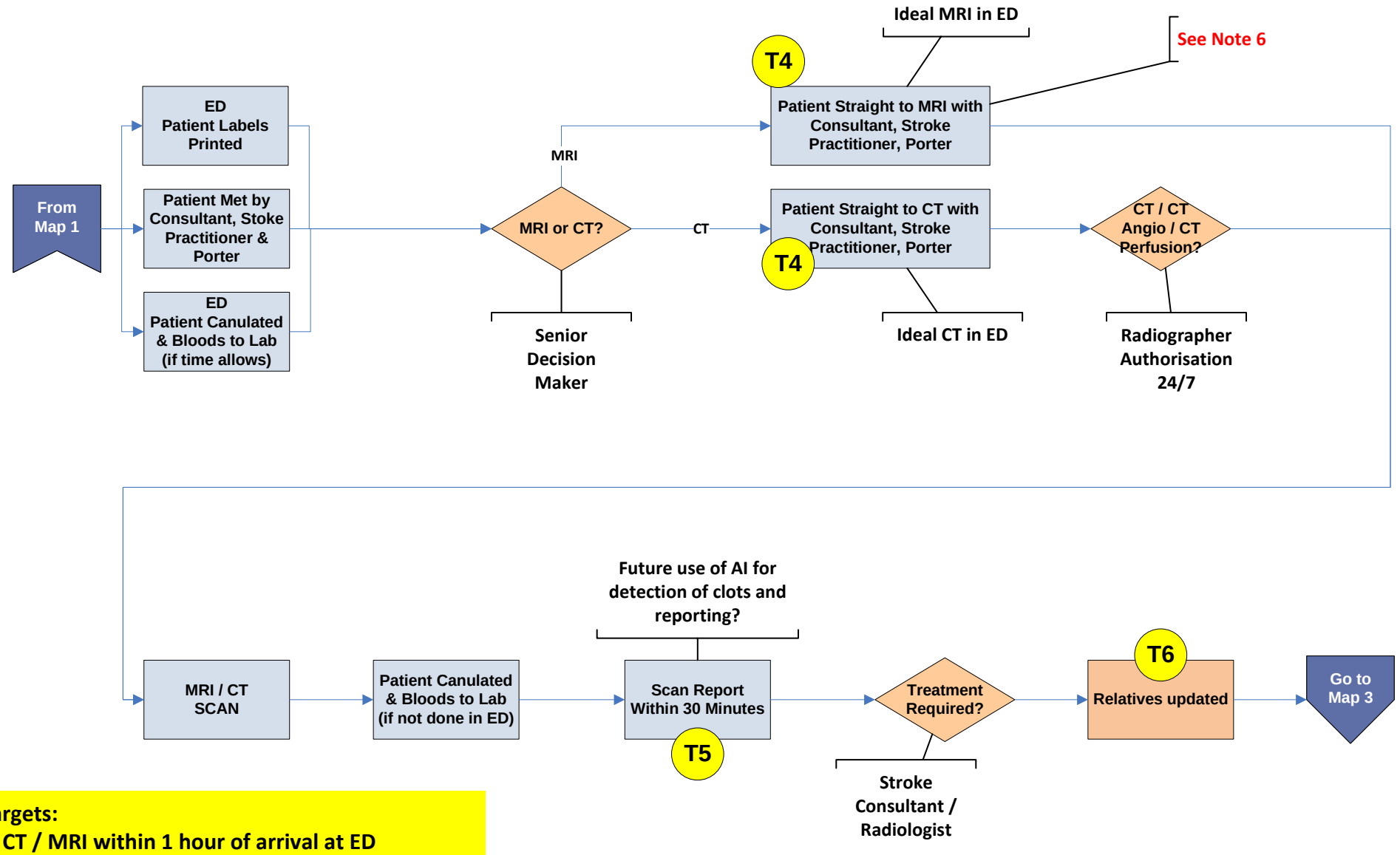
From Meeting 1st March 2022

Targets:

1. **SWAST on scene (with Ambulance) Cat 2 19 minutes, Cat 3 60 Minutes**
2. **Identification of FAST symptoms on scene/front door ED**
3. **Family involvement throughout pathway**

Somerset Stroke Hyperacute Service – Map No 2 – Ideal Pathway

Integrated and Urgent Care



Targets:

4. CT / MRI within 1 hour of arrival at ED

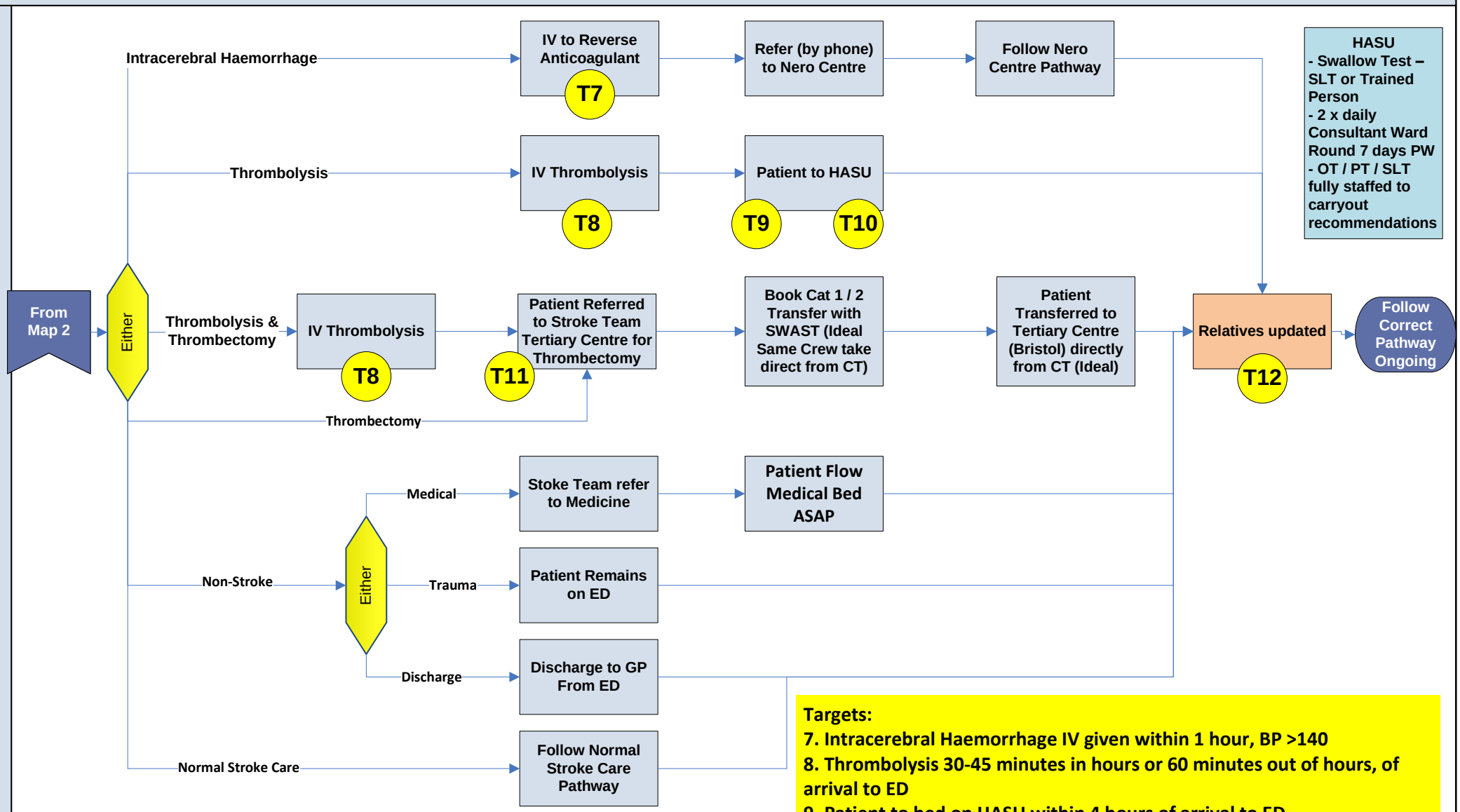
5. Scan report within 30 minutes

6. Family involvement throughout pathway

From Meeting 1st March 2022

Somerset Stroke Hyperacute Service – Map No 3 – Ideal Pathway

Integrated and Urgent Care



Note 1:
Ideally everyone would have a TEP/AD uploaded to a central system that SWAST would have access to. E.g. 82 year old patient in nursing home with a TEP that states no medical intervention would not be sent a CAT2/3 ambulance and be conveyed to hospital.

Note 2:
FAST – Face (drooping), Arms (weakness), Speech (difficulties), Time
MEND – Checklist covering mental status, cranial nerves and limbs

Note 3:
Do we need a separate pathway for TIA?
? Treatment SDEC or assess on HASU with forward management, therefore no return to clinic required?

Note 4:
ED/Stroke Team require access to patient history, NOK details taken by Paramedics, can this be done digitally?

Note 5:
Need to learn from other Trusts/Areas that have done similar:
- Vascular Service East & South Devon
- Winchester & Basingstoke
- Durham & Darlington

Note 6:
Even in an ideal world getting a patient to MRI within an hour maybe difficult due to the safety implications associated with a magnetic field and the need for an accurate safety questionnaire to be filled out by the patient or relative who knows a full history. Some patients may not be suitable either due to the length of time of an MRI scan and potential swallowing issues – which may need an initial/basic assessment first.

From Meeting 1st March 2022

The short list of Options for the review of Stroke Services has been created following consideration of the longlisted options prior to the 2019 Stroke Strategy and is for discussion within the Stroke Transformation Group.

From Meeting 1st March 2022

Integrated and Urgent Care

1. DO NOTHING	**Pros:**	**Cons:** - Doesn't help with recruitment issues. - Doesn't allow for development of the service. - Currently not cost effect. - Left as is will not be sustainable.
2. SINGLE DELIVERY TEAM	**Pros:** - Good option however will need the correct workforce to do this and access to scanners etc. - Minimal change in hours.	**Cons:** - Ongoing costs of meeting all stroke targets across two sites. - Diluting current expertise. - Potential to limit services in different settings. - Less expertise if spreading thinly. - Ideal solution but not so easy to achieve. - Complex to deliver. - Potential for patients going to wrong centre. - Concerns over secondary transfer . - This will not improve the workforce or resources. - Significant risk of staff fatigue and wellbeing issues.
3. YDH & DCH	**Pros:** - ?No impact on Musgrove? - Reduced transfers to Musgrove.	**Cons:** - Sharing services across Counties / ISDN's / ICS - Potential for wrong service location. - Confusing for SWAST & more crews needed. - Other hospitals become overloaded.

From Meeting 1st March 2022

Integrated and Urgent Care

4. NO YDH HASU	**Pros:** - No access to CT angiogram OOHs limits YDH ability to offer thrombolysis & assessment for thrombectomy OOHs, this is available at MPH. - Could work with a Stroke assessment unit and a direct referral to medics if adequate ring fenced assessment beds. - 4A Would not affect the onset to thrombolysis time. - 4A Maintain skills and competencies on both sites.	**Cons:** - Pts will still walk-in. - Confusing for SWAFT & service users as to what services is where. - Bed capacity would need to increase at MPH to accommodate. - Possible excess mortality 1:86 from ED overcrowding. & poor care for patients with Stroke mimics (2/3). - Increased secondary transfers, repatriation and demand for SWAST. - Patients care not always close to home. - Overloading other hospitals. - 4A Will create some confusion regarding available services with ED / paramedic staff. - 4A Increased pressure on repatriation on next week for YDH. - 4B Will affect the onset to thrombolysis time. - 4B More pressure to staff and resources in SFT. - 4B Significant risk of staff fatigue and wellbeing issues. - 4B May impact weekend care to remaining HASU patient in YDH. - 4B This will increase number of mimics to SFT ED (if not stable or require an urgent interventions , they would not be suitable for direct medical referrals).
5. SFT ONLY HASU	**Pros:** - Clarity for SWAST and patients. - Single HASU site. - Could work with a Stroke assessment unit and a direct referral to medics if adequate ring fenced assessment beds. - 5A Less confusing compared to option 4A. - 5A Would not affect the onset to thrombolysis time, therefore better hyperacute care. - 5A Minimise transfer of stroke mimics to SFT. - 5B Clear and constant pathway, less complicated. - 5B Much more effective service development in a single centre considering workforce and resources issues.	**Cons:** - Delay to patients seeing a Stroke Specialist within the natinal standard of 1 hour. - Possible excess mortality 1:86 from ED overcrowding & poor care for patients with Stroke mimics (2/3). - Care distant from family and rehab services. - Concerns over secondary transfers. - Other hospitals DCH & MPH become overloaded. - 5B Significantly high pressure on staffing and resources at SFT. - 5B Significant risk of staff fatigue and wellbeing issues. - 5B Potential risk of deskilling YDH staff.

From Meeting 1st March 2022

6. HASU / ASU ON SINGLE SITE ONLY - SFT	**Pros:** - Could work with a Stroke assessment unit and a direct referral to medics if adequate ring fenced assessment beds.	**Cons:** - Delay to patients seeing a Stroke Specialist within the natinal standard of 1 hour. - YDH area patients will not receive acute care closer to home. - Care distant from family and rehab services. - Delays to HASU for Stroke patients.
7. NO HASU IN SOMERSET	**Pros:**	**Cons:** - Conveying patient to out of area facilities would be detrimental to health outcomes. - Negative impact on all Somerset partners not meeting targets and standards expected of a Stroke service. - Huge impact on Stroke services in either counties. - Will worsen outcomes for Stroke patients in Somerset. - Care distant from family and rehab services. - Need full modelling from SWAST perspective.

From Meeting 1st March 2022

Integrated and Urgent Care

1. DO NOTHING	- Issues with recruitment of Stroke physicians at YDH. - Current service not equal & difficult to maintain (RN). - Need to enable service development not appropriate with current service, not cost effective (R Halley RN). - Not viable. - Need full modelling from SWAST perspective. - Not sustainable long term (SWAST).
2. SINGLE DELIVERY TEAM	- Ongoing costs of meeting all stroke targets across two sites. - Diluting current expertise & would need staffing (R Larkham SP). - Unless staffing is resolved, potential to limit services in different settings. Less expertise if spreading thinly (R Halley RN). - Ideal solution but how easy is this to achieve? (Dr Shah). - Not very different to option1without the additional resources (Rob Whiting, Stroke Consultant). - Complex to deliver. - Need full modelling from SWAST perspective. - Minimal change in hours (SWAST). - Did not work with vascular in East & South Devon (SWAST). - Potential for patients going to wrong centre (SWAST). - Concerns over secondary transfer (SWAST).
3. YDH & DCH	- No impact on Musgrove? (R Larkham SP, R Halley RN). - 3A Sharing services across two Counties / ISDN's / ICS would be complicated. - Need full modelling from SWAST perspective. - 3A Potential for wrong service / location (SWAST). - 3A Did not work in other services (SWAST). - 3A Confusing for ambulance service on location (SWAST). - 3A Reduced transfers to Musgrove (SWAST). - 3A More crews in area (SWAST). - 3B Clarity for crews and patients (SWAST). - 3B Single HASU site (SWAST). - 3B Other hospitals DCH & MPH become overloaded (SWAST)

From Meeting 1st March 2022

Integrated and Urgent Care

4. NO YDH HASU

- Would need bed base increasing to enable this. Confusion over what service & when (R Halley RN).
- 4B If patients to Taunton at weekends only would we get increase bed capacity or would in stay the same like for Weston? (R Larkham SP).
- Standardisation of imaging across the area.
- No access to CT angiogram OOHs limits YDH ability to offer thrombolysis & assessment for thrombectomy OOHs (evenings/overnight & weekends) (Rob Whiting Stroke Consultant).
- 4B/5B Excess mortality 1:86 from ED overcrowding. & poor care for patients with Stroke mimics (2/3).
- Need 4-6C, Could work with a Stroke assessment unit and a direct referral to medics if adequate ring fenced assessment beds.
- 4-7 care distant from family and rehab services.
- Need full modelling from SWAST perspective.
- 4A Increase IFT's to HASU concerns over secondary transfers (SWAST).
- 4A Increase demand on Stroke nurses (SWAST).
- 4A No change on current pathway (SWAST).
- 4A Increase demand and transfers (SWAST).
- 4A Would not affect the onset to thrombolysis time.
- 4A Maintain skills and competencies on both sites.
- 4A Will create some confusion regarding available services with ED / paramedic staff.
- 4A Increased pressure on repatriation on next week for YDH.
- 4B Decrease alternative (SWAST).
- 4B Increase demand and transfers, confusion for crews OOH (SWAST).
- Overloading at MPH, DCH & RUH of general medical team with mimics.
- Need for repatriation for Stroke mimics / PTS
- 4B Will affect the onset to thrombolysis time.
- 4B More pressure to staff and resources in SFT.
- 4B Significant risk of staff fatigue and wellbeing issues.
- 4B May impact weekend care to remaining HASU patient in YDH.
- 4B This will increase number of mimics to SFT ED (if not stable or require an urgent interventions , they would not be suitable for direct medical referrals).

From Meeting 1st March 2022

Integrated and Urgent Care

5. SFT ONLY HASU

- National standards recommend Stroke Specialist review for Stoke patients (within 1 hour), this options 5a & 6a will add delay to Stroke patients seeing a specialist. I would opt for 5a (Rob Whiting Stroke Consultant).
- 4B/5B Excess mortality 1:86 from ED overcrowding. & poor care for patients with Stroke mimics (2/3).
- Need 4-6C, Could work with a Stroke assessment unit and a direct referral to medics if adequate ring fenced assessment beds.
- 4-7 care distant from family and rehab services.
- Need full modelling from SWAST perspective.
- 5B/6B Would work but modelling and funding be needed (SWAST).
- 5B/6B Has negative impact /decisions on destinations.
- 5A Increase IFT's to HASU concerns over secondary transfers (SWAST).
- 5A Increase demand on Stroke nurses (SWAST).
- 5A Less confusing compared to option 4A.
- 5A Would not affect the onset to thrombolysis time, therefore better hyperacute care.
- 5A Minimise transfer of stroke mimics to SFT.
- 5B Clarity for crews and patients (SWAST).
- 5B Single HASU site (SWAST).
- 5B Other hospitals DCH & MPH become overloaded (SWAST).
- 5B Clear and constant pathway, less complicated.
- 5B Much more effective service development in a single centre considering workforce and resources issues.
- 5B Significantly high pressure on staffing and resources at SFT.
- 5B Significant risk of staff fatigue and wellbeing issues.
- 5B Potential risk of deskilling YDH staff.

From Meeting 1st March 2022

Integrated and Urgent Care

6. HASU / ASU ON SINGLE SITE ONLY - SFT	- National standards recommend Stroke Specialist review for Stoke patients (within 1 hour), this options 5a & 6a will add delay to Stroke patients seeing a specialist. Stroke Consultant). - Will stop YDH area patients receiving their acute care closer to home (Rob Whiting Stroke Consultant). - Need 4-6C, Could work with a Stroke assessment unit and a direct referral to medics if adequate ring fenced assessment beds. - 4-7 care distant from family and rehab services. - Need full modelling from SWAST perspective. - 5B/6B Would work but modelling and funding be needed (SWAST). - 5B/6B Has negative impact /decisions on destinations. - 5A Increase IFT's to HASU concerns over secondary transfers (SWAST). - 5A Increase demand on Stroke nurses (SWAST). - Delays to HASU for Stroke patients.
7. NO HASU IN SOMERSET	- Not an option, impact on all Somerset partners (R Larkham SP). - Impact on partners not meeting targets and standards expected on Stroke service)R Halley RN). - Huge impact on Stroke services in either counties. - Will worsen outcomes for Stroke patients in Somerset (Rob Whiting Stroke Consultant). - Politically unacceptable. Not best patient care. - 4-7 care distant from family and rehab services. - Need full modelling from SWAST perspective.

From Meeting 1st March 2022

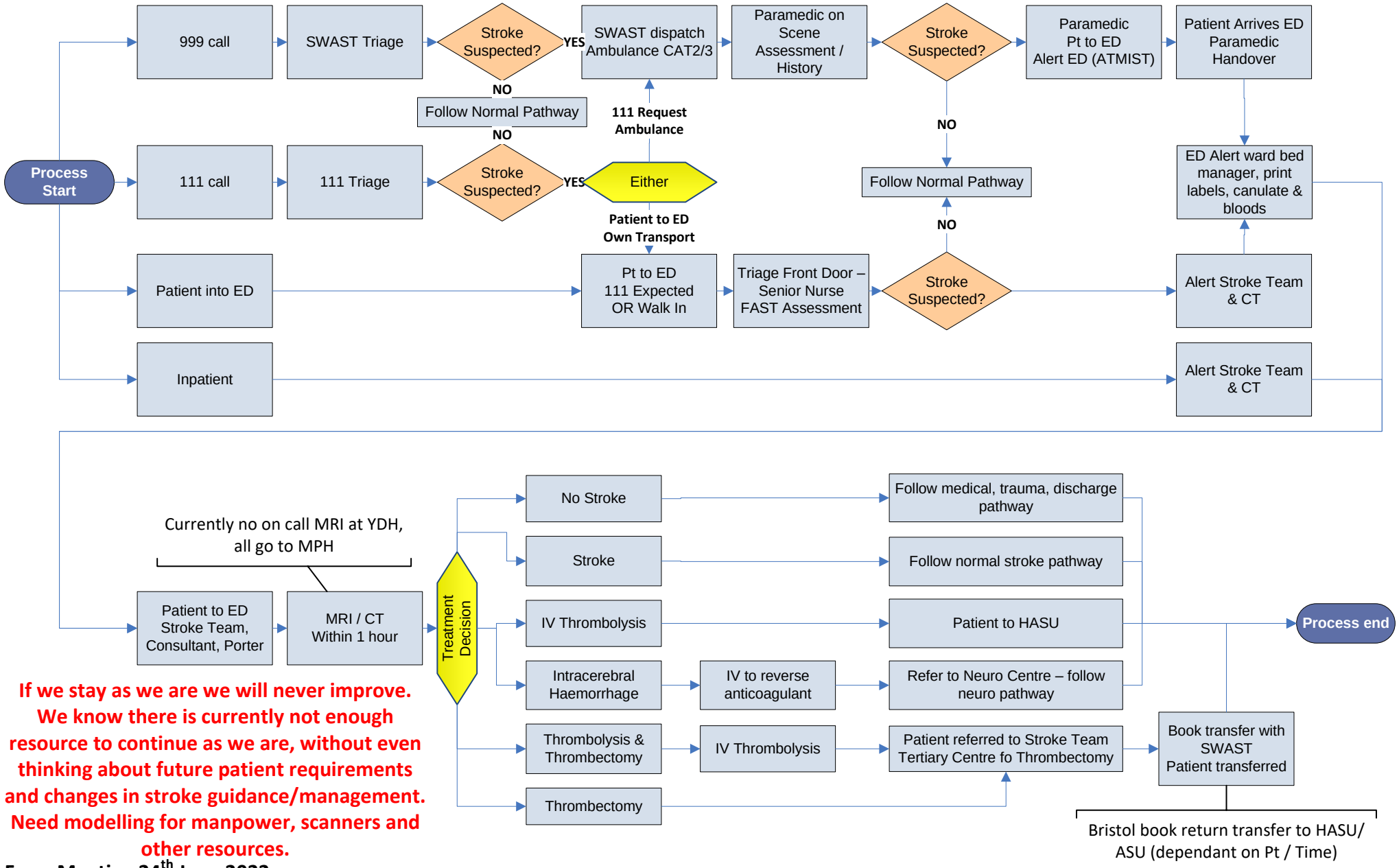
Final stroke shortlist

OPTION A NO CHANGE TO CURRENT MODEL	OPTION B NO CHANGE SINGLE MEDICAL DELIVERY TEAM	OPTION C SINGLE HASU AT SFT	OPTION D SINGLE HASU & ASU AT SFT
There would be no change to the current delivery model	There would be no change to the current delivery model	SWASFT would take all suspected stroke patients to nearest HASU	SWASFT would take all suspected stroke patients to nearest HASU
HASU and ASU services would continue to be delivered in both Taunton and Yeovil in the same way	HASU and ASU services would continue to be delivered in both Taunton and Yeovil	Yeovil emergency department would not receive suspected stroke patients at any time	Yeovil emergency department (A&E) would not receive suspected stroke patients at any time
	There would be a single medical workforce would be shared across both sites	Most patients who would normally go to Yeovil would go to Taunton for all their hyperacute stroke treatment	Patients would go to Taunton for both HASU and ASU care
		Patients would return to Yeovil for their ASU care	Patients would be discharged closer to Yeovil following their acute care
		There will be an impact on Dorset for this option	There will be an impact on Dorset for this option

From Meeting 24th June 2022

Somerset Stroke Hyperacute Service – Options Shortlist – Option A – No Change to Current Model

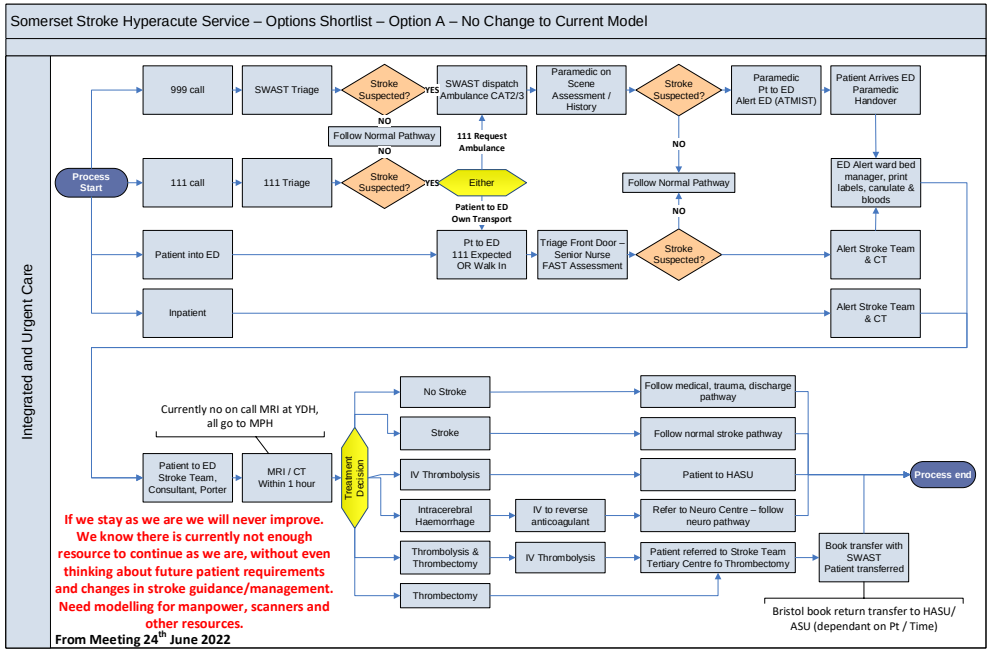
Integrated and Urgent Care



If we stay as we are we will never improve. We know there is currently not enough resource to continue as we are, without even thinking about future patient requirements and changes in stroke guidance/management. Need modelling for manpower, scanners and other resources.

From Meeting 24th June 2022

Integrated and Urgent Care



As Option A however using a single medical delivery team.

How many Consultants would be needed?

Some many be more flexible than others, however more time will be spent travelling to the different locations impacting on clinical hours.

May not be easy to get agreement from existing workforce to cover both areas.

General on call commitment would need to be backfilled.

Using technology when Consultant not on site to make decisions, what challenges would this involve? Has this been done elsewhere?

Need to see resource modelling and what this would look like in the future. How does changing nothing improve a service?

From Meeting 24th June 2022

Integrated and Urgent Care

SWASFT

Ideal – Direct contact with stroke team, bypass ED.

Would need good communication with SWASFT and negotiation regarding SWASFT conveying patients only to SFT, which goes against there policy of taking patients to the nearest ED.

EMERGENCY DEPARTMENT

Physical space for extra patients.

Transport for repat to YDH or home 24/7, not ESAC.

Porters to take patients to CT/MRI.

Mimic rate 50-60%, would need to repat these patients to YDH or put on correct pathway in SFT which would lead to an increase in patients and reliance on other services at SFT.

Would need 24/7 Stroke Practitioners (ACPs) to assess all suspected stroke patients. Consultants available on site 08:00-20:00/7 and on call overnight for advice.

DIAGNOSTICS

Ideal CT Scanner in ED with associated workforce.

Increase in CT slots required if no scanner in ED.

Increase in MRIs.

Increase ASU beds at SFT would also increase diagnostics.

HASU

Would need more physical space, beds (that weigh), cardiac monitors 1 per bed, specialist seating, IPC pumps, NG pumps, overhead hoists, mobile hoists, stand aids, chairs.

Increase in workforce – HASU Nurses, HCEs, Cleaners/Support, Therapy Team OT/PT/SLT (or train HASU Nurses for Swallow Assessments).

Therapy area with equipment storage.

Need relatives room.

Need side rooms with cardiac monitors.

Need computers / office space.

Bed management for Stroke only – manage beds for YDH/SFT.
7 day service, bed co-ordination, repat arrangements (FAST Ambulance), incorporate cardiology.

ASU

Increase beds and associated resources if no ASU at YDH.

If ASU at YDH would also increase ASU beds and associated resources as patients who were to unwell to be repatriated.

Would not need bed co-ordinator or repat facility if all HASU and ASU beds were at SFT.

Visiting maybe difficult if all ASU beds were at SFT. E.g. Transport to over side of the County, LOS in ASU.

OTHER

How to maintain competences of team in YDH? If no stroke service at YDH what happens to ED walk ins at YDH?

Displaced medical beds.

Need for greater administration provision, whole workforce capacity.

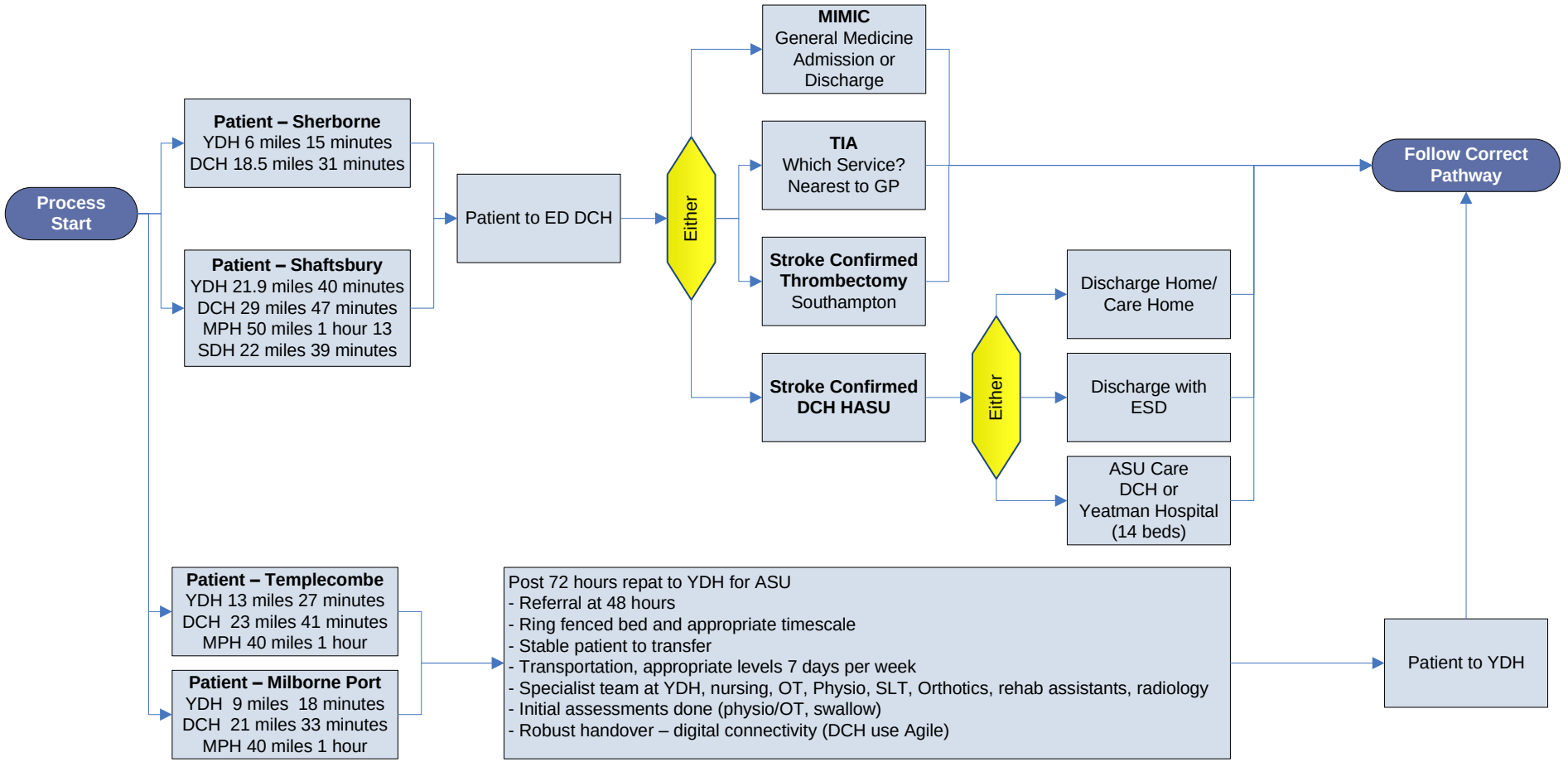
Displaced equity of service for the patients on the YDH side of Somerset.

What would happen to Somerset patients who need repat from DCH, normally go to YDH?

From Meeting 24th June 2022

Integrated and Urgent Care

Option C Single HASU at MPH (YDH retain ASU)



Yeovil Suspected Stroke Patient to DCH
Mimic however Brain Tumour
Repat to YDH
Patient to Bristol for Treatment

ESD
Need consistent referral process, Cross boundary working
Currently ESD support for Dorset 2 weeks, Somerset 6 weeks. Need for as long as patient requires.

Purbeck
Continue to go to DCH
2021 – 60 patients

Note:
Patient for vascular surgery will go to Bournemouth from DCH

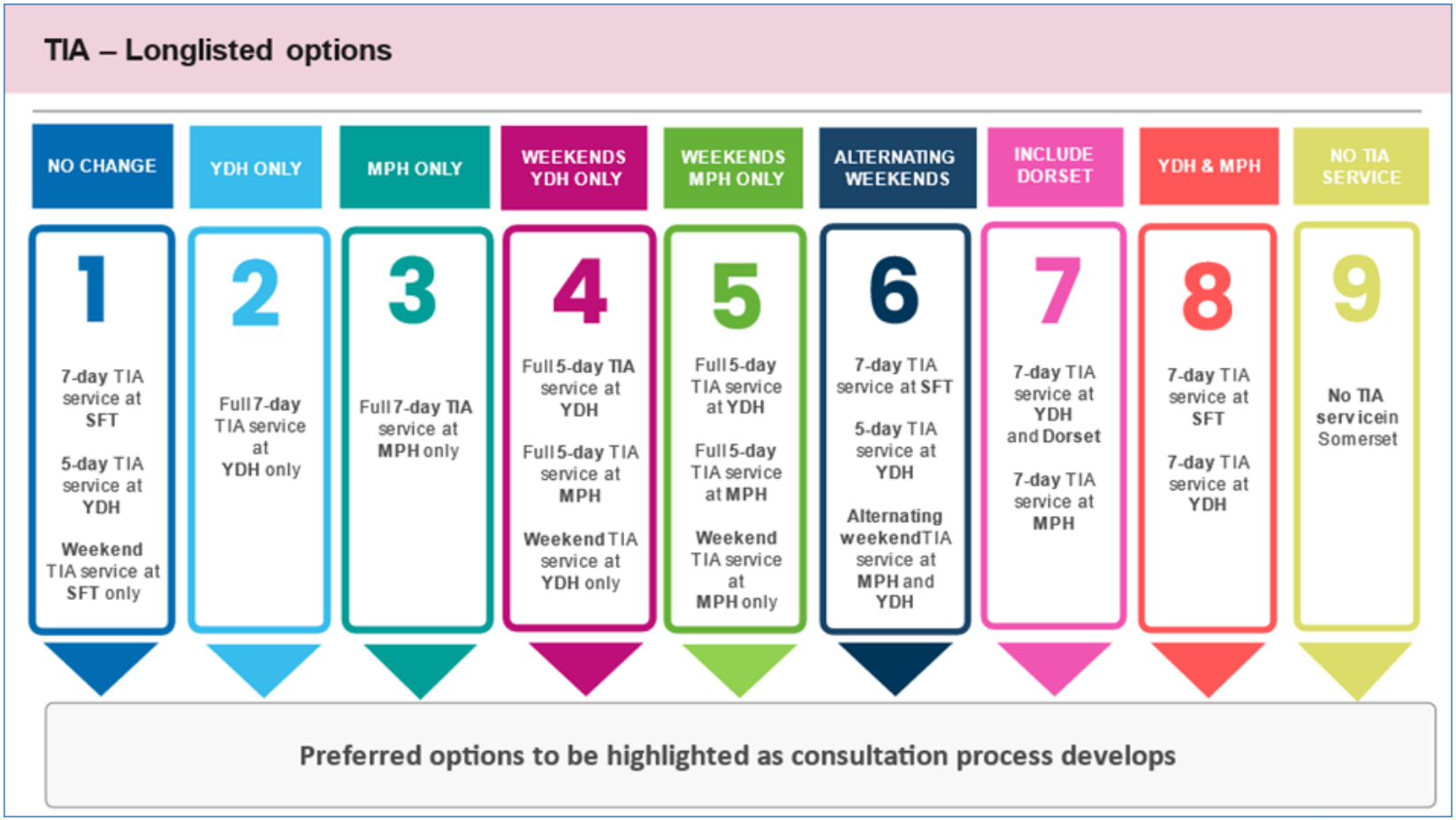
YDH Yeovil District Hospital
DCH Dorset County Hospital
MPH Musgrove Park Hospital
SDH Salisbury District Hopspital

From Meeting 9th August 2022

Option D Single HASU & ASU at MPH

- Pathways the same as Option C without repat to YDH.
- Dorset County Hospital would need equal admitting rights to South Petherton.
- Dorset County Hospital would need more rehab beds and additional workforce, including at Yeatman Hospital.
- Yeovil District Hospital would need FAST call number to MPH stroke consultant.
- Medical consultant at YDH for Stroke needed?
- Challenges with family & friends visiting patient visiting if not repat and staying at MPH / DCH. Affect on patient mood, added stress to patients and friends & family.
- Inpatient Strokes & Walk Ins at YDH:
  - What is safe? Move patient to MPH? How if unstable?
  - Who could provide Thrombolysis if required? ED?
  - What patient numbers does this involve?

From Meeting 9th August 2022



General consensus that offering TIA service in one geographical area only would not be beneficial, practical or in the best interest of patients or staff. Alternating to location of a weekend service could become confusing and difficult to staff. The option of offing no service in Somerset should not be considered further.

Options to consider further are options 7, 8 and possibly 5.

From Meeting 24th June 2022