South East
Critical Care Network

Annual Report 2017/18

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1. Summary

Caroline Wilson
SECCN Network Manager/Lead Nurse

2017/18 has been a busy year for the network. We have collaborated on a range of projects with neighbouring networks, colleagues in Specialised Commissioning and, of course, with Critical Care units in South East. Their continued support of network activities ensures ongoing progress with network and regional initiatives.

The high profile given to Critical Care by Specialised Commissioners is welcomed. Sustained collaboration has enabled the network to facilitate a far reaching improvement strategy that will have an influence on the commissioning, contracting and delivery of services regionally and nationally. A comprehensive review of critical care capacity and costing is planned for the coming year building upon the groundwork of the past 12 months.

All Trusts in South East have been visited by the network in a rolling programme of assurance visits which has enabled the network to keep abreast of key challenges, share best practice and advise and direct units on a range of issues. Assurance visits will continue and will serve to support units with the capacity and costing review.

The data report for 2017/18 is a reminder of the challenges critical care units commonly face. None more so than the delayed discharge of patients to the ward and the associated impact on other performance metrics such as night time discharge. Despite this, outcome, as measured by standardised mortality ratio, remains generally very good and units are congratulated on this achievement. The network will continue to work with all units to secure a meaningful and sustained reduction in delayed discharge whilst ensuring a continuing focus on quality and outcome.

This year I have taken on the role of Network Manager's representative on a newly convened data subgroup of the National Clinical Reference Group for Critical Care which has the remit to review and revise the national dataset and coordinate national dashboards. Involvement with this group will ensure network influence in the development of data capture and analysis to meet current and future need.

Network successes for the year include signing off the Major Incident Plan, encouraging adoption of the accredited STricT transfer course, progression of service delivery in all aspects of the rehabilitation pathway, development of a policy for neurosurgical referral and acceptance with St George's Hospital and, once again, the hosting of a very well evaluated Critical Care Network Conference. The network will continue to work closely with provider units to promote sustained progress over the coming months.

Thank you to everyone for your commitment and hard work.

Caroline Wilson

Dr Mike Carraretto

SEC CCN Network Medical Lead and Chair of National Critical Care Medical Leads Group

Over the course of the last year my work for the South East Network has found me taking on some further roles and responsibilities, namely those of working more closely still with NHS South Specialised Commissioning and chairing the National Networks' Medical Leads Group. Working with the commissioners has enabled our Network to help explain and analyse the key clinical aspects of the work we all do, in order that our commissioners are more able to understand the data they collect regarding the cost and efficiency of critical care services across the south east. We have been able to direct their efforts to improve quality effectively through our knowledge and understanding of the service that is delivered in our critical care units thanks to the unit visits we have conducted, your honest and open participation in these and the fantastic repository of data which you all collect for your individual units.

At the national level we have been able to co-ordinate a response on behalf of all the critical care networks in England, Wales and Northern Ireland regarding the principles of access to immediate life preserving treatment following Sir Bruce Keogh's letter in 2016 relating to two article 28 coroners' recommendations. The linking of the National Chair's position to sit on the Joint Standards Committee of the Faculty of Intensive Care and the Intensive Care Society means that we also have a direct link with all of the latest key developments in critical care medicine and a representative voice. These will be shared as always through our clinical forum and any appropriate matters raised may be represented at the National Medical Leads Group or the Joint Standards Committee.

As for the year ahead, I am looking forward to being involved with a Faculty Working Group on Medical Workforce Planning following on from the recent workforce survey that was carried out. This aims to initiate with a widely inclusive group to discuss the medical workforce problems facing intensive care medicine and how we might address these problems and find solutions for the future of our speciality. Within the South East we would like to continue to visit units and focus in on any particular problems they may be having with service delivery. I am sure that when the Guidelines for Provision of Intensive Care version 2 comes out later this year that it will help units to focus even more on the challenges that face them and as always we will be there to assist you.

Michael Carraretto.

2. Stakeholders and Governance

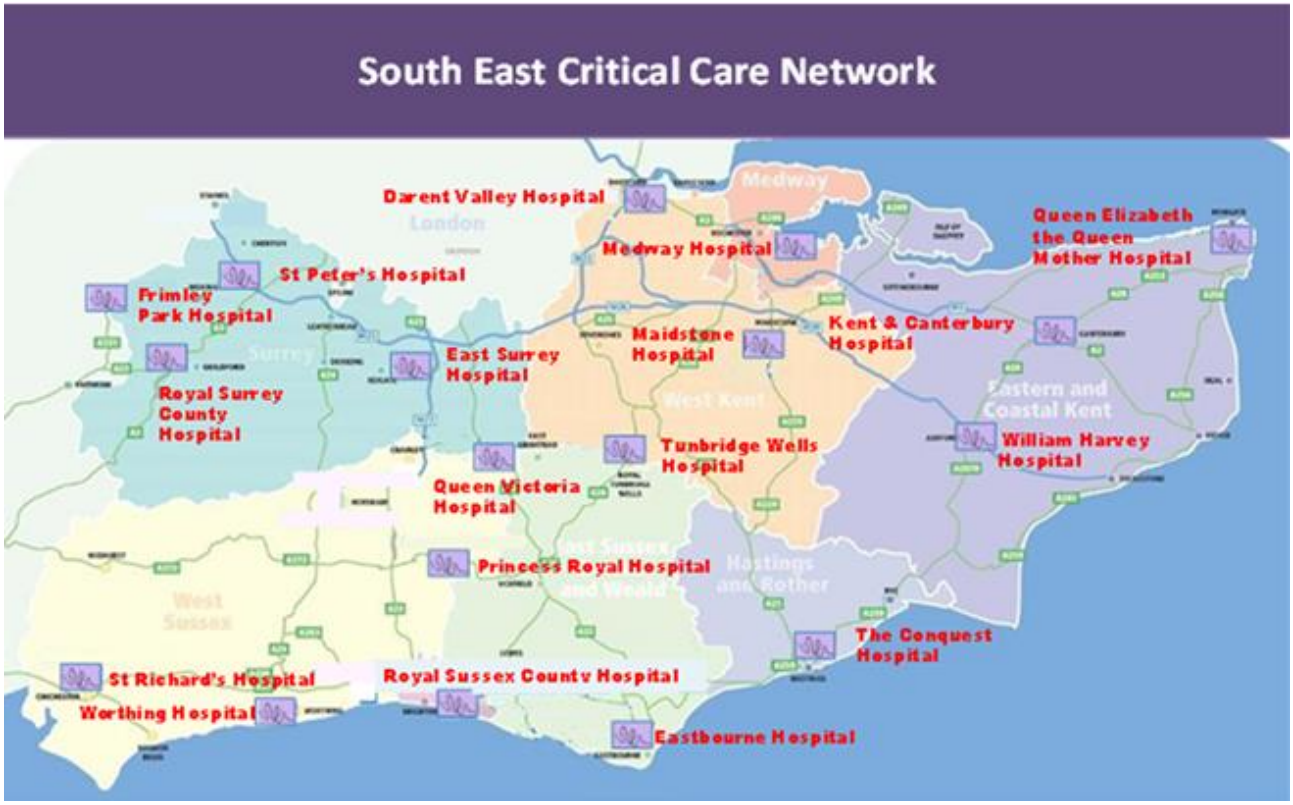
Medway NHS Foundation Trust became host to the South East (formerly South East Coast) Operational Delivery Network (ODN) for Critical Care & Neonatal in October 2013. They are responsible for employing the ODN team and supporting their roles. Oversight and governance arrangements for the South East Critical Care and Neonatal Networks are provided in partnership with NHS South Specialised Commissioning with network accountability to the NHS South ODN Director.

South East Critical Care Network (SECCN) works with NHS providers of critical care, NHSE regional teams and Clinical Commissioning Groups to deliver programmes of work with agreed annual priorities. Throughout 2017/18 SECCN has worked closely with fellow networks in the NHS South region and with colleagues in Specialised Commissioning to devise a far reaching programme of improvement for Critical Care. An extensive programme of work is progressing into 2018/19.

The South East Critical Care Network team consists of

- Caroline Wilson – Deputy Network Manager/Lead Nurse
- Dr Mike Carraretto – Network Medical Lead
- Sue Overton – Network Administrator (shared with Neonatal ODN)

SECCN serves the counties of Kent & Medway, Surrey and Sussex. The population served is approximately 4,680,000 over 3,545 square miles.



SECCN consists of the following Critical Care Units from 12 Acute Hospital Trusts.

Ashford and St Peter's Hospital NHSFT	St Peters Hospital Critical Care	15 beds – level 3 & 2 13 beds commissioned
Brighton and Sussex University Hospitals NHST	Royal Sussex County Hospital Critical Care – including neurosurgery	31 beds – level 3 & 2
Brighton and Sussex University Hospitals NHST	Royal Sussex County Hospital Cardiac Intensive Care Unit	8 beds – level 3 & 2
Brighton and Sussex University Hospitals NHST	Princess Royal Hospital Critical Care	12 – level 3 & 2 8 beds open
Darent Valley NHST	Darent Valley Hospital Critical Care	10 beds – level 3 & 2
East Kent University Hospitals NHS FT	Kent & Canterbury Hospital Critical Care	10 beds – level 3 & 2 6 beds commissioned
East Kent University Hospitals NHS FT	Queen Elizabeth the Queen Mother Hospital Critical Care	9 beds level 3 & 2
East Kent University Hospitals NHS FT	William Harvey Hospital Critical Care	13 beds – level 3 & 2
East Sussex Healthcare NHST	Conquest Hospital Critical Care	11 beds – level 3 & 2
East Sussex Healthcare NHST	Eastbourne Hospital Critical Care	8 beds – level 3 & 2
Frimley Park NHSFT	Frimley Park Hospital Critical Care	12 beds – level 3 & 2
Maidstone and Tunbridge Wells NHST	Tunbridge Wells Hospital Critical Care	9 beds – level 3 & 2
Maidstone and Tunbridge Wells NHST	Maidstone Hospital Critical Care Unit	9 beds – level 3 & 2
Medway NHSFT	Medway Hospital Intensive Care Unit	9 beds – level 3
Medway NHSFT	Medway Hospital Medical High Dependency Unit	6 beds – level 2
Medway NHSFT	Medway Hospital Surgical High Dependency unit	10 beds – level 2
Queen Victoria NHSFT	Queen Victoria Hospital / dedicated burns beds – affiliated with Burns Network	3 beds – level 3 & 2
Queen Victoria NHS FT	Queen Victoria Hospital/ General Critical Care beds	2 beds – level 3 & 2
Royal Surrey County NHSFT	Royal Surrey County Hospital Critical Care	28 beds – level 3 & 2 20 beds commissioned
Surrey and Sussex Healthcare NHST	East Surrey Hospital Critical Care	16 beds – level 3 & 2
Western Sussex NHSFT	St Richards Hospital Critical Care	10 beds - level 3 & 2
Western Sussex NHSFT	Worthing Hospital Critical Care	12 beds - level 3 & 2

The SECCN clinical and governance forum is held twice a year. Here the annual work programme and key quality outcome data are presented and discussed with agreed actions. Additional specialist and sub group meetings are convened throughout the year. SECCN has active engagement from medical, nurse and allied health professional critical care leads from all critical care units in Kent, Surrey and Sussex, fostered through an ongoing programme of unit assurance visits. SECCN regularly attends national critical care managers, medical and nurse leads groups. Furthermore Mike Carraretto contributes to the national overview and priorities in his role as Chairman of the National Critical Care Medical Leads Group with associated membership of the critical care Joint Standards Committee, as does Caroline Wilson in her role representing the national managers at the National Audit Critical Care Data Group of the Clinical Reference Group for Adult Critical Care.

3. Adult Critical Care (ACC) - Quality, Innovation, Productivity and Prevention (QIPP) improving value scheme

SECCN continues to work closely with neighbouring networks and Specialised Commissioning South to deliver the ACC QIPP scheme. The vision of the scheme is to achieve a high quality, safe, effective and sustainable critical care service providing patients with timely and equitable access to an appropriate environment and clinically appropriate length of stay.

The work during 2017/18 has focussed on a number of key areas. All the work streams are ongoing and will continue into 2018/19:

- Data and Challenge – work has included identification of the impact of commissioning identification rules, challenge of zero organ support activity, of areas of significant change in activity and of high levels of delayed discharge.

- Capacity, Costing and Currency – a template to review capacity, demand and unit costs has been developed and will be rolled out across units in the coming 24 months through a programme of supported visits; this work will inform consideration of a new model of finance for critical care.
- Pathways and Service Improvement – three clinical pathways have been identified and will be reviewed to identify and understand variation in admission to Critical Care.
- Rehabilitation – a business case for a Case Manager in South East is being developed to facilitate the placement and rehabilitation of patients awaiting ongoing transfer of care and rehabilitation.

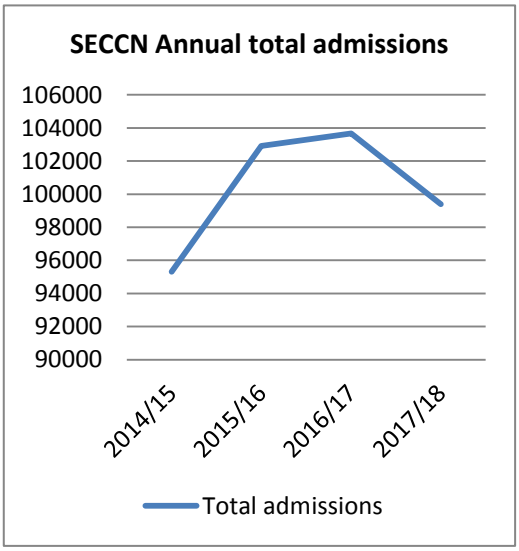
4. 2017/18 Data Report

An annual network report is produced by the Intensive Care National Audit and Research Centre (ICNARC) following a robust validation process (due to which the 2017/18 report is not yet available). The 2017/18 data presented here is taken from network data unless indicated otherwise. Data is submitted monthly via a dedicated template from unit data software. Each unit is sent a monthly summary of specific data metrics which are collated in a combined quarterly network report. This permits timely analysis of data but precludes full data validation. (The Cardiac Intensive Care Unit at the Royal Sussex County Hospital submits data to the National Cardiac Benchmarking Collaborative – this data is not included in the report).

Provider unit identification has been removed from graphs for reasons of confidentiality. Comprehensive data graphs can be requested (with appropriate authorisation) from caroline.wilson2@nhs.net

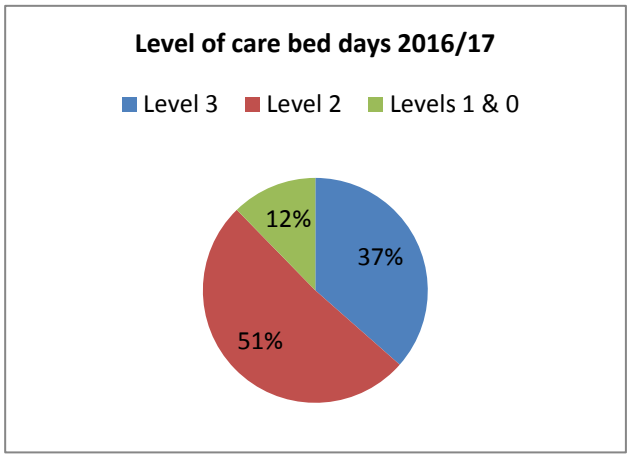
Number of admissions

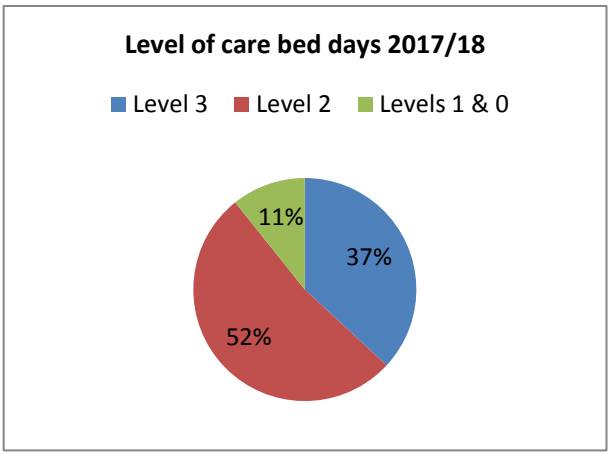
2017/18 – network data
2013/14 – 2016/17 – ICNARC data where available



The trend over the past 4 years is difficult to interpret due to changes in configuration of critical care services. The transfer of neurosurgical services from Hurstwood Park to Royal Sussex County Hospital in 2015 is associated with an increase in admissions for the latter; the figure for 2014/15 is for both units. The merger of the intensive care unit (ICU) and medical high dependency unit (MHDU) at St Peter's Hospital in 2017 is associated with a drop in combined admissions as some patients would have previously been counted for both an ICU admission and step down to MHDU; this would account for some of the decrease seen in 2017/18.

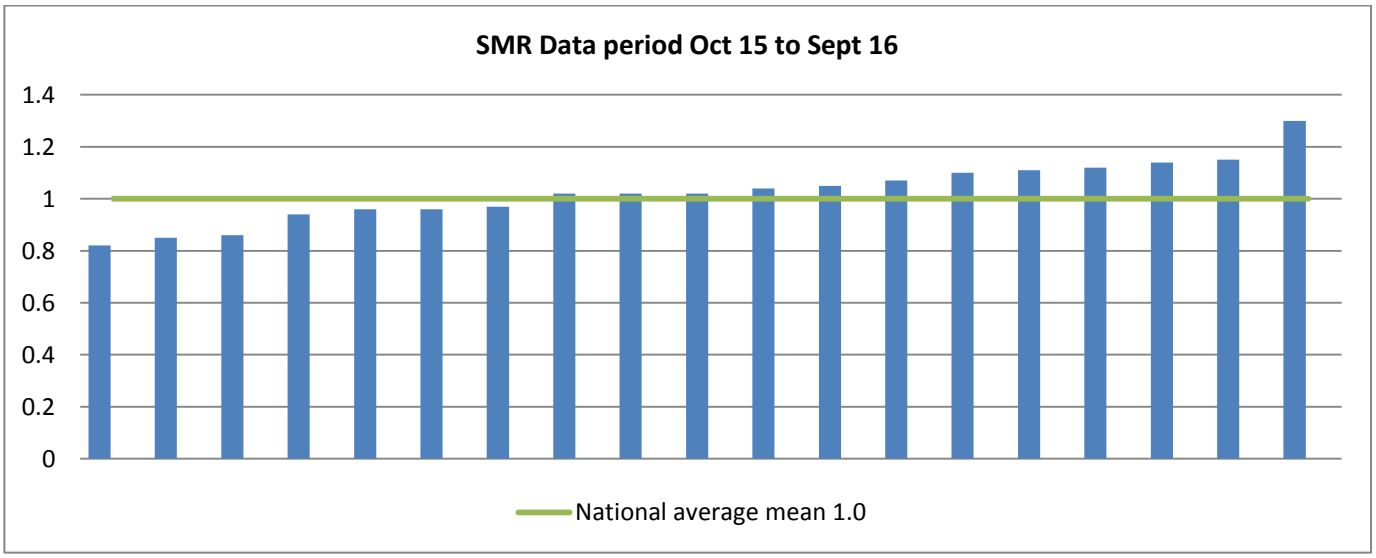
During the past two years, where there is data available, the levels of care bed days have remained very constant. The split for level of organs supported data will be available in the ICNARC report and will enhance undrestanding of the demand on critical care. However, both the network and ICNARC reports highlight the limitations of the current reporting process. Anecdotally, units are reporting significant pressures, with some patients being cared for in non-critical care areas. This data is not available at present and adds impetus to the detailed analysis of demand, capacity and costing central to the regional improving value scheme.





Performamce metric – Risk adjusted acute hospital mortality

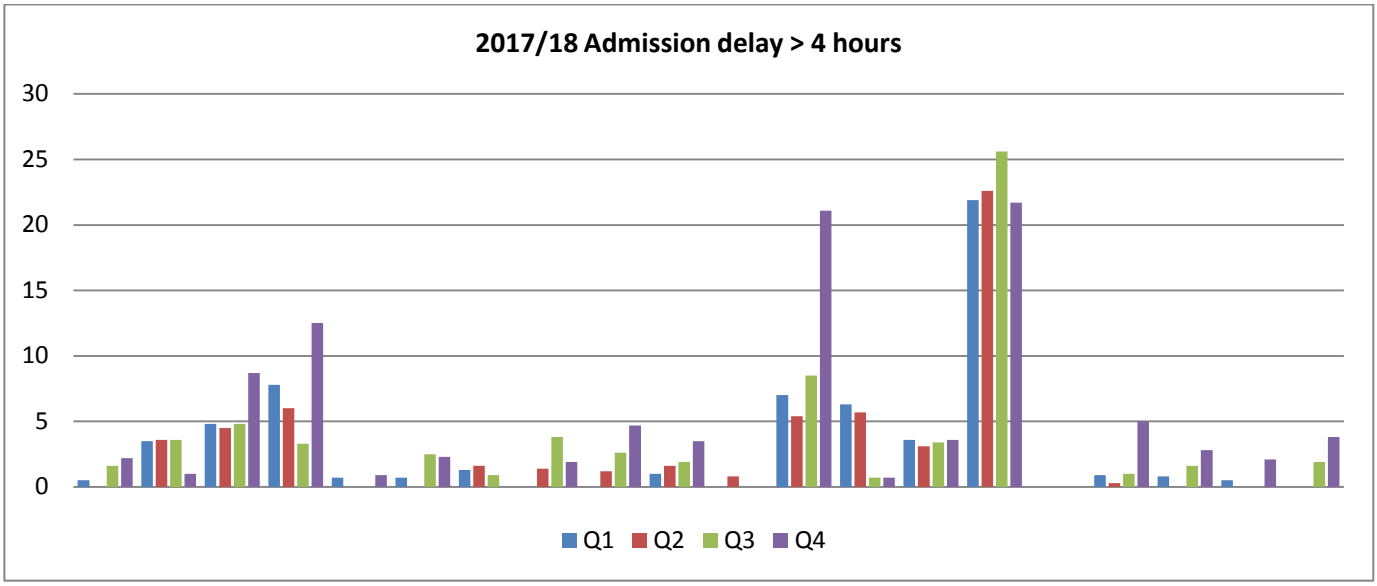
Taken from latest available specialised service quality dashboard



The Standard Mortality Ratio (SMR) is calculated by ICNARC and is derived from the ratio of observed to expected deaths using a severity of illness tool. The performance across SECCN is generally very good with some excellent results compared to the national mean. Just one unit sits outside 2 standard deviations from the mean.

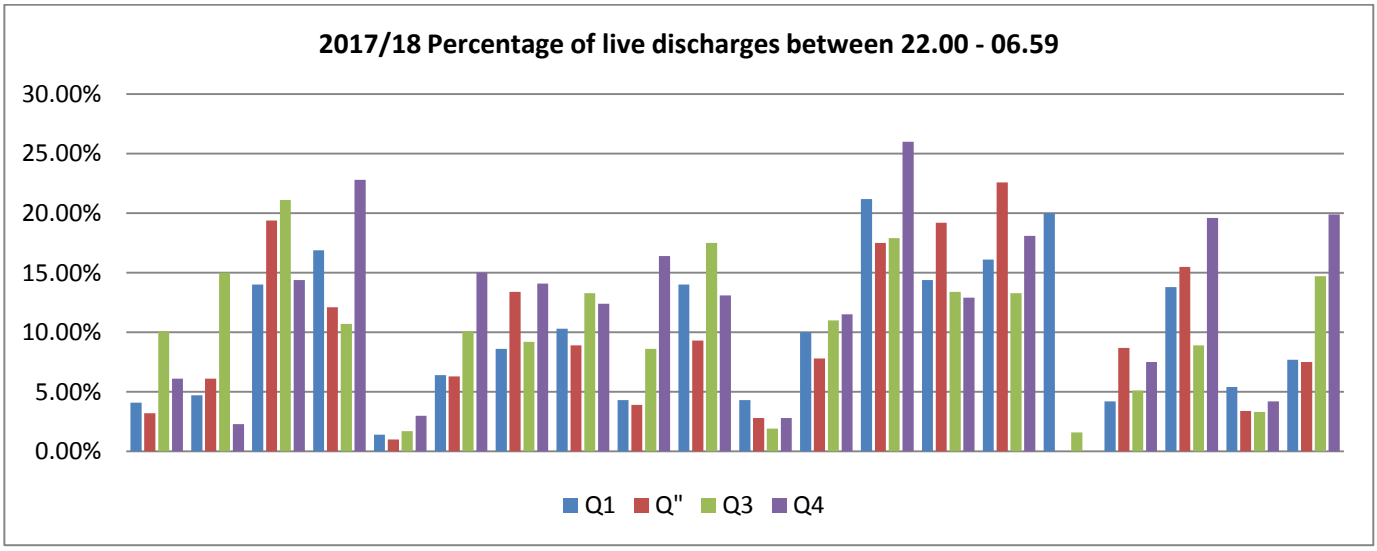
Efficiency metric - 2017/18 Delayed admission to critical care

The target for SECCN and nationally is zero admission delays of over 4 hours. The data clearly shows that a number of units in SECCN are increasingly struggling to achieve this, particularly over the busier winter months. This is a worrying trend. The association between admission delay and bed capacity and between admission delay and inefficiencies such as delayed discharge to the ward is not known. The capacity, demand and costing review will help understanding and underpin improvement initiatives.



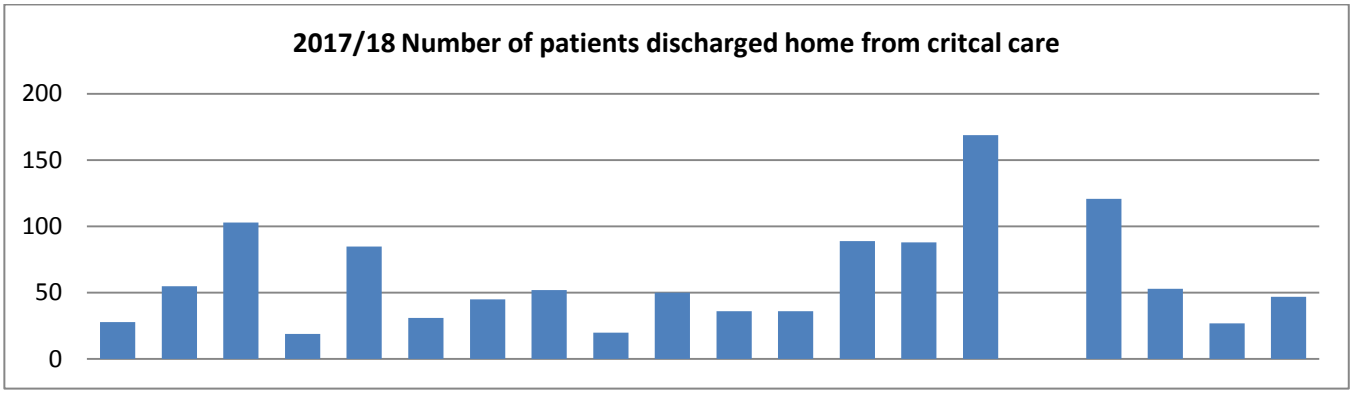
Efficiency metric - 2017/18 Discharge from critical care between 22.00 & 07.00

The association between discharge at night and discharge delay has not be proven categorically, however, a 3 month audit of night time discharge by Royal Surrey County Hospital concluded that for all patients the night time transfer was potentially avoidable with better facilitation of ward bed availability. This demands further scrutiny as part of a demand and capacity review given the troubling number of patients who were transferred to the ward between 20.00 and 07.00 across SECCN. A proposal that units report on every night time discharge is being considered to facilitate oversight.



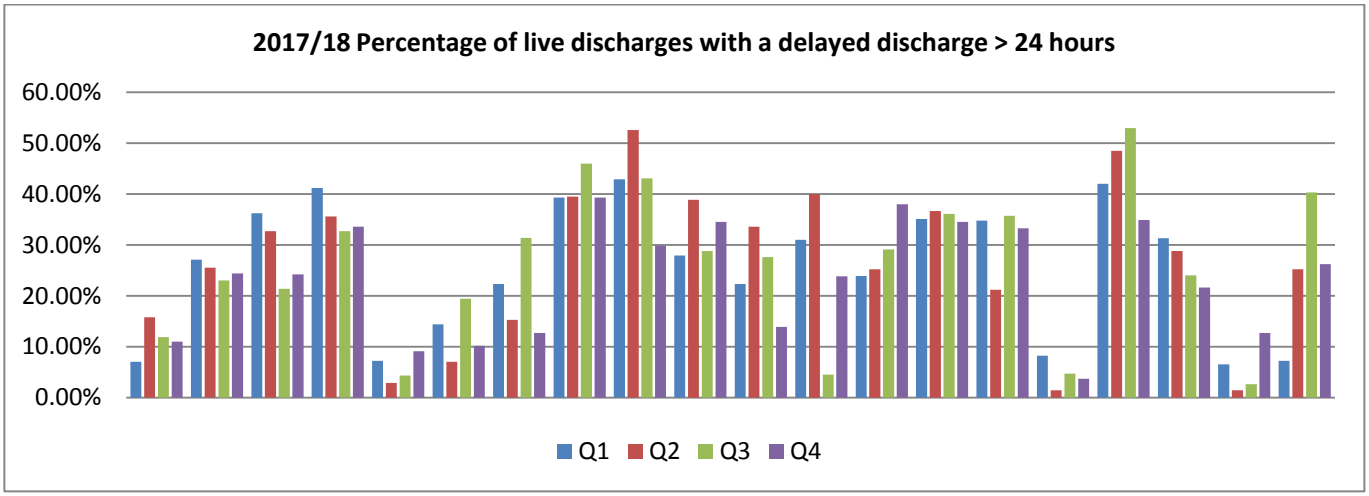
Efficiency metric - 2017/18 Number of patients discharged home

Many units have seen an increase in the number of patients discharged home from critical care during the past 12 months. The reason for discharge home is not recorded however, anecdotally, it is suggested that this is almost always related to delayed discharge from Critical Care to the ward. Any impact on patient experience is not quantifiable but it can be supposed that experience is not enhanced at such a stressful time for the patient and their family.



Efficiency metric - 2017/18 Delayed discharge from critical care

Delayed discharge from Critical Care continues to be a major challenge for many Trusts in SECCN. The percentage of patients with a delayed discharge over 24 hours is amongst the highest nationally. The bed days associated with a delayed discharge of greater than 24 hours was, collectively, 7095; this is a concern for both Trusts and commissioners. The association between delayed discharge and other efficiency metrics has never been proven categorically, however when an initiative at Western Sussex Hospital Trust led to a significant reduction in delayed discharge one consequence was a reduction in delayed admissions and a consequent reduction in daily stress reported from unit staff. Undoubtedly, these challenges require a Trust wide initiative as many factors external to critical care are key to any improvement. This will remain a major focus for SECCN in 2018/19.



The above data demand further scrutiny and, as the current methods of data capture for SECCN prohibit triangulation of data or more meaningful analysis, SECCN has joined with neighbouring networks in the south region to employ a data analyst to develop data analysis. The potential for improved understanding and presentation of data is being explored for 2018/19.

5. Unit assurance visits

SECCN sustained a programme of unit assurance visits during 2017/18 visiting one Trust per month. The structure for the visits this year was informal; actions and progress since the previous Trust visit were discussed along with specific challenges and achievements. The visits are fundamental to an appreciation of the issues that concern critical care staff and are an opportunity to offer advice and support and promote

sharing of good practice and initiatives. SECCN has advised on issues including medical staffing, on call, work patterns and ratios; multi-disciplinary meetings and engagement; the practice of critical care nurses being asked to work on general wards; environmental requirements and major incident and escalation plans. The visits are an opportunity to review unit performance including the metrics in the data report, as well as other specific performance measures. This has prompted better review of performance such as admission to critical care following in-hospital cardiac arrest, anaesthetic attendance at medical emergency calls and the provision of rehabilitation.

6. Emergency Preparedness Resilience and Response (EPRR) Sub Group

The SECCN EPRR Group was convened to review and update the network major incident plan. The purpose of the plan is to detail the actions required of SECCN and critical care units in the event of a major incident to enhance communication and mutual aid; a process for which has been identified for both slow surge escalation and immediate mass casualty events. The plan is underpinned by national and regional frameworks and supplements, but does not override Trust and critical care unit policy documentation. SECCN holds a list of equipment and disposables held by the units to facilitate sharing if required.

SECCN attends area resilience forums and has participated in a south regional mass casualty table top exercise and a Kent and Medway active mass casualty exercise, all of which contribute to network preparedness. SECCN has also participated in a review of preparedness for secondary transfers following major incident and suggested action cards will be published shortly.

7. Referral and acceptance of the patient requiring lifesaving intervention

As a response to a coroners regulation 28 report concerning a patient awaiting transfer for neurosurgery, SECCN was requested by the Medical Director for NHS South East to review referral and acceptance agreements in this clinical situation. Meetings have been held with representation from Trusts and critical care units in Surrey and at St George's hospital as their tertiary referral centre for neurosurgery. A policy for referral and acceptance has been agreed and is in the process of final sign off. Flowcharts are being developed to aid decisions in clinical practice and will be circulated to critical care units and emergency departments. SECCN will work with St George's to establish a robust review of the quality of, and response to, referrals and will discuss the policy with tertiary neurosurgery centres for Kent and Sussex to ensure that reciprocal arrangements are in place.

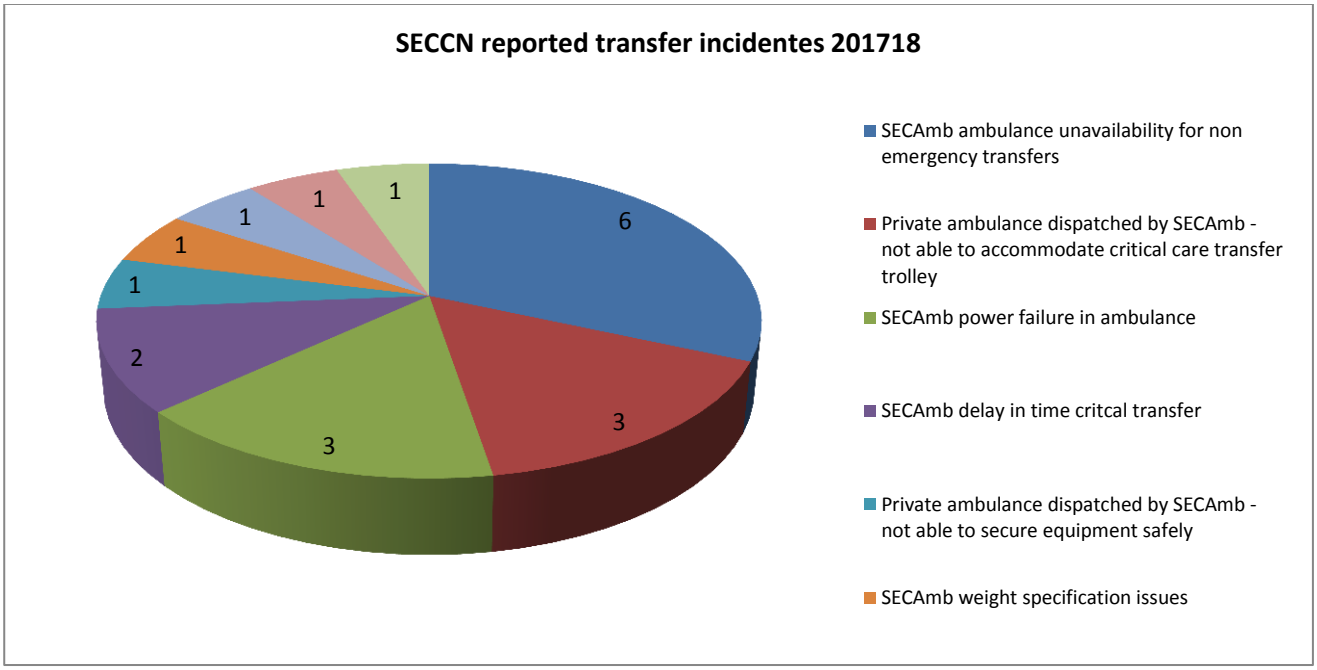
SECCN strongly advocates national adoption of the principles for immediate transfer for life saving surgery, irrespective of clinical specialty, and will inform the Clinical Reference Group and NHS England of this work to promote such discussion. Timely repatriation of patients from tertiary centres is essential in order to further facilitate timely acceptance, but is frequently problematic due to poor critical care bed availability. SECCN intends to get a better understanding of delays to repatriation and to influence discussion regionally and nationally about how to improve oversight and performance.

8. Transfer

The timely transfer of level 2 and 3 patients has continued to be problematic during 2017/18. The emergency contract with South East Coast Ambulance (SECAmb) is agreed individually for Kent, Surrey and Sussex and, whilst the precise wording of each contract is not known, it has been acknowledged that level 2 and 3 patients requiring non urgent transfer are not universally included. The patient transport services do

not have the facility to transfer such patients safely and, though SECAmb will accept these patients if able, the high volume of emergency calls does at times prohibit this. This is reflected in the incident chart below. In a very positive development, SECCN understands that a Kent, Surrey and Sussex emergency contract is to be negotiated and a mapping exercise is currently being undertaken to identify commissioning gaps. The SECCN transfer guidelines were withdrawn some time ago due to the uncertainty over acceptance and will be revised as soon as clarification is received.

All critical care units are requested to submit transfer incidents to SECCN that relate to ambulance availability or have significance for wider learning. The extent of possible under-reporting is not known but the data does give an indication of the types of incidents that have occurred. Units perform a local investigation of incidents and submit to SECCN for sharing and learning.



Incidents whereby a private vehicle, either dispatched by SECAmb or requested directly, have not met safe transfer capability have prompted a review of vehicle specification. A list of independent ambulance providers has been compiled and each will be requested to submit a specification template as agreed by the network.

All Trusts in SECCN run critical care transfer training and a minimum network requirement for courses has been agreed. Simulation is being increasingly used to provide experiential learning and units in SECCN are able to access a SECAmb simulation ambulance funded through Health Education Kent, Surrey and Sussex. The Simulation Tricky Trips (STricT) transfer course, a fully simulation-based course, developed by St Peter's and Royal Surrey County Hospitals has been rolled out to East Sussex Hospitals and a number of Trusts have expressed interest and have attended the training as observers.

9. Rehabilitation

The provision for rehabilitation continued to develop during 2017/18 with progress in all stages of the rehabilitation pathway, but, unsurprisingly, gaps and challenges remain. SECCN performed a SWOT (Strengths/Weaknesses /Opportunities/Threats)analysis of service delivery which highlighted a number

of key issues, namely the enthusiasm across SECCN for the continued development of rehabilitation and the recognition of an early and sustained multi-disciplinary (MDT) approach. A number of units have introduced MDT rehabilitation rounds although the inclusion of ward based patients remains limited. All but one Trust now provide a follow up service two to three months following discharge home and the number of post discharge exercise classes has increased. Significant challenges persist with many services being delivered without recognised funding, the provision of ward based rehabilitation remains problematic and essential clinical psychological provision is sparse.

The rehabilitation groups met to discuss the updated National Institute for Clinical Excellence quality standards for critical care (NICE QS 158) and progress with subsequent action plans is to be reviewed in 2018/19. Many units committed to improving pathway documentation, handover to ward staff and information for patients and it will be interesting to review the impact of the quality standards on the challenges identified in the SWOT analysis.

10. Independent Hospitals Associate Group

The number of declared critical care beds in independent hospitals has reduced significantly with many hospitals revising their post-operative provision to ensure safety standards. SECCN has been able to support hospitals to review post-operative facilities and pathways and has drawn up guidance on standards for post-operative recovery which are awaiting network sign off. The change in service model has necessitated that all independent hospitals have robust arrangements for the recognition and safe transfer of the deteriorating patient and SECCN has assisted independent hospitals to finalise service level agreements with their local district general hospital to ensure appropriate, safe and timely transfer.

The Independent Hospitals Associate Group met a couple of times in 2017/18 but attendance at meetings was very poor despite attempts by SECCN to revise the agenda in line with feedback. It was agreed not to arrange future meetings with the proviso that SECCN or any independent hospital could convene a meeting if required. SECCN will continue to facilitate communication and advise on essential policy updates.

11. Workforce

Workforce concerns have been expressed nationally for all professional groups working in critical care, with an anticipated increase in demand for critical care services not being met by a reciprocal increase in recruitment. All units in SECCN report vacancies and gaps in medical and nursing rotas and the ongoing use of bank or agency staff. All but one unit in SECCN contributed to a national nursing workforce survey which has recently been published. The SECCN submissions were collated into a local report to assist staff with establishment and recruitment decisions. SECCN has met with a representative of a company that has developed an app that enables units to build a trusted bank of staff to fill vacant locum shifts and this will be presented at a dedicated workforce discussion at the next clinical and governance forum. Some units are already using similar software solutions to improve bank staffing for junior doctor rota gaps.

12. Annual Critical Care Conference

The annual SECCN conference is a great success story. Held in June 2017 for the 4th consecutive year the conference attracted delegates from across Kent, Surrey and Sussex and speakers both from SECCN critical care units and further afield. Subjects included emergency safety huddles; early goal directed rehabilitation; workforce challenges and development of the Advanced Critical Care Practitioner role;

telemedicine; preparing for a coroner's court and human factors in critical care. The last two sessions were presented by a Medico-Legal Adviser and an Airline Pilot Crew Resource Management Trainer respectively, demonstrating the breadth of expertise attracted to present. The conference was awarded accreditation by the Royal College of Anaesthetists. A big thank you goes to the sponsors of the event who ensured the event remained free to delegates.