

BOC Compliance Audit and Risk Assessment

Manage Your Risks with Our Comprehensive Compliance Audit and Risk Assessment Service



Compliance Audit and Risk Assessment (CARA)

The successful management of medical gas systems in hospitals plays a vital role in maintaining patient safety. In order to assess the level of risk, it is essential that a comprehensive compliance audit is carried out to allow the risks to be identified and quantified.

HTM 02-01 requires the Authorised Person (MGPS) to have a demonstrable awareness of the state of plant, equipment and MGPS in general, and to have a management process in place:

HTM 02-01 Part B, Section 5

5.2 It is recommended that an operational policy should be prepared. This should be based on a fully documented compliance survey in which the MGPS is examined in the light of current requirements, particularly those of this Health Technical Memorandum.

HTM 02-01 Part B: AP Learning Outcomes, Section 7.36 7.36 The ability to:

- a. Ensure that the guidance in this Health Technical Memorandum is implemented by all staff working on or with the MGPS
- b. Prepare or commission a compliance survey of the MGPS, and associated risk assessment and proposals for any consequent remedial actions
- c. Ensure current quality assurance registration of MGPS contractors
- d. Ensure contractors provide appropriate method statements, risk assessments and health and safety statements

Informing hospitals

BOC's Medical Engineering Risk Management Services team assists hospitals by giving them the information necessary to manage risk. Having the most up-to-date information, compiled following detailed investigation and followed up with a comprehensive executive summary, means that hospital estates teams have an accurate overview of the MGPS, with priorities and risk levels clearly quantified. BOC recommends that the compliance audit and risk assessment process is carried out every three years to ensure documentation remains up to date, to track remedial actions and to make sure information is current.

A tailored service

The scope of the CARA service can be tailored to meet the requirements of each hospital, covering any particular areas of concern or management of the entire MGPS. It can be carried out regardless of the MGPS contractor, to ensure the safest patient care. It can be utilised at existing and new hospitals to confirm full system compliance. The audit is compiled, delivered and presented by members of the BOC Risk Management Services team, all of whom are experienced in every aspect of the MGPS, working closely with the hospital throughout.

The CARA includes:

- → A comprehensive compliance audit
- → A detailed risk assessment, prioritising areas of concern
- → An executive summary, delivered by a member of the BOC team

This is a service for an AP (MGPS), estates department, or medical gas committee, ensuring the hospital is compliant, delivering the safest patient care and fully prepared for any inspection.

Compliance Audit

Keeping an overview of every element of MGPS management is a complex task that requires detailed understanding of hospital systems, procedures and all current guidelines, combined with a thorough, detailed and systematic assessment process.

Once the scope of the audit has been agreed, the audit team from BOC Risk Management Services will carry out a comprehensive survey as per the scope, which may include wards, departments, procedures and policies and other documentation that relates to medical gases, completing a detailed assessment of how medical gases systems have been installed and are managed in the hospital, identifying any areas of potential risk. This involves surveying plant and associated equipment as well as discussions with staff, covering all the areas referred to in HTM 02-01 as well as BS EN ISO 7396-1:2007+A2 2010, BOC standard operating procedures and best practice.

For a typical 500-bed hospital, the on-site assessment will last approximately five days. It may include identification of potential risks and shortcomings in the following areas:

- → Plant capacity and condition
- → Distribution systems
- → Emergency preparedness
- → Manual handling
- → Management systems and documentation
- → Preventative maintenance effectiveness
- → Analysis of training needs
- → Signage
- → Level of patient risk
- → Provision of equipment and emergency back-up



Risk Assessment

Once the compliance audit has been completed, the risk assessment can be used to develop solutions to any issues identified. These are then documented, prioritised and may be incorporated into the hospital's risk register.

The risk assessment applies an impartial and consistent view of risk in hospital systems, using the experience BOC Healthcare has gained from supplying medical gases to the NHS since 1948. Data gathered in the compliance audit is reviewed using an acknowledged risk analysis methodology that employs BOC Healthcare's global risk management database to ensure consistency. Risks are assessed based upon potential consequence and frequency ratings. This provides a solid foundation for a hospital to build upon, categorising risks from low, medium, high or extreme, allowing APs and estates teams to prioritise remedial works.

Extreme	High	Medium	Low
Fatality	Loss of supply – personal injury		Costs

Risk categorisation chart

Operational policy

Once the CARA has been completed, BOC Risk Management Services can work with hospitals to develop a bespoke operational policy. This supports compliance with the guidance in HTM 02-01, which states that each healthcare facility must have an operational policy that advises relevant stakeholders of their duties and responsibilities. The operational policy includes a full overview of the system and its operation. It also features elements such as management responsibilities, training requirements and plant and manifold log sheets.

For full details, please refer to our operational policy information sheet.

Common risks identified in the assessment include:

- → Inadequate training
- → No product/prohibition signage and emergency notices
- → Medical gas drawings incomplete or out of date
- → Operational policy incomplete or out of date
- → Inadequate storage and/or segregation
- → Insufficient knowledge of standards/compliance shortfall
- → No cylinder management programme in place
- → No designated storage areas at ward level
- → Indistinct MGPS specifications
- → Inadequate understanding of plant and system flowrate capacities/ demand characteristics
- → No H&SAWA/COSHH assessment of medical gas systems or procedures
- → AP (MGPS) not authorised

BOC Risk Management Services can provide expert, impartial and qualified guidance on how to approach these risks and ensure they are prioritised accurately.



Executive Summary and Presentation

BOC Medical Engineering Risk Management Services gives hospitals a clear plan of action that prioritises key risks, helping them to move forward by providing the tools needed to ensure their medical gas pipeline system (MGPS) management is fully compliant and delivering the safest patient care and working environment.

The team from BOC Risk Management Services will collate all the findings from the compliance audit and risk assessment and develop an executive summary document, including photographs and clearly presented information on the findings of the compliance audit and risk assessment (CARA). The document will be issued in hard and electronic copies.

BOC Risk Management Services will present to the hospital team, giving everyone present the opportunity to discuss the findings and conclusions and gain an in-depth understanding of the process and recommendations.

The compliance audit and risk assessment services from BOC Healthcare's Medical Engineering team has been designed to give hospitals the peace of mind that comes from knowing they have been working with a team that truly understands every aspect of the MGPS. Once the service is completed, hospitals will have a comprehensive set of MGPS compliance audit and risk assessment documents. MGPS risks will have been clearly identified allowing a plan of action to be developed.

In addition to providing hospitals with the information needed to address risk, CARA provides:

- → Compliance with HTM 02-01 guidelines as well as BS EN ISO 7396-1:2007+A2 2010, BOC standard operating procedures and industry best practice
- → Preparedness for CQC inspection
- → Preparedness for investigation in the event of accidents or pandemics

BOC Risk Management Services can also work with hospitals in identifying remedial actions in the CARA.

BOC has a range of consultancy services that include:

- → Development of MGPS operational policy and procedural documents
- → Vocational and engineering training (can be organised at BOC premises or customer sites)
- → Gas facilities management
- → Medical drawings: as-fitted, isometric and schematic drawings
- → Specification and design
- → Provision of AP (MGPS) services

"BOC Risk Management Services completed a tailored compliance audit and risk assessment on our behalf. The compliance audit and risk assessment was completed with no disruption to the hospital. The detailed audit was compiled, delivered and presented by BOC Risk Management Services team to ourselves. We were delighted with the service that BOC have provided and would recommend this service to other hospitals."

Glyn Davies Lead Estates Manager, University Hospitals of Morecambe Bay NHS Trust

"From my perspective, I believe the compliance audit and risk assessment is a valuable asset for the estate team and other departments that are directly responsible for the safe administration and handling of medical gases within the hospital. It highlights all levels of risk from Extreme to Low. The hospital can use this as a working document that allows them to address their priorities within a timeframe, as highlighted on the comprehensive report we provide."

Kaush Makwana: Medical Account Manager, BOC Healthcare

BOC is a Linde company, the Leading Global Gases and Engineering Business with a Mission to Make the World More Productive

We are the UK and Ireland's largest provider of industrial, medical, and special gases as well as related equipment, engineering services, and solutions to support them.

We produce, package, and distribute thousands of different types of gases to our customers every day. Our unrivalled range includes atmospheric gases, high purity gases and mixtures, refrigerants, and chemicals, for applications as diverse as cooling magnets in hospital MRI scanners to fuelling zero emissions vehicles and much more.

BOC offers tailored supply solutions for every size of customer; our cylinder customers enjoy a nationwide delivery and collection network; bulk customers the reassurance of 24/7 delivery; and for our high-demand customers we offer onsite production or dedicated pipeline supply.

And all of this is backed up by industry leading customer service, expert technical support and best-in-class levels of safety and environmental performance – the basis on which we have earned our reputation as a reliable and trusted partner.