



South West Burn Care
Operational Delivery Network

Annual Report

1 April 2020 to 31 March 2021

**South West Burn Care
Operational Delivery Network**

Hosted by:
North Bristol NHS Trust
Southmead Hospital
Bristol BS10 5NB

Audience

This document is intended as an information resource for Chief Executives, Medical Directors, Senior Managers and Clinicians in the following NHS organisations within the South West Burn Care Operational Delivery Network (SW Burn Care ODN) area:

- NHS England and NHS Improvement (NHSEI) Specialised Commissioning (SW)
- NHSEI Acute Trusts and NHS Wales Health Boards providing specialised burn care
- North Bristol NHS Trust (host of the SW Burn Care ODN)
- Specialised Burn Services within the SW Burn Care ODN
- Major Trauma Operational Delivery Networks
- Critical Care Operational Delivery Networks
- Ambulance Services in SW England and Wales
- Helicopter Emergency Services (HEMs) in SW England and Wales
- South West Integrated Care Systems:
 - Bath and North East Somerset, Swindon and Wiltshire
 - Bristol, North Somerset, South Gloucestershire
 - Cornwall and the Isles of Scilly
 - Devon
 - Dorset
 - Gloucestershire
 - Somerset

Additionally, the document is intended for:

- Other Specialised Burn Care Operational Delivery Networks in England
- Specialised Burn Care In Scotland (COBIS)
- NHSEI Major Trauma Clinical Reference Group

This document will also provide an information resource for the following non-NHS organisations:

- The British Burn Association (BBA)
- Changing Faces
- Dan's Fund for Burns
- The Katie Piper Foundation
- Child Accident Prevention Trust
- The Scar Free Foundation

Contents

Message from SW Burn Care Operational Delivery Network Clinical Directors	1
What is the SW Burn Care Operational Delivery Network?	2
Statement from NHS England Specialised Commissioning South (Host Commissioner)	3
Statement from North Bristol NHS Trust (Host organisation)	3
SW Burn Care ODN Management Team	4
Network Key Challenges and Successes in 2020-21	5
Regional Morbidity & Mortality Audit 2020-21	7
Network Adult Activity	8
Network Paediatric Activity	9
Overview of Referrals over the last four years	10
Overview of MDSAS Telemedicine Referrals (1.4.20 to 31.3.21)	11
Overview of MDSAS Telemedicine Outcomes (1.1.20-13.10.21)	12
Burns Prevention and Awareness in the South West	13
Service & Quality Improvements from:	
• Senior Nurses Group	15
• Therapies Group	17
• Psychology Group	18
Network Priorities for 2021-22	20
Working in Partnership	21
Specialised Services Quality Dashboard (SSQD) for Burns	22
• Adult Quality Dashboard Compliance	23
• Paediatric Quality Dashboard Compliance	24
Highlights from Specialised Burn Services	
• The Welsh Burns Centre, Morriston Hospital, Swansea	25
• South West Paediatric Burn Centre, Bristol Royal Hospital for Children, Bristol	28
• Adult Burns Unit, Southmead Hospital, Bristol	30
• Paediatric & Adult Burns Unit, Salisbury District Hospital, Salisbury	33
• Paediatric & Adult Burns Facility, Derriford Hospital, Plymouth	35

Message from SW Burn Care ODN Clinical Directors

This year has been a strange one. We have all had to acclimatise to the new rules and restrictions that COVID-19 has imposed, while maintaining as normal a service for patients as possible. For the Network, this has proved challenging at times, but there have also been opportunities and successes along the way.

The Network Management Team (NMT) continued to push forward with projects aimed at improving pathways for burn-injured patients. The introduction of a single telemedicine/tele-referral system in all five Specialised Burn Services in June 2020 has seen real benefits, reducing footfall in hospitals in many cases. Teleconferencing has allowed teams to meet virtually to discuss the care requirements of patients being transferred between Services, making this challenging step as seamless as possible. The SW Trauma Triage Tool, developed in cooperation with the SW Ambulance Service, went live in April 2020, providing a clear guide for Critical Care/Enhanced Care teams at the scene of injury on accessing advice from a Consultant Burns Surgeon.

Governance issues and improvements continue to occupy much of the NMT's time. The long-standing deficit in outpatient psychology provision for burn patients treated at the Plymouth Service remains a particular concern. Efforts to address this with Commissioners will continue into next year and the issue will remain on the Network Risk Register.

This year's Regional Morbidity & Mortality Audit Meeting took place virtually in March 2021, covering the period from 1 April to 31 December 2020 following a request that the National Audit change to review by calendar year. It was our great privilege to have Mr Jorge Leon-Villapalos (Consultant Burns & Plastic Surgeon, Chelsea & Westminster Hospital) as co-chair. It was pleasing to hear that he felt the audit process was honest and candid, but also educational. Several cases were put forward for presentation at the national meeting in April 2021.

While the COVID-19 pandemic has meant that the Network's usual programme of face to face educational events has been paused, we were able to run the Annual ODN MDT Conference virtually in December. As ever, this proved interesting and instructive with talks themed around 'Rapid Change & Resilience'.

Lastly, 2021 saw changes in both the Network name and NMT members. Although many may not have noticed, the South West UK Burn Care Network (SWUK) is now the South West Burn Care Network (SWBCN). Not a huge change, but necessary due to NHS identity rules, I gather. More importantly, Dr Joanne Bowes stepped down as Clinical Director in May. Over the last two years, Jo has worked hard for the Network, leading on the development of our Education Strategy and acting as lead for the National Burns Annex Task & Finish Group. We are very grateful for all her efforts. In her place, it was a great pleasure to welcome Mr Sankhya Sen, who I look forward to working with in the year to come.

The coming year seems likely to bring new challenges for the Network. I hope that we can continue to work together to build on the successes of the last year and navigate a safe passage through this stormy period.



Mr Peter Drew
Consultant Plastic
Reconstructive & Burns
Surgeon
ODN Clinical Director
The Welsh Centre for
Plastic Surgery & Burns
Morriston Hospital
Swansea



Dr Joanne Bowes
Consultant Burns
Anaesthetist
ODN Clinical Director
The Welsh Centre for
Plastic Surgery & Burns
Morriston Hospital
Swansea

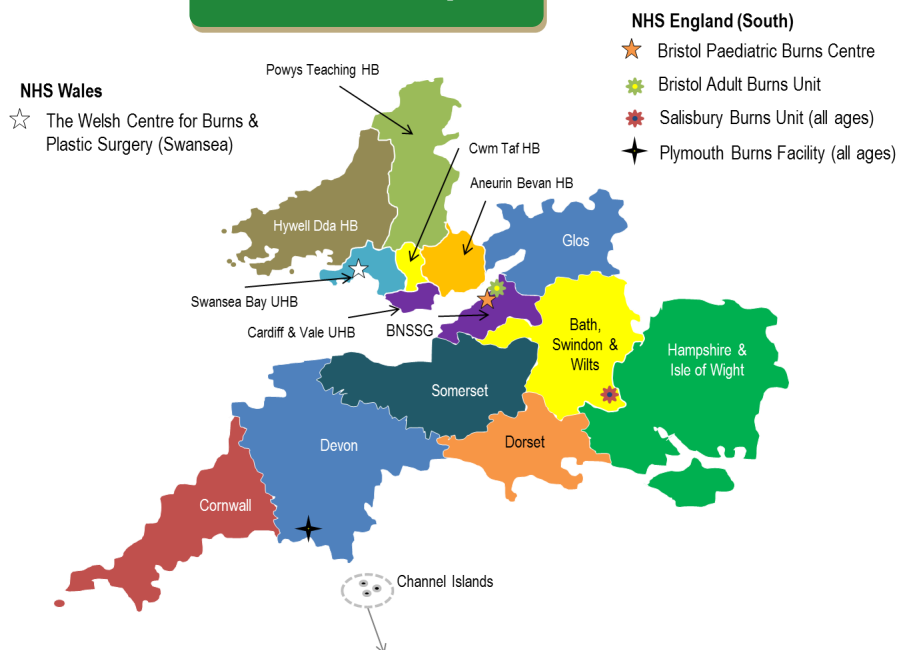
What is the SW Burn Care Operational Delivery Network?

Background

The SW Burn Care Operational Delivery Network (SW Burn Care ODN) is one of four national Burn Care ODNs in England and Wales. It is hosted by North Bristol NHS Trust and serves the populations of South West England (including Hampshire, Isle of Wight and the Channel Islands) and South/Mid Wales. The total population is approximately 10 million.

The Network is made up of a tiered model of specialised burn care services consisting of Centres, Units and Facilities.

Network Footprint



Specialised Burn Services in Network

Burn Centres	 Bwrdd Iechyd Prifysgol Bae Abertawe Swansea Bay University Health Board	Adults only
	University Hospitals Bristol  NHS Foundation Trust	Children only
Burn Units	North Bristol  NHS Trust	Adults only
	 Bwrdd Iechyd Prifysgol Bae Abertawe Swansea Bay University Health Board	All ages
	Salisbury  NHS Foundation Trust	All ages
Burn Facility	 University Hospitals Plymouth NHS Trust	All ages

Network Aim

The aim of the SW Burn Care ODN is to ensure patients who suffer from a serious burn injury, within the Network area, receive optimal treatment in a timely manner at a service appropriate for the injury sustained, and that the treatment and care given to patients and their families is of the highest quality as measured by regular review of outcomes. **Ensuring right level of burn care at the right time in the right service.**

Network Key Objectives

- Cross-organisational multi-disciplinary clinical engagement to improve pathways of care.
- Safe transfers of patients to the most appropriate level of specialised care
- Standardised protocols for acute care and rehabilitation within specialised burn services.
- Delivery of education and training to support high standards in burn care throughout the patients treatment pathway
- Ensure patient involvement in service improvement and development planning
- Use of Clinical Governance processes to ensure clinical outcomes are audited
- Assurance that burn injured patients are seen within the correct specialised burn service
- Assessment of specialised services against national Standards for Burn Care.
- Collaboration in research and clinical audit for patient benefit.

NHS England NHS Improvement Specialised Commissioning (South)

Supporting networks in their functions is part of the privileges of my role.

I would like to commend the Burns Network for another year of incredible achievements - especially in light of this occurring while managing the ongoing pressures of Covid-19 and elective recovery.

This report captures the hard work and dedication of all those associated with Burns services within the Network and I would like to thank all of you for managing to deliver such a high class service in the situation we found ourselves.

It is comforting to see that, despite the difficulties, governance and improvement remained at the heart of the Network's agenda and this is borne out by the South West Burns Trauma Triage Tool, ongoing leading nationally in burns emergency preparedness (which has been especially important in the last two years) and the implementation of a single dedicated burns telemedicine system.

I am fully aware that the Network we still face some significant hurdles together, especially around workforce sustainability and multi-disciplinary services outside of the centres. I look forward to working with you all over the following year to address these challenges.



Dr Peter Wilson
Medical Director - NHS England & NHS Improvement South West

SW Burn Care ODN Host—North Bristol NHS Trust

Supporting specialist services through ODNs is vitally important for ensuring that high quality services are available for patients when they need them most. North Bristol NHS Trust is proud to host the SW Burn Care ODN and I am pleased to have recently taken over from Dr Chris Burton as Chair of the ODN Board. Chris has been a passionate advocate of the Burns Network and we all owe him thanks for helping to establish the programme and set the course.

The period covered by this Annual Report was prior to my joining the ODN Board in October 2021. It details progress in many areas, despite the challenges of the Covid pandemic. Reading through the service reflections, there are clearly dedicated professionals committed to enhancing the care of burn-injured patients via direct clinical care and through education of other healthcare professionals treating burns. Collaborations have continued across the ODN between the psychologist, therapists and nursing teams to ensure patient pathways and quality standards are maintained, as illustrated by the SSQD data. Burns prevention and awareness is high on the ODN's agenda to reduce avoidable accidental burn injuries.

A year on from the implementation of a single burns telemedicine system across the ODN, it is good to see that this is being used effectively to provide immediate advice to referring organisations. This, alongside the use of Attend Anywhere virtual consultations, ensured patients who did not need to travel long distances to a burn service could still access advice and support remotely.

From a governance point of view, I am reassured that the Network Management Team has continued to meet services via virtual Clinical Governance meetings and Morbidity and Mortality Audit meetings. There has also been greater involvement between the ODNs in the South West and NHS England NHS Improvement South West Commissioners. I can also see some challenges, but I know that everyone is working hard to solve problems and constantly aspire to excellent services and the highest quality care for our patients.

Delivery Networks are just operational vehicles for fantastic people to share, transform and inspire. Reflecting on that I would like to thank everyone involved in Burns care for their passion and their expertise.



Mr Tim Whittlestone
Medical Director - North Bristol NHS Trust

Meet the Network Management Team

A small dedicated Network Management Team provides leadership for the SW Burn Care ODN. It consists of two Clinical Directors, a Lead Nurse and a Network Manager. Their role is to recommend key priorities and an annual work plan to the Network Board and drive forward actions to deliver those key objectives. The team works closely with the Burn Service Clinical Leads, Senior Nurses, Lead Therapists and Psychologists. The Network Management Team consists of:

Mr Peter Drew - Consultant Burns Surgeon & ODN Clinical Director

It was my great privilege to be appointed as a Clinical Director for the SW Burn Care ODN in July 2018, joining a well-established and successful Management Team. I had previously acted as Service Lead for the Swansea Burn Service, giving me some insight into how the Network functions and areas in which I felt development could be beneficial. Since joining the management team, I have tried to foster closer working relationships with colleagues in services in England and to streamline pathways for helicopter transfer of burn patients and tele-referral. I strongly believe that the Network has a key role in educating colleagues in pre-hospital and frontline roles in burn injury and its management.



Dr Joanne Bowes – Consultant Anaesthetist & Clinical Director

Having been appointed to my current post as Consultant Anaesthetist with a specialist interest in burns and burns intensive care at the Welsh Centre for Burns in April 2000, I have been active within the SW Burn Care ODN for the past eleven years: Firstly as lead for adult intensive care and now as one of the two Clinical Directors, working with colleagues to ensure the ODN provides the best possible care for patients. I am co-author of the documents "Outcome Measures for Adult and Paediatric services" (British Burns Association) and "Guidance for the Provision of Anaesthetic Services (GPAS) for Burns and Plastic Surgery". In addition, I am a keen advocate of education as a means of improving burn care and co-founded the "Burns for Anaesthetists" one day course.



Nicola Mackey – Matron & Lead Nurse

I am very proud of the hard work and commitment demonstrated by nurse colleagues throughout the Network, in particular to education in burn care across the patient pathway. It was a great pleasure to co-develop our Annual Regional MDT Conference with our Network Manager. This provides an opportunity for many of the nurses from across the ODN to join together and celebrate their successes over the year and learn from each other. I also had the opportunity to be a member of a Trauma & Burns Clinical Reference Group working group to review the Specialised Services Quality Dashboard Indicators. These will be published in 2022 and will form part of the SW Burn Care ODN's clinical governance arrangements in ensuring burn services maintain their excellent standards into the future.



Sharon Standen—Network Manager

I joined the SW Burn Care ODN in September 2017 and have found working with all five burns multi-disciplinary teams to be extremely rewarding. I couldn't do my job without their co-operation and commitment to deliver improvements and provide exceptional care for burn injured patients. My overarching role is to ensure effective engagement with all stakeholders to deliver national and regional outcome ambitions in line with the National Standards for Provision and Outcomes in Paediatric and Adult Burn Services. It has been a challenging year, that has seen stronger engagement with colleagues in the other ODNs in the South West, specifically Trauma and Critical Care, to ensure our pathways are maintained.



Network Key Challenges and Successes in 2020-21

The SW Burn Care ODN Board agreed a work programme for 2020-21. The objectives set were related to Clinical Governance, Emergency Preparedness, Resilience & Response (EPRR), Professional Education & Training, Patient & Public Engagement & Education Audit & Data, Research & Innovation and Communications. Below is a summary of some of the key successes and challenges during 2020-21.

Pathway improvements

- By June 2020 all the South West Specialised Burn Services had implemented a single telemedicine system for use across the Network. This was expedited due to the pandemic and the need to reduce footfall into hospitals. Between 1 April 2020 to 31 March 2021 there were a total of 3,591 referrals via MDSAS. The Network are extremely grateful to the burn services for implementing this major change. See full details on page [12](#).
- Planning repatriations between burn services was improved with the involvement of the whole burns MDT from sending and receiving services providing a handover via MSTeams. This ensured a more holistic approach to ensure a seamless transfer of patients between hospitals. Our Network repatriation guidelines were updated to reflect this.
- A South West Burns Trauma Triage Tool, developed in collaboration with the South West Ambulance Service, went live on 1 April 2021. This provides a direct pathway from scene to a specialised burn service if there is no other associated trauma. The clinical condition of the patient must meet a certain criteria and referrals can only be made by a member of a pre-hospital Critical Care / Enhanced Care Team to a Consultant Burns Surgeon. We plan to review the use of this tool in 2022.
- We agreed three new Key Performance Indicators with the South West Commissioners, but unfortunately, due to the pandemic these had to be put on hold and were rolled over onto our 2021-22 work programme. These were:
 - * Pilot a monitoring feedback checklist on the clinical condition of resus/intubated patients arriving in the Swansea Burn Centre.
 - * Improving the experience of patients aged ≥ 65 years old ensuring, where appropriate, they receive a rehabilitation prescription on discharge or transfer. We are awaiting the completion of a National Burns Rehabilitation Prescription.
 - * To deliver year 2 of our Network Education and Training Strategy in preparing non-burns healthcare professionals for managing burn injuries in the event of a burns mass casualty incident. We will work with the other three specialised burn care networks to provide this online via the Health Education England Learning Hub.

Organisational Governance

- Dr Jo Bowes was due to step down as Network Clinical Director at the end of May 2021. We are grateful for all the work she did in developing a Network Education Strategy and utilising her knowledge and experience as a Burns Anaesthetist/Intensivist to improve patient outcomes. She was also a valued lead for the National Burns Annex Task and Finish Group.
- We successfully recruited Mr Sankhya Sen, Consultant Burns and Plastic Surgeon to the Network Clinical Director post and he will start in June 2021. He will work alongside Mr Peter Drew who extended his tenure as Clinical Director for a further year.
- The Network Management Team and Host Trust signed a new Memorandum of Understanding and Service Level Agreement with NHS England and NHS Improvement Specialised Commissioning South West. This included a requirement for Network Clinical Leads to be known as Clinical Directors and a generic job description was provided by the commissioners which all Clinical Directors to work to. The role will be recruited to for a two year period with an option to extend for a further year. They will report to the Medical Director for Specialised Commissioning.
- Unfortunately, the Plymouth Burns Facility remains without a Burns Clinical Psychologist. Due to the pandemic, the collaborative work with the Severn Major Trauma Centre and South West Critical Care Network to develop a joint Clinical Psychologist post had to be paused. Therefore, this remains on the Network's Issue Register and we will continue to work with the commissioners in 2021-22 to try and address inequity in patient care within the Network.
- Both Bristol paediatric and adult services submitted data in December and underwent a virtual GIRFT review in August 2020. We are awaiting the final report.
- The ODN did a self-assessment against the Burn Care Standards in July 2020 and was fully compliant with 81 of 89 standards. We were missing some roles within our Network Management Team as recommended by the standards. We need to draft a transition guideline for children's/young people's services transferring patients to adult services. However, there are specific transition guidelines within the burn services. We also need to draft a workforce strategy and a

strategic development plan for the next 5-10 years.

- We were asked to change our name from South West UK Burn Care Network (SWUK) to South West Burn Care Network to comply with NHS Identity. We had to change our web site link to www.southwest-burncare-network.nhs.uk

EMERGENCY PREPAREDNESS RESILIENCE AND RESPONSE (EPRR)

- The SW Burn Care ODN continued as Lead Network coordinating national work streams relating to burns EPRR.
- A national review of the **NHS England Concept of Operations (ConOps) for Managing Mass Casualties—Burns Annex** and the **NHS England Management of surge and escalation in critical care services: standard operating procedure for Adult and Paediatric Burn Care Services in England and Wales**, was completed and both documents have been published and are available on the NHS England website
- **The National BIRT Training Group** first met in January 2020, however, this was paused until we could meet virtually again in September. Since then, the group has identified e-learning modules already available and pulled them into a BIRT Learning Catalogue on the Health Education England Learning Hub. We plan to launch the complete training along with a simulation video early in 2021-22.
- The Network had approved funding for a bespoke **Burns Trauma Risk Management course** which was finally started in February 2021. Nineteen members of staff from across the network volunteered to become TRiM Practitioners and four Clinical Psychologists volunteered to become TRiM Strategic Management Leads. An on-boarding webinar was held by DNA Definitive prior to self-directed on-line.



RESEARCH AND AUDIT

- We held a virtual **Annual Regional Morbidity & Mortality Audit** meeting in March 2021. All burn services were represented and reviewed cases seen between 1 April to 31 December 2020.
- Our Lead Nurse, Nicola Mackey, joined a **National Specialised Services Quality Indicator (SSQI) Review Group**. This group will review the SSQIs for Burns (adult and paediatric) services.
- All specialised burn services continued to input data into iBID.
- We undertook an analysis of the main causes of burn injuries within the Network. Full details of this can be found on page [14](#)

EDUCATION AND TRAINING

- Unfortunately, face to face Education had to be cancelled, so we were unable to deliver the 2nd year of our Education and Training Strategy.
- We were able to run our **Annual ODN Multi-disciplinary Team Conference** via MSTeams on 8 December 2020. The theme this year was "Rapid Change and Resilience". We were grateful to Dr Scott Grier, Lead Consultant for RETRIEVE adult critical care transfer service, for providing an overview of their service. The Network has plans to work with Scott to improve the treatment and management of resus/intubated burns patients being transferred to a specialised burn service. We also heard from the Outreach teams who had adapted their way of working during the pandemic to ensure patients could still access specialist care and advice over the phone or via Attend Anywhere. Some home visits still took place, but satellite clinics had to be stopped due to local infection control policies. The Burns Therapists also faced many challenges in providing outpatient rehabilitation; from staffing redeployment, sickness and self-isolation/shielding to initial cancellations of all outpatient therapy sessions and the reluctance of patients to come into the hospital to receive treatment. However, as always, the therapists developed new ways of working using virtual follow-ups which has now become a positive option for long distance patients requiring scar management. There were also presentations on staff resilience and safety and our Network Lead Nurse presented on Infection Prevention and Control: Burns and Covid-19—Maintaining the Pathway.
- As part of the Continuing Professional Development of burns surgeons working in Burn Units, we obtained agreement from the Medical Directors of the adult and paediatric Burn Centres within our ODN to allow Burn Surgeons to visit them and observe major complex burn cases. However, due to the pandemic, visits could not take place. Hopefully, with the use of NHS Digital Passports in the future, this will become more of an option.

PATIENT ENGAGEMENT

- Unfortunately, patient engagement was difficult this year. We were unable to move forward with the development of the Salisbury repatriation video. We hope to complete this in 2021-22.
- We sought expressions of interest from patients in the development of adult burn survivor support. However, we only had four expressions of interest. We plan to discuss this further with charitable groups and look at options for collaboration.

Regional Morbidity & Mortality Audit—2020-21

Despite the pandemic, the SW Burn Care ODN met the **National Burn Care Standards for Provision and Outcomes in Paediatric and Adult Burn Care** by holding our Annual Regional Morbidity and Mortality (M&M) Audit meeting on 16 March 2021 via MSTeams.

We were grateful to Mr Jorge Leon-Villapalos, Consultant in Plastic Surgery and Burns and Burns Unit Clinical Lead at Chelsea and Westminster Healthcare NHS Foundation Trust (London and South East Burns ODN) for co-chairing the meeting with Mr Peter Drew, ODN Clinical Director.

All burn services presented cases seen between the period of 1 April to 31 December 2020. This was a shorter audit period to previously as the National M&M Audit was moving to a calendar year audit.

Forty eight participants joined the virtual meeting. As previously, the virtual meeting focused on all mortalities, unexpected survivors and any SUIs/RCA. Fortunately, there had been no paediatric mortalities, therefore the Paediatric Burns Centre presented two paediatric critical care cases which involved transfer to Bristol from another Network area. These led to a collaborative meeting between all parties to address reasons for delays in the transfer pathway.

Sadly there were 14 adult mortalities during this period, two of which were unexpected. All were fully discussed. In total, five cases will go forward to the Annual National Burns M&M Audit meeting, including an SUI/RCA, two adult mortalities and the two paediatric transfer cases.

Due to the shortened audit meeting, transfers and repatriations were not discussed. However, all of these cases were routinely discussed in the quarterly ODN Clinical Governance Group meetings where any issues can be raised and addressed as necessary.

Chairs' Comments

Mr Jorge Leon-Villapalos felt the audit was an honest and candid approach to discussions and had learnt a lot from the Network during the day. He thought the South West had a fantastic approach and it had been a good opportunity to be involved as Chair especially with the overlap of cases from the London and South East Burns Network.

Outputs of the Audit

- Learning points actioned within burn service in respect of SUI/RCA. Would also be noted in the National presentation along with impact of PPE in theatre during pandemic.



Morbidity & Mortality Audit

ADULTS:

14	Mortalities (burns & non-burns)
12	Expected mortalities (burns & non-burns)
2	Unexpected mortalities (burns)
48	Requiring ventilation and/or fluid resuscitation (burns & non/burns)
1	Serious Untoward Incident (SUI) / Root Cause Analysis (RCA)

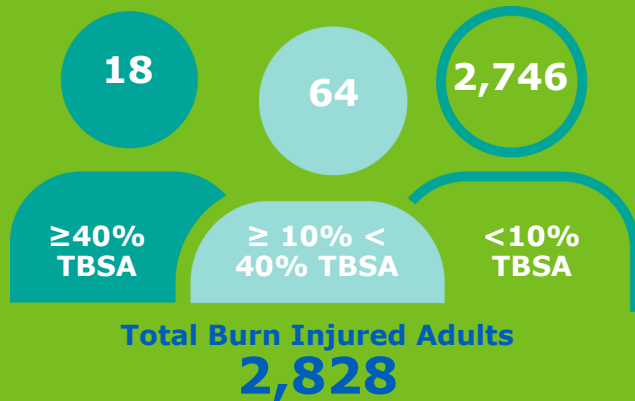
PAEDIATRIC:

0	Mortalities
13	Requiring ventilation and/or fluid resuscitation (burns)
0	Serious Untoward Incident (SUI) / Root Cause Analysis (RCA)

- To improve collaboration with Wessex Trauma Network regarding direct access to burn consultants for complex referrals and Southampton and Oxford Retrieval Team (SORT) regarding paediatric burns critical care transfer pathway and crossover between SORT and ODN pathways/regions.
- Recognised excellent care of the elderly/end of life care. Presented at National Audit meeting and asked to lead on overall guidance document for end of life care for burn injured patients.

Network Adult Activity 1 April 2020 to 31 March 2021

Breakdown of new referrals within designated thresholds

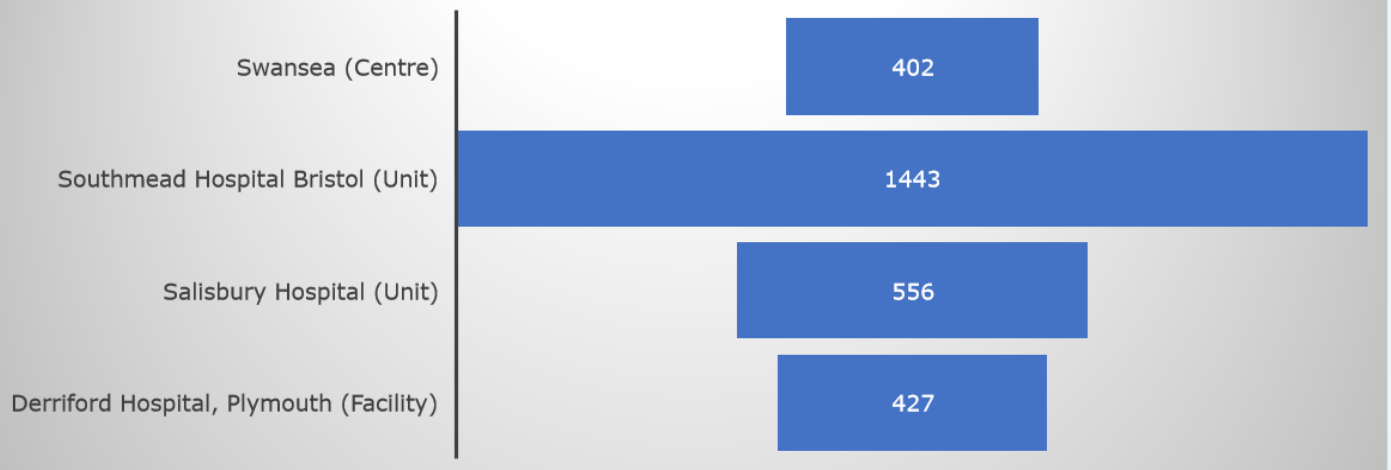


These figures show an 80% increase in burns referrals ≥40% TBSA compared to last year.

There was a very small drop in referrals ≥10% TBSA and <10% TBSA compared to last year.

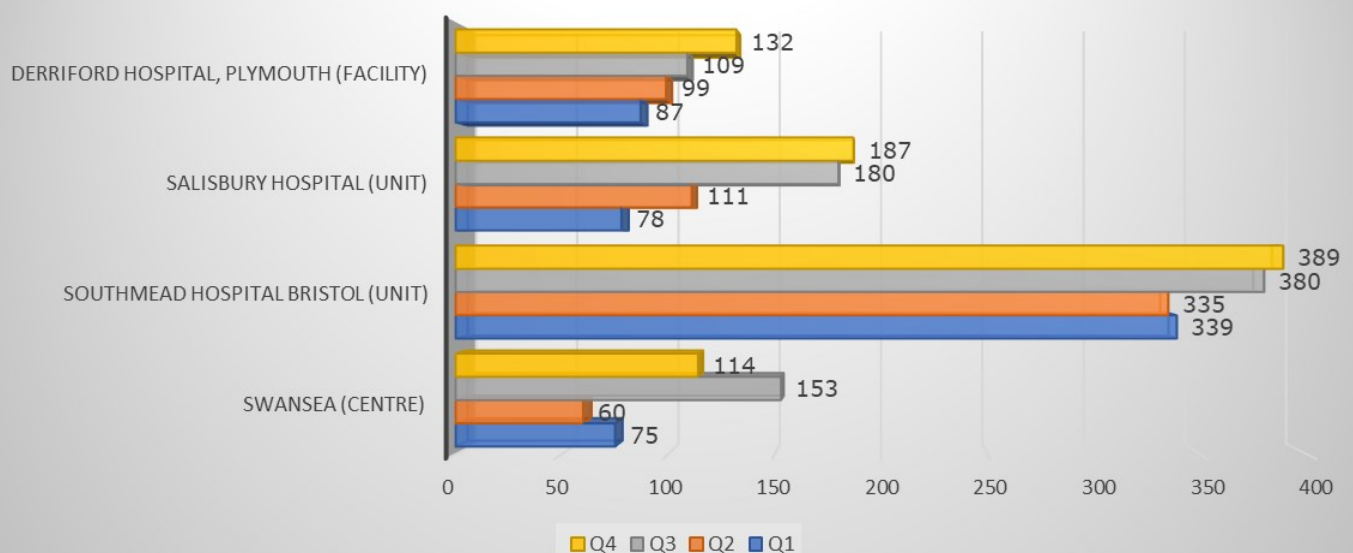
Bristol had around 88% more referrals than the other burn services

Total Adult Referrals by Burn Service



Swansea and Salisbury saw the greatest surges in referrals in Q3 (87% and 47% respectively) with all services experiencing some surge during Q3 and Q4.

Total Adult Referrals by Quarters

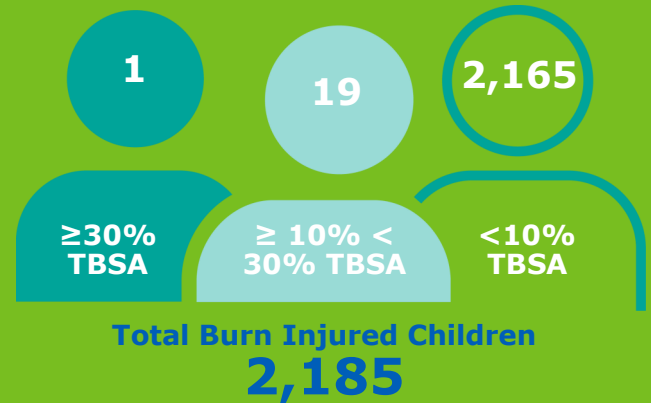


Network Paediatric Activity 1 April 2020 to 31 March 2021

Breakdown of new referrals within designated thresholds

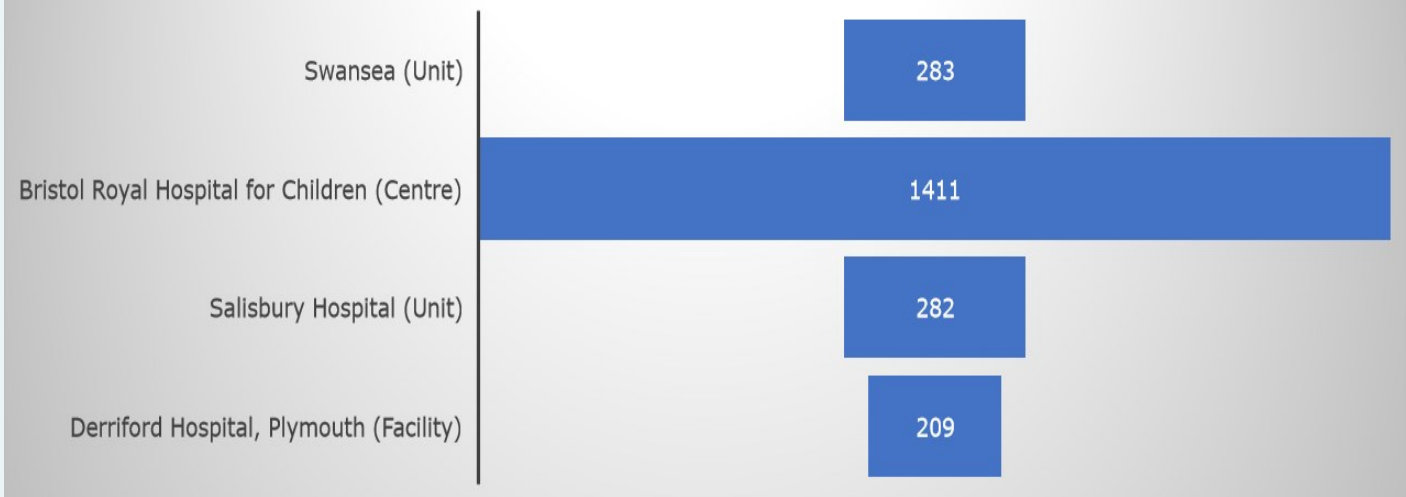
Compared to last year, these figures show:

- A drop in referrals $\geq 30\%$ TBSA
- Referrals $\geq 10\%$ but $< 30\%$ TBSA remained the same
- Referrals $< 10\%$ TBSA increased by 19%



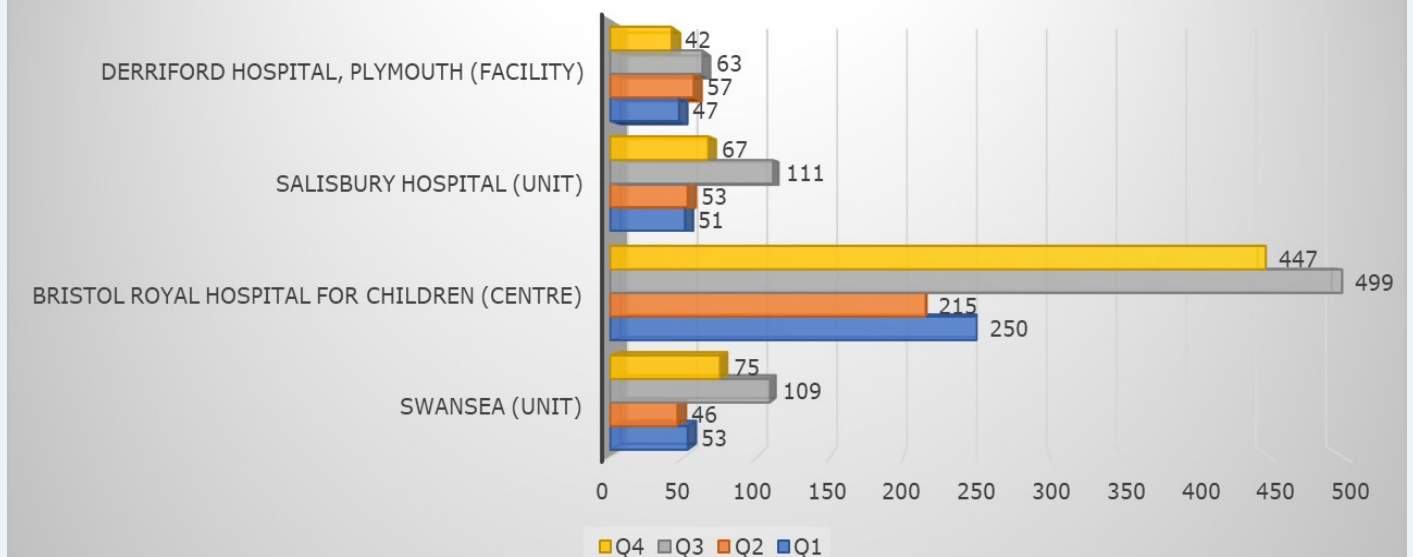
Bristol received around 130% more referrals than the other burn services.

Total Paediatric Referrals by Burn Service



All services, except Plymouth, saw between a 80-88% increase in referrals in Q3, which Bristol and Swansea remaining high in Q4

Total Paediatric Referrals by Quarters



Overview of referral numbers over the last four years

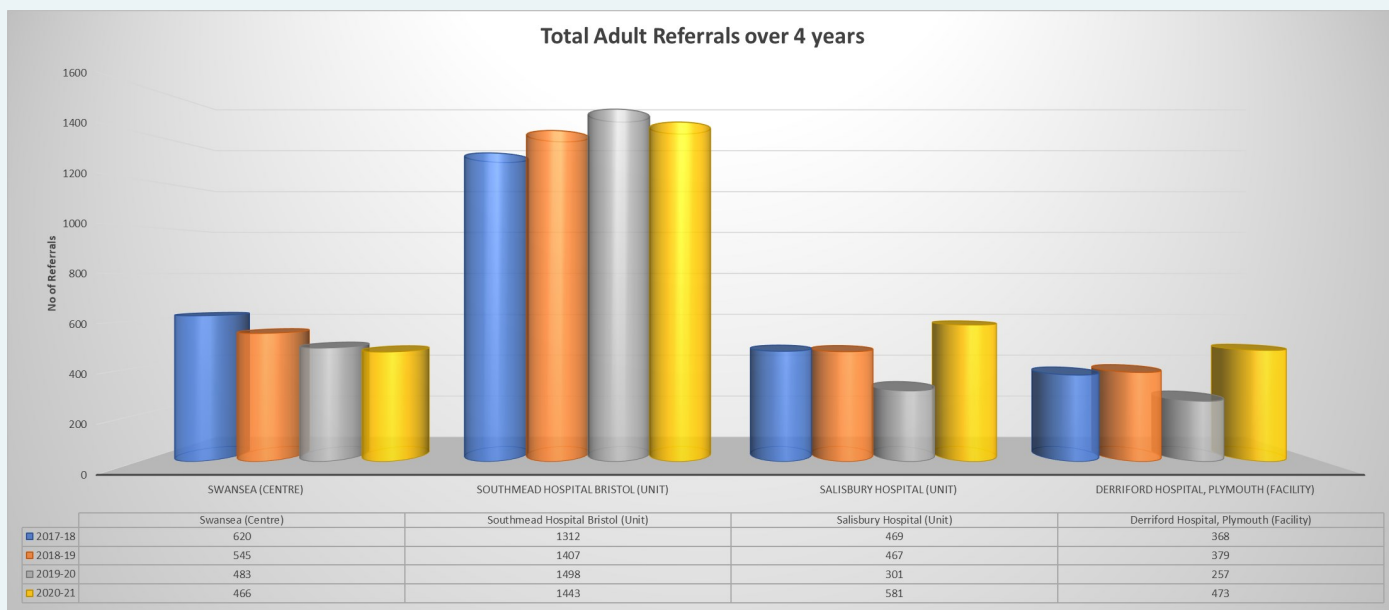
Swansea ↓ 28%

Bristol ↑ 10%

Salisbury ↑ 21%

Plymouth ↑ 25%

Total Adult Referrals over 4 years



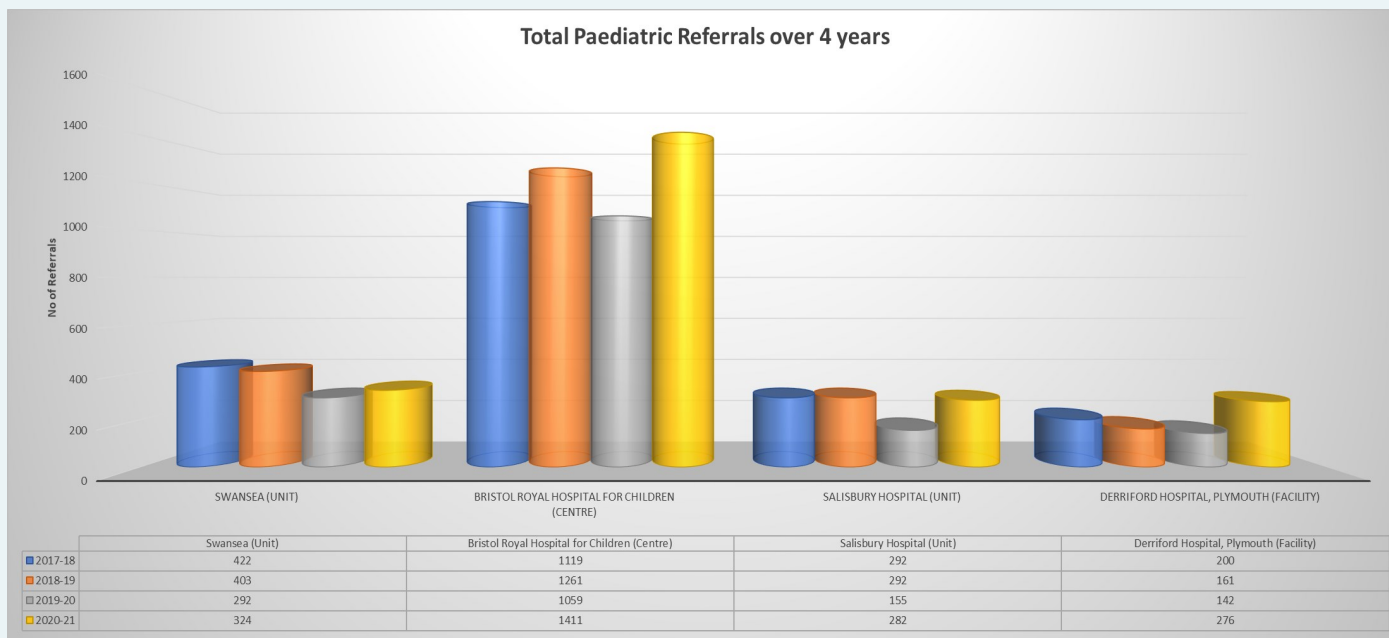
Swansea ↓ 26%

Bristol ↑ 23%

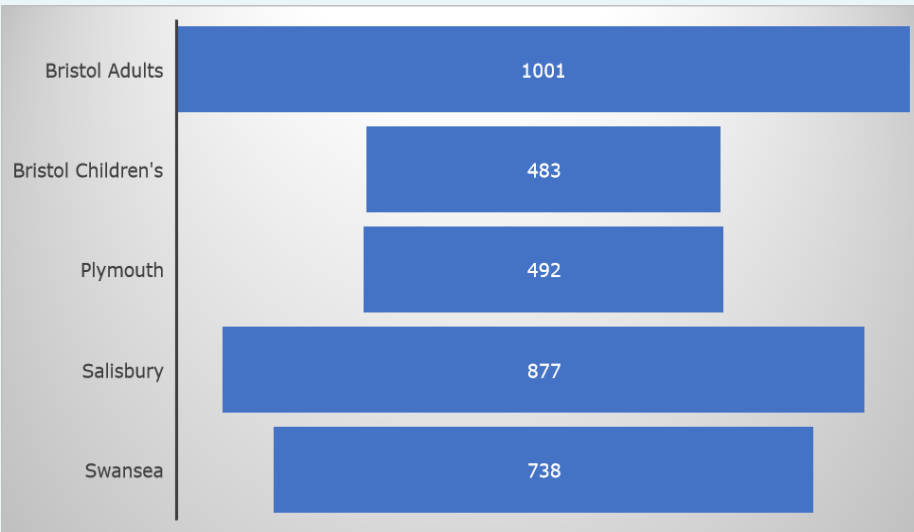
Salisbury ↓ 3%

Plymouth ↑ 31%

Total Paediatric Referrals over 4 years



Overview of referrals via MDSAS telemedicine (1.4.20-31.3.21)

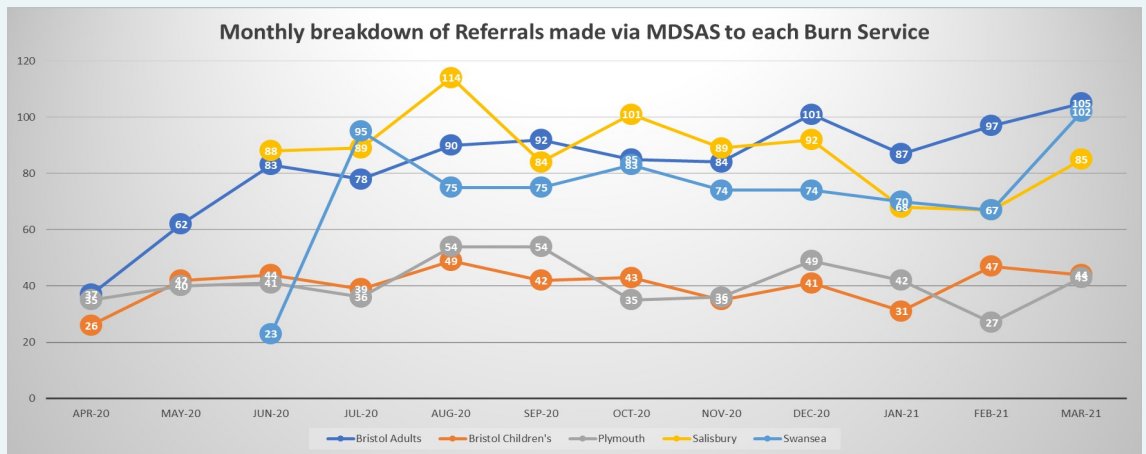


Total Referrals via MDSAS telemedicine = 3,591

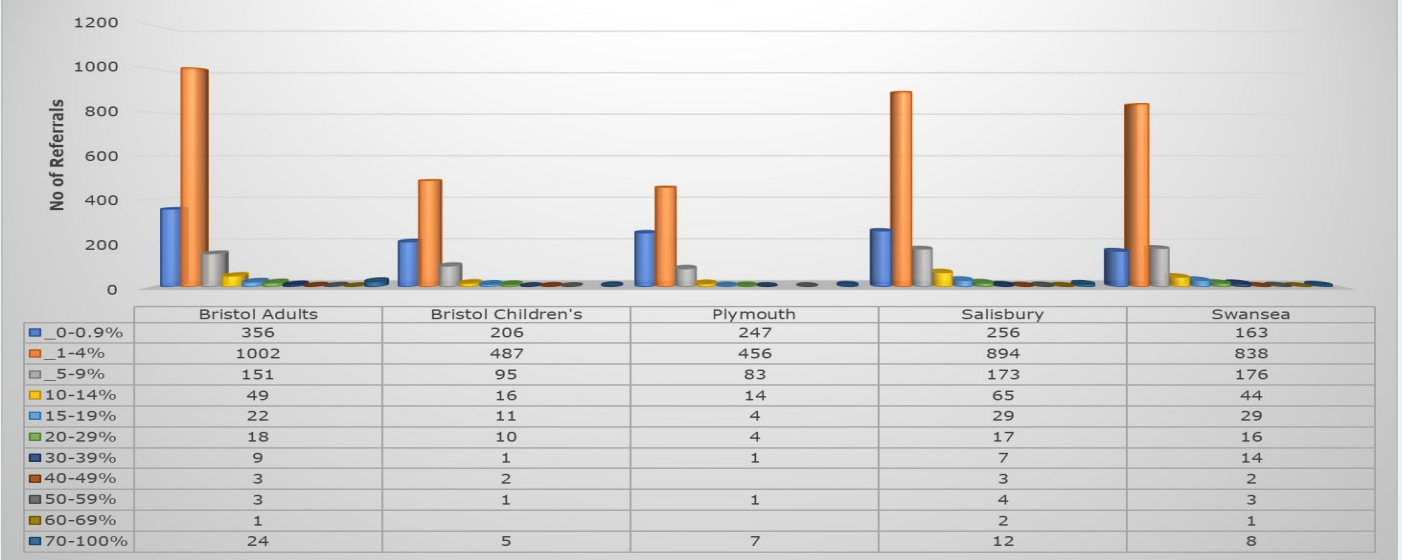
NB: These figures are taken from the beginning of April, but some services didn't fully implement MDSAS telemedicine until July.

Overall number of new referrals = 5,013

Referral numbers remained fairly consistent showing a good uptake of the new system



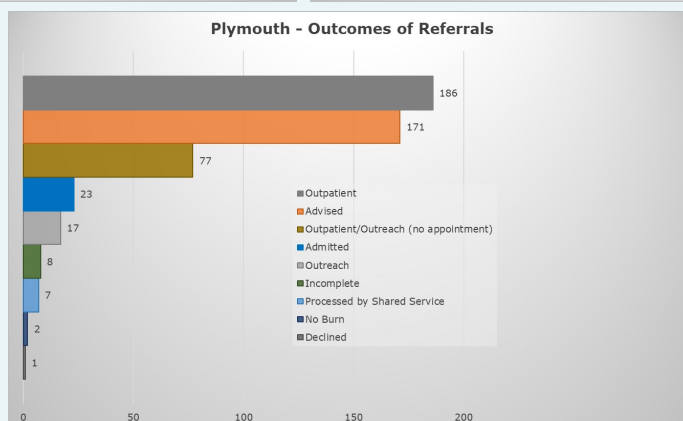
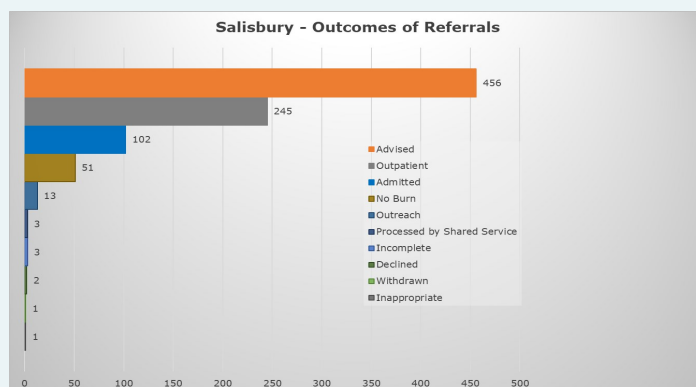
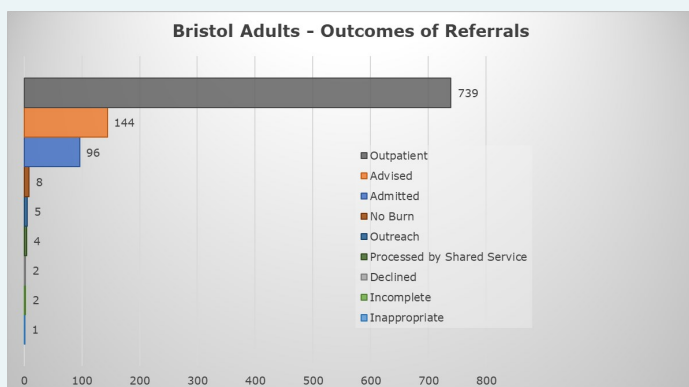
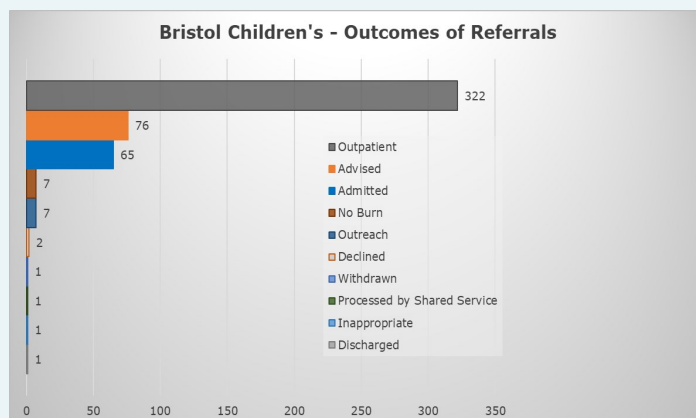
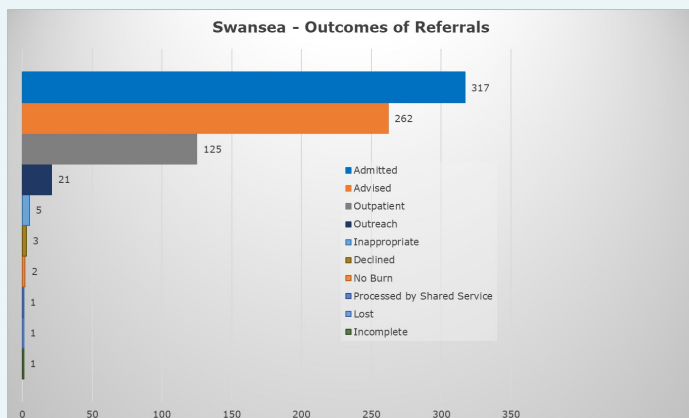
Breakdown of MDSAS Referrals by % TBSA to each Burn Service



The above graph shows MDSAS referral activity by %Total Body Surface Area (TBSA) provided by referrer (final %TBSA assessed by burns service often differs from referrer's). This is over the period of January 2020 to mid October 2021 totalling 6,045 referrals

**49% of referrals were between 1-4 %TBSA
32% of referrals were between 0.09% TBSA
16% of referrals were between 5-9% TBSA**

Overview of Outcomes via MDSA telemedicine (1.1.20-13.10.21)



Referrals came in from 46+ hospital trusts

The above graphs are a preview of the data that we will be analysing in 2021-22 to review the outcomes of referrals across the Network. Services appear to be using MDSAS in different ways, and therefore we want to understand this and where possible develop consistency across the network. The rationale for implementing a single telemedicine system across the Network was that it combines a written record of the referral alongside photographs of the wounds and assists in transfer of information between specialised burn services. It is very difficult for referrers to assess the size of the burn accurately, therefore, photographs provide an extra piece of information to assist the burn specialists in deciding what action is required. It is hoped it will assist in ensuring patients get to the right service at the right time. However, it may also help to avoid unnecessary travel for patients and families to a specialised burn service as the burn specialist can support the local healthcare professionals to manage minor burns locally. Many burns are already treated in local Emergency Departments, but this system also provides a direct link to expert advice if needed. We can initially see that some services provide more advice than others who prefer to bring the patient into an outpatient clinic. In times outside of the pandemic, outreach satellite clinics may have been a preferred option based on the urgency of the referral.

Burns Prevention and Awareness in the South West

Top 5 Injury Causations in SW Burn Care ODN in 2020-21

A total of 3,648 cases recorded on iBID



1,649 Scalds

- ⇒ 776 child*
- ⇒ 872 adult
- ⇒ 1 unrecorded

933 Contact

- ⇒ 614 child
- ⇒ 317 adult
- ⇒ 2 unrecorded



671 Flame

- ⇒ 151 child
- ⇒ 520 adult

278 Chemical

- ⇒ 69 child
- ⇒ 208 adult
- ⇒ 1 Unrecorded



35 Cold

- ⇒ 16 child
- ⇒ 19 adult

34—Friction
29—Electrical
13—Flash
2—radiation

iBID — International Burn Injury Database

*Child—0 to 19 years due to iBID categorisation

Scalds and contact burns continue to make up the majority of burn injuries in the South West, as they do nationally. As you can see from the graph on page 12, the majority of burns seen in the specialised burn services are between 0 and 4 %TBSA.

In late 2020 we undertook an audit to identify the specific mechanisms of scald and contact injuries over a four year period (2015-19). We identified:

Top ten mechanisms of injury over 4 year period

Mechanism of Injury	No of Cases
P02 Tea Cup	1811
N01 Kettle Spill	1050
A03 Electric Hob	954
F10 Burn from hot object (other)	913
N09 Other Hot Fluid	904
E02 Fat (Non Burning)	681
N03 Saucepan Spill	661
F07.1 Hair Straighteners	657
P04 Coffee Cup	642
P09 Other Hot Food	481

Top ten highest costs over 4 year period

Mechanism of Injury	Total Cost
Q01 Bathing Immersion (n=134)	£1,824,540
N01 Kettle Spill (n=1050)	£1,643,516
P02 Tea Cup (n=1811)	£1,350,467
F01 Central Heating Radiator (n=441)	£863,076
N09 Other Hot Fluid (n=904)	£812,978
N03 Saucepan Spill (n=661)	£667,317
P04 Coffee Cup (n=642)	£652,772
F10 Burn from hot object (other) (n=913)	£608,600
N05 Bowl Spill (n=326)	£474,851
F08 Hotwater Bottle (n=220)	£420,326

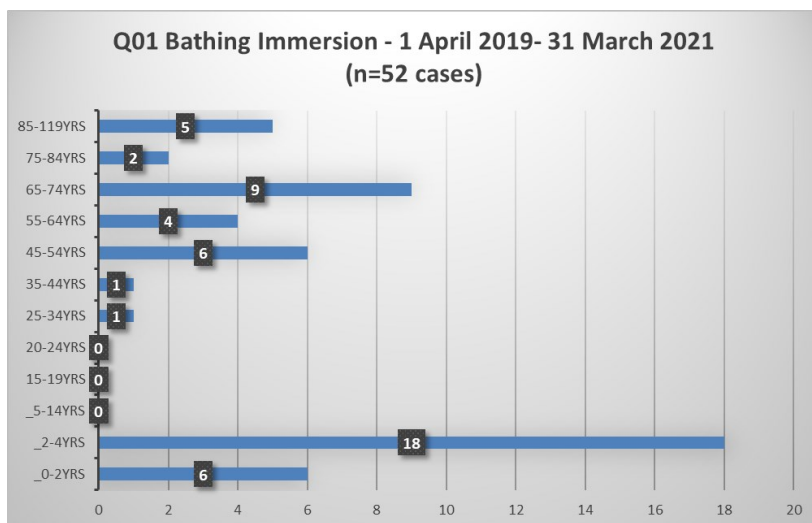
Top five average highest cost per patient

MECHANISMS	No of Cases	Total Cost	Average cost per patient
Q01 Bathing Immersion	134	£1,824,540	£13,615.97
Q07 Shower	53	£316,812	£5,977.59
Q02 Sink Immersion	9	£46,162	£5,129.08
B03 Electric Heater	68	£340,739	£5,010.87
N06 Tap Splash/Spill	106	£389,314	£3,672.77

Costings were provided by Mr Ken Dunn and are summated costs captured by iBID. Patient Level Cost (PLC) was added into iBID in 2012 prior to NHS Improvement making this a mandatory return for acute care in 2019. Use of identified cost drivers (ICU bed days, theatre, etc) were applied to every record in iBID. The costs in these figures are costed Spells rather than finished consultant episodes (FCEs) or episodes. For more information on the costing methodology please see Dunn KW, Burn service costing using a mixed model methodology. Burns 46, 520-530 (2020) - <https://www.sciencedirect.com/science/article/abs/pii/S0305417919307958>

We have since added to this data up to 31 March 2021. Many of the mechanisms of injury are preventable accidents and the mechanisms identified across the network did not come as a surprise to the clinical teams. In fact, they remain pretty much consistent each year. During 2020-21, hot drink spills accounted for nearly 40% of scalds in children under the age of 2 years old and touching hot objects related to cooking accounted for 34% of contact burns in children between the ages of 2 and 4 years old.

The findings illustrated by the data do need further examination and therefore we set up a Burns Prevention and Awareness Group in 2020 with representation from each of the network's five specialised burn services. The aim of the group will be to 'fact check' the data against clinical experience. For example on the next table it is worrying to see quite a rise in bathing immersions in the under 4 year olds during 2020-21.



52 patients seen with scalds following bathing immersion between 1 April 2019 and 31 March 2021. 37 of these were during 2020-21 and 24 of these were under 4 years old.

Data entry may be an issue, but this highlights something that may need further investigation and possibly require a link with health visitors to provide awareness around bath temperatures for the young and elderly.

At an average cost of £13,615 per patient, based on the iBID costs, this comes to £707,980.00.

The burn services already deliver a lot of prevention and awareness focused training with community teams and public groups, such as Mother and Baby Clubs and organisations such as Age UK. However, this has mainly been in isolation from each other. By bringing together the Outreach Teams (nurses and therapists) we hope to be able to develop a more unified approach to raising awareness and be able to offer support to each other in respect of developing resources and focusing on specific themes throughout the year. Below are the ten most common mechanisms of injury during 2020-21 in under 19 year olds, 20 to 64 year olds and over 65 year olds.

Mechanism of Injury	0-2yrs	2-4yrs	5-14yrs	15-19yrs	Total
P02 Tea Cup	136	59	52	8	255
A03 Electric Hob	35	110	29	7	181
F10 Burn from hot object (other)	25	37	32	8	102
P04 Coffee Cup	60	18	12	5	95
N01 Kettle Spill	19	15	37	10	81
N09 Other Hot Fluid	42	12	17	5	76
F07.1 Hair Straighteners	38	19	12	2	71
P09 Other Hot Food	18	14	9	9	50
N03 Saucepan Spill	11	14	17	7	49
B02 Solid Fuel Heater	12	24	10	2	48

Mechanism of Injury	20-24yrs	25-34yrs	35-44yrs	45-54yrs	55-64yrs	Total
N01 Kettle Spill	18	30	32	34	17	131
E02 Fat (Non Burning)	14	48	28	20	7	117
N03 Saucepan Spill	12	21	24	19	17	93
C02 Petrol Ignition	11	23	18	25	15	92
U09 Other Chemical	14	16	19	13	17	79
U04 Cement	6	20	16	20	17	79
F10 Burn from hot object (other)	12	15	17	13	6	63
C09 Other Ignition	8	22	16	11	7	64
F08 Hotwater Bottle	7	16	8	14	9	54
P02 Tea Cup	9	14	10	13	8	54

Mechanism of Injury	65-74yrs	75-84yrs	85-119yrs	Total
N01 Kettle Spill	20	9	5	34
F01 Central Heating Radiator	7	11	5	23
N03 Saucepan Spill	10	6	3	19
F08 Hotwater Bottle	7	5	7	19
P02 Tea Cup	7	7	2	16
F04 Garden Or Bonfire	6	7	1	14
F10 Burn from hot object (other)	9	3	1	13
P04 Coffee Cup	6	4	3	13
Q01 Bathing Immersion	7	2	4	13
C02 Petrol Ignition	12			12

Highlights from Burns Specialist Interest Groups (SIGs)

Burns Lead Nurses

Nicola Mackey, ODN Lead Nurse and Matron at North Bristol NHS Trust

The Burns Lead Nurses Specialist Interest Group is led by Nicola Mackey in her role as Network Lead Nurse. The group consists of the Service Lead Nurses from each specialised burn service who act as links to the Network and sit on the Network Clinical Governance Group meetings. Other Band 6 and above Nurses are also part of a wide group which take part in quarterly Nurses Forums



General Overview

Despite the challenges of the pandemic during 2020-21, the ODN Lead Nurses Group were able to meet virtually. The use of MSTeams has been invaluable in supporting colleagues from across the network in facing major changes to practice as conveyed in the burn services' reflections in this Annual Report. Challenges and solutions have been shared enabling nursing burn care to continue without derogation of care despite the difficulties. The burns nurses are all part of supportive and resilient teams. We are looking forward to working together in 2021-22. Below are some of the reflections of the last year.

Challenges

- All services were maintained, however, we remained mindful of the potential workforce issues generally and in the coming period of restoration and beyond.
- Managing patients on different pathways due to changes in practice became more defined within Hospital Trusts. Services adapted to the green elective pathways and ensured any burn patients with Covid-19 who needed to be on the blue pathway still had good access to burn care professionals.
- Swansea experienced some difficulties with recruiting to paediatric nursing posts. This led to any burn injured children being moved to the main paediatric ward in Morriston Hospital. The paediatric team were supported by the highly experienced burns dressing team and paediatric burns nursing staff. They are hoping to appoint a Band 6 Burns Link Paediatric Nurse in 2021-22. We await to see if the relocation of burn injured children will be a permanent change or not.

Nurse Forum

- As mentioned above, we were pleased to re-invigorate our Nurses Forums to an online meeting. The forum provided an opportunity to maintain contact with nursing colleagues from across the Network in the absence of being able to meet in person during 2020 and as you can see, even the family dog joined in!.

- As a very collaborative network, the use of MSTeams has been a positive step and we will be able to meet more frequently as 'blended' options become more popular in 2021.
- We held our first virtual Nurses Forum on 8 September 2020. This was well attended and well received. Each service provided an update of how their services had changed and adapted to working in the pandemic. An outstanding factor was that all of the services had had to move some of their activity to another location, but this was undertaken with speed whilst maintaining the burn care standards.

Education and Teaching

- We all agreed that it was right to suspend formal external training and education in the early days of the pandemic. However, education that had been undertaken previously by Outreach Nurses definitely proved beneficial as more patients were managed remotely by well trained staff in the community or local Emergency Departments and Minor Injury Units.
- Many services were able to continue in-house training.
- The nursing staff contributed to the Annual ODN MDT Conference in December 2020 which was focused on Rapid Change and Resilience. We were grateful to the Outreach Nurses for presenting on the challenges of delivering an outreach service during lockdown and Amy Johnson, Burns Clinical Nurse Specialist in Salisbury, presented the findings of a survey on staff resilience. I also gave a presentation on Infection Prevention and Control in Burns and Covid-19 and maintaining the care pathway.



- Unfortunately, the Emergency Management of Severe Burns (EMSB) course didn't run in 2020, but we are looking to run the first post-pandemic course in September 2021
 - The University of the West of England Burns Rehabilitation Module, led by Shirin Pomeroy, Clinical Nurse Specialist at the Bristol Children's Hospital, commenced in February 2021. With the help of several colleagues, the course was successfully adapted to an online module and ran with 29 candidates from across the UK.
 - A number of nursing staff from each burn service volunteered to become TRiM Practitioners. Their training will be completed in Autumn 2021. Having TRiM Practitioners on-site will enable quicker, more focused support for the whole MDT. Nurses, in particular, will benefit from access to this support when faced with challenging behavioural issues and distressing circumstances of injury. An added advantage is that there will be a network team of Practitioners to support each other and will strengthen resilience across the Network should a major burns incident occur.
- great examples of service changes were discussed.
- The nursing teams were integral to the implementation and roll out of a single burns telemedicine referral system across the Network. Louise Walker, Advanced Nurse Practitioner in Plymouth, which was the first burn service in the South West to start using the system, shared their experience via a webinar in July on 'Using MDSAS Burns Telemedicine during the Covid-19 lockdown'.
 - Our already high standards in preventing infections within burn care enabled all nursing teams to adapt to Covid-19 prevention and control measures. Teams were well versed in the isolation and segregation of patients and were extremely experienced in supporting patients during this challenging time.
 - I personally have been involved in a national review of the Adult and Paediatric Burns Quality Indicators on the Specialised Services Quality Dashboard. This is due to be completed in late 2021 and go live in April 2022.
 - Finally, I would just like to document how truly grateful and proud I am of the hard work and resilience of the burn nurses over the last year. They go above and beyond delivering safe and compassionate care to burn injured patients. The number of compliments and thank you cards they report at each of our Network Clinical Governance Group meetings is truly astounding. I look forward to continuing my role as Network Lead Nurse and collaborating with such dedicated nurses in the year ahead.

Service Improvements

- As mentioned, all members of the nursing teams adapted to new ways of working. The Outreach nurses adapted to providing virtual consultations via Attend Anywhere and developed novel ways of providing remote burn care, particularly in the immediate lockdown period. They ensured patients had access to appropriate dressings without them having to visit a hospital unless absolutely necessary.
- Nurses from the South West attended the British Burn Association National Nurses Webinar on 19 August focused on sharing Covid-19 experiences in Burn Care. Some

Burns Therapists

Janine Evans, Advanced Practitioner Occupational Therapist, Swansea

The Burns Therapists Specialist Interest Group consists of Lead Therapists from each of the specialised burn services. Janine Evans represents the group at the Network Clinical Governance and Board meetings. The therapists rotate this role yearly. The group meets quarterly and sets a work programme in collaboration with the Network. Group members also attend a National Burns Therapists SIG and provide a good communications link between national, network and service developments.



Challenges

- Outreach therapists/nurses were unable to run satellite outreach clinics due to covid-19 restrictions. We are hopeful this will open up again early in 2021-22
- Swansea experienced difficulties with the therapy management of patients with MDRO infections.
- Laser therapy services were not functioning due to Covid-19 which placed an additional burden on therapists as a result.
- Unfortunately, both the Salisbury and Swansea paediatric repatriation videos were delayed due to Covid-19 and relocation of the burns paediatric ward onto the general paediatric ward.

Service Improvements

- A new burns rehabilitation room was completed in Swansea which provides a separate therapy space for burns rehabilitation of patients with an MDRO infection.
- Janine Evans (Swansea) obtained funding from the British Burn Association to run a Therapy-led burn prevention programme for older adults in collaboration with Cardiff University. This work was also shortlisted in the Faculty of Public Health and Public Health England award for contributions to public health in the Advancing Healthcare Awards 2021.
- A [Burns Patient Concerns Inventory for adults](#) was piloted with all patients newly referred to complex scar clinics in Swansea. There are plans for this to be rolled out nationally.
- We used MSTeams to co-ordinate transfers and for long-distance discharge planning with burns or community teams which improved and streamlined the handover process.
- The Bristol Children's Hospital therapists collected patient feedback on changes to out-patient services in response to Covid-19 restrictions. This will be compared to responses collected pre-Covid-19 and be used to inform service planning.
- Salisbury created a specialist paediatric therapy room for use in Scar management and laser consultations.

Emergency Planning and Resilience

- As part of the Network's response to a burns mass casualty incident, the Therapies SIG developed some condition cards to support

physiotherapists on general ICUs. The first cards developed were Respiratory Management and Burns Rehabilitation. Once finalised, they will be submitted to respective registration organisations for agreement. They will eventually be distributed to ICUs nationally.

Patient Support

- The therapists were involved in helping to identify patients that may have benefitted from adult peer support. However, as already mentioned within this Annual Report, expressions of interest were low and therefore we started to look at options for collaborating with Dan's Fund for Burns and The Katie Piper Foundation to develop a co-ordinated approach. Plans to hold a virtual meeting in October had to be put on hold due to Covid-19 work pressures. We hope to pick this up again in early 2021-22.
- In April 2020 we developed an online patient self-help guide to exercise and recovery and published it on the [ODN website](#). This enabled us to signpost patients to this resource when we were unable to see patients in person.

Training

- Janine Evans and the Network Manager attended a virtual meeting with Health and Care Innovations regarding a video platform to host patient self-management videos. There were a number of generic videos already available for patients to access freely. However, to create our own burns specific therapy videos was too expensive.
- Online training resource for community therapists E-learning for Healthcare e-LPRAS Module 9 (Burns) link was added to ODN's website rather than develop whole a new resource: <https://www.e-lfh.org.uk/programmes/plastic-reconstructive-and-aesthetic-surgery/>
- A number of therapists volunteered to undertake the TRiM Practitioner training.

National Projects

- The National British Burn Association Therapies SIG was co-ordinated and hosted by the Network therapists in July 2020.
- Janine Evans and Amanda Dufley represented therapists from the South West on a National group to develop a Burns Rehabilitation Prescription. It is hoped this will be available by early 2022.

Burns Clinical Psychologists

Dr Helen Watkins, Consultant Clinical Psychologist, Swansea

The Burns Clinical Psychologists Specialist Interest Group consists of the Burns Clinical Psychologists from each of the specialised burn services. Dr Helen Watkins represents the group at the Network Clinical Governance and Board meetings. The Psychologists rotate this role yearly. The group meets quarterly and sets a work programme in collaboration with the Network. Group members also attend a National Burns Clinical Psychologists SIG and provide a good communications link between national, network and service developments.

Challenges

- There continues to be a lack of an outpatient psychology support for burn injured patients living in Devon and Cornwall. The Burn Facility at Derriford Hospital, Plymouth, is a vital part of the overall burn care pathway. They treat minor burns in the local population and often stabilise major burns prior to transfer to either Swansea, Bristol or Salisbury for their acute care. These patients are then transferred back to Plymouth either as inpatients or outpatients for their on-going follow-up and rehabilitation. Even minor burns can be traumatic and require psychosocial support from an experienced psychologist. However, the lack of this support for people who have had a major burn injury can often have an impact on timely repatriations to Devon and Cornwall. We continue to work with the commissioners and contract managers to look for solutions.

Service Improvements

- The National Standards for Provision and Outcomes in Adult and Paediatric Burn Care state that patients admitted for more than 24 hours should have psychosocial screening as soon as clinically appropriate. We recognised the need for consistency across the network in how patients are screened on admission for psychosocial morbidities. We developed a set of screening questions that can be incorporated into local practice and trained members of the MDT in undertaking initial screening.

Adult Peer Support

- Due to the pandemic, the proposal to develop adult burns support within the Network was put on hold. Letters were eventually sent out to former patients exploring interest to attend a virtual, region wide, peer support network meeting. Unfortunately, and not unexpectedly, only five people expressed their interest in being involved.
- In January 2021, Dan's Fund for Burns informed the National Psychology SIG about a new Befriending database that they were planning to develop. We, therefore, put a hold on any further peer support developments within the Network with a view to collaborating with Dan's Fund for Burns. We will report more on this in our 2021-22 Annual Report.



Trauma and Resilience Management (TRiM) Training

- We were grateful to the Network for funding 20 places on the MED-TRiM Training provided a DNA Definitive.
- Nineteen members of staff, from different disciplines, volunteered to undertake the training and registered on a new online TRiM Practitioner course in February 2021. It is expected they will complete this training by the end of July 2021.
- The ODN also funded up to six places on the TRiM Management Strategic Lead online training (two places from Swansea, two from the Bristol Royal Hospital for Children, one from Salisbury and one from Southmead). These roles will work together to provide a networked model for supporting delivery of TRiM Quality Assurance and TRiM policies and procedures, including a model of networked TRiM peer support.



Highlights from each Burn Service

Swansea – Dr Helen Watkins, Consultant Clinical Psychologist

- Helen Watkins reduced her Consultant grade hours from 36 to 25.5/week from November. A 22.5 hour highly specialist post was appointed to (Dr Nicola Murphy) ensuring a continued five day week service with a day overlap between the posts.
- There was some rearrangement of Helen's role in relation to the Health Board's Covid-19 response (particularly in the first quarter) in terms of providing support to the Health Board's Employee Wellbeing Service.
- Burns inpatient work has continued throughout the pandemic and outpatient appointments are being provided primarily via Attend Anywhere.
- Helen ran a pilot online 8-week Mindfulness Based Stress Reduction (MBSR) course for burn centre staff (Jan-March 2021) with a colleague from Cardiff which was well received. She plans to give a presentation on MBSR in the burns audit in May and offer another course to staff in September.

Bristol (adults) – Dr Vera Fixter, Consultant Clinical Psychologist

- Burns inpatient work continued throughout the pandemic. I-pads have been used to deliver virtual inpatient appointments, and Outpatient appointments were delivered online via Attend Anywhere.
- Vera Fixter worked with burns nursing and allied health professional colleagues to develop an assessment booklet that incorporates psychological screening questions, in line with the national burn care standards.
- Vera developed psychological skills training for burns ward staff.
- A project to update pain management guidance to include non-pharmacological pain management strategies was started. The project is in collaboration with North Bristol NHS Trust acute pain team and Consultant Burns Anaesthetist, Dr Lorna Burrows.
- An ongoing project to review the prevalence of self-harm among plastics and burns patients was started. This aims to improve the patient pathway. The project is being run in collaboration with plastic surgery and psychiatry colleagues.

Bristol (children) – Dr Julia Cadogan, Consultant Clinical Psychologist

- The psychology service at the Bristol Royal Hospital for Children continued with on-line support, face to face and telephone appointments.
- A collaborative project with a member of the ward staff (nurse) was undertaken to find ways to improve access for staff to teaching and training in the psychological impact of burn injuries.
- Julia developed an extension of the current screening of inpatients which are delivered by nursing staff and others.
- Julia also developed e-learning for burn care staff which addresses the psychological impact of burn injuries.

- Films for families were developed by the psychology service in conjunction with the University of the West of England and Karen Coy, Research Nurse, were made available on the UHBW website. [South West UK Children's Burn Centre \(uhbristol.nhs.uk\)](https://www.uhbristol.nhs.uk)

Salisbury Burns Unit – Dr Jane Lewendon, Consultant Clinical Psychologist

- Psychology has developed an extended psychology screening document in line with national standards which is now part of the daily nursing documents. Staff training to deliver this screening is currently being rolled out to ward staff.
- Discussions are ongoing with senior nursing staff to offer regular, accessible reflective practice sessions to ward staff.
- Jane delivered teaching on Medical Trauma to the University of Bath Doctorate in Clinical Psychology Course, with specific focus on Burns including a video of a Salisbury Burns patient talking about their experience.
- Jane also supported a six-month placement to two Clinical Psychology Trainees from Bath University over the past year, working within the Burns service and across Salisbury hospital.

National Projects

- Helen Watkins is a member of the National Burn Incident Response Team (BIRT) Training group and continues to liaise with colleagues across the UK with regards to the planning of BIRT training, in particular incorporating Psychological First Aid into the training and wellbeing support/debriefs for BIRT members post-deployment.
- Jane Lewendon is a member of the National Burns Patient Reported Experience Measures (PREMs) group which has been tasked to develop a standardised PREM for Burn services in the UK.
- Julia Cadogan advised the National Paediatric Burn Specification Task & Finish Group.

Network Priorities for 2021-22

The SW Burn Care ODN develops a work plan every year based on regional and national priorities. Regular service reports to the ODN Board ensures areas of concern are raised and can be addressed as part of the ODN work plan. All work plan topic areas are aimed at improving standards of care, access and outcomes for patients and their families. The ODN Work Plan for 2021-22 was approved by the ODN Board and below is an overview of the ODN's objectives for 2021-22.



ODN Governance

- To engage with Specialised Commissioning South West, NHSE/I, Trauma and Critical Care Programme Board and Engagement meetings, providing quarterly reports.
- To ensure the Network identifies any issues relating to the specialised burn care pathway and escalate as appropriate to the commissioners and/or provider risk registers.
- To produce an Annual Report for 2021-22.

Clinical Governance

- To audit the use of MDSAS Burns Telemedicine system and develop overarching guidance principles for its use.
- To embed the National Burns Rehabilitation Prescription into all South West Specialised Burn Services.
- To review any delayed transfers of patients between Specialised Burn Services, identifying reasons for delays and any learning to reduce future delays.
- To align burn specific infection prevention and control (IPC) policies across the Network, including MDRO, CPE and Covid-19 to protect patient pathway.
- Burn services to update the 2018 self-assessment against the National Standards for Provision and Outcomes in Adult and Paediatric Burn Care.
- Continue to highlight lack of outpatient psychosocial support for burn injured patients living in Devon and Cornwall.

Burns Prevention

- Establish a Network Burns Prevention Group made up of representatives from each of the specialist burn services to analyse causes and mechanisms of injuries within the Network region.
- To implement a network prevention strategy in collaboration with key stakeholders to develop and embed prevention and raising awareness in everything we do.

EPRR

- To test the **Burns Annex of the National Concept of Operations for Managing Mass Casualties**
- Monitor use of NHSEI **Management of surge and escalation in critical care services: standard operating procedure for Adult and Paediatric Burn Care Services in England and Wales (2020)**.

Education and Training

- To develop an ODN Education and Training Strategy to take account of on-going use of on-line delivery.
- To focus on preparing non-burns healthcare professionals for a burns mass casualty incident in collaboration with other burn care networks.
- To pilot the monitoring of the clinical condition of fluid resuscitation and/or intubated burn injured patients (adults) on arrival in the Swansea Burns Centre with a view to feeding back to referrers and critical care teams and offering further training as required.

Patient and Public Engagement

- To improve adult peer support within the network region, working with third sector organisations as appropriate.

Working in Partnership

National Burn Care Operational Delivery Network Group

The SW Burn Care ODN is one of four Specialised Burn Care Operational Delivery Networks covering England and Wales. The ODN Managers, ODN Clinical Directors and ODN Lead Nurses form a National Burn Care ODN Group (NBODNG) which usually meets quarterly and works collaboratively to deliver national projects on behalf of NHS England and NHS Improvement and the Major Trauma and Burns Clinical Reference Group.

During 2020-21, the group was joined by Commissioning Leads from the regional NHSE/I specialised commissioning teams in response to Covid-19. A National Burns Clinical Director and National Programme of Care (Trauma) Lead co-ordinated the development of specialty guidance for burn care.

Achievements in 2020-21

Clinical Governance & Audit

- The National Burns Morbidity and Mortality Audit meeting was held via video conference on 26 April 2021 covering case studies related to mortalities and serious untoward incidents (SUIs) for the period 1 April to 31 December 2020.
- A number of work streams came out of the audit which will be monitored via the National Burns ODN Group. The South West has agreed to develop guidance for End of Life Care for unsurvivable burn injuries.

Emergency Preparedness, Resilience and Response (EPRR)

- The Concept of Operations for the Management of Mass Casualties: Burns Annex was published in September 2020.
- The Management of Surge and Escalation in Critical Care Services: Standard Operating Procedure for Burn Care Services in England and Wales was published in June 2021.
- In response to the G7 Conference being held in Cornwall in June, the Burns Networks worked together to identify four Burns Strategic Clinical Leads who could be contacted running up to and during the weekend of the conference should there be an incident. Many staff from across all four networks also volunteered to be on a Burn Incident Response Team (BIRT) log so they could be contacted quickly if required for deployment. We were very grateful for everyone's willingness to support us in the South West should they be needed.
- In collaboration with the other Networks, the South West led on the planning of a National Burns Exercise to test aspects of the Burns Annex. The exercise was undertaken in May 2021 over MS Teams with all services taking part. We will address the lessons identified from the exercise in 2021-22.

Development of Burn Incident Response Team (BIRT) Training

- The SW Burn Care ODN continued as lead network for the Burn Incident Response Team (BIRT) Training Task and Finish Group. By April 2021, the group had agreed the topics that needed to be covered via e-learning and that they would be provided via a BIRT Catalogue on Health Education England's Learning Hub. and had drafted . All services were advised to sign up to NHS Digital Passports if their organisations had registered as it was considered these would aid with deployment of BIRT members. A BIRT deployment simulation training video went into development. An BIRT Operational Debrief plan was completed and BIRT well-being guidance was shared with the National Psychology SIG to ensure every service had a psychosocial support plan in place with a named person to co-ordinate that support.

Specialised Services Quality Dashboard for Burns

Specialised burn services are delivered as part of the National Programme of Care for Trauma and the Major Trauma and Burns Clinical Reference Group. Each Specialised Burn Service submits data to the [Specialised Services Quality Dashboards \(SSQD\)](#) for metric definition sets for paediatric and adult quality indicators. Table 1 describes the quality indicators for 2020-21 along with the aspirational target for achieving these indicators.

Specialised Services Quality Dashboard for paediatric and adult burn care

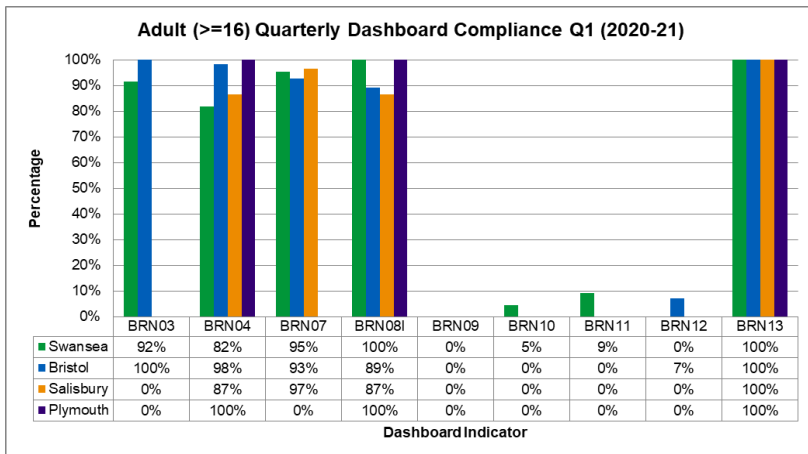
Dashboard Indicator	Name of Indicator	Aspirational Target
BRN03	% of resuscitation and/or mechanically ventilated burns (in age group) assessed by a Consultant Burns Surgeon within 12 hours of admission	75%
BRN04	% of inpatients (in age group) receiving a daily pain assessment using a validated pain assessment tool.	80%
BRN07	% of inpatients (in age group) screened for psychosocial morbidity prior to discharge from burns ward.	75%
BRN08i	% of inpatients (in age group) screened for functional morbidity within 2 working days of admission to the specialised burn service.	80%
BRN09	% of inpatients (in age group) acquiring a blood borne multi-resistant infection.	0%
BRN10	No of admissions (in age group) who died indicated as possibly unexpected deaths.	n/a
BRN11	No of admission (in age group) who survived calculated as being unexpected.	n/a
BRN12	No of inpatients (in age group) admitted to an inappropriate level of care according to the National Burn Care Referral Guidelines (2012).	0%
BRN13	% iBID Minimum dataset completed for inpatients (in age group)	80%

Each Specialised Burn Service must submit data to the SSQD via the International Burn Injury Database (iBID). This data is uploaded to the SSQD each quarter and is used by NHS England & NHS Improvement Specialised Commissioning South West to ensure quality and outcome measures are being achieved. It also enables the commissioners to make comparisons between burn service providers nationally and support improvements over time.

Overall, data entry has improved this year with the recruitment of dedicated iBID administrators. Training was also provided to new administrators and other members of the burns MDT to avoid gaps in data entry in the future.

Pages 17 and 18 provide a summary of Burn Services compliance with the SSQD indicators during 2020-21. These still indicate the requirement for service improvement in Plymouth in respect to psychosocial screening of all inpatients (paediatric and adult).

Adult Specialised Services Quality Dashboard (SSQD) 2020-21



Areas highlighted indicate service below target.

All services reported zero blood borne MDRO infections (BRN09).

BRN10

There were a total of 3 unexpected mortalities (BRN10) and 4 unexpected survivors (BRN11)

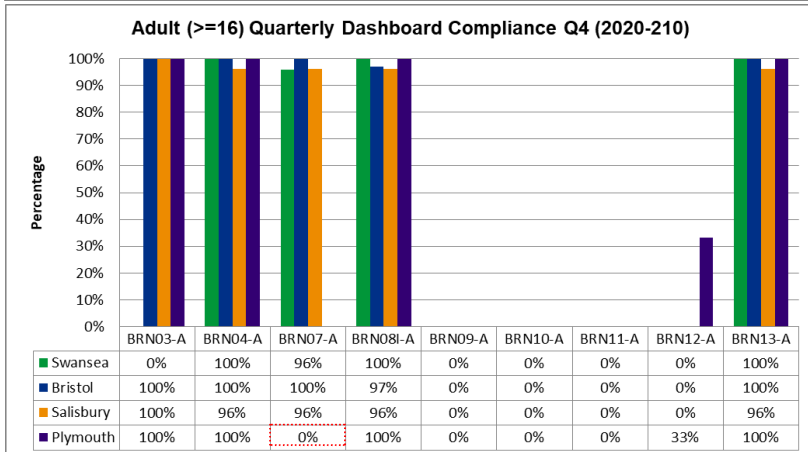
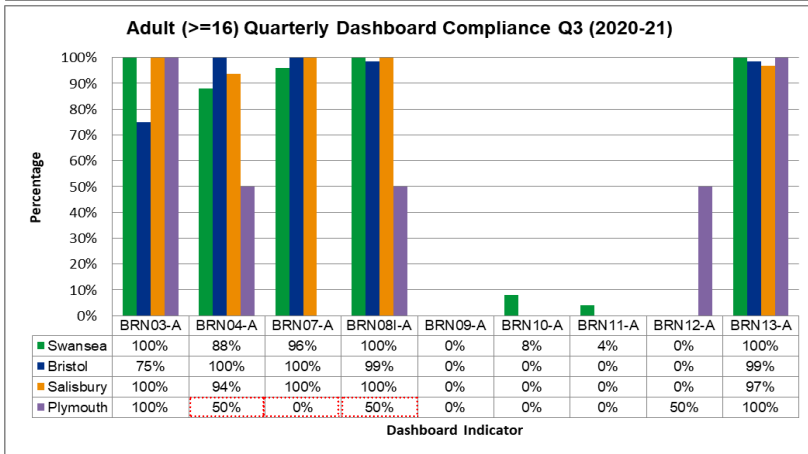
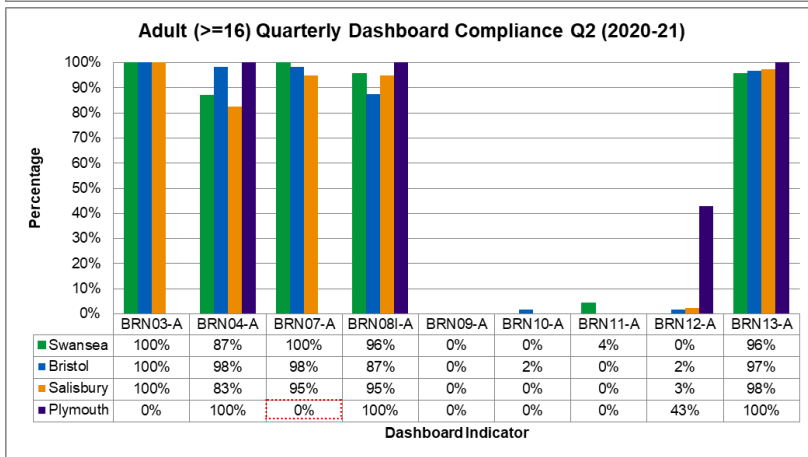
Plymouth was below target for:

BRN07

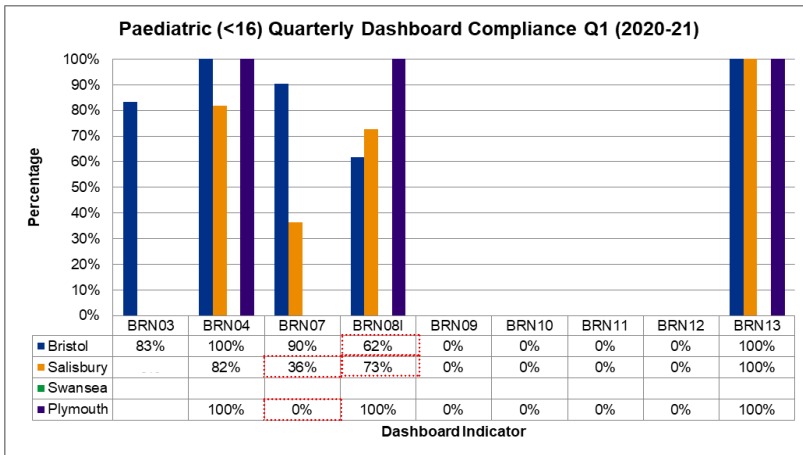
All quarters: 14 of 14 adult inpatients were not screened for psychosocial morbidity.

BRN12 (admission of inappropriate level of care)

4 of the 14 admissions were outside of the burns facility designation. These will have been referred onto, or discussed with, a Burns Unit or Centre as appropriate. These cases will have been discussed at the ODN Clinical Governance Group.



Paediatric Specialised Services Quality Dashboard (SSQD) 2020-21



Areas highlighted indicate service below aspirational target.

All services reported zero blood borne MDRO infections (BRN09)

Bristol was below target for:

BRN08i

All quarters: 43 of 114 paediatric inpatients were not screened for functional morbidity.

Salisbury

BRN07

Q1: 7 of 11 paediatric inpatients were not screened for psychosocial morbidity.

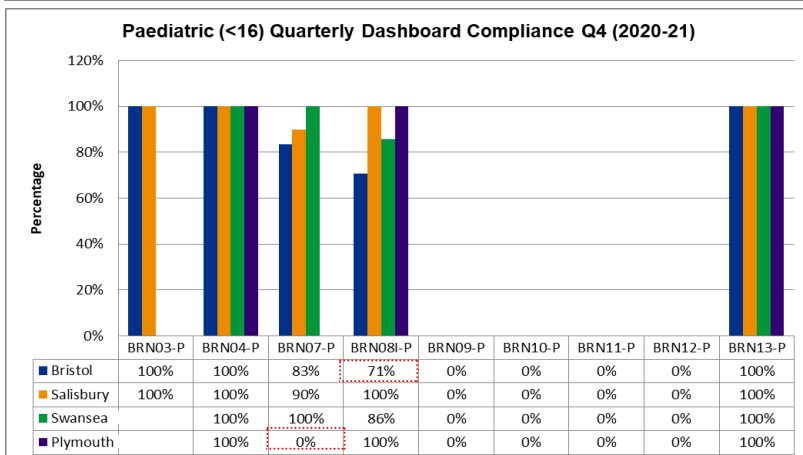
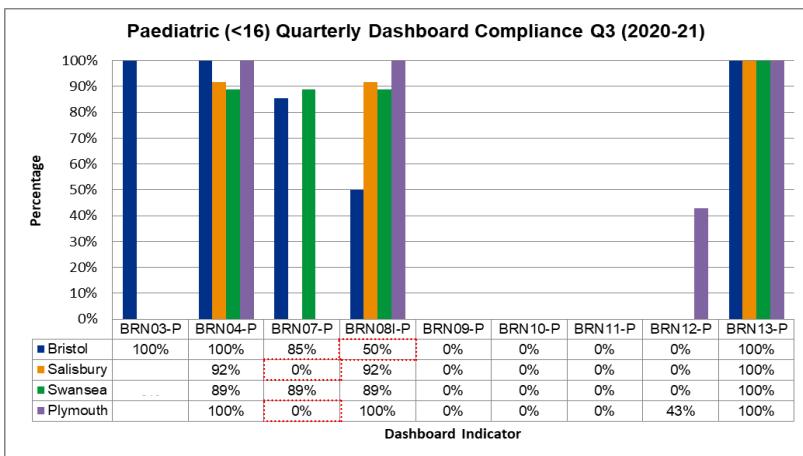
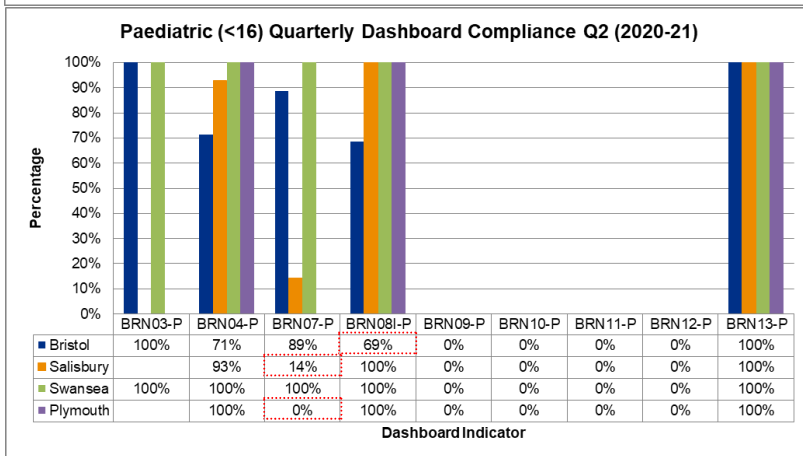
Q2: 12 of 14 paediatric inpatients were not screened for psychosocial morbidity

Q3: 0 of 12 paediatric inpatients were not screen for psychosocial morbidity.

Plymouth was below aspirational target for:

BRN07

All quarters: 13 of 13 paediatric inpatients were not screened for psychosocial morbidity.



Highlights from our Burn Services

Welsh Centre for Burns & Plastic Surgery, Morriston Hospital, Swansea

Service Clinical Lead—Mr Jeremy Yarrow, Consultant Plastic Surgeon

The Welsh Centre for Burns and Plastic Surgery is based at Morriston Hospital, Swansea and is part of Swansea Bay University Health Board (SBUHB). We are the only designated Adult Burns Centre for the SW Burn Care ODN, providing specialised burn care for all burn-injured adult patients from South and mid Wales and the most severely injured from the South West of England. We also provide up to Unit level care for children from South and mid Wales with minor to moderate burns.



Operational Delivery

NEW IN PATIENT & OUT PATIENT ACTIVITY DURING 2020-21			
Total Adult Referrals:		Total Paediatric Referrals	
TBSA% Burn Injury <10%	270	TBSA% Burn Injury <10%	208
TBSA% ≥10% to <40%	17	TBSA% ≥10% to <30%	0
TBSA% ≥40%	12	TBSA% ≥30%	0
TBSA% Not recorded	3	TBSA% Not recorded	0
Total Adult Cases	302	Total Paediatric Cases	208

Service Improvements and Achievements

- SBUHB authorised the development of an additional rehabilitation facility ring fenced for rehabilitation of MDRO colonised burn patients.
- Janine Evans (Occupational Therapist) was awarded a grant from the British Burn Association to develop and evaluate a burn prevention teaching programme for community-dwelling older adults, which has since been presented at 20th Congress of the International Society for Burn Injuries (ISBI) and published in OT News magazine, and was also shortlisted for an Advancing Healthcare Award.
- Unfortunately, due to Covid-19 infection control guidance, Burns Outreach services provided in satellite clinics across South Wales were suspended. However, the Outreach team embraced new ways of working to support their patients by arranging virtual consultations via Attend Anywhere. Where necessary, the Outreach team undertook *ad-hoc* house visits for essential care and also supported the Outpatient team.
- Six members of the burns MDT (therapists and nursing staff) signed up to be TRiM Practitioners and two Clinical Psychologists undertook the TRiM Strategic Management Lead training. TRiM will be embedded into the service during 2021-22.
- We were also successful in obtaining a £10,000 grant from BlondMcIndoe Research Foundation to further develop a escharotomy teaching model and roll out a teaching programme to Major Trauma Centre and Surgical Trainees.

Challenges

- Our capacity to undertake elective burn reconstruction within Health Board was limited due to pressure on theatres. Elective admissions were limited to priority 1-3 cases and this continued through the year. We were able to utilise some spare burns emergency theatre capacity for elective surgeries.
- During the first few months of 2021, there was a great deal of pressure on Tempest Ward due to lack of ward bed availability across the hospital. However, this did not impact on our ability to accept burn injured patients.

- The Consultant Burns Anaesthetist/Intensivist on-call rota remained short by six full time equivalents. Anaesthetic staffing was added to the Network and Health Board's Risk Register and remains a significant service risk.

Staffing

- We were pleased to welcome a new substantive Consultant Burns Surgeon to the team in September 2020.
- The burns paediatric service had to be moved to the general paediatric ward due, in part, to a shortage of burns paediatric nurses. The ward was supported by burns paediatric nursing staff and there are plans to recruit a Band 6 Paediatric Burns Link Nurse to ensure good governance links between specialties.
- The Occupational Therapy team came under additional pandemic pressure, with one full-time equivalent redeployed to the community. The vacancy remained unfilled until June. Additional pressure on the Occupational Therapy service resulted from staff members shielding with limits remaining to this day.
- Our Consultant Clinical Psychologist service was strengthened following the successful recruitment into an additional post. This specialist psychologist post adds an additional 22.5 hours a week ensuring a continued five day week service with a day overlap between the posts.

Clinical Governance

- We reported nine mortalities during 2020-21.
- We are pleased to report there were no MDRO blood borne infections during 2020-21. Three cases of MDRO pseudomonas and two cases of CPO/CPE were reported. Internal review of cases confirmed they were of different strains and were not due to cross-infection. A full Route Cause Analysis (RCA) was undertaken and it was reported that we had robust infection control measures in place.
- We reported two Serious Untoward Incidents (SUIs) to the Network in Q1 which were presented at the Annual Regional and National Morbidity and Mortality Audit meetings.
- Due to a high volume of complex burn rehabilitation patients, the burns physiotherapists had a period of sustained pressure during Q1 and Q2. Therapists from burns and plastic surgery temporarily pooled resources to share the workload across a larger physiotherapy team. Delayed discharges within Wales and England exacerbated the burn rehabilitation workload.
- We had a delayed repatriation back to Bristol due to infection control procedures. This affected our ability to admit major burns and has led to a piece of work to align infection control procedures across the network.
- We received four inappropriate referrals. Two were below the Burns Centre referral threshold and the others were given advice on providing comfort care due to the nature of the injury and patient wishes.
- We repatriated eight patients from the centre to burn services closer to where the patients lived for their on-going care.
- During the year, we provided mutual aid for two cases from the London and South East Burns Network.
- We declared B-OPEL 2 (closed for critical care admissions) on two occasions; one day when capacity had been reached during Q1 and one when our Burns ICU had to be closed for essential maintenance.
- A review of waiting lists was requested by the Network which confirmed 12 patients in the P4 priority group were waiting for surgical intervention with the average wait around 45 weeks. There were no patients waiting to see therapies or psychologists.

Education and Training

- Due to the cost of the Emergency Management of Severe Burns (EMSB) training, it has been difficult to achieve nursing team compliance with EMSB qualification. Several places have been supported by the ODN in the past, but due to a non-pay budget cut this was no longer available. This was exacerbated by the cancellation of the Bristol EMSB course in September 2020.
- Despite the pressures, the team were able to provide some education and training including:
 - * Reflective practice for ICU burns ward staff
 - * 8 week Mindfulness-Based Stress Reduction (MBSR) course for burns MDT
 - * Burns Assessment and Management in Major Trauma Centre (MTC), Cardiff
 - * ED training – ABC of burn care
 - * Cardiff MTC – Burn injury as part of poly-trauma
 - * Escharotomy workshop for surgical trainees.
 - * In-house teaching of new burns staff
 - * Occupational Therapy training on preventing burn injuries in the home for adults aged 65+

living in the community.

- * Welsh Occupational Therapy Showcase Event – Presentation on the evaluation of Occupational Therapy led online burn prevention sessions with older adults in community group settings.
- * Lymphatouch for burns scar management presentation to the International Burns Therapists
- * Biomechanics and splinting training to Cardiff University pre-registration Occupational Therapy students
- * Burns prevention for older adults – the role of occupational therapy. Presentation to Occupational Therapy students and new Band 5 Occupational Therapists.

Patient/Public

- Burns Prevention for older adults – Rhondda 50+ forum, Centre for Aging and Dementia Research.
- Burns Prevention for Babies and Toddlers – Parent and Baby Group

Audit and Research

- We undertook a review of compliance and practice against guidelines when using BASAT (Burns and Scalds Assessment Template) paediatric safeguarding tool in acute burn paediatric admissions. This reviewed the current system of completing a Burn Risk Assessment of Neglect and Maltreated in Children Tool (BuRN Tool). Changes were implemented to ensure the BuRN tool was placed more visibly in the middle of the burns clerking pro-forma and more visible and up to date posters were displayed. The BuRN tool completion rate increased from 69% to 100% and referral outcome documented increased from 50% to 100% This review was repeated in October with new cohort of SHOs.

Publications

- Brown, L, Giles L and Williams N. A collaboration to improve access to specialist burn care for prisoners. *Nursing Times* (on-line) Feb 2021 Vol 117 Issue 2 pages 32-34.
- Evans, J., Ingham, I., Purcell, C., & Roberts, M. Developing a burns prevention resource. *OT News*. June 2021, pp42-44.

South West Paediatric Burn Centre, Bristol

Service Clinical Lead—Mr Sankhya Sen, Consultant Plastic Reconstructive & Burns Surgeon

The Children's Burns service is based at the Bristol Royal Hospital for Children which is part of the University Hospitals Bristol and Weston NHS Foundation Trust. We are the only designated paediatric burn centre in the SW Burn Care ODN and deal with burns of all sizes affecting a child's total body surface area (TBSA) including those with inhalational injuries. We have had another busy year seeing well over 1000 new cases. The outcomes continue to be outstanding and the whole multi-disciplinary team (MDT) is to be congratulated for this. A brief overview of aspects of our service is below.



Operational Delivery

NEW IN PATIENT & OUT PATIENT ACTIVITY DURING 2019-20	
Total Paediatric Referrals	
TBSA% Burn Injury <10%	1352
TBSA% ≥10% to <30%	18
TBSA% ≥30%	1
Total Paediatric Cases	1371

Service Improvements and Achievements

- We implemented MDSAS telemedicine across all the referring services within our region. It has become an integral part of our referral pathway.
- Our Nurse Outreach service expanded to cover satellite clinics or home visits in Taunton/Somerset and Swindon/Wiltshire.

Challenges

- During the first lockdown, between March-May 2020, the Burns ward/HDU was used as a Covid-19 ward, due to its thermoregulated, pressure controlled individual room model of care. Burns patients were cared for by burns ward staff on other wards/medical HDU. Service continuity was maintained. Children with burns were prioritised to be seen throughout this period.
- Follow-up clinics were not fully re-established within the year since the first lockdown. Patients were offered telephone, video and face to face appointments.
- Changes to scheduling of elective/reconstructive lists (including LASER) caused difficulty with the co-ordination of lists and surgeon availability. This is an ongoing problem as we enter the recovery phase of the pandemic. Alternative strategies to overcome this were developed, including re-prioritisation of elective patients according to Birmingham model.
- University Hospitals Bristol NHS Foundation Trust merged with Weston General Hospital on 1 April 2020 to become University Hospitals Bristol & Weston NHS Foundation Trust (UHBW). The Trust experienced winter level pressures on beds throughout the hospital in Q3 and Q4. However, no change in practice was required for acute burn referrals/management during this period.
- Two Internal incidents were declared (19/08/20 and 21/09/20). Though the Paediatric Intensive Care Unit (PICU) was shut to admissions for 24 hours, there was no impact on the burns service.
- The Network was advised of possible issues with physiotherapy cover arrangements until June 2020. This situation was resolved and a new band 7 physiotherapist was appointed.

Staffing

- A sixth (fixed term) Consultant was recruited and a new rota established to cover Adult and Paediatric Burn Services in Bristol.
- We recruited two 0.5WTE Band 6 Paediatric Outreach Nurses to expand the reach of the Paediatric burn community outreach services to Taunton/Somerset and Swindon/Wiltshire

- We continue to strive to meet the National Burn Care Standards in respect of therapy assessment and psychosocial assessment which was impacted on due to staff establishment.

Clinical Governance

- We are delighted to report no mortalities, RCAs/SUIs, refusals or MDRO infections this year.
- We repatriated two patients back to Swansea and one to the London and South East Network. The latter was discussed at the Annual Regional Morbidity and Mortality Audit meeting, due to concerns surrounding referral pathways outside our Network.

Education and Training

- Two nurses were allocated to undertake EMSB Course in September 2020, but unfortunately this was cancelled due to the pandemic.
- The UWE Burn Care and Rehabilitation course was delivered online in October 2020 by members of the Bristol paediatric and adult MDTs. The course ran again in March 2021. 29 students from a variety of nursing and allied healthcare practitioner backgrounds attended virtually. Candidates from Bristol, Birmingham, Belfast, Salisbury and Chelmsford were able to undertake the course due to the new online format which is likely to be adopted in the future.
- Three members of staff volunteered to under the TRiM Practitioner Training.
- Acute burns and safeguarding in paediatric burns teaching for new junior doctors working at the Bristol Royal Hospital for Children.
- Occupational Therapy teaching on burns splinting and burns therapy for in-house Occupational Therapy department.
- There were various burns teaching and simulation sessions for the Children's Emergency Department Nurses and several 'Burns updates' for doctors of all levels of seniority.
- Paediatric Critical Care 1 and 2 modules: Burns for nurses within the PICU and PCC Advanced module.
- Nurse led teaching was delivered for the Emergency Departments in Gloucestershire and Taunton

Patient/Public

- The Trust suspended Friends and Family Test reports. However, we continued to receive thanks and compliments from patients and families.
- We were involved in the Annual Burns Awareness Day which we ran over a week with different focus each day. Due to Covid-19 restrictions we used the hospital's Facebook to run a daily burns newsfeed and put articles in the Hospital's Newsbeat announcement. We also put up displays in the outpatient areas and shared resources with local nurseries and schools.

National Audit

- We presented two paediatric cases of interest at the National Burns Morbidity and Mortality Audit. We had no mortalities to present.

Research

- The Scar Free Foundation funded a feasibility study to determine the appropriateness and practicality of a future cohort study of genetic and other risk factors for poor scarring and to examine the psychosocial impact of scarring over time in children with small area scalds. Amber Young + MD research team.

Publications

- Pre-attendance analgesia advice for small acute paediatric burns in the British Isles: A National Survey. H Chu, SK Sen. Burns. September 2020 doi: 10.1016/j.burns.2020.02.006.
- Reducing pain through distraction therapy in small acute paediatric burns. H Chu, R Brailey, E Clarke, SK Sen. Burns. February 2021; doi: 10.1016/j.burns.2021.01.012.

Bristol Burns Adult Unit, Southmead Hospital, Bristol

Service Clinical Lead—Mr Sankhya Sen, Consultant Plastic Reconstructive & Burns Surgeon

The Adult Burns Service is based at Southmead Hospital which is part of North Bristol NHS Trust. We are designated as a Burns Unit which means that we deal with burns involving up to 40% of an individual's total body surface area (TBSA). However, if they have inhalational injuries, this number reduces to 25% TBSA. We have had another busy year, perhaps our busiest for several years, in terms of larger burns. The outcomes have been outstanding once again and the whole multi-disciplinary team must be given credit for this. A brief overview of aspects of our service is below.



Operational Delivery

NEW IN PATIENT & OUT PATIENT ACTIVITY DURING 2020-21	
Total Adult Referrals:	
TBSA% Burn Injury <10%	1,349
TBSA% ≥10% to <40%	21
TBSA% ≥40%	4
Total Adult Cases	1,374

Service Improvements and Achievements

- A refit plan for Theatre 1 to higher specification for appropriate management of major burns was approved. (The work was completed in mid 2021. It is working well.)
- Our scar management team were successful in getting Noursil (silicone gel) approved and added to the BNSSG formulary from January 2021.
- Five members of the Burns MDT trained to become TRiM Practitioners. Our Clinical Psychologist will also be trained as a TRiM Strategic Management Lead to ensure TRiM practice is embedded into the service.
- We implemented MDSAS telemedicine soon after the start of the first lockdown. It has become an integral part of the service.

Challenges

- Another busy year for the adult burn service! This was particularly so during Q2 and Q3. Some patients with less extensive burns who required admission for management had to be cared for on the plastic surgery ward. However, given the Southmead model of predominantly individual side rooms and the nursing cohort being trained in both burn care and plastic surgery, this was in no way detrimental.
- We did not raise any risks or issues with the Network this year.

Staffing

- We welcomed a new fixed term Burns Consultant who commenced in July 2020 and left in January 2021. (A new locum is due to start in January 2022.)
- In Q3 we recruited two surgical Occupational Therapists (Band 3 and Band 6) which relieved some of the strain on the Occupational Therapy service (due to sickness and vacancies).
- We restructured the physiotherapy team, and upgraded the Band 3 post to a Band 4 (0.4 WTE) so they can see an independent caseload with guidance, including outpatients. There was also agreement to remove the junior (Band 5) post from the team and to employ a static part-time Band 6 to work along-side 0.9 WTE Band 7 and 1 WTE Band 6 covering burns and plastics. By the end of 2021, the Physiotherapy team was fully staffed.
- We successfully recruited a Band 3 Clinic Coordinator for the Acute Burns Clinic on a six month secondment.
- Four nursing staff successfully completed the UWE Burn Care and Rehabilitation module. We secured funding for a further four members of staff to join the February 2021 cohort.
- In Q4 we recruited three internationally Registered Nurses who will start in June 2021 and four newly qualified Registered Nurses who are due to start in September 2021.

Clinical Governance

- We are pleased to report that there were no RCAs/SUIs or unexpected mortalities during 2020-21.
- We had one case of MDRO pseudomonas and a patient was transferred into our service with MDRO/CPE. There was no cross-infection.
- In Q2 we were unable to accept two repatriations due to excessive clinical workload on the burns unit.
- During this year we repatriated five patients to services closer to where they lived to continue their on-going outpatient care with their nearest burn service. We also provided mutual aid for Salisbury and the patient was repatriated as an inpatient for continuing specialised burn care.
- We had to declare B-OPEL 2 (closed to critical care admissions) on three occasions, totalling six days. One day was due to patient dependency: staffing ratio. One day was due to ICU level being at maximum capacity for burns and four days were due to ward level beds being significantly above our commissioned inpatient capacity. (This is becoming increasingly frequent.)

Education and Training

- A broad range of teaching activities continued to be undertaken by a variety of members of the burns MDT. Highlights include:
 - * Guidance on the use of the MDSAS burns telereferral system, for both referrers and the clinicians taking referrals.
 - * Our Burns Clinical Nurse Specialist (CNS), Karen Highway, provided training for general practice nurses and community nurses on burns protocols, wound assessment and on-going wound care, and ICU burns nursing management updates.
 - * Continuous virtual teaching and burns education resources were e-mailed out to nursing staff in Minor Injury Units, Emergency Departments and Her Majesty's Prisons.
 - * Acute burns and safeguarding in burns teaching for new junior doctors.
 - * Physiotherapy for burns and plastics training to support general physiotherapy cover on the ward during Covid-19.
 - * MSTEams support and teaching specific burns patient rehabilitation with local physiotherapy departments.
 - * Burns and plastic surgical reconstruction – Bristol University Medical School
 - * Psychology teaching and skills training for burns MDT covering psychosocial issues in burn care, non-pharmacological approaches to procedural anxiety and pain, self-harm and risk assessment, appearance and body image concerns.
 - * Many members of the Bristol Burns MDT delivered teaching modules on the University of the West of England Burn Care and Rehabilitation course which went online this year.
 - * Our Burns CNS continued supporting and teaching ward staff to complete their burns nursing clinical competencies.

Patient/Public

- North Bristol NHS Trust, like many other Trusts, suspended the collection of Family and Friends Tests during 2020-21. However, we continued to receive a number of thank you cards and boxes of chocolates from grateful patients as well as e-mails and verbal compliments about the service throughout the year.
- We took part in the National Burns Awareness Day and the Stay Safe Christmas Burns Awareness Campaign: 'Avoid Injury and support your NHS – Stay Safe this Christmas'. We linked up with the Trust's Communications team to raise awareness via social media, Twitter and Facebook due to the limitations on face to face delivery.

Audit and Research

- RSTN Covid-19. Looked at ways in which the Covid-19 pandemic affected referrals to burns services. This is a national audit registered at NBT. Anthony Sack and Ian Mackie
- Our Occupational Therapist took part in a study on 'Understanding the needs and interventions for the treatment of scarring (Burns & Plastic Surgery patients)' run by Centre of Appearance Research at the University of the West of England.
- Attitudes of Emergency Clinicians towards the Use of Telemedicine for Burn Referrals. Esther Goh and Jonathon Pleat.
- European standards for thermoregulation in burns patients. Majid Al Khalil and Jonathon Pleat
- To investigate the effect of inpatient stay on psychological outcome. Psychologists Olivia Donnelly, Susan Whitehead & several North Bristol NHS Trust trainees
- Involvement in a multi-centre study of Pulsed Dye Laser (PDL) for early hypertrophic scars.
- A study of internet provision of information about burns. Eduardo Deliyannis

- Burns presentations during 1st and 2nd national lockdown in the UK, have the trends changed? Jennifer Mason, Rumi Kisyoova, Sankhya Sen
- QISP to update pain management guidance to include non-pharmacological pain management strategies. Lorna Burrows, Vera Fixter, Alia Medniuk, Anthony Sack
- Prevalence of self-harm among plastics and burns patients: improving the patient pathway. Yazan Qaqish, Amy Green, Grace Crowley, Vera Fixter, Anthony Sack

Posters

- Dr Cameron Pye. The interface of diabetic foot clinics and burns. (Poster presentation) 20th Congress of the International Society of Burn Injuries (ISBI) 2021.

Publications

- Wright EH, Tyler M, Vojnovic B, Pleat J, Harris A, Furniss D. Human model of burn injury that quantifies the benefit of cooling as a first aid measure. Br. J. Surg (2019) Oct; 106(11):1472-1479. <https://pubmed.ncbi.nlm.nih.gov/31441049/>
- Majid Al-Khalil, Anthony Sack, Rachel Ellison, Jon Pleat. A 5 year single centre retrospective study of potential drug interactions in burns patients with psychiatric co-morbidities. Burns (2020) 46/5/pages 1043-1050. <https://pubmed.ncbi.nlm.nih.gov/32057547/>
- Howard Chu, Gavin Reid, Anthony Sack, Rebecca Heryet, Ian Mackie, Sankhya Sen. Changes in Burns Referrals during Covid-19. Burns (2020). 46/4/pages 756-761. <https://pubmed.ncbi.nlm.nih.gov/32651092/>

Paediatric and Adult Burns Unit, Salisbury District Hospital, Salisbury

Service Clinical Lead—Mr Eunan Tiernan, Consultant Plastic Surgeon

The Salisbury Burns Unit is based at Salisbury District Hospital which is part of Salisbury NHS Foundation Trust. We are a regional service covering a population of approximately 3.5 million within a catchment area comprising Wiltshire, Hampshire and the Isle of Wight, Dorset and the Channel Islands. The Burns Unit provides care for both adults and children with small to medium sized burns. It also provides a Paediatric Outreach service for children and their families at home.



Operational Delivery

NEW IN PATIENT & OUT PATIENT ACTIVITY DURING 2020-21			
Total Adult Referrals:		Total Paediatric Referrals	
TBSA% Burn Injury <10%	363	TBSA% Burn Injury <10%	181
TBSA% ≥10% to <40%	14	TBSA% ≥10% to <30%	1
TBSA% ≥40%	1	TBSA% ≥30%	0
Total Adult Referrals	378	Total Paediatric Referrals	182

Service Improvements and Achievements

- We transformed our burns outpatient service, moving location on a number of occasions and setting up a virtual system for reviewing patients. We managed to dramatically reduce the number of face to face consultations during the two lockdowns.
- We utilised a robust triage system to prevent patients having to come into the hospital as much as possible.
- We used Attend Anywhere to continue patient contact remotely for adults and children through those times whilst any dressing needs were dispatched through the postal system.
- The introduction of MDSAS (Telemedicine referral system) at the end of Q1 helped enormously with triaging referrals and minimising contact where appropriate. Our well established community teaching programme (run by our Paediatric Outreach Nurse, Nicola Beavan) meant that our referring EDs/MIUs/GPs were able to manage most minor burns and some more complex ones appropriately.
- Despite the obvious challenges and pressures, the team has embraced new ways of working and there are many aspects that will stay and help develop our service in the future.

Challenges

- This year, our adult inpatient admissions increased by 30%. We have seen many elderly and vulnerable patients who have had complex needs. Discharge planning has been difficult and many have remained in hospital much longer than they might normally have. The ward has been at or over our burns capacity on many occasions and access to theatre has been variable throughout the year. Paediatric admissions have remained similar to previous years.
- Covid-19 has given us many challenges and we have worked hard to maintain a safe and efficient service whilst experiencing staffing, skill mix and logistical difficulties throughout the year.
- Due to Covid-19, we were forced to dramatically transform our outpatient service. Outreach home visits stopped almost completely, outpatient clinics became virtual and we ran a very minimal laser service.
- In Q3 we relocated the burns outpatient clinic to the Laser Centre so patients were not being seen on the ward. However, the Centre was closed out of hours which presented difficulties for running clinics at weekends and bank holidays or seeing patients on an ad-hoc basis. For much of the year (and certainly during lockdowns), the majority of the appointments were virtual.
- At the beginning of the year we were unable to provide seven day therapy cover. We ran a pilot study which ended at the beginning of Q1, however, a business case submitted to the Trust was not approved. Where complex cases required essential therapy over the weekends, this was covered by bank staff where possible. The business case was resubmitted in Q4 and has since been approved for 6 day working.
- Therapy cover was limited during Q3 due to staff on maternity leave or shielding. Weekend

cover during January and February was provided by bank staff.

- We experienced issues early on with uploading timely data to iBID during lockdown due to staff shielding and delays in getting access to database on laptops. This was resolved by Q3.
- Towards the end of December we had issues with ICU and ward capacity due to increasing numbers of Covid-19 patients being admitted.

Staffing

- We recruited a Locum Burns and Plastic Consultant in June 2020 and a new full time Burns and Plastics Consultant was appointed in Q4.
- Due to the re-deployment of burns staff to ICU during the lockdown period, we had skill mix concerns on our burns and plastic surgery ward during this period. Later in the year, there was a successful recruitment drive for ICU staff which eventually led to less re-deployment. We also recruited a Registered Nurse on a year's fixed term contract to help cover the re-deployment needed.
- During Q1 to Q3, Senior nurses and Clinical Nurse Specialist staff throughout the hospital were redeployed onto wards to release staff nurses to hotspots in the hospital. All study leave was cancelled.
- We recruited a new Dietician who started in post in Q3
- By Q4 we had no nursing vacancies. The skill mix was variable, but in-house teaching and competencies training continued.

Clinical Governance

- In Q1, Q2 and Q4 we had no RCAs/SUIs or MDRO infections. We also had no inappropriate referrals or transfers to the burn service and no refusals.
- In Q3, we unfortunately had one refusal in December due to lack of ICU capacity. Mutual aid was provided by Bristol. The patient was repatriated five days later.
- In Q2, we had one patient repatriated from Swansea who was seen out of area due to capacity issues.
- We had to declare B-OPEL 2 (closed for critical care) for four days in Q2 due to lack of adult capacity. During September we were extremely busy, but remained open taking cases following Consultant discussion for any admissions. There were no closures in Q3 and Q4, but we were well over normal capacity in October and admissions were on a case by case discussion with the Consultant on-call.
- The Trust was supportive in protecting specialised burns beds during times when the Network was having capacity issues.
- In Q3, we cared for one patient outside of our designation with support from Swansea.
- We had one non-burn mortality in Q3 and a medical patient in Q4.
- Q4 request for information on waiting lists. None reported.

Education and Training

- Our Paediatric Outreach Nurse, Nicola Beavan, undertook almost daily training sessions with referring organisations in the use of the new tele-referral system implemented in June 2020. She also continued her burns assessment and management training in person or via videoconference for primary care and community staff.
- A number of four hour virtual teaching sessions for SW Ambulance Service paramedics was also developed and delivered by our Nicola.
- Our Clinical Nurse Specialist, Amy Johnson, ran internal burns study days and provided training for new burns and plastics junior doctors on burns dressings, paediatric burns and the referrals system, with an overview of burns from a Burns Consultant.
- Two nurses passed the UWE Burns Care and Rehabilitation course in March 2021 and two more are enrolled on the next course in 2022. Places on the EMSB course were deferred to Sept 21.

Patient/Public

- We continued to receive excellent Friends and Family Test feedback.

Audit and Research

Our Clinical Nurse Specialist undertook an audit of the effect of Covid-19 on the Burns Service and staff experiences. This was presented at the Network's Nurses Forum.

Presentations & Publications

- Miles J, Lloyd N and Johnson A. Alcohol related burns during the Covid-19 pandemic. Burns. June 47(4) 962-963 (2021) [Alcohol-related burns during the COVID-19 pandemic - PubMed \(nih.gov\)](https://pubmed.ncbi.nlm.nih.gov/35111111/)

Paediatric & Adult Burns Facility, Derriford Hospital, Plymouth

Service Clinical Lead—Ms Jolita Zakaraite, Consultant Plastic Surgeon

The Plymouth Burn Facility is based in Derriford Hospital's Plastic Surgery Department and is part of University Hospitals Plymouth NHS Trust. We treat approximately 500 patients a year with minor burns from Cornwall and Devon. The majority do not require in-hospital stay. The Facility provides services for adult and paediatric patients, with paediatric outreach support provided by South West Children's Burn Centre. Moderate and major burns are transferred to the Bristol Children's Burn Centre.



Operational Delivery

NEW IN PATIENT & OUT PATIENT ACTIVITY DURING 2020-21			
Total Adult Referrals:		Total Paediatric Referrals	
TBSA% Burn Injury <10%		TBSA% Burn Injury <10%	
TBSA% ≥10% to <40%		TBSA% ≥10% to <30%	
TBSA% ≥40%		TBSA% ≥30%	
Total Adult Referrals		Total Paediatric Referrals	

Service Improvements and Achievements

- Our Trauma service moved to the Plastic Surgery Trauma Clinic which is a purpose designed dedicated area for Plastic Surgery trauma and burns patients. This is run Monday to Friday between 8.00 am and 6.00 pm. It is separate to the main hospital outpatient department containing its own reception, waiting area, assessment room, dressing clinic room, minor ops and space for the Occupational Therapist. A Trauma clinic runs every day between 09:00 am and 1:00 pm for acute assessments and we held a burns dressing clinic with a Burns Consultant present every Tuesday between 2.00 and 4.00 pm.
- A Burns MDT Follow-up scar clinic was established to run twice a month. A Burns Consultant, Burns Nurse and Occupational Therapist were involved.
- We also started to use Attend Anywhere for burns scar clinics for long term patients to avoid them having to come into the hospital during the pandemic.
- We implemented plans for patient prioritisation for surgical procedures and for outpatient/outreach wound management prioritisation – this involved using the MDSAS Telemedicine system to review referrals with images with the on-call Consultant to decide on the need for the patient to attend the hospital for review or whether local follow-up with ongoing support or Outreach follow-up would be more appropriate due to the Pandemic.

Challenges

- The 1st April 2020 to 31st March 2021 was challenging due to the ongoing Pandemic. Our Trauma Clinic was moved from within Lynher Ward to an external non-NHS hospital and then moved a further three times (finally into the purpose built clinic detailed below). We received approximately 600 Burns referrals, 28 patients required surgery. In the remaining patients around 60% were seen as Outpatients/Outreach and 40% the referrers were given advice and ongoing support.
- We continued to have no Clinical Psychologist to support outpatients. Unfortunately, discussions with commissioners stalled due to lockdown. These were picked up again later in the year, but although the need was recognised, there was no additional funding to support 0.4 WTE appointment in conjunction with a 0.6 Trauma Clinical Psychologist. We hope to make further progress in 2021-22
- During Q4 elective theatre capacity was reduced by 20% across the University Hospitals Plymouths NHS Trust which was to remain for 18-24 months. This affected the amount of surgical time available for Burns Surgery. There was a quarterly review of waiting lists with Care group.

Staffing

- Scar management Occupational Therapy support was unavailable during April to July due to self-isolation

- The nursing skill mix was affected on the plastic surgery ward. We were supported by the Trauma Advance Nurse Practitioner, Louise Walker, who has burns competencies and was able to provide help with burns dressing changes.
- As already mentioned, we do not have a Clinical Psychologist within the burns service.

Clinical Governance

- We recorded no RCAs/SUIs and no MDRO blood borne infections.
- We had a number of inappropriate referrals via MDSAS with an over estimated Total Body Surface Area (TBSA) – teaching has been limited due to the Pandemic, but we have tried to feedback to the referrers and are planning a Study day as soon as it is appropriate.
- We accepted three patients with burn injuries outside of our designated treatment threshold. Two remained in Plymouth with support from the Bristol Burns team. One patient was transferred on to Swansea as Bristol did not have a burns bed available at the time.
- We had seven repatriations in all from within the Network.

Education and Training

- Teaching as part of the Emergency Child Module, Nurse Practitioner Module, 3rd Year paediatric students, Minor Injury Module.
- In-house teaching of Lynher ward staff and junior doctors' induction
- Prevention training for Health Visitors/ School Nurses based in Plymouth
- Management of Burns training in Falmouth Minor Injury Unit (MIU), Torbay Emergency Department and Cornwall Children's Community Team

Patient/Public

- We took part in the National Burns Awareness Day in Oct 2020. This had to be mostly via social media.
- Information boards in ward area being temporarily used for plastics trauma/burns clinic and dressing clinic

Audit and Research

- Audit of MDSAS referrals pre-Covid-19 vs. during Covid-19 Pandemic.

Presentations & Publications

- Network Webinar – Using MDSAS Burns Telemedicine during Covid-19 Pandemic. Louise Walker, Advanced Nurse Practitioner

Acknowledgements

This ODN report has been prepared by members of the SW Burn Care ODN Team.

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Further information about the South West Burn Card ODN and our work is available on the our website:

www.southwest-burncare-network.nhs.uk