

Medical Gases Policy

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Distributed via:	Website / Intranet

**Lincolnshire Community Health Services NHS Trust
Medical Gases Policy**

i) Version Control Sheet

Version	Section/Para/ Appendix	Version/Description of Amendments	Date	Author/Amended by
1	ALL	New document to replace G_CS_24.	June 2017	Tim Balderstone Medical Gases Group
2	LSOP1	Updated contacts for cylinder replacement	January 2020	Tim Balderstone
	LSOP3	Updated to reflect no general anaesthesia.	February 2020	Tim Balderstone
	LSOP4	Deleted		
	LSOP7	Revised with new NHSPS contractor details	February 2020	Dave Sedman
	Guide 1	Spelling corrections		Tim Balderstone
	Guide 2	Additional warning added to 'dial type' flowmeter section		Tim Balderstone/Cheryl Day
	Guide 7	Deleted		
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Lincolnshire Community Health Services NHS Trust

Medical Gases Policy

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Lincolnshire Community Health Services NHS Trust

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ii) Policy Statement

Lincolnshire Community Health Services NHS Trust (the "Trust") is committed to ensuring that there are robust processes for effective medical gas management.

This document has been developed to set out the essential key aspects of the systematic approach required to ensure that the Trust does deliver services that promote the safe use of medical Gases and that ensures that the Trust complies as a minimum with its statutory legal requirements.

This document must be read in conjunction with associated portfolio of core documents as detailed within Appendix A that serve to provide detailed guidance and to ensure that the Trust responsibilities in relation to the management and safe use of medical gases and relevant elements of Health Technical Memorandum 02-01: Medical Gas Pipeline Systems are embedded.

Responsibilities

This document applies to all staff employed (or contracted) by the Trust who are involved in the use, handling and maintenance of medical gas systems, cylinders and associated equipment. All staff are required to ensure that they work within the boundaries set out by this policy

Dissemination

This policy will be available/accessible via the staff intranet.

Links with other policies

This policy should be read in conjunction with other local and national documents to include:

- P_CS_09 Medical Devices Policy
- P_RM_02 Risk management strategy (and other associated local guidance)
- P_GIG_03 Central Alert System (CAS) Policy
- P_IPC_01 Infection Prevention Policy (and other associated local guidance)
- P_HS_02 Corporate health and safety policy
- P_RM_02 Risk Management Policy (and other associated local guidance)

Resource Implications

The resource implications of this policy are primarily related to the safe provision and use of medical gases within the Trust.

Failure to meet regulatory standards could lead to imposition of financial penalties, patient harm and reputational damage.

Staff time to complete training requirement.

iii) NHSLA Monitoring Template

Minimum requirement to be monitored	Process for monitoring	Responsible individual	Frequency of monitoring /audit	Responsible committee (multidisciplinary) for review of results	Responsible individuals / committee for development of action plan	Responsible individuals / committee for monitoring of action plan
Policy is current and available to staff	Policy is reviewed, updated and approved		Min every 3 years	Medical Gases Group	Medical Gases Group	Medical Gases Group
Standards of safety in medical gases used are attained	Oxygen use Audit	Service Leads	Quarterly	Medical Gases Group	Service Leads	Safeguarding & Patient Safety Committee
Annual report	Report is generated by the Medical Gases Group	Head of Medical Devices and Technology	Annually	Health & Safety Committee	Medical Director	Medical Director

iv) Equality Analysis

A.	Briefly give an outline of the key objectives of the policy; what it's intended outcome is and who the intended beneficiaries are expected to be	This document sets out the key requirements for the safe management of medical Gases. Ensures that risks associated with their use is effectively managed.		
B.	Does the policy have an impact on patients, carers or staff, or the wider community that we have links with? Please give details	Not directly – but serves to ensure/support a robust governance framework for patient safety.		
C.	Is there is any evidence that the policy\service relates to an area with known inequalities? Please give details	No		
D.	Will/Does the implementation of the policy\service result in different impacts for protected characteristics?	No		
		Yes	No	
	Disability		X	Applies to all persons equally
	Sexual Orientation		X	Applies to all persons equally
	Sex		X	Applies to sexes equally
	Gender Reassignment		X	Applies to all persons equally
	Race		X	Applies to all persons equally
	Marriage/Civil Partnership		X	Applies to all persons equally
	Maternity/Pregnancy		X	Applies to all persons equally
	Age		X	Applies to all persons equally
	Religion or Belief		X	Applies to all persons equally
	Carers		X	Provides advice on how to reduce /identify risks
	If you have answered 'Yes' to any of the questions then you are required to carry out a full Equality Analysis which should be approved by the Equality and Human Rights Lead – please go to section 2			
The above named policy has been considered and does not require a full equality analysis				
Equality Analysis Carried out by:		Tim Balderstone		
Date:		27 th February 2020		

Medical Gases Policy

1. Medical Gases

The term *medical gas* covers a wide range of products used for diagnostic and treatment processes in primary and secondary care settings.

2. Medical Gas management... key principles

The management of medical Gases is an important pre-requisite of a safe clinical service. Effective management requires a process that is agreed across all areas that contribute to the assurance and safe operation processes and requires organisational sign up to the core management principles to include Clinical Service Managers, and all staff using medical Gases together with NHSPS as manager/landlord of premises where medical Gases are supplied.

3. Aim and purpose of this document

This document sets out to establish a governance framework for the management of *medical devices* used by staff working for and on behalf of Lincolnshire Community Health Services NHS Trust ("the Trust").

It must be read in conjunction with associated portfolio of core documents detailed in Appendix A that serve to ensure that the individual service and premises location responsibilities in relation to the supply, management and use of medical Gases are understood and embedded.

The overarching aims of the policy and associated documents is to ensure that whenever a Medical Gas is used it is managed in concordance with MHRA and manufacturers requirements and

- that the gas and any associated medical device is suitable and used only for its intended purpose
- that its operation and purpose and risks associated with its use, are properly understood by the User, who has undertaken appropriate training and deemed competent.
- That any supply is maintained in a safe and reliable condition
- That the procedures to be adopted in the event of an adverse or potentially adverse incident involving the *medical gas* are understood.

This Policy and Procedure **does not** specifically cover patient connected administration equipment, medical devices, associated with use of medical gases. This aspect is covered by the [P_CS_09 Medical Devices Policy](#).

4. Key Responsibilities

4.1 Chief Executive

The Chief Executive has the overall accountability for the management of *Medical Gases*.

4.2 Medical Director

The Medical Director is the Trusts nominated Executive Director accountable for the management of

Medical Gases. The Medical Director is the chair of the Medical Devices Group.

4.3 Head of Estates and Facilities Management

The Head of Estates and Facilities Management has the delegated responsibility for the management of the processes of medical Gases provision within LCHS. This includes the arrangements with NHSPS regarding their assurances the following titled roles are held by persons trained and competent in their duties.

NHSPS Head of Estates and Facilities
NHSPS Authorised Engineer (MGPS)
NHSPS Authorised Person (MGPS)
NHSPS Competent Person (CP)
NHSPS Designated Porter (MGPS)
NHSPS Quality Controller (QC(MGPS))

Additional information regarding the operating processes for the MGPS can be found in **LSOP 7 MGPS**

4.4 Head of Medical Devices and Technology

The key purpose of this role is to promote learning and safe use of *medical devices* across the organisation and provide the expert clinical resource. This role also encompasses that of Medical Devices Safety Officer.

4.5 Risk Managers

The Risk Managers are the nominated MHRA/CAS liaison officers and are responsible for the dissemination and co-ordination of and for maintaining the local inventory for MHRA/CAS alerts and local action responses. The risk managers will provide CAS status update reports to the Medical Devices Committee detailing alerts received, alerts relevant to the Trust, alerts sent out and responses

4.6 Heads of Service (or their nominated representatives)

Heads of Services are responsible for ensuring that

- In areas where medical Gases are supplied via Medical Gas Pipeline Systems (MGPS) there are Designated Medical or Nursing Leads identified and trained appropriately.
- Training needs of staff are identified, learning needs met and recorded in staff personnel files and training records (e.g. local records, TNA, ESR)
- Instructions for *medical gas* use are available at point of use of that gas
- Appropriate clinical policies and risk assessments, to support the use of medical Gases, are in place within each ward/ department area
- All *medical Gases* are appropriately properly stored.
- They actively participate in the dissemination and any relevant action of *appropriate* alerts published by the MHRA and in reporting adverse or potentially adverse incidents.

4.7 Medical Gas users

A member of staff using the *medical gas* is known as the user.

The user is ultimately responsible for ensuring that

- they decline to use or operate any medical gas system which they have not been adequately

- trained to use and/ or do not feel competent and confident to operate.
- the device is safe to use and that any deficits are reported promptly and where appropriate the *medical device* is taken out of use and quarantined until service/repair or replacement has been completed.
- all staff have a responsibility with regard to adverse incident reporting and should follow the Incident Reporting Policy in respect of *medical Gases and associated devices*.

Under Health and Safety regulations staff must also take reasonable care for their own health and safety and also of other people who may be affected by their acts or omissions. It is the responsibility of each individual member of staff to ensure that they are conversant with the content of this policy and are appropriately trained and competent to use the medical gas devices which they are required to use as part of their duties. They should report any problem relating to use, maintenance, servicing or decontamination as contained in this policy to their line manager.

5. Governance arrangements

5.1 Trust Board

The Trust Board will receive and consider the annual report and agree content. The Board will ensure that adequate resources are available to facilitate the effective management of medical Gases.

5.2 Risk and Quality Committee

The Quality and Risk Committee will oversee all risks within the organisation and will incorporate any issues relating to the management of medical Gases in the annual report to the board.

5.3 Medical Gases Group

The Medical Gases Group (MGG) will report to the Health & Safety Committee .

The Medical Gases Group should meet as required by circumstance.

The terms of reference may be located at [Appendix D](#).

The Medical Gases Group will advise and prompt;-

- Review and update of the medical Gases policy
- Identification, development promotion of activities that serve to minimise risks associated with the provision and use of medical Gases within the Trust.

5.4 Local Quality Assurance Groups

Will provide a forum for any requirements of this Group to be discussed and disseminated and agree service specific Local Standard Operating Procedures (LSOP's)

6. Training

Training for *medical Gases* will be available via several mechanisms

- staff Induction
- device specific training from the device manufacturers
- device specific training local lead clinicians/educators
- Workforce and Transformation team will support organisational training needs.

See **Medical Gas Guide 5: Training** for details.

7. Policy Monitoring

Elements of this policy will be monitored by a number of established groups within the Trust such as;

- Medical Devices Committee
- Quality and Risk Committee
- Procurement Sub-Group
- Infection Prevention Committee
- Training and Development

Any deficiencies identified will be actioned and changes implemented accordingly.

Required action plans will be monitored by the Heads of Service and reported via the local Quality & Risk meeting process.

7. Dissemination

This policy will be distributed via the Trust intranet.

8. Policy review

This policy will be reviewed every 3 years.

Appendix A: Medical Gases document portfolio: Key associated documents

This policy sets out to establish a governance framework for the management of *medical Gases* used by staff working for and on behalf of Lincolnshire Community Health Services NHS Trust ("the Trust").

It should be read in conjunction with the associated portfolio of documents:

Local Standard Operating Procedures (LSOP's) provide service specific information for supply and use of medical gases. Medical Gases Guides provide information on prescription issues, equipment and delivery techniques, and the elements of provision of home oxygen.

These can all be found within the Medical Gases page of the staff Trust Intranet

Medical Gases LSOP 1: Community Hospital Ward Areas

Medical Gases LSOP 2: Urgent Care Settings

Medical Gases LSOP 3: John Coupland Theatres

Medical Gases LSOP 5: Sexual Health Services

Medical Gases LSOP 6: Urgent Care O2N2O

Medical Gases LSOP 7: Medical Gas Pipeline Systems (MPGS)

Medical Gases Guide 1: Prescription Issues

Medical Gases Guide 2: Delivery Equipment

Medical Gases Guide 3: Oxygen Administration

Medical Gases Guide 4: Oxygen Cylinders

Medical Gases Guide 5: Training Requirements

Medical Gases Guide 6: G_CS_074 -

[G_CS_74 Assessment and Review of Patients on Home Oxygen SOP.pdf](#)

Appendix B: Associated Document Revision Table

Document	Topic	Version Number	Approval Date	Revision Date
LSOP 1	Community Hospital Ward Areas	2.1	Feb 2020	Feb 2023
LSOP 2	Urgent Care Settings	2.1	Feb 2020	Feb 2023
LSOP 3	John Coupland Theatres	2.1	Feb 2020	Feb 2023
LSOP 5	Sexual Health Services	2.1	Feb 2020	Feb 2023
LSOP 6	Urgent Care O ₂ N ₂ O	2.1	Feb 2020	Feb 2023
LSOP 7	Medical Gas Pipeline Systems (MPGS)	2.3	Feb 2020	Feb 2023
Guide 1	Prescription Issues	2.1	Feb 2020	Feb 2023
Guide 2	Delivery Equipment	2.1	Feb 2020	Feb 2023
Guide 3	Oxygen Administration	2.1	Feb 2020	Feb 2023
Guide 4	Oxygen Cylinders	2.1	Feb 2020	Feb 2023
Guide 5	Training Requirements	2.1	Feb 2020	Feb 2023
Guide 6	G_CS_074	1	September 2019	September 2021

Appendix C: Useful definitions

MGPS	Medical Gas Pipeline Systems
MDA	Medical device alerts
NHSPS	NHS Property Services
Adverse incident	An event which gives rise to, or has the potential to produce, unexpected or unwanted effects involving the safety of patients, users or other persons.
CAS	Central Alerting System
MDSO	Medical Device Safety Officer
MHRA	Medicines and Healthcare Products Regulatory Agency
PPC	Pre-purchase checklist

Appendix D: Types of Medical Gases

This list is not exhaustive but provides examples of medical Gases and their purpose.

Medical Oxygen - Sustains life and is used in emergency, operating and resuscitation rooms and to provide respiratory assistance

Medical Nitrous Oxide - Is primarily used as an inhalant anaesthetic and analgesic agent in combination with Oxygen or anaesthetic agents

Medical Carbon Dioxide - Is used in operating theatres for insufflation, in dermatology, blood analyses and can be used with Medical Air or other mixtures to test respiratory functions and as dry ice for sample transport

Medical Helium - Is used for medical imaging and when mixed with Oxygen assists with severe respiratory obstruction, used as a carrier gas in analytical applications and in hyperbaric decompression chambers

Medical Air - Is used to provide respiratory assistance, drive gas for suction venturis and surgical tools and for cleaning

50% Oxygen / 50% Nitrous Oxide (Entonox/Equanox) - Also known as gas and air, is mainly used as short term pain relief

Liquid Nitrogen – Used for pathological examination of specimens by Sexual Health.

Appendix E: TOR Medical Gases Group

MEDICAL GASES GROUP

TERMS OF REFERENCE

PURPOSE OF THE GROUP

To identify, develop, propose and promote activities that serve to minimise risks associated with the provision and use of Medical Gases within Lincolnshire Community Health Services NHS Trust in collaboration where appropriate with NHS Property Services as managers of Medical Gas Pipeline Services infrastructure.

ACCOUNTABILITY

The Medical Gases Group (MGG) will report to the Trust Health & Safety Committee

RESPONSIBILITIES

1. To develop, distribute and review the Medical Gases Policy.
2. To advise on the development of and receive Standard Operating Procedures for operational use of medical Gases for the Policy document portfolio.
3. To produce an annual report on the efficacy of the Medical Gases assurance and compliance processes for submission to the Health & Safety Committee.
4. To advise on risk management considerations in relation to medical gases.
5. To advise on the selection and evaluation of equipment for use with medical gases.
6. To develop a Medical Gas Training Matrix and advise on medical gas training issues
7. To advise on appointment of Designated Medical/Nursing Officers and receive and maintain records of training compliance.
8. To receive compliance and assurance documentation from NHSPS regarding safe management of MGPS installations.
9. To receive details of the NHSPS appointed persons in relation to the MGPS.
10. To ensure compliance with Care Quality Commission Outcome 11 – Safety, availability and suitability of equipment.
11. To consider and monitor all Central Alerts System alerts (CAS) and incident reports relating to Medical Gases.
12. To establish, monitor and receive reports from specialist sub groups as and when required.
13. To advise on development of Action Plans required following identification and review of risks.

14. To monitor and receive reports on progress of all identified Actions Plans.
15. Compliance with ToRs is monitored on an annual basis by this Group who will identify any deficiencies and nominate a responsible member to produce and monitor implementation of an Action Plan to ensure future compliance.
16. Progress on all Action Plans should be reported to this Group on a schedule determined by the Group. Reports by be submitted 'virtually' to members nominated by the Group.

CONSTITUTION

Permanent Members

Chair (nominated from membership)

Deputy Chair (nominated from membership)

Head of Medical Devices and Technology/Medical Device Safety Officer

Clinical Risk Manager

Health & Safety Adviser

Senior Clinical Service Representatives (to be agreed by the services)

Resuscitation Lead

Medicines Management Officer

To attend as required representatives

Pharmacist

NHSPS Representative

Should the main representative not be able to attend, a designated deputy/representative is to attend. Nominated alternative attendees must have delegated authority to make decisions on behalf of the named attendee.

Additional members, subject matter experts, may be co-opted as required with the agreement of the Chair to provide guidance and advice on specific matters as the Group may determine.

QUORUM

The quorum is Chair or Deputy Chair, and two other members

FREQUENCY OF MEETINGS

To meet as required by circumstance. A meeting may be convened by any committee member.

SECRETARIAL SUPPORT

Secretarial support to be provided by LCHS Beech House