Standards of Physiotherapy and Occupational Therapy Practice in the Management of Burn Injured Adults and Children 2017

Revised by the Burn Therapy Standards Working Group 2017

Endorsed by the BBA Burn Therapists' Interest Group, the British Burn Association and the Four Burn Operational Delivery Networks.

Northern Burn Care Network

London and South East of England Burn Network

Midland Burn Operational Delivery Network

SWUK

Foreword

This document is a revision of the published 'Standards of Physiotherapy and Occupational Therapy Practice in the Management of Burn Injured Adults and Children', 2005 (1), which itself was a development from the original document 'Standards of Physiotherapy and Occupational Therapy Practice for the Management of People following Burn Injury', 2000 (2).

It is imperative this document is used in conjunction with relevant documentation produced by the professional bodies, The Chartered Society of Physiotherapy and The College of Occupational Therapy (3,4,5,6) and also the National Burn Care Standards, 2013 (referred to subsequently as NBCS) (7). Several references are made to these documents throughout these standards. It is noted that all Physiotherapists and Occupational Therapists must adhere, in full, to their professional codes of practice. In addition, relevant guidelines and standards produced by other clinical interest groups should also be considered where appropriate.

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How to use this document

This document is organised into sections relating to different elements of Burn Therapy. This document contains both **standards** of burn therapy and **guidance on specific considerations** for clinical decision making. The **standards** are the expected baseline threshold that should be met for Physiotherapy and Occupational Therapy management. The standards can be used for audit.

Following the standards, each section contains an algorithm, to direct professional clinical decision making. The algorithm and accompanying table of specific considerations are a guide to assessment and treatment. Therefore the **specific considerations suggest how the standards may be achieved**. The specific considerations do not form the standards but should be used at the therapist's discretion, as guidance for clinical reasoning to allow the standards to be met.

Introduction

Approximately 250,000 people experience burn injuries in the UK each year, varying from small burns requiring minimal treatment, to major burns which require intensive and prolonged hospital care (1). A burn injury can affect people of any age and of any background. Recent advances in the management of major burn injuries have resulted in an increase in survival rates. These patients often have more complex rehabilitation needs. However severe the burn injury, it has the potential to have a physical and/or psychosocial impact for which the therapist has a specialist role to play.

Physical, functional, psychosocial and aesthetic rehabilitation must be commenced immediately post burn in order to achieve optimal outcome. The ultimate goal of burn rehabilitation is to assist the individual in their return to pre-injury status. The nature of some burn injuries may make this impossible and in such cases, the focus is on returning the individual to as near their pre-morbid status as possible. For some individuals, in particular those who have sustained major burns or who have complex additional needs, the entire rehabilitation process may last for many years.

It is essential that burn rehabilitation is multi-disciplinary (NBCS Standard A-4), co-ordinated, individualised and holistic. The affected individual will require the services of a team of highly specialised, dedicated healthcare professionals. Staff providing specialised burn services must be members of the burn care team and have burns specific time allocated in their job plan (NBCS Standard B-19). The Physiotherapist or Occupational Therapist will be referred to as the Burn Therapist in this document unless otherwise specified. This is a reflection on the fact that the Physiotherapist and Occupational Therapist roles will often overlap and also vary across different service providers.

The Burn Therapist plays a vital role throughout the recovery from burn injury and the emphasis will change throughout the rehabilitation process. The sections listed will be relevant to the treatment of burn patients in both the initial phase of treatment and following each surgical reconstructive intervention.

Specialised burn care services are provided by designated Burn Centres, Burn Units or Burn Facilities and organised on a regional network structure. Therapists working in burn services should have specific training and experience in the care of people with burns (NBCS Standard B-19). It is vital that therapists have access to education and training (Standard B-16 NBCS) to ensure they meet a required competency framework and are able to provide the best possible care.

Aims of this document

- To assist Physiotherapists and Occupational Therapists working with burn injured patients to meet the requirements of the National Burn Care Standards (7).
- To guide Physiotherapists and Occupational Therapists in the assessment and treatment of burn injured patients.
- To ensure equity of therapy care between service providers.
- To incorporate best practice guidance, using the evidence base where possible and expert consensus where this is lacking.
- To inform service users and carers.
- To facilitate audit and research.

Scope

The guidance set out in this document should be used in conjunction with information from employers and other relevant organisations and professional bodies. These standards and accompanying flow diagrams and information tables are designed to assist in the clinical decision making process. The Burn Therapist is required to use their own clinical reasoning skills and judgment in the delivery of individualised assessment and treatment programs.

Physiotherapists or Occupational Therapists delivering care to burn injured patients at any point in their care pathway, in any setting, can refer to this document in order to inform best practice.

Section 1 Core Professional Standards

It is imperative to highlight that the Burn Therapist is legally and ethically obliged to maintain all of the professional standards laid down by their relevant professional bodies (Chartered Society of Physiotherapy, College of Occupational Therapy, Health and Care Professions Council).

The following core standards are of particular relevance to the Burn Therapist.

Standard 1.1 The burn injured child or adult will be respected and treated as an individual by their Burn Therapist.

-Quality Assurance Standards for Physiotherapy Practice

-Professional Standards for Occupational Therapy Practice Section 2 2

-Code of Ethics and Professional Conduct for Occupational Therapists

Standard 1.2 The Burns Therapist will follow the standards laid down by law and their professional bodies or other relevant professional bodies relating to informed consent. Where an individual lacks capacity to give consent for themselves the appropriate process is in place to allow a best interests decision to be made under the relevant acts of law.

-Quality Assurance Standards for Physiotherapy Practice Section 5

-Professional Standards for Occupational Therapy Practice Section 2 2

-Code of Ethics and Professional Conduct for Occupational Therapists

-Mental Capacity Act

-Safeguarding Children Act

-Local Policies

Standard 1.3 The Burn Therapist is ethically and legally obliged to treat all information relating to the burn patient in the strictest of confidence.

-Quality Assurance Standards for Physiotherapy Practice Section 7

-Professional Standards for Occupational Therapy Practice Section 2, 7

-Code of Ethics and Professional Conduct for Occupational Therapists

Standard 1.4 The Burn Therapist must recognise, understand and fulfil their duty of care.

-Quality Assurance Standards for Physiotherapy Practice

-Professional Standards for Occupational Therapy Practice Section 1.7

-Code of Ethics and Professional Conduct for Occupational Therapists

Standard 1.5 The Burn Therapist must be able to evidence that they are carrying out best practice and following national and local guidelines relevant to burn care. There should be dissemination of current clinical evidence and best practice between Burn Therapists, (NBCS F-1)

The Burn network supports educational programmes that meet the identified learning needs of therapists (NBCS G-9).

Standard 1.6 All documentation must meet the relevant legal and professional standard. The documentation must be accurate and timely. The Therapist must be able to keep accurate, comprehensive and comprehensible records (HCPC Standards of Proficiency 10.1 Occupational Therapy and Physiotherapy). It is recognised that there is variation in the way in which documentation is held: some services have electronic patient records, some have combined multidisciplinary notes others have individual therapy records.

Standard 1.7 The Burn Therapist must comply with local and national safeguarding children, young people and vulnerable adult policies (NBCS E-12). At the point of initial assessment the therapist must be aware of how to escalate any concerns and should be aware of the appropriate investigations.

Section 2 Delivery of Care

These are general standards of practice to support the therapist's delivery of care. They may be pertinent to one or more of the other standard sections.

Standard 2.1 The patient should have a named therapist throughout their care (inpatient and out-patient settings) and access to the therapists contact details. The named therapist will be responsible for co-ordinating the patient's therapy.

Standard 2.2 Working as an integral part of the burns multi-disciplinary team, the therapist assists, co –ordinates and where appropriate leads the planning, implementation and review of the patient's on-going care and management (NBCS A-4 Plan of Care).

Standard 2.3 Treatment modalities, techniques and outcomes are recorded within 24 hours and with sufficient accuracy to enable another therapist to replicate the treatment.

Standard 2.4 The patient, and where possible their family or carers, are educated in all aspects of the therapeutic treatment programme including the purpose and potential benefits of treatment as well as the risks of non-compliance. This must be documented in the patient's notes

Standard 2.5 Accurate assessment is used to create a problem list, a treatment plan and treatment goals which are developed in conjunction with the patient and their family or carers whenever possible. This should be reviewed and updated at regular intervals and shared with the MDT.

Standard 2.6 Where possible and appropriate, written information is given to supplement verbal advice and this is evidenced in the notes. (NBCS A-2)

Standard 2.7 There is written evidence that regular liaison has occurred with relevant MDT members as appropriate to the need of the patient dependant on size and severity of the burn injury. Copies of written referrals and reports are kept in the Patient's notes (NBCS A-4).

Standard 2.8 The Burn Therapist should have access to rehabilitation facilities both on and off the ward (NBCS D-12).

Standard 2.9 The Burn Therapist considers referral to local therapy services for on-going rehabilitation as appropriate.

Standard 2.10 The Burn Therapist should ensure there is a written transfer summary and/or telephone conversation with the receiving therapist on transfer of patient between care services.

Standard 2.11 The Burn Therapist should review the patient with the Consultant Burns Surgeon at pre-operative reconstruction appointments to plan delivery of care post reconstruction.

Standard 2.12 Appropriate outcome measures are used for each aspect of identified need in line with the BBA document Outcome Measures for Adult and Paediatric Services 2nd Edition 2016 (11).

Specific Considerations for Delivery of Care

For the standards to be met, a professional assessment must be carried out by the therapist. The following list is to be used as guidance on factors to consider, as appropriate to the size and severity of the burn injury. All information gathered must be documented clearly and concisely. Where information is not available it can be obtained at a later stage as appropriate.

ADULTS	**CHILDREN**
Patient Information Name NHS and hospital numbers Date of birth Address Contact telephone number GP details Next of kin details	**Patient Information** Name NHS and hospital numbers Date of birth Address Contact telephone number GP details Parent/Guardian details
History of Present Condition Cause of burn injury (Flame, scald, chemical etc.) Location of where incident occurred (home, work, indoors, inside car, outdoors etc.) Nature of the incident (accidental, suspected non accidental, deliberate self-harm, assault) Date and time of burn Date and time of admission to burn service Exposure to smoke or other respiratory irritants Additional Injuries %TBSA, distribution, depth (to include body diagram) Treatment at scene/first aid given Treatment to date and details of surgical interventions Current medication	**History of Present Condition** Cause of burn injury (flame, scald, chemical etc.) Location of where incident occurred (home, work, indoors, inside car, outdoors etc.) Nature of the incident (accidental, suspected non accidental, deliberate self-harm, assault) Date and time of burn Date and time of admission to burn service Exposure to smoke or other respiratory irritants Additional Injuries %TBSA, distribution, depth (to include body diagram) Treatment at scene/first aid given Treatment to date and details of surgical interventions Current medication
Past Medical History Include all Past Medical History Any Psychiatric History Any Learning Disability Cognition pre-admission Level of physical function prior to admission Drug history pre-admission Allergies	**Past Medical History** Include all Past Medical History Any Psychiatric History Any Learning Disability Developmental stage Drug history pre-admission Allergies

Social History	**Social History**
Hand dominance Smoking history Alcohol history Recreational drug history Patients accommodation details: who they live with, type of dwelling Pre-burn level of support from family, friends, carers. Pre-burn level of mobility, use of walking aid Occupation Hobbies Language Religion Previous community input/ other agencies	Hand dominance Patients accommodation detail: who they live with, type of dwelling Pre-burn social situation. Pre -burn developmental stage Schooling Hobbies Language Religion Previous community input/ other agencies Substance abuse, smoking, alcohol

Section 3 Respiratory

Standard 3.1 An assessment of the patient's pre-burn respiratory function is carried out.

Standard 3.2 An assessment of the patient's current respiratory function is carried out, as appropriate to the location and severity of the injury, within 24 hours of the patient's admission. Those with acute deterioration (as identified by senior medical staff) are seen within forty five minutes. The physiotherapist must conduct a respiratory assessment for all patients with:

- Suspected or known inhalation injury
- Artificial airway
- Mechanical or non-invasive ventilation
- Supplementary oxygen requirement
- Pre-existing respiratory problems
- Other respiratory complications as a result of the burn injury.

The respiratory assessment should be carried out as per ACPRC guidelines (2009) and NICE guidelines CG83.

Standard 3.3 Respiratory assessment findings are accurately recorded.

Standard 3.4 The assessment findings are used to form a treatment plan tailored to the individual needs of the patient to regain optimal respiratory function.

Standard 3.5 Where possible, the treatment plan is developed in conjunction with the patient and their family or carers (NBCS A-4).

Standard 3.6 The Burn Therapist implements a treatment plan to improve respiratory function.

Standard 3.7 Treatment modalities, techniques and outcomes are recorded promptly and with sufficient accuracy to enable another therapist to replicate the treatment.

Standard 3.8 The Burn Therapist undertakes re assessment to evaluate the treatment given and adjust the treatment accordingly.

Standard 3.9 Appropriate outcome measures are used to assess treatment efficacy. Outcome measures are used for timely reassessments.

Standard 3.10 Respiratory treatments are carried out by appropriately trained staff who have achieved burns specific competency.

Standard 3.11 The patient, and where possible their family or carers, are educated in all aspects of the therapeutic treatment programme including the purpose and potential benefits of treatment as well as the risks of non-compliance. Care must be taken to tailor this information appropriately according to patient age, state of consciousness and comprehension to optimise their understanding. This must be documented in the patient's notes.

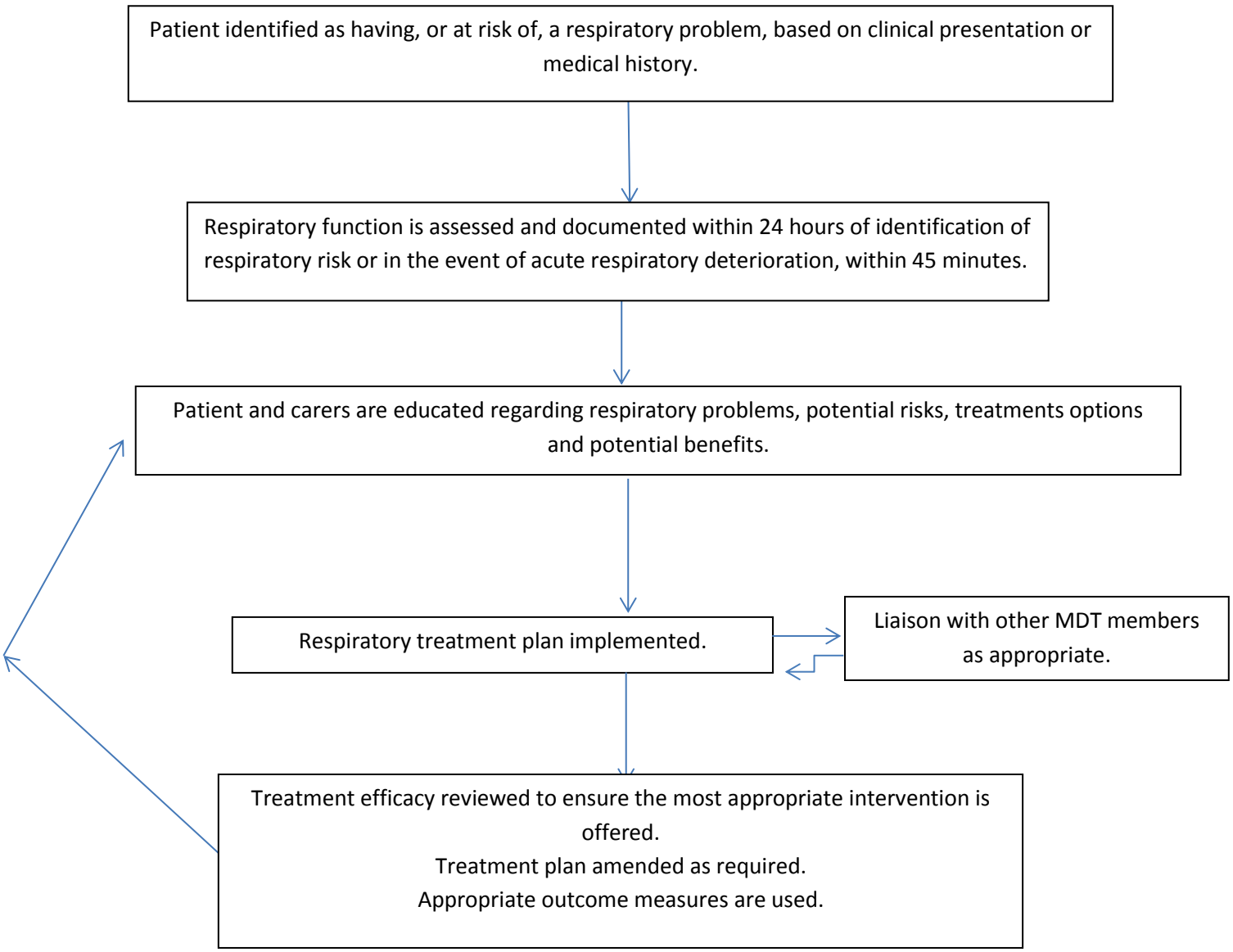
Standard 3.12 Where possible and appropriate, written information is given to supplement verbal advice and this is evidenced in the notes (NBCS A-2).

Section 3 Respiratory

A respiratory assessment is conducted to determine the immediate treatment needs of the patient. It is acknowledged that it may only be relevant for the Occupational Therapist to document summary details such as the ventilator status and conscious level of the patient.

The following respiratory criteria are specific to physiotherapists only.

The following algorithm is to guide the therapist on the appropriate course of action for those patients with respiratory needs.



Specific Considerations for Respiratory

ADULTS	CHILDREN
Considerations / Risk Factors Age Long Term Disabilities / Limitations Past medical history History of burn mechanism/risk of inhalation injury Home oxygen	**Considerations / Risk Factors** Age – Developmental Level Past medical history History of burn mechanism/risk of inhalation injury Home oxygen
Pre Injury considerations/assessment factors Cough Sputum Wheeze Chest pain Shortness of breath	**Pre Injury considerations/assessment factors** Developmental level Mobility (not yet mobile, crawling, walking) Recent coughs/colds
Social History Smoker Occupation Exposure to pollutants	**Social History** Family background Childcare / education Exposure to pollutants
Management Positioning Mobility Chest manual techniques Respiratory adjuncts Education to patients and their family Ventilator support Tracheostomy/airway management	**Management** Play Positioning Mobility Chest manual technique Respiratory adjuncts Education to patients and their family Ventilator support Airway management
Outcome Measures: Sputum clearance Oximetry ABGs ETCO2 Work of breathing	**Outcome Measures:** Sputum clearance Oximetry ABGs ETCO2 Work of breathing

Section 4 Oedema

Standard 4.1 When oedema is present, an assessment of the patient's oedema is carried out as required.

Standard 4.2 Assessment findings are accurately recorded.

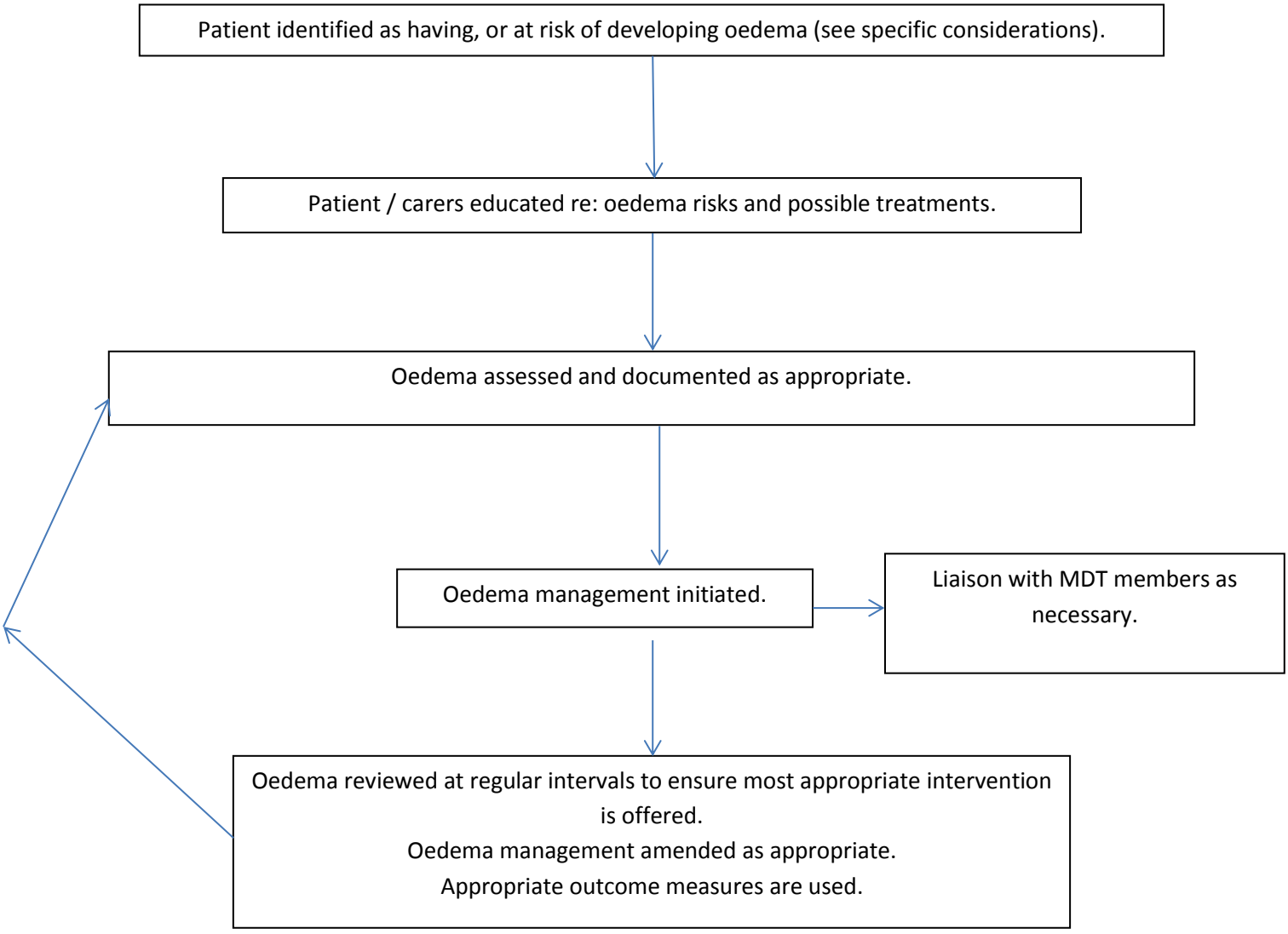
Standard 4.3 The assessment findings are used to form a treatment plan tailored to the individual needs of the patient.

Standard 4.4 Where possible, the treatment plan is developed in conjunction with the patient and their family or carers (NBCS A-4).

Standard 4.5 The Burn Therapist implements a treatment plan to reduce oedema.

Standard 4.6 The Burn Therapist undertakes reassessment to evaluate the treatment given and adjust the treatment accordingly.

The following algorithm is to aid the therapist in identification of the problem of oedema following burn injury and subsequent management.



Specific Considerations for Oedema

ADULTS	CHILDREN
Considerations / Risk Factors: Depth of burn Location of burn Infection Nutrition Pain Skin fragility – friction / shearing PMH Patient Concordance / Compliance	**Considerations / Risk Factors:** Depth of burn Location of burn Infection Nutrition Pain Skin fragility – friction / shearing PMH Patient Concordance / Compliance
Assessment Area affected Circumferential measurements ROM limitation Volume Pain Limb Function Skin condition	**Assessment** Area affected Circumferential measurements ROM limitation Volume Pain Limb function Skin condition
Management Elevation and positioning Exercises Splinting Massage Pressure Therapy – oedema / pressure garments (once healed), Coban, tubigrip Stretches Taping Flowtrons	**Management** Elevation and positioning Exercises Splinting Massage Pressure Therapy – oedema / pressure garments (once healed), Coban, tubigrip Stretches Taping Flowtrons
Outcome Measures: Photography Circumferential measurements Figure of 8 (hand)	**Outcome Measures:** Photography Circumferential measurements Figure of 8 (hand)

Section 5 Pain, Itch and Sensation

Standard 5.1 The patient's pre-injury pain status is documented.

Standard 5.2 An assessment of the patient's current pain, itch and/or sensation is carried out within 72 hours. This may be as part of a wider musculoskeletal assessment.

Standard 5.3 Assessment findings of pain and sensation, including analgesia requirements for therapy, are accurately recorded.

Standard 5.4 The assessment findings are used to form a treatment plan tailored to the individual needs of the patient.

Standard 5.5 The Burn Therapist implements a treatment plan to manage pain and itch and to improve hypersensitivity as appropriate to assessment findings.

Standard 5.6 The Burn Therapist undertakes re-assessment to evaluate the treatment given and adjust the treatment accordingly.

Standard 5.7 Appropriate outcome measures are used.

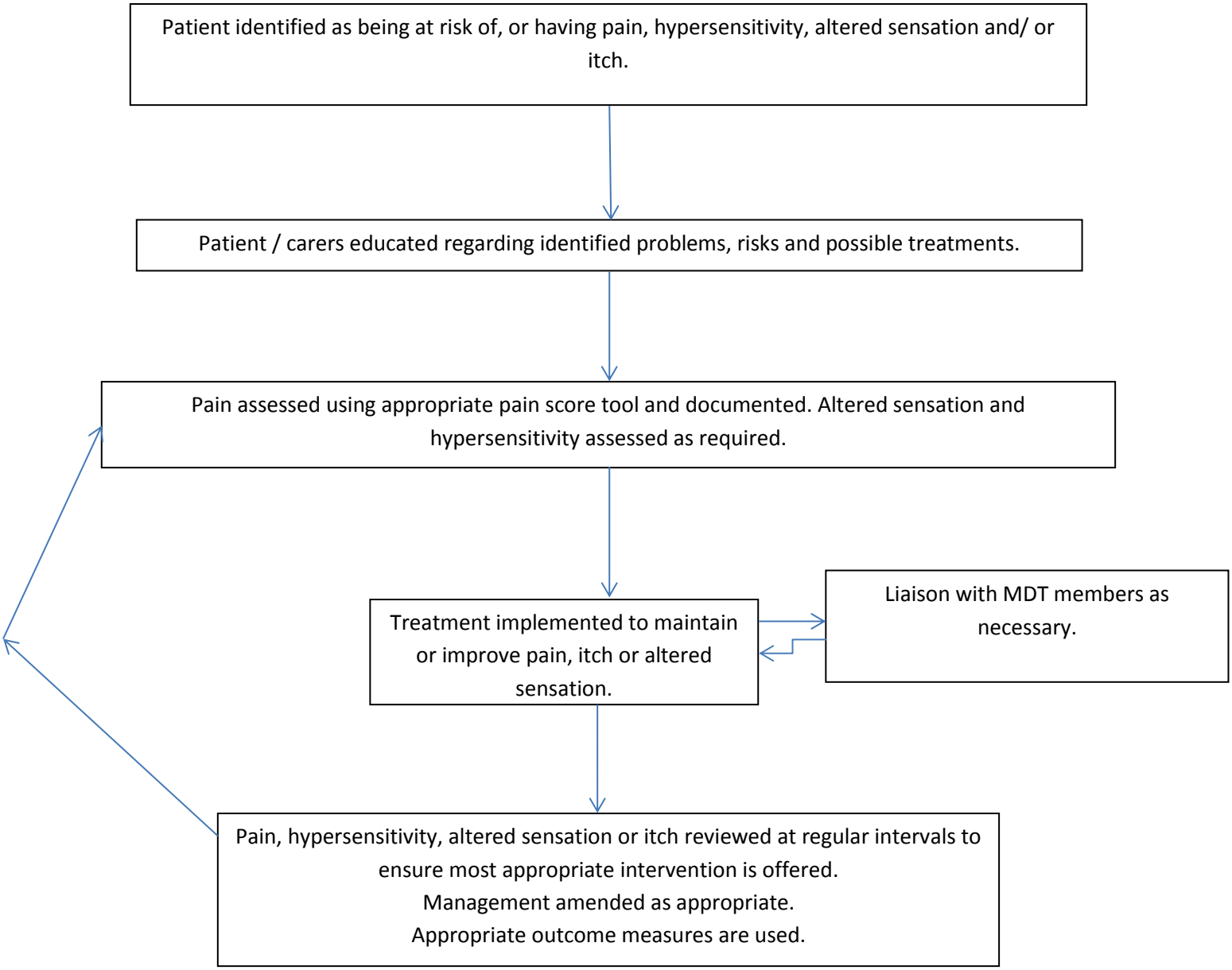
Standard 5.8 The Burn Therapist refers to local pain team as appropriate.

Standard 5.9 Liaison with MDT occurs for the purposes of pain, itch and sensation management.

Section 5 Pain, Itch and Sensation

Most burn injuries will cause pain. Some will cause altered sensation, hypersensitivity and/or itch. Therefore, careful assessment of sensation should be conducted on admission and at subsequent therapy sessions to determine the treatment needs of the patient. This assessment can be completed and documented to determine an appropriate treatment plan.

The following algorithm is to aid the therapist in identification of the problem of pain, hypersensitivity, altered sensation and itch following burn injury and subsequent management.



Specific Considerations for Pain, Itch and Sensation

ADULTS	CHILDREN
Considerations / Risk Factors Location of burn Depth of burn Joint Involvement Facial Involvement Age Long Term Disabilities / Limitations Past medical history Allergies History of burn mechanism Coping mechanisms Social/ family support Associated injuries	**Considerations / Risk Factors** Location of burn Depth of burn Joint Involvement Facial Involvement Age – Developmental Level Past medical history Allergies History of burn mechanism Social/ family support Associated injuries
Pre Injury considerations Pre-injury pain Pre-injury altered sensation History of anxiety	**Pre Injury considerations** Developmental level
Management Pharmacological management Reassurance Distraction Education to patients and their family. Positioning Splinting Mobility Active Exercise Passive Exercise Strengthening Optimisation of Cardio Fitness Exercise program	**Management** Pharmacological management Reassurance Distraction Positioning Splinting Mobility Play Active Exercise Passive Exercise Education to patients and their family. Exercise program
Outcome Measures Patient reported pain scale Monofilaments 2 point test Patient reported itch scale Abbey pain score Visual analogue scale	**Outcome Measures** Paediatric pain scores Pictures/faces pain chart

Section 6 Range of Movement (ROM), Cardiovascular Fitness and Strength

Standard 6.1 The patient's pre-injury status is documented regarding range of movement, cardiovascular fitness and strength as appropriate.

Standard 6.2 An assessment of the patient's current ROM and strength, in the area(s) affected by the injury, is carried out within 72 hours, providing there are no contraindications such as medical instability, skin grafts, fractures or associated injuries. This may be as part of a wider musculoskeletal assessment.

Standard 6.3 Assessment findings of ROM and strength are accurately recorded. Soft tissue restrictions should be recorded for areas at risk of or with contractures. Any restrictions of ROM should include the reason for the restriction. Document any exposed structures i.e. tendon, bone.

Standard 6.4 The assessment findings are used to form a treatment plan tailored to the individual needs of the patient. Indications and contraindications to active exercise are documented.

Standard 6.5 The Burn Therapist implements a treatment plan to maintain and improve ROM and strength.

Standard 6.6 Suitability for active rehabilitation is assessed as early as possible and reassessed frequently.

Standard 6.7 Restrictions following surgical interventions are documented and assessment and / or treatment plans are adapted accordingly.

Standard 6.8 The Burn Therapist undertakes reassessment to evaluate the treatment given and adjust the treatment accordingly.

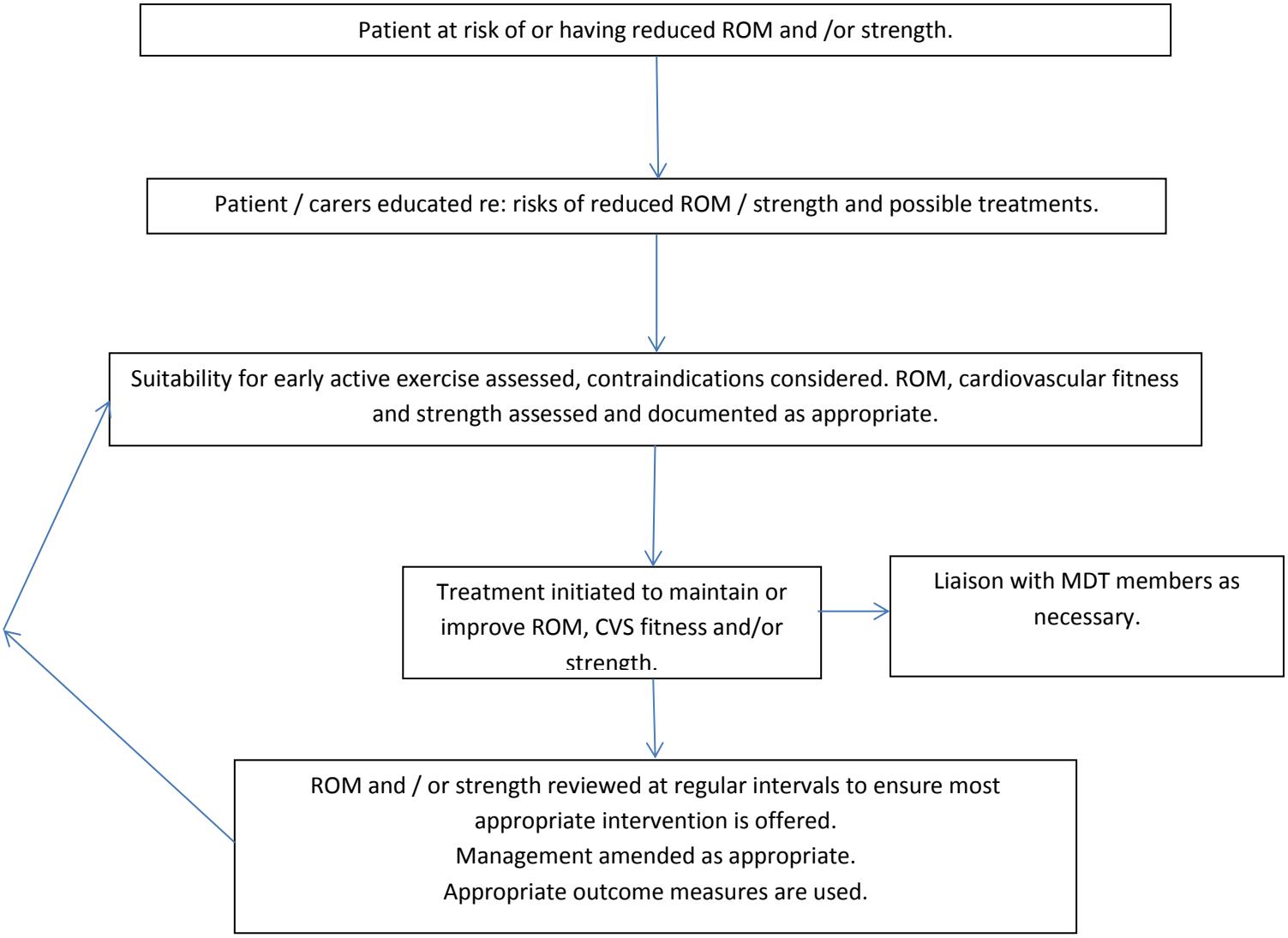
Standard 6.9 Appropriate outcome measures are used.

Standard 6.10 The Burn Therapist considers referral to local therapy services for ongoing rehabilitation as appropriate.

Section 6 Range of Movement (ROM), Cardiovascular Fitness and Strength

Most burn injuries will result in a reduction in range of joint movement or strength. Therefore, assessment of active, active assisted, passive movements and strength assessment should be conducted on admission to determine the immediate treatment needs of the patient. This assessment can be completed and documented by either a Physiotherapist or Occupational therapist to determine an appropriate treatment plan.

The following algorithm is to aid the therapist in identification of the problem of reduced ROM and/or strength following burn injury and subsequent management.



Specific Considerations for Range of Movement, Cardiovascular Fitness and Strength

ADULTS	CHILDREN
Considerations / Risk Factors Joint Involvement Facial Involvement Age Long Term Disabilities / Limitations Past medical history History of burn mechanism Grafting Surgical Management Exposed Structures Critical Illness Polyneuropathy	**Considerations / Risk Factors** Joint Involvement Facial Involvement Age – Developmental Level Long Term Disabilities / Limitations Past medical history History of burn mechanism Grafting Surgical Management Exposed Structures Critical Illness Polyneuropathy
Pre Injury considerations Mobility (aids)	**Pre Injury considerations** Developmental Level Mobility (not yet mobile, crawling, walking)
Management Positioning Splinting Mobility Active Exercise Passive Exercise Strengthening Optimisation of Cardiovascular Fitness Education to patients and their family. Exercise program Resistive exercise Functional exercise Proprioceptive neuromuscular facilitation	**Management** Positioning Splinting Mobility Play Active Exercise Passive Exercise Education to patients and their family. Exercise program Resistive exercise Functional Exercise
Outcome Measures ROM (goniometry) Dynamometry Oxford muscle scale Borg Dyspnoea scale Endurance tests	**Outcome Measures** ROM (goniometry) Dynamometry

Standard 7 Function

Standard 7.1 An assessment of the patient's pre-burn functional ability is carried out.

Standard 7.2 An assessment of the patient's current functional ability is carried out within 72 hours, as appropriate to the location and severity of the injury. Suitability for functional rehabilitation is assessed as early as possible and reassessed frequently.

Standard 7.3 Assessment findings are accurately recorded.

Standard 7.4 The treatment plan is tailored to the individual needs of the patient to regain optimal function.

Standard 7.5 Where possible, the treatment plan is developed in conjunction with the patient and their family or carers (NBCS A-4).

Standard 7.6 The Burn Therapist implements a treatment plan to improve functional ability, aiming to return to previous level of function including work, education, hobbies and social reintegration.

Standard 7.7 Treatment modalities, techniques and outcomes are recorded promptly and with sufficient accuracy to enable another therapist to replicate the treatment.

Standard 7.8 The Burn Therapist undertakes reassessment to evaluate the treatment given and adjust the treatment accordingly.

Standard 7.9 Appropriate outcome measures are used to assess pre-burn and post burn function. Outcome measures are used for timely reassessments.

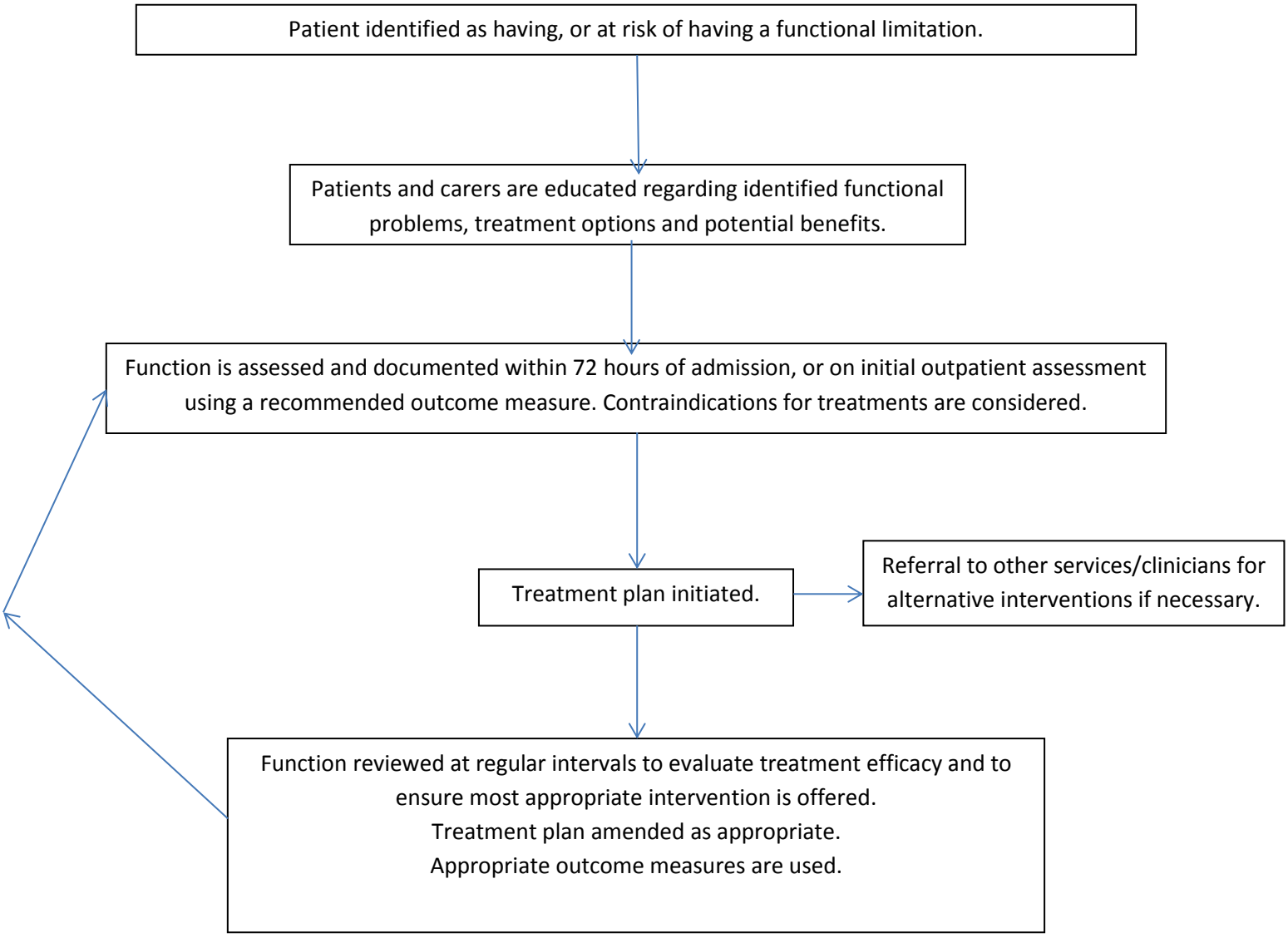
Standard 7.10 The Burn Therapist considers referral to specialist residential rehabilitation outside the acute services, for further functional rehabilitation as appropriate (NBCS D-13).

Standard 7.11 The Burn Therapist considers referral to local therapy services for ongoing functional rehabilitation as appropriate.

Section 7 Function

A burn injury often results in functional impairment which may be the focus of rehabilitation. Accurate assessment is conducted to determine the functional implications of the injury and to identify immediate treatment needs of the patient.

The following diagram is to guide the therapist on the appropriate assessment and intervention.



Specific Considerations for Function

ADULTS	CHILDREN
Considerations / Risk Factors Age Long Term Disabilities / Limitations Past medical history Environment/home Carers / Family Support	**Considerations / Risk Factors** Age – Developmental Level Past medical history Environment/home Carers / Parental / Family Support Likes / Dislikes/preferences
Pre Injury Function considerations Mobility Transfers ADLs Hand dominance	**Pre Injury Function considerations** Developmental level Mobility (not yet mobile, crawling, walking) Hand dominance
Social History Family/support network Dependants Occupation Hobbies	**Social History** School/nursery Siblings Friends and peers Hobbies, sports etc.
Management Transfers / Mobility Practice & Progression Functional Treatments Social / Family Roles Reintegration Work / Study Reintegration Discharge Planning Driving	**Management** Play Functional Treatments Social Reintegration School / Nursery Reintegration Discharge Planning
Treatment Where appropriate therapy sessions should take place in gymnasiums, occupational therapy workshops or activity areas. (NBCS D-12 Rehabilitation facilities)	**Treatment** Where appropriate therapy sessions should take place in gymnasiums, occupational therapy workshops or activity areas. (NBCS D-12 Rehabilitation facilities)
Outcome Measures: CPAX – Chelsea Physical Assessment Scale FAB – Functional Assessment for Burns EQ5D – Quality of Life AusTOMs – Australian Therapy Outcome Measures Timed unsupported stand Get up and go FIM – Functional Independence Measure	**Outcome Measures:** PedsQL CHU9D

Standard 8 Scarring

Standard 8.1 An assessment of the patient's scarring is carried out, as required.

Standard 8.2 Assessment findings are accurately recorded.

Standard 8.3 The assessment findings are used to form a scar management plan tailored to the individual needs of the patient.

Standard 8.4 Where possible, the scar management plan is developed in conjunction with the patient and their family or carers (NBCS A-4).

Standard 8.5 The Burn Therapist implements a scar management plan.

Standard 8.6 The Burn Therapist undertakes reassessment to evaluate the treatment given and adjust the treatment accordingly.

Standard 8.7 Appropriate outcome measures are used.

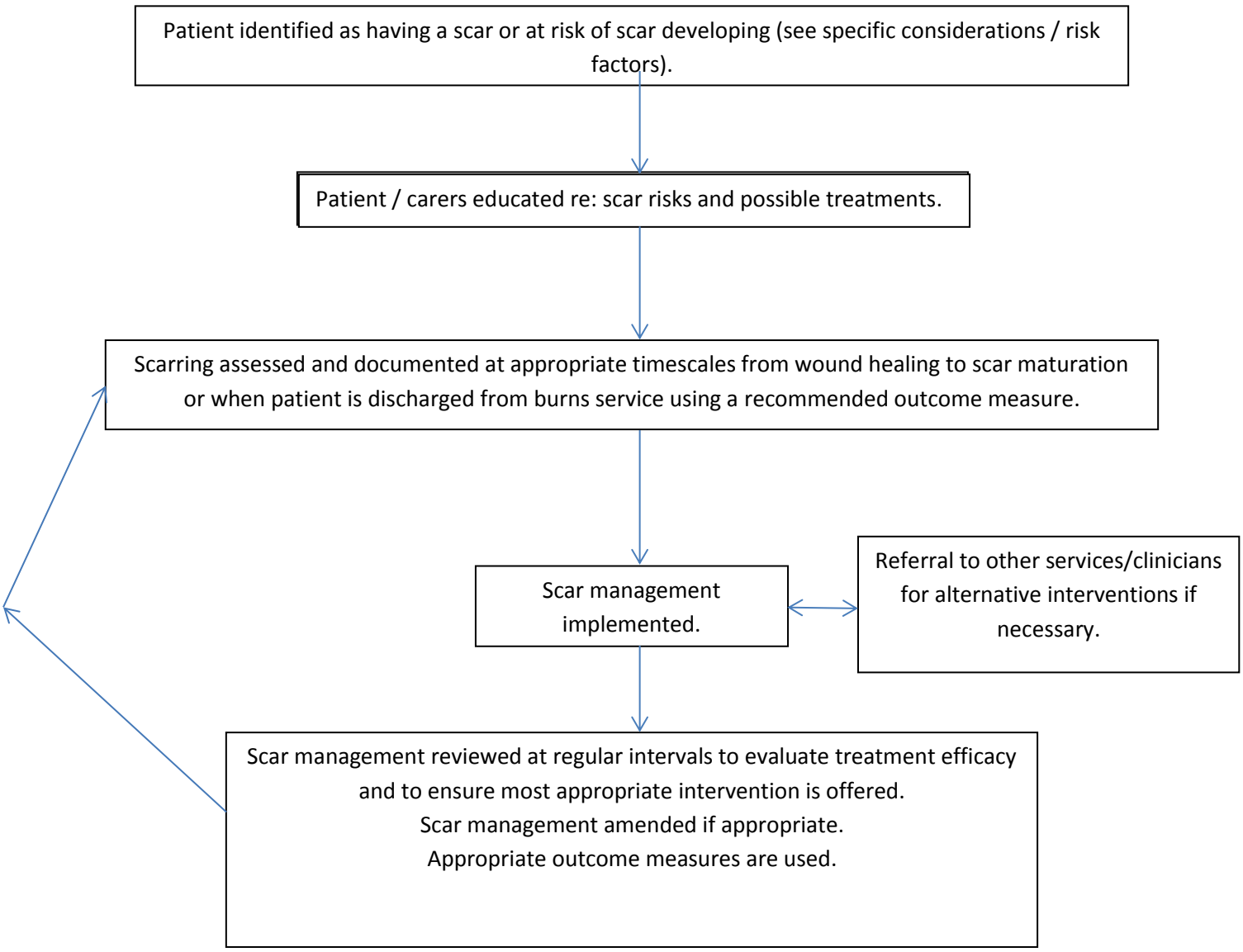
Standard 8.8 Scar management is carried out by appropriately trained staff with burns specific competency.

Standard 8.9 The Burn Therapist refers to the MDT for further treatments (camouflage, laser, steroid etc.) as appropriate.

Section 8 –Scarring

There are many risk factors that can lead to complex scarring following a burn injury. An assessment is conducted that includes looking at these risk factors to determine whether scar intervention is required. Scar assessment and appropriate scar treatments should be introduced early on in the patients care pathway.

The following algorithm is to aid the therapist in identification of the problem of scarring following burn injury and subsequent management.



Specific Considerations for Scarring

ADULTS	CHILDREN
Considerations / Risk Factors Depth of burn Location of burn Time to heal Complications to healing Infection Nutrition Itch / Pain Skin fragility – friction / shearing Skin type Scarring history Age Past medical history Patient Concordance / Compliance	**Considerations / Risk Factors** Stage of growth Depth of burn Location of burn Time to heal Complications to healing Infection Nutrition Itch / Pain Skin fragility – friction / shearing Skin type Scarring history Age Past medical history Patient Concordance / Compliance
Social History Family/support network Dependants Occupation Hobbies	**Social History** School/nursery Siblings Friends and peers Hobbies, sports etc
Management Pressure Therapy – pressure garments, pressure plates/prosthetics Silicone Gels Non-Silicone Gels Scar Massage Splinting Positioning Exercises Stretches Desensitisation Skin Camouflage Steroid Injections Taping Laser Tattooing Derma rolling Micro needling Prosthetic devices Body image – Changing Faces Psychology	**Management** Pressure Therapy – pressure garments, pressure plates/prosthetics Silicone Gels Non-Silicone Gels Scar Massage Splinting Positioning Exercises Stretches Desensitisation Skin Camouflage Steroid Injections Taping Laser Tattooing Derma rolling Micro needling Prosthetic devices Body image – Changing Faces Psychology

Outcome Measures	**Outcome Measures**
POSAS – Patient and Observer Scar Assessment Scale BBSIP – Brisbane Burn Scar Impact Profile (Adults) VSS – Vancouver Scar Scale Modified VSS Photography	VSS – Vancouver Scar Scale Modified VSS Photography BBSIP – Brisbane Burn Scar Impact Profile (Children 8-18 years, Caregivers of children 8 years +, Caregivers of children less than 8 years)

Section 9 Psychosocial Management of Burn Injury

Standard 9.1 An assessment of the patient's pre burn psycho-pathology and social circumstances is conducted during initial assessment.

Standard 9.2 An assessment of the patient's current psychological well-being and social status is carried out at the earliest appropriate point in the patient's recovery.

Standard 9.3 Assessment findings are accurately recorded and shared with the multi-disciplinary team as appropriate.

Standard 9.4 The Burn Therapist refers to psychology or psychiatry services if indicated, following an agreed local pathway.

Standard 9.5 The assessment findings are considered during formulation of the burn therapy rehabilitation plan.

Standard 9.6 The Burn Therapist considers existing or potential psychosocial issues during delivery of the rehabilitation programme.

Standard 9.7 The Burn Therapist undertakes regular re-assessment of the patients' psychosocial status and adjusts the rehabilitation programme accordingly.

Standard 9.8 Any changes to the patient's psychosocial status are accurately recorded, and shared with the multi-disciplinary team as appropriate.

Standard 9.9 Discharge planning is commenced as soon as appropriate to ensure the transition to discharge is optimised.

The psychosocial aspects of burn injury relates to both the psychological effects of the injury as well as the impact of the burn injury on the patient's social environments. As such, psychosocial management is integral to the burn therapy process.

Specific Considerations for Psychosocial

ADULTS	CHILDREN
ADMISSION AND CRITICAL CARE	
Psychological Considerations/ Risk Factors Pre-existing mental health diagnoses Self-inflicted burn injury Assault by burning Acute Stress Disorder Anxiety Sleep pattern Effects of pain	**Psychological Considerations / Risk Factors** Child protection if NAI or neglect Acute stress reactions Sleep pattern Effects of pain
Social Considerations Medico-legal capacity and substitute decision-making Advance care planning and end of life planning Care of the family unit/dependants Income and financial resources Housing and living arrangements Safeguarding issues	**Social Considerations** Advance care planning and end of life planning Care of the family unit Housing and living arrangements Safeguarding issues
ACUTE CARE AND HOSPITAL DISCHARGE	
Social Considerations Grief, loss and bereavement Family support Discharge from the Burns ward Income and financial resources Housing and living arrangements Safeguarding issues	**Social Considerations** Grief, loss and bereavement Family support Discharge from the Burns ward Housing and living arrangements Safeguarding issues
REHABILITATION AND COMMUNITY REINTEGRATION	
Psychological Considerations/ Risk Factors Pre-existing mental health diagnoses Self-inflicted burn injury Assault by burning Post-traumatic stress disorder Body image, self-concept and disfigurement Sexuality	**Psychological Considerations/ Risk Factors** Child protection if NAI or neglect Post-traumatic stress disorder Role of parents in recovery Body image, self-concept and disfigurement Effect of injury on family members
Social Considerations Social roles Return to work Peer support Support agencies	**Social Considerations** Social roles Return to school Peer support Support agencies
Management Work re-integration programme Facilitation of skills to manage social situations, improve communication and social risk-taking. Promote re-engagement of social roles. Support family/ friends in their adaptation to social role changes for both the patient and the family unit.	**Management** School re-integration programme Encourage and promote peer support opportunities throughout the rehabilitation process Provide patient and caregiver with information with existing burn support network information including local burn camps

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Appendix 1 Members of the Burn Therapy Standards Working Group

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Alison	Guy	Occupational Therapist	North Bristol NHS trust
Emily	Huddleston	Physiotherapist	Birmingham Children's Hospital
Rachel	Kettle	Physiotherapist	University Hospital Birmingham
Rebecca	Kirk	Physiotherapist	University Hospital Birmingham
Clare	McGrory	Physiotherapist	University Hospital South Manchester
Kate	Whiting	Occupational Therapist	Birmingham Children's Hospital
Rachel	Wiltshire	Physiotherapist Therapy Lead LSEBN	St Andrews Burns Centre MEHT and LSEBN