

Severn Urgent and Emergency Care Network (SUECN) – Integrated Clinical Hub (ICH) Trial Evaluation



Purpose

The aim for the ICH trial;

- To test potential for specific pathways to be managed in a hub environment as an alternative to higher acuity services;
- To provide evidence for wider hub rollout or alternative action.

A three month trial with Wiltshire provider Medvivo was agreed to meet the described aims.

Background

- **Five Year Forward View** - urgent and emergency care services will be redesigned focussing on integration
- **NHS England Commissioning Standards Integrated Urgent Care**
 - designed to support and “enable commissioners to deliver a functionally integrated 24/7 urgent care service”
 - recommended that commissioners include an “urgent care clinical advice hub”

SUECN approach

- **ICH Project Aim** - *To define, develop and then support the implementation of a model of care for an Integrated (Urgent Care) Clinical Hub.*
- **ICH Objectives** (defined in IUC Standards)
To provide urgent care clinical advice to;
 - Patients contacting 111 or 999 services
 - Clinicians, particularly ambulance staff and community clinicians
 - The wider urgent care system, where defined as required, such as nursing and residential homes

ICH Trial Methodology

What calls should be transferred to a ICH?

- No national profile to work from
- Requirement for bespoke profile which does not;
 - replicate or duplicate current community/primary care services
 - inappropriately identify patients who require emergency treatment

The challenge was to identify those patients that with additional clinical advice could be managed in the community as an alternative to a higher acuity service.

ICH Trial Methodology (2)

Bespoke local profile developed by DoS Team in conjunction with Medvivo

- Initial profile included a large number of 'ED' dispositions
 - However when scenario tested, too few cases would have been referred to the Hub
- A further profile developed based on out of hours profile, community services such as MIU's, Dental, Pharmacy were removed to avoid duplication.
- On 19th December, the Hub profile was extended to include disposition 'ED within 4 hours' as well as a number of SG and SD codes.

ICH Trial Methodology (3)

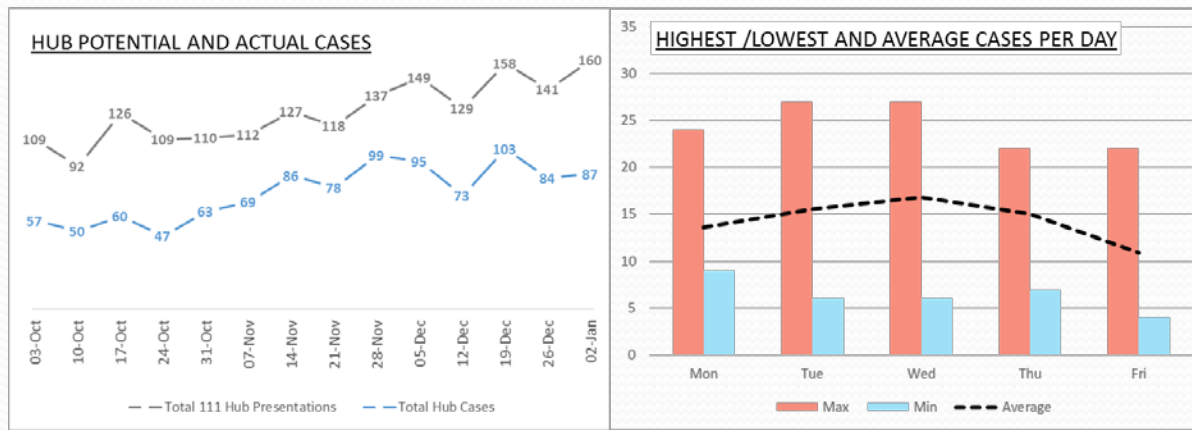
- **Costs** – £40k. £30k from Network, £10k from Wiltshire CCG
- **Calls transferred** – from 111 Health Advisor, after NHS Pathways assessment
- **Hours** – 0800 – 1830, weekdays.
- **Suggested volume** – 12.6 calls per day
- **Scope** – Wiltshire patients, 111 patients
- **Period** – 3rd October 16 – 8th January 17
- **Governance sign off** – Wiltshire CCG, Medvivo, SUECN Management Team and Programme Board
- **Resourcing** – GPs 30%, Nurse Practitioners 70%

Results

- **Stage 1** – to enable routing of calls each will have three outputs
 - **A DX Code** - Timeframe for a certain service to access given patient condition
 - **a Symptom Group Identifier** – a high level view of the patient's condition based on symptoms
 - **Symptom Discriminator** - level of skill set or equipment required for the treatment of the patients symptoms.

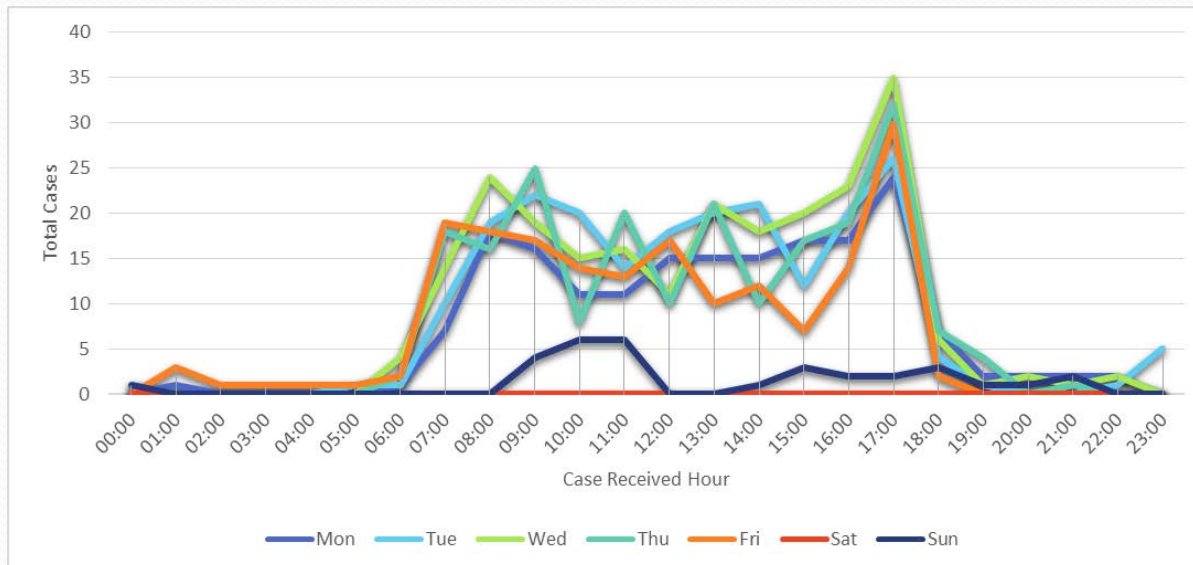
Results (2)

- **Overall call volume** - Over the 14 week pilot, the Clinical Hub received **1051** cases from NHS 111 Providers and the Ambulance Service
- **Mon – Wed busiest time** - Average daily activity higher Monday to Wednesday and then reduced again on Thursday and Friday
- **Hub potential vs Actual cases** – more calls could be transferred than were transferred



Results (3)

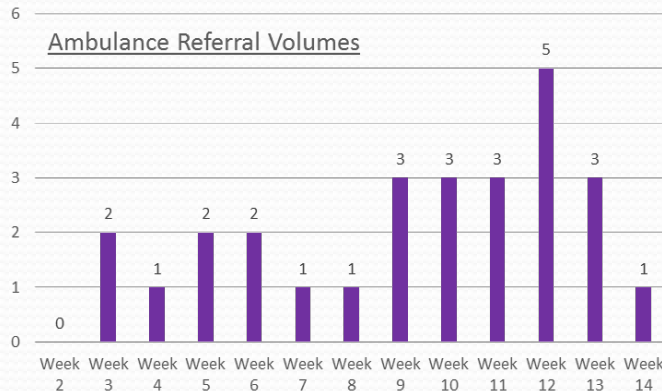
- **Daily Peaks in Activity** - peak in the morning between **0700 and 1000** followed by relatively stable activity before a larger peak in the afternoon between **1500 and 1800**.



Results (4)

- **Ambulance Service Links**

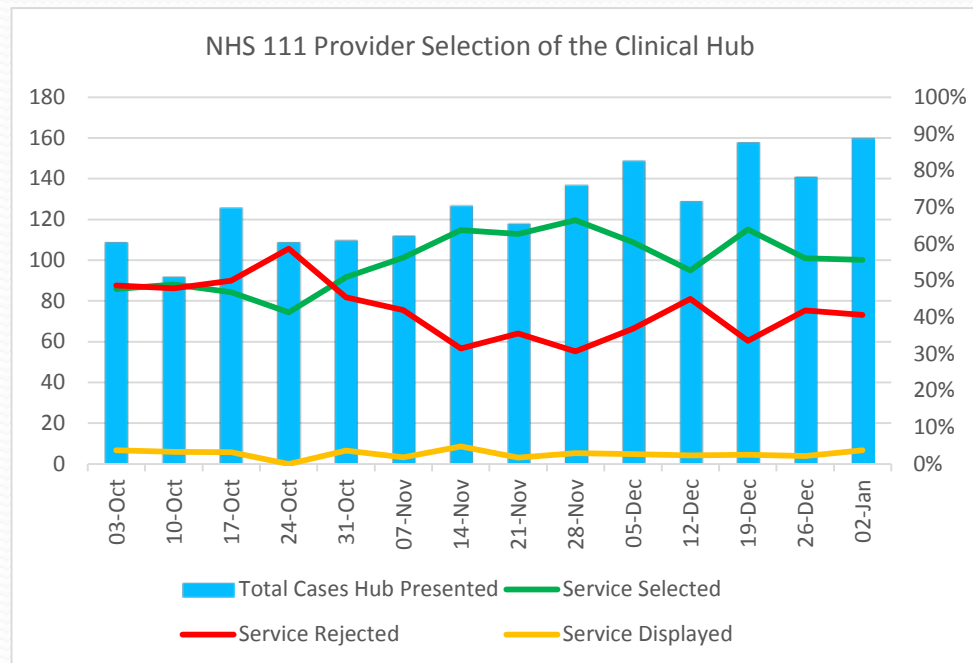
- A referral route from the Ambulance Service was opened up enabling their Clinical Desk and crews on scene to pass cases to the hub.
- Local Clinical Update was sent to frontline teams
- Uptake from the Ambulance Service limited, 27 cases referred.
- Ambulance service run an internal clinical desk, arguably offering a similar service to the ICH, to support their own crews.
- Of the calls that were referred to the ICH from SWAST over 50% were closed with no further follow up.



Follow Up	%
No Follow Up - Call Again If Needed	55.6%
Referred to District Nurses	11.1%
Patient Advised Must Contact Own G.P	7.4%
Admitted to Acute Hospital Trust	7.4%
Other	7.4%
Patient Advised to attend ED	3.7%
999 Called by Medvivo Clinician	3.7%
Patient Deceased	3.7%

Results (5)

Transferred calls from 111 - Overall the acceptance rate for the Hub has been 56%.



Results (6)

Referral by Provider Site

- Overall **98%** of cases were received at a Care UK
- When cases have been received by Care UK; they have been received within the Bristol centre in **73%** of cases and in alternative Care UK site in **27%**

Receiving Site	%@ Site	Care UK %
CareUK_Bristol	71%	73%
CareUK_Ipswich	13%	14%
CareUK_Southall	10%	10%
CareUK_Global	3%	3%
CareUK_Dorking	0%	0%
Somerset Doctors Urgent Care	1%	
Staffordshire Doctors Urgent Care_111	1%	
SWAST 111	0%	
West Mids 111 (CareUK)	0%	
NEAS_North East 111	0%	
LCW_London Central West 111	0%	
DHU_Derbyshire	0%	
South West London 111 (Vocare)	0%	
IOW_Isle of Wight 111	0%	

Results (7)

Referral by Site and Week

- Table contains figures broken down per week and per site along with the % of cases where the Hub has been selected, rejected or displayed
- Improvement in acceptance at Care UK in Bristol with overall acceptance at **71%**
- In the majority of other centres acceptance has remained very low
- 13% of all activity was received at the Care UK Ipswich site where overall acceptance of the Hub as an endpoint was only **19%**

Receiving Site / Week Commencing	03-Oct	10-Oct	17-Oct	24-Oct	31-Oct	07-Nov	14-Nov	21-Nov	28-Nov	05-Dec	12-Dec	19-Dec	26-Dec	02-Jan	Total
CareUK_Bristol	73%	76%	71%	61%	72%	75%	72%	73%	80%	68%	65%	73%	69%	71%	71%
Service displayed	5%	4%	3%	0%	5%	1%	3%	2%	4%	3%	4%	3%	3%	5%	3%
Service rejected	38%	39%	36%	41%	28%	33%	17%	19%	20%	19%	26%	23%	29%	25%	27%
Service selected	58%	57%	61%	59%	67%	65%	79%	79%	76%	78%	70%	73%	68%	70%	70%
CareUK_Dorking	0%	1%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Service rejected	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
CareUK_Global	5%	3%	4%	6%	5%	3%	6%	0%	1%	2%	2%	1%	5%	4%	3%
Service rejected	80%	100%	100%	100%	80%	67%	86%	0%	100%	100%	100%	100%	71%	100%	89%
Service selected	20%	0%	0%	0%	20%	33%	14%	0%	0%	0%	0%	0%	29%	0%	11%
CareUK_Ipswich	14%	8%	13%	15%	8%	13%	12%	12%	12%	19%	20%	9%	18%	12%	13%
Service displayed	0%	0%	0%	0%	0%	7%	7%	0%	0%	0%	0%	0%	0%	0%	1%
Service rejected	80%	86%	88%	81%	100%	67%	80%	86%	69%	79%	85%	67%	81%	84%	80%
Service selected	20%	14%	13%	19%	0%	27%	13%	14%	31%	21%	15%	33%	19%	16%	19%
CareUK_Southall	8%	11%	10%	17%	10%	7%	8%	14%	5%	8%	11%	12%	6%	11%	10%
Service displayed	0%	0%	0%	0%	0%	0%	20%	0%	0%	8%	0%	0%	0%	0%	2%
Service rejected	78%	60%	85%	84%	91%	75%	30%	75%	71%	58%	71%	42%	33%	67%	66%
Service selected	22%	40%	15%	16%	9%	25%	50%	25%	29%	33%	29%	58%	67%	33%	32%
West Mids 111 (CareUK)	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	1%	0%	0%
Service rejected	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	67%
Service selected	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	33%
DHU_Derbyshire	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Service rejected	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
IOW_Isle of Wight 111	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Service rejected	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%
LCW_London Central West 111	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Service rejected	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
NEAS_North East 111	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Service selected	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Somerset Doctors Urgent Care	0%	0%	2%	0%	2%	0%	2%	1%	1%	0%	2%	3%	0%	0%	1%
Service displayed	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%
Service rejected	0%	0%	50%	0%	100%	0%	100%	100%	100%	0%	0%	100%	0%	0%	79%
Service selected	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	14%
South West London 111 (Vocare)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Service rejected	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	100%
Staffordshire Doctors Urgent Care_111	0%	0%	0%	1%	1%	1%	1%	0%	1%	2%	1%	0%	0%	1%	1%
Service rejected	0%	0%	0%	100%	100%	100%	100%	0%	100%	100%	100%	0%	0%	100%	100%
SWAST 111	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
Service rejected	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	67%
Service selected	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	33%

Results (8)

Outcome	Count	%
No Follow Up - Call Again If Needed	490	47%
Patient Advised Must Contact Own G.P	241	23%
OGP Telephone Follow Up Arranged	83	8%
OGP Appointment Arranged	73	7%
Other	21	2%
OGP Visit Arranged	20	2%
Referred to District Nurses	19	2%
Did Not Attend / Unable to Contact	17	2%
999 Called by Medvivo Clinician	17	2%
OOH Follow Up Arranged	15	1%
Patient Advised to attend ED	13	1%
Patient advised to attend MIU	11	1%
Admitted to Acute Hospital Trust	10	1%
Salisbury Walk in Centre - Walk In	6	1%
Patient advised to contact own Dentist	3	0%
Referred MIU	3	0%
Referred to Sexual Health Clinic	2	0%
Referred to Dental Helpline	2	0%
Midwife	1	0%
Referred to Optician	1	0%
Referral to Access to Care (Community Team)	1	0%
Patient Deceased	1	0%
Referred to Maternity Services	1	0%

Patient Outcomes

- **490 or 47%** (from 1051) have been closed with no further action required
- **241 or 23%** advised to contact own GP.
- Only **2%** of cases resulted in 999
- **1%** of cases resulted in ED or MIU disposition.

Results (9)

Outcome vs Discipline

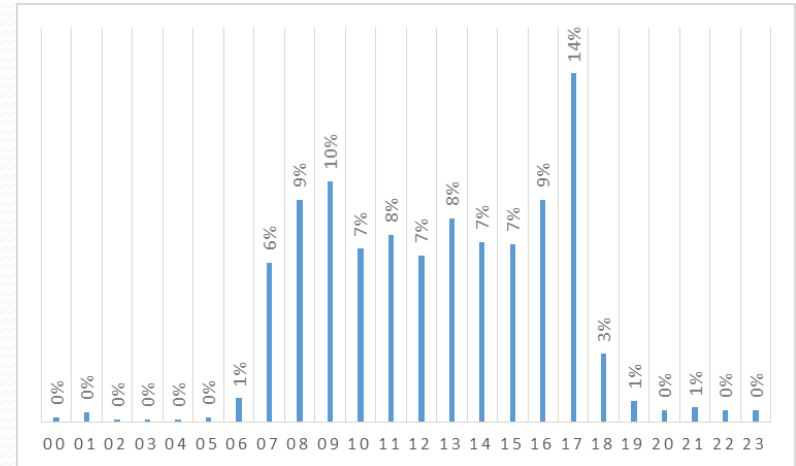
- Overall 70% of cases were completed by NPs and 30% by GPs
- GPs closed 58% with this outcome compared to 41% closed by NPs

Outcome	GP	NP
No Follow Up - Call Again If Needed	58%	41%
Patient Advised Must Contact Own G.P	21%	24%
OGP Telephone Follow Up Arranged	5%	9%
OGP Appointment Arranged	5%	8%
Other	0%	3%
OGP Visit Arranged	2%	2%
Referred to District Nurses	2%	2%
Did Not Attend / Unable to Contact	3%	1%
999 Called by Medvivo Clinician	1%	2%
OOH Follow Up Arranged	1%	1%
Patient advised to attend MIU	0%	2%
Patient Advised to attend ED	2%	1%
Admitted to Acute Hospital Trust	1%	1%
Salisbury Walk in Centre - Walk In	0%	1%
Patient advised to contact own Dentist	0%	0%
Referred MIU	0%	0%
Referred to Sexual Health Clinic	0%	0%
Referred to Dental Helpline	0%	0%
Patient Deceased	0%	0%
Midwife	0%	0%
Referral to Access to Care (Community Team)	0%	0%
Referred to Maternity Services	0%	0%
Referred to Optician	0%	0%

Results (10)

Outcome vs Time of Day

- Total cases received by the Hub per hour, peak generally after 5pm.



- Breakdown of six key outcomes achieved per hour of the day they were received
 - More primary care referred to earlier in the day
 - More cases closed or referred to District Nurses after 5pm

Outcome/ Hour Received	No Follow Up - Call Again If Needed	Patient Advised Must Contact Own G.P	OGP Telephone Follow Up Arranged	OGP Appointment Arranged	OGP Visit Arranged	Referred to District Nurses
00	0%	0%	0%	0%	0%	0%
01	1%	0%	0%	0%	0%	0%
02	0%	0%	0%	0%	0%	0%
03	0%	0%	0%	0%	0%	0%
04	0%	0%	0%	0%	0%	0%
05	0%	1%	0%	0%	0%	0%
06	1%	2%	0%	0%	5%	0%
07	4%	15%	1%	1%	5%	0%
08	6%	13%	11%	14%	0%	10%
09	8%	10%	13%	14%	29%	5%
10	7%	6%	11%	4%	19%	5%
11	8%	5%	9%	14%	10%	10%
12	6%	7%	6%	12%	10%	0%
13	7%	8%	15%	12%	5%	0%
14	7%	7%	9%	8%	0%	5%
15	7%	6%	11%	7%	5%	11%
16	9%	8%	9%	7%	0%	11%
17	20%	6%	5%	8%	14%	32%
18	3%	3%	0%	0%	0%	0%
19	1%	0%	0%	0%	0%	0%
20	0%	0%	0%	0%	0%	0%
21	1%	1%	0%	0%	0%	0%
22	1%	0%	0%	0%	0%	0%
23	1%	0%	0%	0%	0%	0%

Audit and Case Study examples

Case Notes audit

- Notes of each ICH case are reviewed along with outcomes
- Any queries are then raised with the relevant leads e.g. the OOH Service Lead for any operational issues and the Medical Director or Lead Nurse Practitioner for any clinical queries (within Medvivo)

Full Call Audit

- A proportion of calls undergo full audit including a review of the call recording.

Cases Completed	Notes Review Completed	Call Audits Completed
1051	1051	209
% Achieved	100%	20%
Average Score	N/A	97%

Case Study Examples

- The overall report has three separate case studies describing how the ICH impacted on the system.

Conclusions

- Project aim was to “*define, develop and support the implementation of a model of care for an Integrated Clinical Hub*”
- To meet that aim the project **developed a bespoke profile and tested it by trialling the model for a period of three months**
- The trial profile and methodology was **built on the outcomes of the previous project stages** which laid the foundations enabling the trial to be conducted

Conclusions (2)

- **Continued use of NHS Pathways** in order to clinically assess
- **The current system is not being used to its full potential**, despite a properly configured DoS and correctly profiled services
- **Break down system boundaries**; the Trial was not able to take activity from the ambulance service due to replication of a similar service within the ambulance service
- **Consideration should be given as to skill mix required** and cross referenced with likely cost and efficacy before deciding on what staff are needed in a hub.
 - Do you need a pharmacist in the hub when there are over 560 pharmacies in the Network area for example..

Conclusions (3)

- **Despite the ICH returning as the top option, after a NHS Pathways assessment, the ICH was not always chosen by the 111 Health Advisor.**
- **The ICH has referred the majority of the cases it received to alternative sources than a higher acuity service** such as an Emergency Department, indeed only 2% of calls resulted in Medvivo calling 999, with 1% of patients advised to attend ED
- **To make accurate assessments of where patients move around the system consideration should be give to trialling systems such as RADR which focus on identifying patient movement around the system which will aid efficacy judgement.**

Recommendations

- **Use NHS Pathways** to make a clinical assessment of patients ringing 111 to allow direction to the appropriate service, including an Integrated Clinical Hub.
- **Make Intelligent Data Tool (IDT) available** - The local DoS Team to make the Intelligent Data Tool (IDT) available to all commissioners at an accelerated rate or local DoS Team to provide regular reports based on IDT dataset as an alternative. This should be used to understand how patients currently move around the system.
- **Create shared governance arrangements** - Commissioners/STPs/Networks to consider setting up shared clinical governance arrangements across CCG and providers to discuss how each system is functioning. Use patient data and IDT data to focus on developing local system working.
- **Develop bespoke ICH profile** - Use the supplied ICH profile to identify those patients who are applicable for the hub, make use of local DoS Team expertise to continue to adapt profile, discuss changes at any newly formed clinical governance group. Focus on reducing any duplication of lower acuity services and including, safely, more acute Dx codes.

Recommendations (2)

- **Remove barriers to change** - Consider developing integrated arrangements between 111 and 999 providers to ensure that 999 activity, that may be applicable to a Hub, can be transferred.
- **Include in your hub only what you need** - Careful needs assessment of staff required based on what is not currently available in your DoS and/or locally commissioned. 'Virtual' hub maybe sufficient in many scenarios. IDT dataset can be used to test.
- **Further modelling to develop staff model** - Further modelling suggested based on area demographics to extrapolate requirements for larger hub (STP size for example).
- **Measure effectively** - Include 'referral to hub' in any new performance indicators, this referral rate to be monitored in any new clinical governance arrangements in addition to normal contract management.
- **Collect more evidence** – The Network to follow up with NHS England and offer to be part of any national trial to roll out the RADR system.



End