

Concept of Operations for the management of mass casualties: Burns annex

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Publishing approval number: PAR193

Version number: 1

Prepared by: Burns annex working group and Emergency Preparedness Resilience and Response

Classification: OFFICIAL

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1 Introduction

This document provides an overview of the expected response by the NHS, specifically specialised burns services, to an incident involving a large number of casualties with burns.

1.1 Purpose

The purpose of this annex is to provide a description of the efficient and effective distribution of a significant number of people receiving burn injuries, from one or more mass casualty incidents, to burn services suitably equipped and staffed to deal fully with the presenting injuries.

Although there are over 220 Emergency Departments, there are comparatively few places where patients with severe burns may be cared for by clinical specialists (see Appendix 1 for list of all specialised burn services and level of care). This is the case particularly for children. Therefore, a mass casualty incident for burns is likely to involve significantly fewer casualties than other mass casualty incidents. It has been estimated that an incident involving more than 20 patients with Level 3 burn injuries (Burn Intensive Care Unit) is likely to lead to activation of this Burns Annex.

In the event of a major incident, before patients with complex burn injuries are transferred to a specialised burn service, they will be moved from a Major Trauma Centre/Trauma Unit to another part of the responding hospital (critical care facility or ward). It is possible that patients with less severe burn injuries may be retained in non-specialised burn hospitals. Therefore, this document also recommends the deployment of Burn Incident Response Teams (BIRTs) to provide specialist advice and support in the responding organisations as soon as possible.

This document does not apply to any direct requests for assistance from overseas. Such requests made direct to a burn service should be escalated to NHS England and NHS Improvement National EPRR.

1.2 Audience

This annex is aimed at services providing adult and paediatric care including:

- Major Trauma Centres and Trauma Units
- Specialised Burns Services (Centres, Facilities, Units)
- Plastic Surgery services
- Critical Care services
- Chief Executives of NHS trusts and NHS foundation trusts
- Ambulance services
- Helicopter Emergency Medical Service (HEMS)
- Operational Delivery Networks (ODNs) (including Burns, Trauma, ECMO, Critical Care)
- Emergency Planning Liaison Officers

1.3 Background

An incident involving critically injured burn patients that exceeds the capacity of a local burn service, a Burn Care Operational Delivery Network (ODN) or England, can happen in any community. Burn injury incidents are unusual in that a relatively small number of critically ill burn injured patients may create the need for a major incident response due to the limited number of burn services and thus burn beds across the country.

Burn patients are complex and require an extended and reoccurring length of stay. This becomes an even more likely scenario if the incident involves paediatrics. In burn major incidents, patients may be admitted with isolated burns or burns with other injuries. Patients with burns may have sustained other life threatening traumatic injuries and these require assessment and management according to standard resuscitation guidance. Decisions about priorities for the care of the traumatic injury and the burn should be by discussion and consensus between the responsible burn clinicians and trauma clinicians.

It is recognised that a burn major incident may overwhelm bed capacity and will have a significant impact on theatre capacity across the responding organisations, specialised burn services, Burn ODNs or nationally depending on the level of routine activity at the time of the incident. Clinicians providing care for burn patients in England are almost exclusively Burns and Plastic Surgeons.

The care of patients with severe burns may be provided on an in-patient or out-patient basis depending on severity, progression and recovery. With a complex injury, the whole specialist burns multi-disciplinary team (MDT) are involved throughout the acute care period and may require continued input following discharge during rehabilitation/re-integration into society. The post-acute care may continue with the same MDT for some years, especially for children, and involve multiple out-patient interventions and several admissions to hospital for reconstructive surgery.

Levels of care provided for patients with severe burns in England are stratified and services are designated as follows:

Designation	Level of Care	% Total Body Surface Area (%TBSA) Thresholds
Burn Centre	This level of in-patient burn care is for the highest level of injury complexity and offers a separately staffed, geographically discrete ward. The on-site facilities are up to highest level of critical care and have immediate operating theatre access.	Paediatric: All burns \geq 2% TBSA
		Adult: All burns \geq 3% TBSA
Burn Unit	This level of in-patient burn care is for the moderate level of injury complexity and offers a separately staffed, discrete ward.	Paediatric: Burns \geq 2% & < 30% TBSA
		Adult: Burns \geq 3% & < 40% TBSA

Burn Facility	This level of in-patient burn care equates to a standard plastic surgical ward for the care of non-complex burn injuries.	Paediatric: Burns $\geq 2\%$ & $< 5\%$ TBSA
		Adult: Burns $\geq 3\%$ & $< 10\%$ TBSA

Few burn services are co-located with a Major Trauma Centre (MTC), and there are differences in service provision across the Burn ODNs (Appendix 1).

The information that follows is directed at all NHS organisations and providers of NHS funded care and aims to help all who may be involved to plan, prepare and respond to all types of emergencies that may involve significant numbers of patients with severe burns.

2 Burns Incident Response

2.1 Phases

There will be several phases during a burns mass casualty incident. The following table outlines the key phases which will need to be considered.

Phase	Actions
<p style="text-align: center;">Phase 1 (0-4 hours) Initial Transport</p>	<ul style="list-style-type: none"> • Patients will be transferred from the scene to Major Trauma Centres and Trauma Units. • Emergency Departments will be used for less serious casualties if the initial responding services become overwhelmed.
<p style="text-align: center;">Phase 2 (4-12 hours) Patient Stabilisation & Redistribution</p>	<ul style="list-style-type: none"> • Secondary triage of patients and, if required, relocation from Trauma Units and Emergency Departments to Major Trauma Centres. • A National Burns Strategic Clinical Lead will be identified. • Availability of Burns Incident Response Teams (BIRTs) will be identified and deployment process activated. • The National Burn Bed Bureau (NBBB) will contact all specialised burns services to confirm their current capacity and request that the services increase capacity by discharging and transferring patients as appropriate. This information will be conveyed to the Clinical Cell. • Consumables for patients will need to be ordered from local NHS Supply Chain.
<p style="text-align: center;">Phase 3 (12-48 hours) Decision Making</p>	<ul style="list-style-type: none"> • BIRTs will gather information from the responding hospitals, to include number of patients, injury severity and need for transfer using defined documentation. • The National Burns Strategic Clinical Lead will assist in clinical decision making relating to the placement of patients to specialised burn services. • The NBBB will continue to update the Clinical Cell on burn services' capacity. • At this point a request for the government to consider European Aid may be made if bed capacity is insufficient.
<p style="text-align: center;">Phase 4 (24-72 hours) Prioritisation</p>	<ul style="list-style-type: none"> • Patients will be distributed for definitive care according to priority. • Transportation will be coordinated by the Clinical Cell in liaison with retrieval services.

Phase	Actions
<p style="text-align: center;">Phase 5 (96+ hours) Extended</p>	<ul style="list-style-type: none"> • Patients will receive appropriate treatments in definitive specialised burn care setting once the surgical treatment is completed. • Following a burns mass casualty incident, longer term tracking of these patients is required to understand overall patient outcomes.
<p style="text-align: center;">Phase 6 (96 hours – 2 years) Rehabilitation</p>	<ul style="list-style-type: none"> • The effect of a burns mass casualty incident will have long term consequences not only on the patient but on the specialised burn services and it is recognised that return to “business as usual” may take many months. Patients will require rehabilitation for many months or years.

2.2 Notification of Burns Major Incident

Notification of major incidents is described within the Concept of operations for the management of mass casualties (CONOPs):

<https://www.england.nhs.uk/publication/concept-of-operations-for-the-management-of-mass-casualties/>

Upon declaration of a burn mass casualty incident the National Emergency, Preparedness, Resilience and Response (EPRR) First on call will ask the National Burns Bed Bureau (NBBB) to notify all burn services directly of a Burns mass casualty event. NHS organisations will also be notified through normal EPRR alerting routes.

The NBBB may be notified by either a specialised burn service, the NHS England and NHS Improvement National EPRR First on call or through an Ambulance Control as requests for beds may come through these channels. Any incident declaration must be confirmed with the National EPRR First on call. The NBBB will be tasked with alerting all specialised burn services and ascertaining the current bed capacity for recording on NHS Pathways Directory of Services (DoS).

On receipt of notification by the NBBB, all specialised burn services will close to new referrals to protect the limited beds. Each burn service will update the NHS Pathways DoS website declaring their service status as Burn-Operational Pressure and Escalation Level 2 (B-OPEL 2). However, any patients who are already in the referral pathway will be accepted. The specialised burn services will remain closed until they are either stepped down or begin to receive patients from the major incident.

Normal referral and transfer practice will be suspended. All major burns will be subsumed into the overall management of the major incident (including non-incident burn injured patients). All burn casualties from the scene of the incident will be taken to the nearest Major Trauma Centre or Trauma Unit.

Specialised burn services will need to escalate internally to ensure the relevant departments within their organisation are notified that a burns incident has occurred within or outside of their catchment area and that their burn service is closed to new referrals and is declaring Burns Operational Pressures Escalation Level 2 (B-OPEL 2) until informed they are stepped down.

2.3 Activation

Activation is described within the CONOPs; however, activation may differ when there is a burn only incident. In this case notification and activation may come from the ambulance services or the specialised burn services due to the number of burn casualties being received. In this scenario, activation will pass upwards through internal organisational alerting systems, and an official declaration issued by NHS England and NHS Improvement.

If burn services are required within Devolved Administrations (DAs), activation will be coordinated in liaison between NHS England and NHS Improvement Incident Management Team (National) and the equivalent organisation(s) in the DAs.

2.3.1 Specialised Burn Services

Upon activation, specialised burns services will assess their current caseload and discharge or transfer patients as appropriate to free up capacity and identify surge capacity within their organisation. They will not take any further patients (unless already accepted into the referral pathway), declare their B-OPEL status as Level 2 and close their beds until either stepped down or they start to receive casualties.

2.3.2 National Burn Bed Bureau (NBBB)

Upon activation, the NBBB will notify all specialised burn services and ascertain current bed capacity within burn services and their potential bed surge capacity once actions described in 2.3.1 have been undertaken. They will contact all burn services and liaise with the National EPRR First on call to determine further actions.

2.4 Roles and responsibilities

Primary roles and responsibilities of key responders in respect of a Burn Major Incident are summarised as follows and are in addition to the generic roles and responsibilities found within the CONOPs.

2.4.1 NHS England and NHS Improvement

2.4.1.1 National EPRR

National EPRR will be responsible for establishing an Incident Management Team (IMT) for the incident in accordance with the CONOPs. In addition to their roles in the CONOPs, the National EPRR First on Call Duty Officer and the Logistic Cell will also undertake the following actions:

The National EPRR First on call (Duty Officer) will:

- Notify the National Burns Bed Bureau (NBBB) of an incident and its location

- Request that the Department of Health and Social Care (DHSC) informs the Devolved Administrations (DAs) of an incident and its location
- Ascertain who is available to act as Burns Strategic Clinical Lead from list of senior clinicians

The Logistic Cell will:

- Support the establishment of two separate Burns Clinical Impact teleconferences for the Incident Clinical Lead (National) and Burns Strategic Clinical Lead with paediatric and adult burn services to provide a brief on the incident and ascertain staff availability for Burn Incident Response Teams (BIRTs)
- Ensure, with advice, that the appropriate number of BIRTs have been identified for the assessment of patients
- Mobilise deployment of BIRTs from burns services furthest away from the major incident as required
- Arrange pick up and transportation of the BIRT members to a rendezvous point closer to the responding hospitals
- Ensure accommodation, food and refreshments are in place for the BIRTs
- Arrange transfer to a responding hospital and arrange a single point of contact and security clearance at the responding hospital
- Arrange transportation home or overnight accommodation

2.4.1.2 Clinical Cell and Strategic Burns Advice

The Clinical Cell will need clinical and strategic burns advice during the incident. This will be provided by a burns specialist from one of the specialised burn services. They will be known as the Burns Strategic Clinical Lead.

The senior NHS England and NHS Improvement Clinician will ensure that a Clinical Cell is formed, and that the senior clinicians/medical advisers from any Devolved Administrations (DAs) are invited to the cell.

This clinician will also ensure that clinical impact assessment teleconferences are held, and where necessary burns specific calls are held using the agenda in Appendix 2

The Burns Strategic Clinical Lead will:

- Take part in teleconferences with the Clinical Cell
- Provide specialist strategic advice to the Clinical Cell on the management of burn injured patients, movement and placement of patients.

Appendix 3 contains information on the Burns Strategic Clinical Lead including a job description and person specification.

2.4.2 National Burn Bed Bureau

The National Burn Bed Bureau (NBBB) will notify the specialised burn services of an incident, following notification and confirmation by the national EPRR First on call. The Incident Management Team (IMT) will ensure that the NBBB is aware of any incident involving sufficient casualties to meet the definition of a mass casualty event in burns.

The main tasks for the NBBB will be to:

- Contact all specialised burn services to ascertain:
 - current bed capacity and ask them to update Part A on NHS Pathways DoS
 - potential surge bed capacity that could be created within the burn services and to update Part B on NHS Pathways DoS
 - ability of the burn service to provide members of a BIRT by completing Part C on NHS Pathways DoS
- Liaise with National EPRR/ Incident Management Team/ Clinical Cell to determine further actions
- Continually monitor the availability of specialist burn beds
- Ensure any direct referrals to the NBBB of burn injured patients outside of the major incident are logged as part of the major incident and given to the Incident Management Team/ Clinical Cell to ensure the patient(s) are captured for assessment and triaged as part of the major incident response.

2.4.3 Specialised Burn Services

Specialised Burn Services (with the support of their organisation) will need to take the following actions on activation:

- Notify local health system of the closure of the specialised burn service to new referrals (via organisational incident structures)
- Ensure NHS Pathways DoS website (Part A) is updated immediately and thereon at least every 4 hours or if capacity changes
- Ensure the NHS Pathways DoS is updated to show the service as B-OPEL 2 (closed)
- Assess current caseload and discharge or transfer patients as appropriate who no longer require specialist burn care
- Consider repatriating patients to their nearest burn service if applicable and clinically appropriate
- Increase capacity of Intensive Care Unit (ICU) beds, High Dependency Unit (HDU) and ward level burn beds
- Review staffing capability and contact members of staff on their BIRT Volunteer Log to ascertain who is available to make up a BIRT and record their contact details for the National EPRR Team/Clinical Cell
- Update NHS Pathways DoS (Parts B and C) confirming the escalation bed capacity and availability of potential BIRT staff
- Provide clinical advice and support as requested to responding Major Trauma Centres and Trauma Units
- Order emergency stock as required
- Ensure all patients referred to receiving specialised burn service are logged, and this information is passed to Clinical Cell
- Ensure requirements for the procedures for the preservation of forensic material are in place and followed.

Staff deployed as part of response to an alternative hospital trust will be covered for indemnity as part of their employing NHS trust's membership of the Clinical Negligence Scheme for Trusts administered by NHS Resolution.

2.4.4 Burns Incident Response Teams (BIRTs)

There will be a requirement for Burns Incident Response Teams (BIRTs) to provide specialist burn care advice via telephone or be mobilised to the responding or non-specialised hospital(s) in the days following a burn major incident. BIRTs will not be sent to the scene of the major incident.

A BIRT will comprise of three burns experts (Burns Surgeon, Burns Anaesthetist/Intensivist and a Senior Burns Nurse), ideally from the same specialised burn service. However, if it is not possible to build a BIRT from a single burn service, then a team could be made up of experts from different burn services within the same Burn Care ODN who have undergone the BIRT training together.

The BIRTs main tasks will be to:

- Assess the burn severity according to standardised criteria
- Provide advice on appropriate dressings and pain management
- Assess fitness for transportation, depending on the severity of organ failure and the need for replacement therapy
- Collect and record demographic and clinical information using a standardised BIRT Patient Clinical Assessment Form
- Provide the Clinical Cell with an understanding of casualties and severity of injuries, advising on level of burn care required using the BIRT Patient Clinical Assessment Form located in section 5 of the BIRT Supporting Guidance. Provide critical care teams with appropriate advice on transferring burn injured patients. BIRTs will not undertake the retrieval/transfer.

Further details and resources for BIRTs can be found in the BIRT Supporting Guidance held within the burn services.

2.4.5 Major Trauma Centres, Trauma Units and Emergency Departments

There will be a requirement for the responding MTCs, TUs and EDs to:

- Provide casualty information to the Clinical Cell for assessment by the Burns Strategic Clinical Lead/BIRTs
- Maintain a list of patients that have been referred, or need to be referred to, specialised burn services
- Provide a designated person to act as logistical support for the BIRT on arrival and provide access to patient information, buildings access and other logistical support as required.

2.4.6 Burns Operational Delivery Networks (ODN) Managers

The ODN Manager's role is to ensure NHS organisations providing specialised burn care services have a Burns Operational Plan within their Major Incident Plan and that it is tested and fit for purpose based on the requirements of EPRR Guidance, Burns guidance, the CONOPs and this Annex.

ODN Management teams will have a limited role in the response to an incident outside of normal working hours. If an incident occurs during normal working hours, then the ODN Managers may be able to give strategic advice to the Clinical Cell and assist in identifying a burns clinician to act as a Burns Strategic Clinical Lead. The

ODN Managers and specialised burn services within the ODN will be significantly involved in repatriation of patients over the weeks following an incident.

2.5 Burns Patient Management

The primary triage of patients will be undertaken in accordance with locally agreed Major Trauma ODN protocols and procedures. It is possible that thresholds of care and survival may be reduced if the number of casualties is very large, complex or overwhelming. This could lead to potential degradation of care. The management of these patients is complex and national guidelines have been developed to facilitate care.

Responding organisations should refer to the Specialties Overviews section of Clinical Guidelines for Major Incidents and Mass Casualty Events (<https://www.england.nhs.uk/publication/clinical-guidelines-for-major-incidents-and-mass-casualty-events/>).

For clinical advice on the ground, the responding MTCs/TUs and EDs should contact any specialised burn service outside of the NHS England and NHS Improvement region that the incident is taking place in and seek advice from the Burns Consultant on-call or the BIRT if deployed.

All specialised burn services need to be aware it is part of their role to provide this clinical advice in the event of a major incident.

2.5.1 Inhalation Injuries

Inhalation injury remains a major factor complicating burn injury. It has a significant impact on all aspects of care and a marked adverse impact on mortality.

Management is complex and requires a multi-disciplinary team approach to aid diagnosis, upper airway management, mechanical ventilation and pharmacological intervention. However, in the event of a national Incident, isolated inhalation injuries may need to be managed outside of a specialised burns service.

2.5.2 Chemical Injuries

For significant chemical injuries there is a need to refer to the “NHS England Emergency Preparedness, Resilience and Response (EPRR) Hazardous Materials (HAZMAT) and Chemical, Biological, Radiological and Nuclear (CBRN) guidance: <https://www.england.nhs.uk/ourwork/eprp/hm/>

2.5.3 Patient Transfers

Transport issues for moving critical care patients will be like other trauma Level 3 patients, however, in relation to burns there is a need to maintain core body temperature, a potential for increased fluid requirements and accurate assessment of fluid resuscitation requirements.

2.5.4 Infection Prevention

Consideration needs to be given to potential for cross infection of patients with severe burns, particularly if there are large numbers of severe burns. Several services have infection control issues and movement of patients between services and potentially overseas may lead to multi-resistant organisms which have the potential to close services. The organisation's Infection Prevention Control team should be engaged during planning and response to the incident.

2.6 Capacity and Demand Management

There is limited specialist burns bed capacity in England and the Devolved Administrations.

The capacity of Specialised Burn Services will depend on the type of incident that has occurred:

- A major trauma incident (blast, crush, puncture injuries) with a small number of burns casualties, and
- A major burns incident, with many burns casualties, some with a trauma.

The age mix of casualties is also a crucial factor in determining what response is required. The number of children that will trigger a national or international response will be a lower number than for adults and will have more significant capacity issues.

2.7 Consumables

Specialised burn services do not carry large stocks of dressings, spare equipment or drugs and typically only have sufficient to deal with fluctuations in their normal activity. Being an emergency service, they rely on re-stocking arrangements with their local NHS Supply Chain system and commercial services to deal with fluctuations in activity.

In the event of a burn major incident, initially it is the MTC/MTU's and EDs who will require access to increased amounts of specialised dressings and other consumables. NHS Supply Chain carries stocks of appropriate dressings and accompanying burn specific consumables which can be ordered by the MTC/MTU's and EDs with a 5-hour delivery, this should be detailed in local plans.

2.8 Demobilisation/Recovery

In the event of a major incident, the additional patients and associated bed utilisation would have a protracted effect on the bed occupancy for some considerable time after the incident. Depending on the numbers and severity, the impact could be up to 12 months or longer for an in-patient episode and a possible 24 months for rehabilitation including post discharge.

It is not feasible to calculate or estimate the longer term impact on activity and capacity in this document. It should be noted that in the event of a major incident involving cases requiring ICU care, the routine capacity available for "normal" activity will be reduced, potentially causing other new patients to be transferred to specialised burn services in other ODNs.

Specialised burn services must give attention and concern to the impact of a major incident on burn care staff. It is recognised that in the first days of a major incident impacting on burn care services and staff, the volume of work in theatres and on the ward will be dramatically increased. This is very likely to affect staff, due to increased physical and emotional demands. NHS organisations need to ensure that staff have access to the appropriate support services and consider debriefs within the services.

Appendix 1: Table of Burn Services by Level of Care

Burn Care Centres

Trust	Hospital	Adult or Paeds	Co-located with MTC	ODN Region
Mid Essex Hospital Services NHS Trust	Broomfield (St Andrews) Hospital, Chelmsford, Essex	Both	No	LSEBN
Chelsea & Westminster Hospital NHS Foundation Trust	Chelsea & Westminster Hospital, London	Adult	No	LSEBN
Swansea Bay University Health Board	Morrison Hospital, Swansea, Wales	Adult	No	SWUK
University Hospitals Bristol NHS Foundation Trust	Bristol Royal Hospital for Children, Bristol	Paeds	Yes	SWUK
Birmingham Women's and Children's NHS Foundation Trust	Birmingham Children's Hospital	Paeds	Yes	MBODN
Nottingham University Hospitals NHS Trust	Nottingham City Hospital	Adult	Yes	MBODN
University Hospitals Birmingham NHS Foundation Trust	Queen Elizabeth Hospital, Birmingham	Adult	Yes	MBODN
The Newcastle upon Tyne Hospitals NHS Foundation Trust	Royal Victoria Infirmary, Newcastle-Upon-Tyne	Both	Yes	NBCN
Alder Hey Children's NHS Foundation Trust	Alder Hey Hospital, Liverpool	Paeds	Yes	NBCN
Manchester University NHS Foundation Trust	Royal Manchester Children's Hospital	Paeds	Yes	NBCN
Manchester University NHS Foundation Trust	Wythenshawe Hospital, South Manchester	Adult	No	NBCN
St Helens & Knowsley Teaching Hospitals NHS Foundation Trust	Whiston Hospital, Liverpool	Adult	No	NBCN
The Mid Yorkshire Hospitals NHS Trust	Pinderfields Hospital, Wakefield, West Yorkshire	Adult	No	NBCN

Burn Care Units

Trust	Hospital	Adult or Paeds	Co-located with MTC	ODN Region
Chelsea & Westminster Hospital NHS Foundation Trust	Chelsea & Westminster Hospital, London	Paeds	No	LSEBN
Queen Victoria Hospital NHS Foundation Trust	Queen Victoria Hospital, East Grinstead, Sussex	Adults	No	LSEBN
Buckinghamshire Healthcare NHS Trust	Stoke Mandeville Hospital, Aylesbury, Bucks	Both	No	LSEBN
Swansea Bay University Health Board	Morrison Hospital, Swansea, Wales	Paeds	No	SWUK
North Bristol NHS Trust	Southmead Hospital, Bristol	Adult	Yes	SWUK
Salisbury NHS Foundation Trust	Salisbury District Hospital	Both	No	SWUK
Nottingham University Hospitals NHS Trust	Nottingham City Hospital	Paeds	Yes	MBODN
The Mid Yorkshire Hospitals NHS Trust	Pinderfields Hospital, Wakefield, West Yorkshire	Paeds	No	NBCN
Sheffield Children's Hospital NHS Foundation Trust	Sheffield Children's Hospital	Paeds	Yes	NBCN
Sheffield Teaching Hospitals NHS Foundation Trust	Northern General Hospital, Sheffield, South Yorkshire	Adult	Yes	NBCN

Burn Care Facilities

Trust	Hospital	Adult or Paeds	Co-located with MTC	ODN Region
Oxford University Hospitals NHS Foundation Trust	Oxford John Radcliffe	Both	Yes	LSEBN
University Hospitals Plymouth NHS Trust	Derriford Hospital, Plymouth	Both	Yes	SWUK
University Hospitals of Leicester NHS Trust	Leicester Royal Infirmary	Both	No	MBODN
University Hospitals of North Midlands NHS Trust	Royal Stoke University Hospital, North Midlands	Both	Yes	MBODN
South Tees Hospital NHS Foundation Trust	James Cook University Hospital, South Tees	Both	Yes	NBCN
Lancashire Teaching Hospitals NHS Foundation Trust	Royal Preston Hospital, Lancashire	Adult	Yes	NBCN

Appendix 2: Teleconference Agenda: Burns Clinical Impact Assessment

1. Update from system on number of identified burns patients at each responding location:
 - a) Ward level patients (include those still awaiting transfer to a ward from the ED /Theatre)
 - b) ITU level patients (including number intubated and ventilated and any patients being managed in surge capacity)
2. Update from Burn Care Services regarding capacity and capability:
 - a) Adults
 - b) Paediatrics
 - c) Capacity to provide staff for a Burns Incident Response Team (Burns Anaesthetist/Intensivist, Burns Surgeon, Burns Nurse)
3. When BIRTs have responded:
 - a) Clinical details should be collated using the template provided and a triaging of patients to take place as part of a Virtual MDT to ensure that the appropriate patients are prioritised for transfer to available Burns beds.
 - b) Update from the NACC on availability of transfer resources
 - c) Availability of suitable transfer teams by trust
4. Infection Control Issues:
 - a) if terrorist attack: Blood Borne Viruses
 - b) if incident abroad and repatriation: multi resistant organisms
5. Rehabilitation Issues
6. Repatriation Issues
7. Supply Chain
8. Recovery
9. Any other Business

Appendix 3: Burns Strategic Clinical Lead Role and Person Specification

To provide specialist clinical and strategic advice to the Clinical Cell in the event of a Burns Mass Casualty Incident.

EDUCATION AND EXPERIENCE:

Essential:

- Up to date revalidation and registration with GMC/NMC
- Burns Consultant (Surgeon, Anaesthetist/Intensivist or Burns Nurse Consultant) usually of at least 4-5 years duration currently working in clinical practice in burns.
- Emergency Management of Severe Burns (EMSB)

Desirable:

- Strategic Leadership in a Crisis
- Defensible Decision Making
- Emergency Management of Severe Burns (EMSB) Instructor
- Advanced Trauma Life Support (ATLS®) or Advanced Paediatric Life Support (APLS®)
- Awareness of BIRT responsibilities

ROLE:

- Take part in teleconferences with NHS England and NHS Improvement National Clinical Cell;
- Provide specialist strategic advice to the NHS England and NHS Improvement National Clinical Cell on the management of burns patients, movement and placement of patients;
- Analyse relevant and available information to inform decision making;
- Work effectively with NHS England and NHS Improvement National Clinical Cell at a strategic level;
- Provide technical/professional advice as appropriate;
- Engage and communicate effectively in complex decision making processes, and with national leaders and cross-Government colleagues in the political decision making process;
- Address medium and long-term priorities to facilitate the response and recovery of the burns services.

Appendix 4: Burn Incident Response Teams (BIRTs) Person Specifications

BIRT Burns Surgeon Person Specification

EDUCATION AND EXPERIENCE:

Essential:

- Up to date revalidation and registration with GMC
- Consultant Burns Surgeon
- Emergency Management of Severe Burns (EMSB) or Advanced Burns Life Support (ABLS)
- The Medical Director for the Trust signs off on the role and on freeing up the person from Trust duties.
- Appropriate professional indemnity (Trust may seek from NHS Resolutions)
- Ability and willingness to travel
- Ability to work collaboratively at a distance and as part of a wider team
- Undertaken the nationally agreed BIRT training

Desirable:

- Advanced Trauma Life Support (ATLS®) or Advanced Paediatric Life Support (APLS®)
- Edward Jenner Programme, NHS Leadership Academy

ROLE:

- Advise on the resuscitation and early management of severe burn injuries
- Identify potential surgical emergencies
- Provides advice for the ongoing management of severe burn injuries

BIRT Burns Anaesthetist/Intensivist Person Specification

EDUCATION AND EXPERIENCE:

Essential:

- Up to date revalidation and registration with GMC
- Consultant Anaesthetist/Intensivist with a specialist interest in burns or a Consultant Intensivist with a specialist interest in burns
- Emergency Management of Severe Burns (EMSB) or Advanced Burns Life Support (ABLS)
- The Medical Director for the Trust signs off on the role and on freeing up the person from Trust duties.
- Appropriate professional indemnity (Trust may seek from NHS Resolutions)
- Ability and willingness to travel
- Ability to work collaboratively at a distance and as part of a wider team
- Undertaken the nationally agreed BIRT training

Desirable:

- Advanced Trauma Life Support (ATLS®) or Advanced Paediatric Life Support (APLS®)
- Edward Jenner Programme, NHS Leadership Academy

ROLE:

- Advise on the resuscitation and early management of severe burn injuries
- Identify the risk of injury to the upper and lower airway
- Provide ongoing advice on the intensive care management of patients with severe burn injuries.

BIRT Burns Nurse Person Specification

EDUCATION AND EXPERIENCE:

Essential:

- Registered Nurse with NMC
- Band 6 or above with minimum of 5 years burns experience
- Emergency Management of Severe Burns (EMSB) or Advanced Burns Life Support (ABLS)
- The Chief Nurse for the Trust signs off on the role and on freeing up the person from Trust duties.
- Appropriate professional indemnity (Trust may seek from NHS Resolutions)
- Ability and willingness to travel
- Ability to work collaboratively at a distance and as part of a wider team
- Undertaken the nationally agreed BIRT training

Desirable:

- Advanced Life Support (ALS®) or European Paediatric Advanced Life Support (EPALS®)
- Edward Jenner Programme, NHS Leadership Academy

ROLE:

- Advise on the TBSA and depth assessment of severe burn injuries
- Advise on effective fluid resuscitation and monitoring of patients with severe burn injuries
- Advise on debridement and dressing of patients with severe burn injuries.

Appendix 5: Burns Annex Action Cards

National Burn Bed Bureau Action Card

The National Burns Bed Bureau (NBBB) currently manages the adult and paediatric burn care capacity data held on NHS Pathways Directory of Services (NHS Pathways DoS) bed capacity management system.

Activated by NHS England and NHS Improvement National EPRR First On-call.

Action	Check List	Time
1. Contact all specialised burn services, alert each to the activation of the arrangements for Burn Mass Casualty incident and request that the NHS Pathways DoS website (Part A) https://www.directoryofservices.nhs.uk be immediately updated and take a verbal update.	<input type="checkbox"/>	
2. Advise specialised burn services to assess preliminary escalation capacity and update NHS Pathways DoS (Part B) within 30 minutes.	<input type="checkbox"/>	
3. Contact all specialised burn services again, within two hours of the first call, to confirm definitive escalation capacity and to update the NHS Pathways DoS (Part B) as required.	<input type="checkbox"/>	
4. Advise specialised burn services to update NHS Pathways DoS every four hours or when capacity changes.	<input type="checkbox"/>	
5. Advise specialised burn services to identify staff from their BIRT Volunteer Log that are available to be mobilised if necessary and ask them to complete NHS Pathways DoS (Part C) within an hour of call to request BIRT member availability.	<input type="checkbox"/>	
6. Collate above information provided by all specialised burn services into a national report of current burns bed capacity, surge capacity and BIRT availability for the National EPRR /Clinical Cell.	<input type="checkbox"/>	
7. Contact Burn Care ODN Managers if within office hours.	<input type="checkbox"/>	
8. Continue to monitor capacity in specialised burn care services.	<input type="checkbox"/>	
9. Ensure any direct referrals of burn injured patients outside of the major incident are logged as part of the major incident and given to the NHS England and NHS Improvement National Incident Management Team/ Clinical Cell.	<input type="checkbox"/>	

Burns Service & On-call Burns Consultant Action Card

Burn Centres and Units that can provide critical care to burns patients within the National Referral Criteria Guidance

Activated by NHS England and NHS Improvement National Incident Management Team

Action	Check List	Time
1. Specialised burns service to identify and notify on-call Burns Consultant once notified of a burns mass casualty incident.	<input type="checkbox"/>	
2. On-call Burns Consultant assumes control of their burns service's major incident response ensuring that the following tasks are undertaken.	<input type="checkbox"/>	
3. Inform organisation Chief Operating Officer or deputy (in hours) or On call director (out of hours) that a burns mass casualty incident has been triggered and determine if the activation of the organisations incident response plan is required.	<input type="checkbox"/>	
4. Ensure local departments and organisations are informed that the specialised burn service is closed to new referrals. Any new referrals outside of the major incident should be directed to the NBBB for triage via the Clinical Cell as part of the major incident triage process.	<input type="checkbox"/>	
5. Assess and prioritise current case load and consider if appropriate to transfer burns patients internally to a different department.	<input type="checkbox"/>	
6. Liaise with NBBB to establish the burn services <u>current</u> capacity and ensure NHS Pathways DoS website (Part A) is updated immediately and at least every 4 hours or as capacity changes.	<input type="checkbox"/>	
7. Within 30 minutes of being contacted by the NBBB, Nurse in Charge or Consultant to update NHS Pathways DoS (Part B) with preliminary estimate of escalation capacity.	<input type="checkbox"/>	
8. Confirm with organisation incident management team definitive escalation capacity within the first two hours following contact from the NBBB and update NHS Pathways DoS (Part B). This figure should be updated every 4 hours or when capacity changes.	<input type="checkbox"/>	
9. Join as required teleconference(s) held in relation to the formation of Burns Incident Response Team (BIRT)s as requested by NHS England and NHS Improvement.	<input type="checkbox"/>	
10. Identify staff available for a BIRT to travel to involved Major Trauma Centres/Major Trauma Units and inform them to be on standby to come into the burn service ready for deployment if necessary.	<input type="checkbox"/>	
11. Update NHS Pathways DoS (Part C) with BIRT	<input type="checkbox"/>	

	members availability as and when requested.		
12.	Activate process for call in of staff and instruct them on their arrival.	<input type="checkbox"/>	
13.	Ensure that adequate staffing is available in a 24 hour shift pattern.	<input type="checkbox"/>	
14.	Provide clinical advice and support as requested to responding Major Trauma Centres, Trauma Units and Emergency Departments or to the Clinical Cell/ Burns Strategic Clinical Lead.	<input type="checkbox"/>	
15.	Ensure emergency stock is ordered through supply chain as required.	<input type="checkbox"/>	
16.	Ensure appropriate tracking system for mass casualty incident is utilised.	<input type="checkbox"/>	

Burns Incident Response Teams (BIRTs) Action Card

The Burns Incident Response Team (BIRT) will consist of a Burns Surgeon (Team Leader), Burns Anaesthetist/Intensivist and Burns Nurse. They will be deployed from the Burn Services furthest away from the Incident.

Activated by NHS England and NHS Improvement National Incident Management Team/ Clinical Cell.

Action	Check List	Time
1. Ensure you have a travel bag with enough supplies for a minimum of 72 hours including: <ul style="list-style-type: none"> a. Clothing b. Toiletries c. Medications d. Passport (if required) e. Staff ID pass (to prove who you are and where you work and your clinical title/role within your home organisation) f. Personal items, such as kindle/book, mobile phone, chargers, etc. 	<input type="checkbox"/>	
2. Ensure you have all the relevant documentation (BIRT information pack) required to undertake and record your actions.	<input type="checkbox"/>	
3. Ensure you are aware of the designated collection point and be there awaiting transport ahead of the agreed time with the BIRT Response bag.	<input type="checkbox"/>	
4. Attend briefing session prior to deployment.	<input type="checkbox"/>	
5. On arrival at responding organisations, prioritise patients in terms of severity and requirements for transfer to burn services and completed defined documentation within BIRT information pack).	<input type="checkbox"/>	
6. Nominate a spokesperson from the BIRT to liaise with the Clinical Cell via telephone and email as required.	<input type="checkbox"/>	
7. Give practical help and advice on burn care for individual patients as required.	<input type="checkbox"/>	
8. Be aware of members of the press and ensure patient and staff confidentiality is maintained.	<input type="checkbox"/>	