Preparing for Emergencies in the NHS in England

NHS

Burn Annex
Burns Incident Response Team Information Pack

Concept of Operations for the management of mass casualties: Burns Annex - Burns Incident Response Team (BIRT) information pack

Publishing approval number: Burns Annex PAR193

Version number: 1

First published: March 2022

Next update: March 2023

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

This information can be made available in alternative formats, such as easy read or large print, and may be available in alternative languages, upon request. Please contact national EPRR team on england.eprr@nhs.net

Contents

1 Introduction

This pack has been developed to assist in the development of Burns Incident Response Teams (BIRTs) and allow NHS organisations to understand how BIRTs will provide specialist burn input to the management of large numbers of burn injured patients.

It should be read in conjunction with the following NHS England documents:

- https://www.england.nhs.uk/wp-content/uploads/2018/03/concept-operations-management-mass-casualties.pdf
- https://www.england.nhs.uk/wp-content/uploads/2020/09/B0193-mass-casualties-burns-annex.pdf

2 Roles and Responsibilities

Specialised burn services and their employing Hospital Trust will be required to follow the National Concept of Operations for the Management of Mass Casualty – Burns Annex in the event of a mass burns casualty incident. Specific roles and responsibilities are:

2.1 Specialised Burn Services (Centres and Units)

- To hold the names and contact details of Burn Surgeons, Burn Anaesthetists/ Intensivists and Burn Nurses (Band 6 and above) who have volunteered to be part of a BIRT and can be contacted on notification/activation of a burns mass casualty incident (Appendix 1).
- To ensure volunteers understand their role within a BIRT and have familiarised themselves with the BIRT Action Cards (Appendix 2).
- To ensure BIRT volunteers have the required education and training as detailed in section 9.1.
- To ensure BIRT volunteers have undertaken the mandatory training and that a local BIRT Training Record is held and kept updated (Appendix 3).
- To ensure volunteers have registered for a Digital Staff Passport, if your hospital is registered on the https://beta.staffpassports.nhs.uk/ website, to facilitate them working in another hospital.
- To ensure the burn service has a BIRT Support Plan in place to be actioned post BIRT deployment (Appendix 4).
- To ensure the BIRT Support Plan specifies a named person responsible for the BIRT psychosocial support.
- To ensure the BIRT Support Plan specifies who their BIRT Lead is and how this individual will liaise with the BIRT Psychosocial Lead in the event of a major incident.
- To ensure BIRTs are supported to undertake BIRT simulation exercises at least once a year and Operational Debriefings during and post deployment. (Appendix 5).
- To identify the best location for a BIRT rendezvous and collection point should your service be asked to deploy a BIRT.
- To ensure processes are in place for BIRT volunteers to access an organisational and psychosocial debrief following deployment.

2.2 Hospital Trusts

- In the event that BIRT volunteers are required for deployment, the Hospital's Executive Team should provide appropriate authorisation to release the staff from their duties. They should also ensure the burn service is appropriately staffed during the deployment and that the BIRT(s) are authorised for a rest period of at least 24 post return from deployment.
- To ensure the BIRT psychosocial support is provided 'in-house' within the burn service or by the Trust/Health Board staff/employee wellbeing services.
- To ensure BIRT operational debriefings are facilitated, and staff are encouraged to attend BIRT regional and national shared learning events.
- To ensure BIRT volunteers deployed as part of a 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.
- To provide support and advice for BIRT volunteers in registering for a Digital Staff Passport.
- To ensure the local EPRR Officer, where possible, is able to assist the Burn Service in the development of local arrangements to respond to burn incidents regionally or nationally. This will also include ensuring the Burn Service is tied into the internal alerting and information cascades should a major incident involving burns occur.

3 Scope of Burns Incident Response Teams (BIRTs)

3.1 In Scope

Burns Incident Response Teams (BIRTs) are teams of specialised burn care experts (Burn Surgeon, Burn Anaesthetist/Intensivist and Burn Nurse) that can be mobilised from burn services furthest from the location of the mass burns casualty incident to receiving hospitals closest to the incident.

The purpose of the BIRT is to provide the necessary expertise for assessing and defining the most appropriate care for patients with severe burns.

Burns Surgeon
• 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
Burns Anaesthetist/Intensivist
• 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.
Burns Nurse
• 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.

3.2 Out of Scope

- BIRTs will not undertake any medical or surgical interventions
- BIRTs are not retrieval teams.

4 BIRT Objectives

The overall objective of the BIRT is to support non-burns hospital staff in the receiving hospitals in response to a mass burns casualty incident by providing highly specialised expertise in burn care.

Upon arrival at the designated hospitals, the specific objectives of the BIRTs will be to:

- Provide specialist advice to receiving hospital staff. This will include a comprehensive assessment of patient's current situation and initial management
- Log patient details on the BIRT Patient Clinical Assessment Form (**Appendix 6**)
- Based on their clinical assessment, BIRTs will also provide secondary medical triage providing recommendations on:
    - The appropriate level of burn care for that patient (L1, L2, L3 or non-burns)
    - The patient's fitness for transport
    - The patient's priority for international referral for treatment if required.
- Prepare detailed recommendations for the medical retrieval team(s)
- Assess any needs for further assistance with regard to continued local care, medication, equipment and care during transport.

BIRTs DO NOT provide hands on clinical care. Remember I-ADVISE:

I	Introduce yourselves to local clinical team
A	Assess patient
D	Document assessment and decisions
V	Visual or video recording as appropriate
I	Inform the local clinical team of proposed care plan
S	Support and advise local clinical team as required
E	Extricate to next patient

5 BIRT Composition

The BIRT will be composed of three burns experts (see table below), ideally from the same 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 Network who have undergone the BIRT training together.

Function	Number	Profile
Burns Surgeon	1	Consultant
Burns Anaesthetist/Intensivist	1	Consultant
Burns Nurse Specialist	1	Burns Nurse (Band 6)

Each BIRT should nominate a BIRT spokesperson who will be the main point of contact for the National EPRR clinical cell and will participate in teleconferences as required.

For further information on BIRT members' person specifications, see Appendix 4 of the Burns Annex of the Concept of Operations for the management of mass casualties.

6 BIRT Preparedness

All BIRT volunteers should have the relevant education and skills as detailed in Section 9.1 prior to volunteering to join a BIRT. They should also ensure they have undertaken the mandatory BIRT Training detailed in **Appendix 3**.

All team members should know where the BIRT rendezvous and collection point is and ensure they are prepared to be deployed for a period of up to 72 hours, including an overnight bag, an up-to-date passport if being deployed abroad and any medications (NB: if taking travel sickness medication, please be mindful of possible side-effects).

The BIRT should also ensure they have a 'BIRT Grab Bag' pre-packed and ready for deployment. This should include:

- Activation and Deployment slides (laminated)
- BIRT Action Cards (laminated) (**Appendix 2**)
- BIRT Patient Clinical Assessment Forms (**Appendix 6**)
- BIRT Reference notes (laminated) (**Appendix 7**)
- BIRT Clinical Impact Assessment Call - Patient Summary Sheet (**Appendix 8**)
- BIRT Action/Decision Log (**Appendix 9**)
- Clipboard(s), notebook(s) and pens
- Standard PPE (gloves, aprons, face masks, etc)
- Covid-19 lateral flow test kits

7 Timeline and Location

BIRTs will be mobilised by the NHS England and NHS Improvement Clinical Cell as soon as possible, ideally within six hours, after the occurrence or declaration of a burns mass casualty incident and will focus on the secondary assessment and triage (ie, once the patients have been transported from the site of the incident to the hospital that is providing the first care).

The duration of deployment of BIRTs is anticipated to be 72 hours, starting immediately/as soon as possible after the time of the major incident and the occurrence of the burn injuries has been confirmed. The medical retrieval of burn injured patients is best performed in the short window of clinical stability, typically 48-96 hours, before patients risk more severe complications.

It is necessary for deployed BIRT volunteers to have a rest period of at least 24 hours before recommencing any clinical duties on return from deployment.

8 Deliverables and Reporting

The BIRTs will be required to:

- Complete a 'BIRT Patient Clinical Assessment Form' (**Appendix 6**) for each patient with severe burn injuries and ensure Part 1 is sent to the National EPRR Clinical

Cell (as advised), Parts 1 and 2 are filed in patients notes and Parts 1 and 2 go with the patient on transfer to a specialised burn service.

- Prepare a 'BIRT Clinical Assessment Call - Patient Summary Sheet' (**Appendix 8**) specifying the number of patients in need of medical evacuation and level of care. This should be used to brief the Clinical Cell during any teleconferences.
- Provide specialised advice on optimal patient care and corresponding needs in the disaster-affected region, e.g., regarding required level of care, transfer of patients, need for skin bank/allografts, etc.
- Co-ordinate BIRT activities with local and national authorities.
- Contribute to a final debriefing on the deployment of patients with the National EPRR Clinical Cell.
- Record contemporaneous decisions in BIRT Action/Decision Log (**Appendix 9**).

9 BIRT Training Framework

The BIRT Training framework sets out the core capabilities BIRT volunteers will require – the knowledge, skills and behaviours needed for safe and effective practice.

This framework can be used to commission or design education or training, for identifying key skills and knowledge needed, for developing BIRTs and ensuring consistency in training standards and for quality assurance purposes.

9.1 BIRT Education and Experience

BIRT Role	Essential Education & Experience	
	Essential	**Desirable**
Surgeon	• Up to date revalidation and registration with GMC • Consultant Burns Surgeon • 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 • Emergency Management of Severe Burns (EMSB) or Advanced Burns Life Support (ABLS)	• Advanced Trauma Life Support (ATLS®) or Advanced Paediatric Life Support (APLS) • Edward Jenner Programme, NHS Leadership Academy
Anaesthetist/ Intensivist	• Up to date revalidation and registration with GMC • Consultant Anaesthetist or Intensivist with a specialist interest in burns • 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 • Emergency Management of Severe Burns (EMSB) or Advanced Burns Life Support (ABLS)	• Advanced Trauma Life Support (ATLS®) or Advanced Paediatric Life Support (APLS) • Edward Jenner Programme, NHS Leadership Academy

Nurse	• Registered Nurse with NMC • Band 6 or above with minimum of 5 years burns experience • 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 • Emergency Management of Severe Burns (EMSB) or Advanced Burns Life Support (ABLS)	• Advanced Life Support (ALS®) or European Paediatric Advanced Life Support (EPALS) • Edward Jenner Programme, NHS Leadership Academy

9.2 BIRT Training

BIRT volunteers should be supported in their role via a training framework that provides an opportunity for:

- National and regional peer support and learning from each other
- Identification of areas for improvement
- Updates on national mass casualty plans
- Developing consistency in roles nationally
- Understanding human factors and patient safety
- Learning from real events and exercises
- Developing leadership and team working skills
- Developing consistency in training with European B-Team training

A BIRT Training Task and Finish Group has developed a BIRT Learning Catalogue that can be accessed via Health Education England's Learning Hub:

https://learninghub.nhs.uk/Catalogue/BIRTs

Further simulation exercises will be available to consolidate this e-learning

10 General Data Protection Regulations (GDPR)

By volunteering to be part of a BIRT, you will be consenting for your contact details (name, role, organisation, e-mail and mobile phone) to be shared with NHS England and NHS Improvement, the National Burns Bed Bureau (NBBB) and the Burns Networks during a burns mass casualty incident. This information may also be shared with the organisation requesting a BIRT.

The purpose of holding this information is to ensure agencies involved in responding to an incident are able to communicate effectively with members of the BIRT and vice versa.

This information will be stored by the above organisations for a period of 30 years.

If you DO NOT wish to consent to this, please discuss alternative arrangements with your BIRT colleagues.

Appendix 1 - BIRT Contact Details Form

If your Burn Care Service has confirmed they can provide a BIRT via completion of Section C of the NHS Directory of Service (NHS DOS) website (https://www.directoryofservices.nhs.uk) you will be asked to provide the following information to the National Burns Bed Bureau (NBBB) who will collate the national BIRTs capability and provide contact details to the Clinical Cell to enable deployment of BIRTs to the appropriate receiving organisations.

Date of Incident							
Your Organisation							
Burn service name							
Designation	**Centre**		**Unit**		**Facility**		
Ages treated	**Children only**		**Adults only**		**All ages**		
BIRT Spokesperson							

Please provide individual contact details:

BIRT Surgeon(s)			
Name	**E-mail**	**Mobile No.**	**Adults/Paeds/Both**

BIRT Anaesthetist/Intensivist(s)			
Name	**E-mail**	**Mobile No.**	**Adults/Paeds/Both**

BIRT Nurse(s)			
Name	**E-mail**	**Mobile No.**	**Adults/Paeds/Both**

You will be instructed by the Clinical Cell where to email this document to.
Mark Official Sensitive when completed

Appendix 2 - BIRT Action Card

Burns Incident Response Teams (BIRTs) Action Card

The Burns Incident Response Team (BIRT) will consist of a Burns Surgeon, 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
PRIOR TO DEPLOYMENT		
1. Ensure you have a travel bag with enough supplies for a minimum of 72 hours including: 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 comfort items, such as kindle/book, mobile phone, chargers, etc. g. If you have registered for an NHS Digital Passport, take a back-up printed copy h. Your personal preference of PPE	☐	
2. Check you have the following items in your BIRT Grab Bag, and that relevant documentation has been pre-laminated, where indicated, prior to departure: a. Activation and Deployment slides (laminated) b. BIRT Action Cards (laminated) c. BIRT Clinical Assessment Forms, clip board(s) and pens d. BIRT Reference notes (laminated) e. Notebook f. Your personal preference of PPE g. Covid-19 lateral flow test kits	☐	
3. Ensure you have a negative Lateral Flow Test prior to deployment.	☐	
4. Go to the designated BIRT collection point within your hospital and be there awaiting transport ahead of the agreed time with your travel bag and BIRT Grab Bag.	☐	
ON ARRIVAL AT RECEIVING POINT (EPRR)		
5. Attend and listen to EPRR briefing session which will provide further information about the incident, the number of casualties and the hospital(s) you will be deployed to.	☐	

6. Check arrangements for: a. Feeding back casualty information to the National Clinical Cell b. Contacting the EPRR Lead	☐	
7. Agree who will act as spokesperson for your BIRT to liaise with the National EPRR Clinical Cell (National Burns Strategic Clinical Lead) via telephone and email as required.	☐	
8. Agree who will record actions and decisions made during your deployment. Consider taking a nominated Loggist if resources allow.	☐	
ON ARRIVAL IN RECEIVING HOSPITAL		
9. Make yourselves' known to the Lead Clinician and brief them on the BIRT's role and ask them to identify the burn injured casualties that need assessment.	☐	
10. DO NOT let the responsible clinician for each patient leave during your assessment. They should remain to answer any questions about the patient, clarify local capabilities, and remain responsible for continuation of care for the patient as soon as your assessment is complete. Any delay in a BIRT moving to assess the next patient could have significant consequences.	☐	
11. Prioritise patients in terms of severity and requirements for transfer to burn services.	☐	
12. Complete all sections of the BIRT Clinical Assessment form for each patient and send to the National Clinical Cell as instructed.	☐	
13. Provide advice and record actions that need to be undertaken by the local healthcare team to clarify order of importance.	☐	
14. Document reasons for all decisions, both positive and negative, for each patient to ensure medicolegal validity.	☐	
15. Be aware of members of the press and ensure confidentiality is maintained.	☐	
POST DEPLOYMENT		
16. Check you have copies of any documentation that you have completed whilst on deployment (i.e., BIRT Clinical Assessment Forms, Decision Logs, etc). These documents should be treated as any other confidential documents in line with your own Trust's information governance policies. This includes the secure transfer and storage of the documents until you are advised by the EPRR Clinical Cell on further actions.	☐	
17. Follow instructions from EPRR Lead on arrangements to be returned home.	☐	
18. On arrival back home, notify your service management and burns lead consultant that you have returned from the deployment and when you will return to clinical duties (recommend at least 24 hours post return)	☐	
19. Consider a debrief with a member of your staff wellbeing team as soon as possible or your TRiM Strategic Lead/Practitioner	☐	
20. Consider an organisational team debrief.	☐	

Appendix 3 – BIRT Training Record

Name:			
BIRT Role:		**Hospital:**	

Course ID No.	Course Title	Mandatory / Advisable	Date Completed	Frequency of Updates	Date of next update
1A	Concept of Operations for the Management of Mass Casualties (Reading)	Mandatory		As required	
1B	Concept of Operations for the Management of Mass Casualties Burns Annex (Reading)	Mandatory		As required	
1C	BIRTs – An Overview (video)	Mandatory		As required	
1D	BIRTs Simulation of a Clinical Assessment (video)	Mandatory		As required	
1E	An Introduction to Human Factors & Patient Safety	Mandatory		3 yearly	
1F	Communication Skills (CUSS) (video)	Mandatory		3 yearly	
1G	Defensible Decision Making	Mandatory		3 yearly	
1H	Legal Aspects of EPRR	Mandatory		3 yearly	
1I	Emergency Response in the NHS	Mandatory		3 yearly	
1J	JESIP Awareness (website)	Mandatory		3 yearly	
1K	JESIP Pre-brief for Deployed BIRT (video)	Mandatory		3 yearly	
1L	NHS On-call Responsibilities	Mandatory		3 yearly	
1M	Working with your Loggist	Mandatory		3 yearly	
1N	Psychological First Aid (PFA)	Mandatory		3 yearly	
2A	Human Factors Recognition to Enhance Team Working & Safer Patient Care (Reading)	Advisable		As required	
2B	Civility Saves Lives (website)	Advisable		As required	
2C	Team Dynamics	Advisable		As required	
2D	Dealing with Conflict	Advisable		As required	
2E	Coping after a Traumatic Event (website)	Advisable		As required	
2F	Help & Support after a Traumatic Event (website)	Advisable		As required	
2G	Clinical Guidelines for Major Incidents and Mass Casualty Events (Reading)	Advisable		As required	

Appendix 4 - Burn Incident Response Team (BIRT): Wellbeing debriefing and psychological support for staff

Background

The British Burn Association (BBA) standards (2018) section E.02.E specify as 'Essential' for all centres and 'Desirable' for units and facilities that:

'Plans are in place regarding the provision of appropriate psychological support for members of the BIRT and wider burn care team post major incident'.

It is recognised that the practicalities of planning, co-ordinating and providing equitable psychological support to BIRT team members across the UK is complex due to BIRTs potentially being made up of individuals from different burns services, within very large regions, all with different levels of resource.

Recommendations for Burns Centres, Units and Facilities:

The BIRT sub-group of the National Burns Psychosocial Specialist Interest Group (SIG) recommends that each burn service has a BIRT Support Plan in place for staff support to be actioned post BIRT deployment. This should be written in conjunction with psychology colleagues and should reflect local service and Trust/Health board resource/provision.

Each plan will need to take a phased approach specifying how staff will be supported at key time-points (as recommended by NHS England, 2020; see page 2-3) and a commitment made to giving staff time to access the support offered.

The provision of such support could be provided 'in-house' within the burns service or by Trust/Health Board staff/employee wellbeing services if available.

Each service should have a named person responsible for the BIRT psychosocial support plan who should be named in the BIRT Support Plan, and this should be reviewed every two years.

Each BIRT Support Plan should also specify who their BIRT Lead is (e.g., Clinical Director) and will need to identify how this individual will liaise with the BIRT psychosocial lead in the event of a major incident. A communication flowchart is recommended.

Recommendations for the National BIRT Training Task and Finish Group

The National BIRT Training Task and Finish Group should include a psychology representative who can advise on local plans and liaise with the National Burns Psychology SIG. This post should rotate every two years.

Dr Helen Watkins
Consultant Clinical Psychologist
The Welsh Centre for Burns and Plastic Surgery
January 2021

NHS England Clinical Guidelines for Major Incidents and Mass Casualty Events (V2, September 2020)

[B0128-clinical-guidelines-for-use-in-a-major-incident-v2-2020.pdf (england.nhs.uk)]

Psychosocial support for staff after a major incident

'Psychosocial' refers to the emotional, cognitive, social and physical experiences of people in the context of particular social and physical environments.
Mental healthcare refers to delivering biomedical interventions from which people with disorders may benefit.

After a major incident, staff who attended to support as first responders and those who worked to provide subsequent care in hospital settings, are at risk of developing mental health disorders.

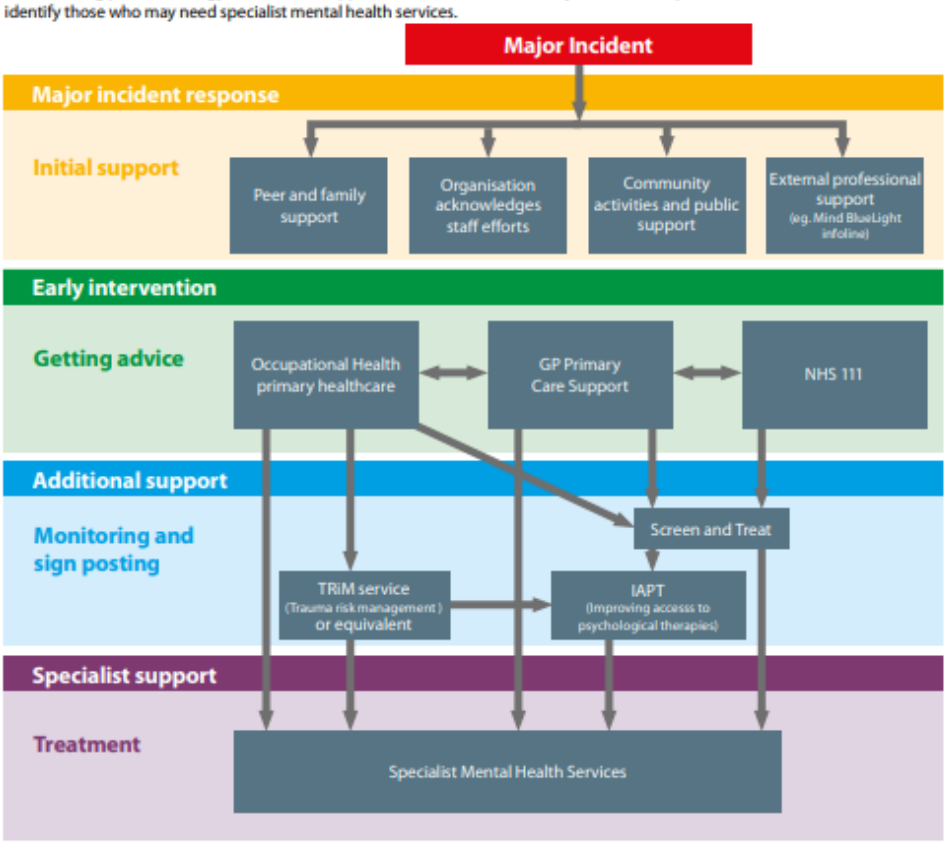
Most people involved in a major incident are likely to suffer short-term effects. In most cases, distress is transient and not associated with dysfunction or indicative of developing mental health disorders. Some people's distress may last longer and be more incapacitating, for example where there are social factors maintaining their distress (e.g. separation from family, loss of home and possessions, social isolation).

A small proportion of people may require access to specialist mental healthcare. However, it is important to access the right help at the right time. Immediately following a traumatic event, personal, brief, single session interventions that focus on the particular event, should not be routine practice and do not need to be organised. Instead, follow Phase 1 advice below.

Depending on the nature of events, around 70% or more of all people who are affected by major incidents are psychosocially resilient, despite their distress. Distress reduces in severity if they receive support they perceive as adequate and intervening early can reduce the risks of people developing disorders later.

The majority of staff who respond cope well and recover after emergencies if social support is available from relatives, friends and colleagues. Employers should support staff by ensuring that they are well briefed, well led and offered effective social and peer support. Recent research shows that events encountered in emergency departments affect the psychosocial wellbeing of staff, and the cumulative effects may be negative and long-lasting.

The following phased strategy is advised to support all those involved in a major incident, to prevent mental disorders and to identify those who may need specialist mental health services.



SO/12 ● Updated: 08/01/2020 ● v2.0

Psychosocial support for staff after a major incident

Phase 1 Initial support

Launched in reaction to the event

- Psychological first aid (PFA) and peer support
- Includes the employer's leadership response to a major incident by communicating key messages of acknowledgement, self-care and support services, internal and external to the organisation
- Access to advice and support as necessary through existing universal services (community, primary care/GP and specialist services)
- Intervene using low level interventions such as peer support leaving biomedical mental healthcare for people who need it

Advice available from:

- **Coping with Stress following a major incident (NHS Guidance)** assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/617321/nhs_trauma_leaflet.pdf
- **Traumatic Stress Guidance (London Ambulance Service)** londonambulance.nhs.uk/stress-management-policy
- **MIND** mind.org.uk/news-campaigns/coping-with-traumatic-events

Phase 2 Getting advice

Weeks two to four

- Psychosocial support
- Aim to manage distress, but an emphasis on maintaining social connectedness and people receiving social support
- Involves listening, advice and support
- With their consent, some staff may be referred to a programme that offers monitoring over a longer period of time and access to screening

Advice available from:

- **Mind Blue Light Programme** mind.org.uk/news-campaigns/campaigns/bluelight
- **NHS 111 (to signpost to an appropriate service)**

Phase 3 Additional support/getting help

From two weeks onwards

Continuing psychosocial support
Monitoring staff at risk via occupational health
This may include referring people to:

- Primary care
- The TRiM service or equivalent (if available)
- Specially created services to identify people who may need continuing support beyond four weeks
- The IAPT service for more intensive psychosocial care

Advice available from:

- **Primary Care/own GP (for referral to IAPT)**
- **Improving access to Psychological Therapy Services (IAPT) for specialist PTSD support** england.nhs.uk/mental-health/adults/iapt
- **Mind Blue Light Programme** mind.org.uk/news-campaigns/campaigns/bluelight

Phase 4 Specialist support/getting more help

When symptoms are still present between four and twelve weeks after an event

People with a history of the following may be at higher risk of developing a mental disorder than the general population:

- Staff injured in the event or during the response
- Exposure to high-severity of trauma
- Close proximity to event
- Dissociative response during the event
- Significant (pre- or post-event) personal trauma, including developmental trauma and previous history of a mental disorder
- Personal or significant family psychiatric history
- Perceived absence of social support network
- Substance misuse
- Traumatic bereavement

⚠ **If people are distressed or have symptoms of a mental disorder after 4 weeks and any of these risk factors are present, an early referral to a specialist mental health service may be advised.**

Advice available from:

- **Primary care/own GP (for referral to IAPT)**
- **Improving access to Psychological Therapy Services (IAPT)** england.nhs.uk/mental-health/adults/iapt

SO/12 ◎ Updated: 08/01/2020 ◎ v2.0

Appendix 5 - Burn Incident Response Team (BIRT) Debriefing I: Operational debriefings

Governance and corporate ownership

Learning should be fully embedded in the BIRT concept, responded to appropriately and be the subject of proper scrutiny to ensure that the structures and processes work as intended.

Information should be recorded contemporaneously while the incident is in progress to enable the BIRT to deliver immediate feedback to incident commanders and post-incident quality assurance to identify best practices. The BIRT should nominate an individual to take responsibility for operational learning during the peri-deployment preparation phase. However, given the small size of the team, this is likely to be a collaborative process in which all members contribute to a comprehensive record of decisions and operational practice captured from each location.

An active reporting culture will generate the raw material for learning from incidents. If actions leading to effective change are taken, additional reporting will be encouraged. If change is not effective and, in the worst case, individuals or teams are blamed for any decisions they made, reporting is likely to inadequate and formal learning from incidents will cease.

Post-incident learning

Post-incident learning should aim to identify and develop areas of good practice. It should also ensure that relevant lessons and opportunities for learning are identified and disseminated to all stakeholders to provide the best possible care for burn injured patients following a mass casualty incident, improve performance, cope with future challenges in operational environments and reduce risk.

The Operational Debriefing process is summarised in **Appendix A**.

Post-incident learning may include:

'Hot' debriefing
The purpose of the 'Hot debrief' is to facilitate feedback around the performance of individuals or teams, as well as the procedures or equipment used. The aim is to facilitate learning and identify any immediate needs or improvements necessary in the operational area. Hot debriefing should occur at the scene whenever the immediate operational involvement has concluded. For example, if the BIRT is moving from one location to another, hot debriefing should occur before leaving the current scene. If the BIRT remains at a location for more than a day, hot debriefing should occur at the end of each day they are there. *See* **Appendix B** *for an aide memoire of good practice points when carrying out hot debriefing*.

Operational ('Warm') debriefing
The purpose of the 'Warm debrief' is to allow those who have attended an incident to provide feedback on the activities that they were involved in and comment on the effectiveness of their operational role from their perspective. This information can be used for subsequent structured debriefing if necessary. In addition, warm debriefing allows organisational learning points to be considered. This is a more formal debriefing process so adequate time and preparation should be allocated to the process. Warm debriefing should occur as soon as is reasonably practicable after the incident, ideally at about two weeks and certainly by four weeks. The warm debriefing can be coordinated by the BIRT for relatively contained incidents but, for more complex deployments, it may be more appropriate to support the BIRT with a debrief facilitator and administrative support to ensure that feedback is collated effectively and in a timely manner. There is no prescribed format for a 'Warm debrief' but it should include a timeline of events, summary of decisions made for each patient, and scrutiny of all learning opportunities.

Formal Review
The purpose of a Formal Review is to bring together all of the personnel involved in a particular incident to discuss or critically analyse specific aspects of the operational deployment. It provides an opportunity to walk through the decisions taken in the context of what was happening at the time and what the consequences of those actions were. A Formal Review should be conducted in an open and transparent manner with its sole aim being to identify what went well and what could have been done better.

Exercises and simulation training
Simulation forms an important part of effective learning and the opportunities to learn from full-scale or tabletop major incident exercises should not be underestimated. Feedback from participants, faculty, and observers from other agencies ensures that operational effectiveness is as robust as it can be prior to any BIRT deployment. A number of evidence-based feedback mechanisms have been validated for simulation training, but the 'Debrief Diamond' will underpin BIRT training. See **Appendix C**.

Learning is not only derived from operational incidents or simulation exercises and training. It can also be derived from National Burn Care Reviews and audits, as well as from secondary sources such as fire investigation reports, periodic reviews of affiliated stakeholder policies and procedures, and national health and safety reports. In addition, shared learning may be derived from international fire disasters and their subsequent investigations. The BIRT Faculty should therefore have an oversight of global learning opportunities.

e-Learning
A web-based learning system may be considered to test, and quality assure the technical knowledge and understanding of BIRTs when new or amended policies or procedures have been introduced. This may be used as a one-off update or as part of an ongoing re-certification process.

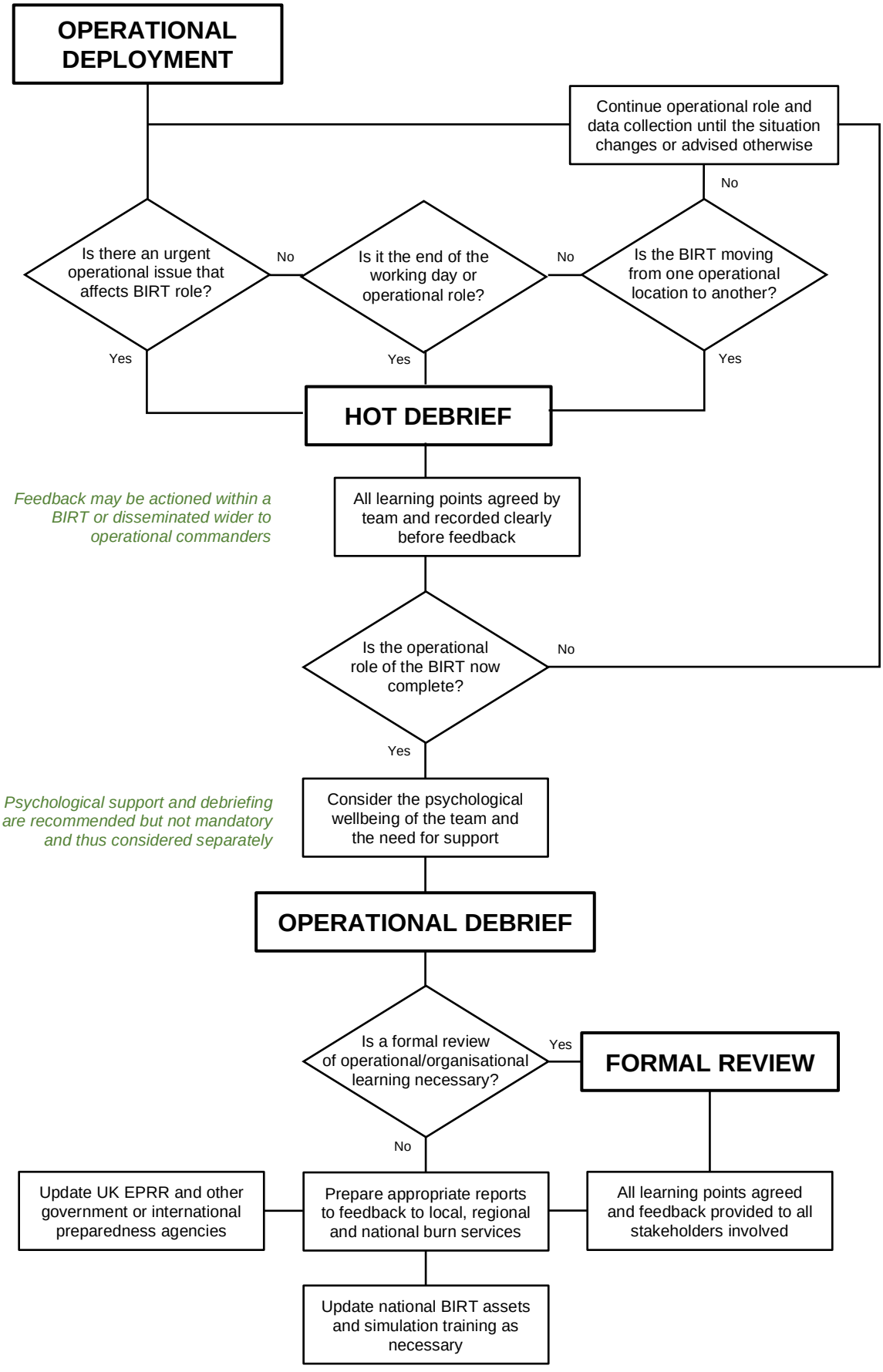
Shared learning

It is important that relevant learning is shared between all stakeholders. Shared learning enables good practice to be identified, which will improve the safety and efficiency of future operational roles. It also enables significant events to be analysed openly so that the events leading up to it can be understood and mitigated wherever possible. And finally, shared learning can identify trends and issues that may not have caused any problems during that operational deployment but that may be a cause for concern in any future incident.

Shared learning requires a common framework, consistent analysis and openness. The principles of root cause analysis are ubiquitous in the NHS and are an appropriate framework for consistent analysis of most learning opportunities. Dissemination of learning points at national burn meetings should be the main effort although preliminary review by a smaller representative group may be appropriate in the first instance. Some information may be considered too sensitive to release and may be considered to have legal implications, particularly if it forms part of a Public Enquiry or ongoing investigation by the Police or Coroners Service. The publication of any shared learning may therefore need to be discussed with legal representatives before wider dissemination occurs.

Mr Niall Martin
Consultant Burns Surgeon
Centre for Trauma Sciences
December 2020

Appendix A: Burn Incident Response Team (BIRT) Debriefing



Appendix B: ‘Hot’ debriefing for the BIRT

Hot debriefing can be undertaken at any point during a deployment (or simulated training event). While it is usually initiated by the BIRT Lead, any member of the team can initiate one if needed.

The ‘Hot’ debrief will typically consider the individuals, team, procedures and equipment or resources.

A suggested checklist for the debrief facilitator is as follows:

Date and time of debrief with individuals present (if not part of the BIRT).	
Is every member of the team fit and well? Are there any injuries?	
Brief synopsis of the incident, information known, discussions and current plan	
Actions and interventions by receiving hospital team	
Actions and interventions advised by local or regional burn service liaison	
Is current treatment and support clear? Any suggestions for improvement?	
Is the role of the BIRT understood in the current operational environment?	
Resource issues?	
Operational training issues?	
Any other issues?	
What could have been done differently to avoid the current issue?	
Is this issue something to address as part of a future simulated training exercise?	
Is a Formal Review of this issue needed? Why?	
Feedback to the BIRT/operational commanders completed? If not, why not?	

Appendix C: The ‘Debrief Diamond’

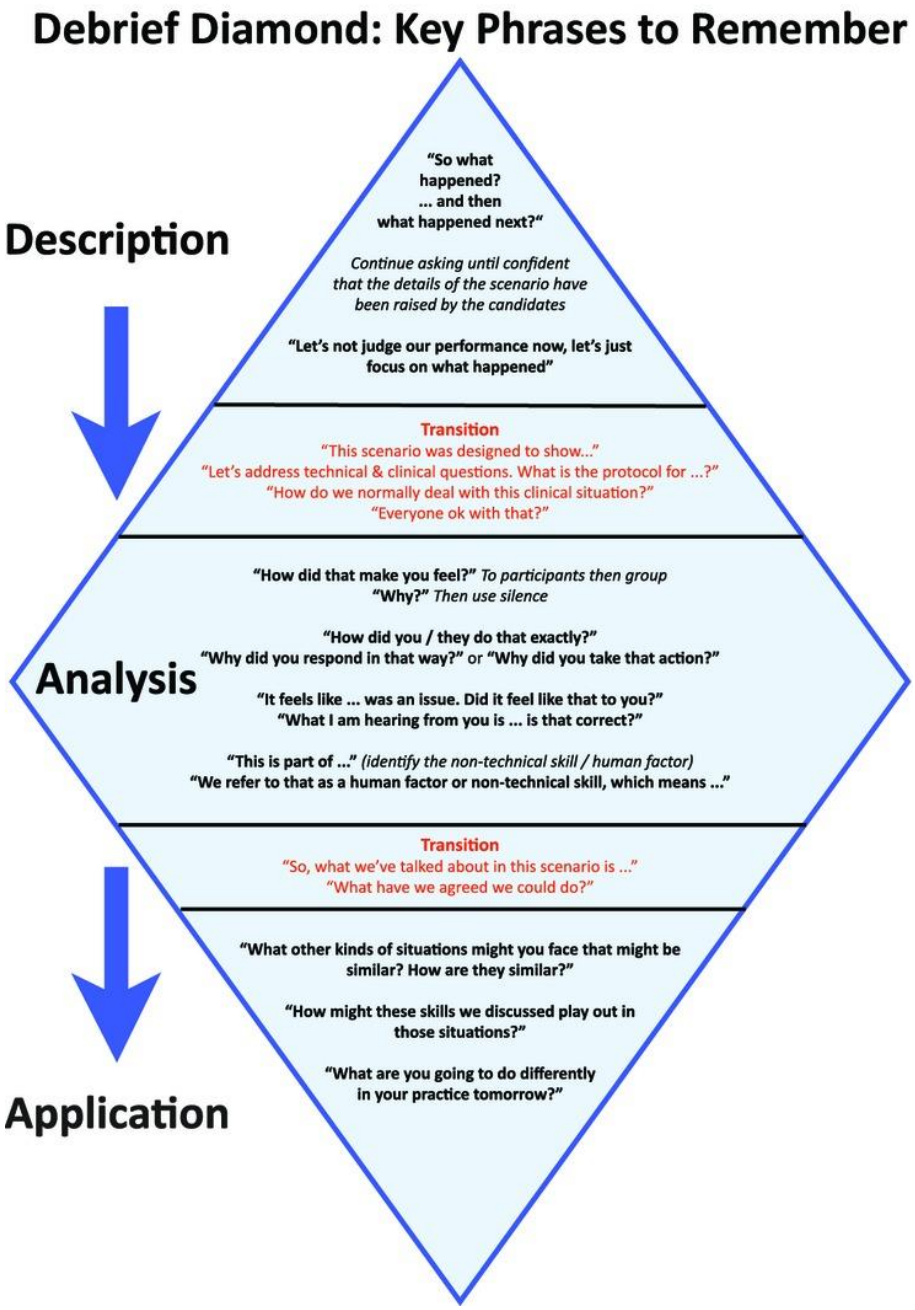


Figure A3.1: The first side of the ‘Debrief Diamond’ contains the scaffold with a series of specifically constructed questions for each phase of the description, analysis and application debriefing.

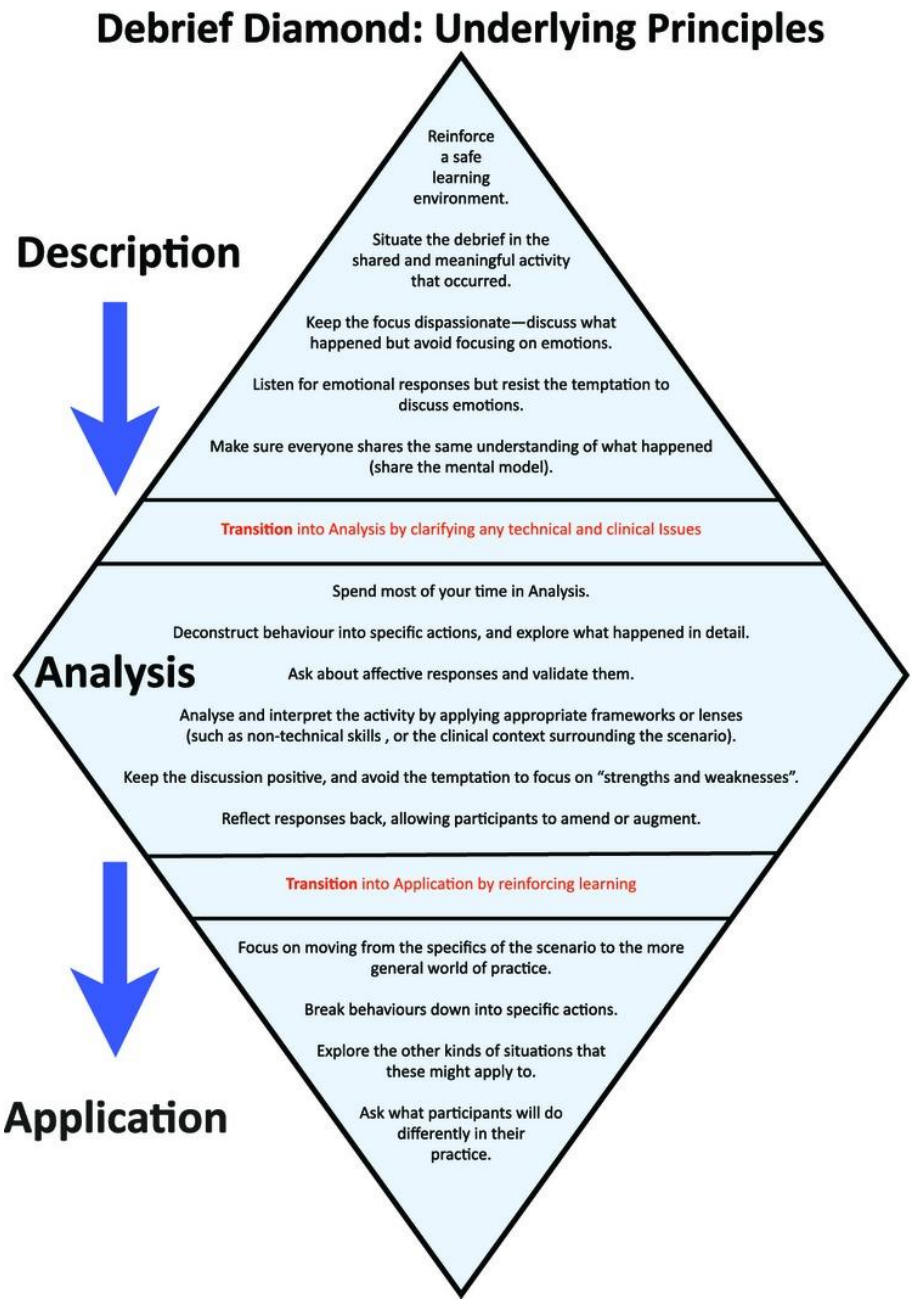
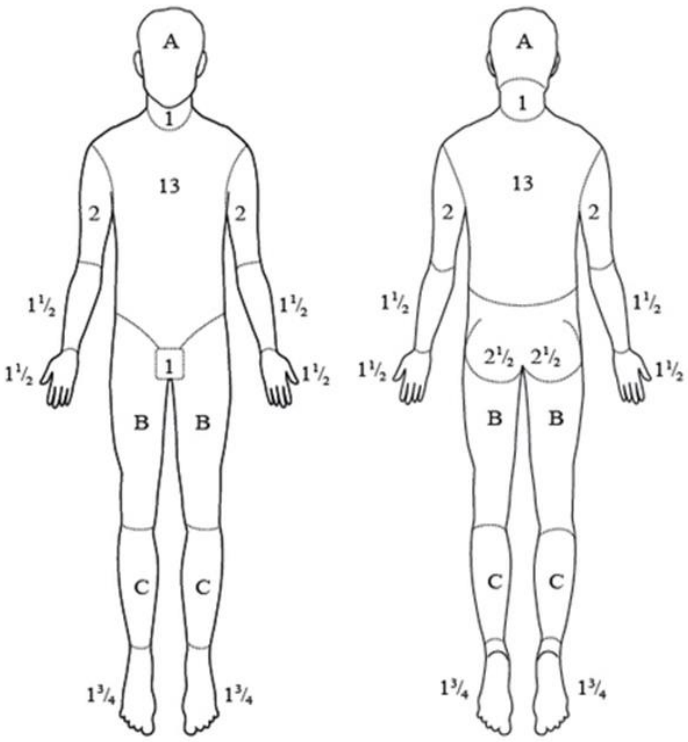


Figure A3.2: The second side of the 'Debrief Diamond' describes the theory behind the questions and the debriefing process. This enables the facilitator to individualise the debrief for individuals or teams in order to provide an optimised learning experience.

Appendix 6 - BIRT Patient Clinical Assessment Form

Patient ID / Addressograph
Name:
DOB:
Address:
Tel No.
Incident ID No.

BIRT Members (name & GMC/NMC No.	
Surgeon	
Anaesthetist/ Intensivist	
Nurse	
Time:	**Date:**



Region	Partial Thickness (%)	Full Thickness (%)
Head		
Neck		
Anterior trunk		
Posterior trunk		
Right arm		
Left arm		
Buttocks		
Genitalia		
Right leg		
Left leg		
Total Burn		
NB: Do not include erythema		

Area Age	0	1	5	10	15	Adult
A = half of head	9 ½	8 ½	6 ½	5 ½	4 ½	3 ½
B = half of one thigh	2 ¾	3 ¼	4	4 ½	4 ½	4 ¾
C = half of one lower leg	2 ½	2 ½	2 ¾	3	3 ¾	3 ½

SUMMARY		LEVEL OF ONGOING CARE		TRANSPORTATION REQUIREMENTS	
Age (estimate if unknown)		**Ongoing Burn Care required**		**Level 1: Does not require transfer, can be managed locally by non-burns specialist**	
		Burns ICU			
		Burns HDU			
		Burns Ward			
% TBSA burned		**Paediatric**		**Level 2: Fit for transfer now, including long distances**	
		Adult			
		General ITU Bed			
		Non-Burns Specialist		**Level 3: Fit for transfer now, short distance only**	
		Associated Trauma			
Inhalation injury?	**Yes / No**	**Head**		**Level 4: Not fit for travel now**	
		Chest			
		Abdo			
BAUX score		**Limbs**		**OTHER FAMILY MEMBERS**	
		C-spine			
ASA grade		**Other**:		Please detail other family members involved in incident if known *(Casualty Incident ID number)*	
Pre-injury frailty					
Signed		*Signed*		*Signed*	
Surgeon		**Anaesthetist/Intensivist**		**Nurse**	

Part 1 – Clinical Cell (as advised) Parts 1 & 2 - Patient's notes Parts 1 & 2 - With patient on transfer

General Information					
Date of incident:	/ /	Time of incident			
Cause of injury:					
Tetanus toxoid up to date?	Y / N	Booster given?	Y / N		
Height		Weight		BMI	

Airway and C-spine	
Risk of c-spine injury	Y / N
Risk of inhalation injury:	
Perioral burns?	Y / N
Sooty sputum?	Y / N
Hoarse voice?	Y / N
Intra-oral swelling?	Y / N
Dyspnoea?	Y / N
Stridor?	Y / N
Wheeze?	Y / N
Soot on bronchoscopy?	Y / N
Intubated?	Y / N / Required
ETT size	Grade of intubation
Uncut tube?	Y / N

Breathing & Ventilation					
RR		SpO_2		FiO_2	
Auscultation					
Ventilator settings					

Most recent ABG:			
Time		Date	/ /
pH		pO_2	
pCO_2		HCO_3	
Lactate		COHb	

Circulation							
Current Obs:							
HR		Rhythm		BP		Cap refill	

IV access:			
Peripheral?	Y / N	Site:	
Central?	Y / N	Site:	
Intra-osseus?	Y / N	Site:	
Arterial line?	Y / N	Site:	
Inotropes?	Y / N	Details:	
Circumferential chest burns?		Y / N	
Circumferential neck burns?		Y / N	
Circumferential limb burns?		Y / N	
Site(s)			
Compartment syndrome?		Y / N	
Site(s)			
Escharotomies needed?		Y / N / Done	
Fasciotomies needed?		Y / N / Done	

Disability		
Pupils equal and reactive?		Y / N
GCS / AVPU		
Corneal damage?		Y / N
Penetrating eye injury?		Y / N
Analgesia given?		Y / N
IV sedation?	Y / N	Give details:

Exposure (additional info)			
Core temp	°C	Peripheral temp	°C
Clothing removed?		Y / N / NA	
Jewellery removed?		Y / N / NA	
False dentition removed?		Y / N / NA	
Contact lenses removed?		Y / N / NA	
Tampon removed?		Y / N / NA	

Fluids and feed	
Current IV fluids (mls/hr)	
Urine output (mls/hr)	
NGT / NJT	
Enteral feeding commenced?	Y / N

Investigations (most recent results):							
Hb		Pts		WCC		HCT	
PT		APTT		Fib			
Na^+		Cl^-		K^+		Ca^{++}	
PO_4^{2-}		Alb		Urea		Creat	
CK							

Radiology results:
Micro results:

PMH (including medication and allergies)

Dressings	
Choice of dressing(s)?	
Date & Time dressing applied?	
Dressing change due:	

Next of Kin details			
Involved in incident?	Y / N	Informed	Y / N
Details:			

GP details	
GP Name:	
Practice:	
Tel No:	

Appendix 7 - Reference Notes for BIRTs

National network for burn care: National burn care referral guidance. NHS specialist services, London 2012. (https://www.britishburnassociation.org/wp-content/uploads/2018/02/National-Burn-Care-Referral-Guidance-2012.pdf) :

Paediatric burns – abbreviated referral guidelines					
Criteria		**Facility**	**Unit**	**Centre**	**Note**
TBSA	Refer	≥2% <5%	≥5%<30% ≥5%<15% age <1	≥30% ≥15% age <1	Neonates should only be admitted to a burn service with onsite NICU
	Consider			≥20% ≥10% age <1	
Depth	Refer	All FTB	≥2%FTB age <10 ≥1% FTB age <6 months	≥20% FTB	
Site	Refer		Any significant burn to special areas		Significant means injuries that require greater expertise to manage
	Consider	Any burn to special areas			
Other Factors	HDU/PICU/ ventilation		Predicted or actual need for HDU or PICU	Ventilation >24hours	Ventilation >24hours should be within a PICU
	Smoke Inhalation				Smoke inhalation injury should be cared for in PICU with burn care on site, irrespective of burn injury
	Unwell child		Deteriorating physiology	Physiologically unstable	Unstable e.g. inotropes, renal support, worsening base deficit, increasing oxygen requirements esp with abnormal CO_2 /RR
Adult burns – abbreviated referral guidelines					
Criteria		**Facility**	**Unit**	**Centre**	**Note**
TBSA	Refer	≥3% <10%	≥10% <40% ≥10% <25% with inhalation injury	≥40% ≥25% with inhalation injury	
	Consider			≥25% and age >65	
Depth	Refer	Any FTB	≥5% <40%		
Site	Refer		Any significant burns to special areas		Significant means injuries that require greater expertise to manage
	Consider	Any burn to special areas			
Other			Any predicted or actual need for HDU/ITU		

1. Non-burn specialist care may be provided by plastic surgery units, emergency departments or general practice
2. Revised BAUX score (BAUXr): Age + TBSA burn + 17 if inhalation injury
3. Frailty Score Guidance:

Frailty Score		Description
1	Very fit	Robust, active, energetic, well-motivated and fit
2	Well	Without active disease but less active than people in category 1
3	Well, with treated co-morbid disease	Disease symptoms are well controlled compared to those in category 4
4	Apparently vulnerable	Complain of being slowed up, disease symptoms, not frankly dependent
5	Mildly frail	Limited dependence on others for activities of daily living
6	Moderately frail	Help is needed with activities of daily living
7	Severely frail	Completely dependent on others or terminally ill

Appendix 8 – BIRT Clinical Impact Assessment Call - Patient Summary Sheet

- This sheet gives early indication to NHS England of transport requirements during teleconference calls
- Precise details of injuries should not be recorded on this summary sheet - Use BIRT Patient Clinical Assessment Form (Appendix 6)

Hospital: …… Completed by: ……

Patient Identifier				Summary Clinical Assessment						Transfer		NHSE Clinical Cell			
Pt Incident ID No.	Pt Initials	Male/ Female	Age	% TBSA	BAUXr Score	Intubated?	Ventilated?	Level of Burn Care (ICU/HDU/Ward/ Non-burns)	Associated Trauma? (Y/N)	BIRT Transport Level (L1/L2/L3/L4)		Burn Centre	Burn Unit	Burn Facility	Receiving Burns Hospital

Appendix 9 - BIRT Action/Decision Log

To be used during the response to an incident if a Loggist is not available to record your actions/decisions.

- **Use a separate Log for each patient ensuring Patient Incident ID number is recorded on each sheet**

Patient Incident ID No: …… Hospital: ……

Entry No.	Date	Time	Information Received	Action / Decision Taken	By Whom