The application of quality assurance schemes to maritime health care

INTERNATIONAL MARITIME HEALTH ASSOCATION (IMHA) WORKING GROUP MEETING

MUMBAI 31 MARCH 2006

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OBJECTIVES OF THE MEETING

1. *To review current approaches to quality assurance in health care and the available methods for assessing performance against quality assurance standards and protocols.*

2. *To appraise the options for quality assurance and clinical audit systems appropriate for use by maritime health providers.*

3. *To identify the costs and benefits of participation in such quality assurance schemes, for the providers, for seafarers, for employers and for maritime authorities.*

4. *To prepare a report proposing an action plan for the development of a quality assurance scheme for maritime health providers, including an appraisal of any alternative approaches identified.*

1.Introduction

Systems of quality assurance are widely used as criteria for good practice and tools for quality improvements in the maritime sector. They are also becoming recognised as important tools in health care. The quality of maritime health provision varies widely both internationally and locally. The broad provisions of international law on which maritime trade depends are not applied consistently on health issues and collusion between health care providers and either employers or seafarers can lead to uneconomic, unethical, discriminatory or unsafe decisions being taken. There are at present only very limited quality assurance provisions for maritime health: some maritime authorities, maritime employers and P and I clubs (insurers) audit and check that criteria for quality of service and decision taking are met, but these are exceptional.

IMHA, as the association which brings together a range of people and organisations concerned about maritime health, is well placed to foster debate on and encourage the development of quality assurance arrangements for maritime health care. The arrangements would need to cover a range of circumstances when health care providers have to manage or advise on seafarer health:

- When fitness is assessed at the start of a career, periodically thereafter or for a specific reason such as return to work after an illness
- As providers of health advice to seafarers to enable them to reduce their health risks and maximise their chances of a full career at sea and a healthy retirement
- When advice is being given on healthy working and living conditions aboard ship. This includes the need for precautions against infection from food, insect vectors and other causes.
- In relation to the training of crew, the provision of medical stores and facilities and in the use of telemedical support for responding to injury and ill-health at sea in both workers and passengers.
- The handling of medical emergencies in seafarers brought ashore from vessels. Their assessment, treatment, rehabilitation and return to work.

Quality assured maritime health provisions should benefit all parts of the maritime world by:

1. Improving the validity and quality of decision taking and advice on maritime health matters.
2. Increasing consistency internationally, with scope for then removing the barriers created by the unwillingness of national authorities and shipping companies to accept decisions made outside their boundaries.
3. Ensuring that advice or decisions are cost effective and ethically sound.
4. Reducing health related risks to maritime safety and operations, while safeguarding the health and careers of seafarers.

This report summarises the presentations made at the workshop. It proposes a way forward for the development of standards and accreditation to document compliance in ways which are relevant to seafaring and compatible with wider international standards and accreditation initiatives such as those of ISO.

2. Presentations

2.(a). Q.A. by a maritime authority: UK approved doctors. Tim Carter
Chief Medical Adviser UK Maritime and Coastguard Agency. IMHA President

The UK Maritime and Coastguard Agency introduced a programme of audit for the doctors approved to issue statutory medical fitness certificates to seafarers in 2002.[1] The 250 doctors who do c.35,000 medicals a year are included and a range of audit tools is used. These include ad hoc monitoring of problems, an annual return on medical findings and a visit programme (to date c.50% have been visited). The aim is to review the whole system and not just the performance of examining doctors. At audit visits, facilities and record keeping as well as clinical practice are assessed. When shortcomings are found these are reviewed with the doctor. Rectification will be required if approval is to continue, and a few doctors have resigned or been removed from the approved list.
Benefits have included improved quality and consistency, better record keeping and a number of improvements to central advice and support. There is now a greater coherence between doctors and the maritime authority.
While there is scope for extension of this sort of arrangement it depends on interest, skills and resources being available to national maritime authorities. An externally recognised QA system could have similar functions. Any international QA initiatives will have to recognise the central role of the state approved doctors who issue statutory medical fitness certificates. These certificates are the formal basis for fitness to work at sea. In most countries it is the doctor and not the clinic which is approved, and this too will need to be taken into account.

2(b). Concepts of quality and clinical governance. Deirdre Hutton
Clinical quality consultant, Health Quality Service (HQS)

Quality assurance systems for health care are a recent development. Their use was illustrated by reference to the experience in the UK private sector. The methods available were described and analysed and their impact on clinical standards reviewed. Any system requires a set of standards against which performance can be assessed. This assessment may be a compulsory regulatory requirement or it may be undertaken within a voluntary framework of accreditation. To be effective both regulation and accreditation require commitment from the chief executive and from all other staff – not just to the process but to the quality improvement aims which underlie it.

Both regulation and accreditation seek to review the organisation against 'Seven Ss': strategy, structure and systems; shared values, staff, style and skills. In health care quality assurance clinical governance is a key concept, not featuring in most other forms of quality management. It relies heavily on peer review of the clinical care provided. Its aim is to create an environment where excellence in clinical care will flourish. It depends on effective multi-disciplinary teamwork and on clinical audit of decisions taken and the procedures used. Quantitative measures of clinical outcomes are the performance measures for clinical governance which the chief executive needs to review and act on to ensure continuing improvement.

Both regulation and accreditation aim to ensure high and improving standards of care as well as economy in the use of resources. Neither is possible without reliable information systems and valid methods for investigation and treatment.

[1] UK Approved doctors' manual. Chapter 5 Audit and Quality assurance. Maritime and Coastguard Agency 2006. http://www.mcga.gov.uk/c4mca/mcga-seafarer_information/mcga-dqs_st_shs_seafarer_information-medical/mcga-dqs_st_shs_approved_docs_list-2.htm

The experience cited indicated that adoption of clinical QA procedures brings benefits in terms of outcomes but it also focuses the provider and all groups of staff towards a mind-set which is beneficial for performance, job satisfaction, delivery of service to patients and self-esteem.

2(c). The application of quality assurance schemes to maritime health care. Sally Bell. *Clinical Quality Consultant*

Two main standard setting and accreditation systems are relevant.

- The ISO provides standards applicable to many sectors of industry and services.[2] It develops standards designed to be implemented worldwide. There are 15,036 standards which specify requirements for products and services. The 9000 series have recently been amalgamated into ISO 9001:2000. This standard specifies the requirements for quality management and covers systems, responsibilities, resource management, product realisation, measurements and monitoring for quality improvements. To apply the standard all the processes used need to be fully described, including work flows, customer requirements and the means used to secure improvements. Accreditation arrangements against these standards are widely available and used. However ISO standards can be hard to interpret and apply to areas such as health care.

- There are a number of quality systems more directly applicable to health care. These are, in general compatible with the broader ISO standards. The UK based but internationally used Health Quality Service (HQS) system was described.[3] American Joint Commission Accreditation for hospitals and the American Ambulatory Health Care Association system covering non hospital settings are very similar in principle. HQS provides a framework of standards, training for auditors with support from a client manager for participating centres, the opportunity to obtain HQS accreditation with optional assessment against ISO 9001:2000 criteria. Unlike ISO HQS and other health care systems look additionally at clinical governance and risk management, the patient's journey through the processes of investigation and treatments, and medical record-keeping. Particular attention is paid to emergency support should there be any complications and to who has taken responsibility for each decision.

Accreditation is not achieved as a single step. A quality process involving all staff and the relevant standards needs to be agreed and introduced, supported by a friendly process of challenge to existing practices, some of which are likely to need to change. All groups of staff have to be involved, as accreditation is about how the whole system works and not just about medical aspects of clinical diagnosis and treatment. A large facility may well take several years to reach the standard needed to secure accreditation from an external audit team. Accreditation under the HQS system is for three years with monitoring visits, and then a follow up audit at the end of this period. The whole process is one of internal commitment and continuing self-improvement, with audit as a confirmation of this rather than one where the auditor imposes on the participating care provider.

2(d). Quality assurance for seafarers' clinics – developing the system. Deirdre Hutton.

This presentation was based on a proposal made by HQS to IMHA for the development of a QA and accreditation system for seafarers' clinics. The justification for the proposal was the worldwide recruitment of seafarers, the use of many small independent clinics to assess their fitness, the demands of health care on board ship and the high costs of repatriation for illness. There were four facets to the proposal:

1. Developing international standards for seafarers' clinics.

2. Quality validation of the standards as a robust, rigorous and appropriate framework

3. Training of auditors from IMHA

4. Development of audit documentation, guidance and report templates.

The maritime standards would largely be derived from existing healthcare standards including, with permission, those used by the UK P and I club. They would be developed with guidance from professional bodies assisted by an IMHA standards working group and would cover professional practice, facilities, the experiences of the seafarers and record

[2] ISO www.iso.org
[3] HQS www.hqs.org.uk

keeping. Like other quality standards they would look at structures and processes, organisational systems of management and staffing, delivery protocols and the recording and transmission of findings.

Standards development would be an iterative process with extensive consultation. HQS would help select and then train IMHA assessors to accredit clinics using the agreed standards as the benchmark and then provide external quality assurance for the assessors.

IMHA would need to sign up to participating in this process and to ensure that there was sufficient support among members to justify development of such a framework for accreditation. HQS had estimated their costs for working with IMHA on the proposal at £12,750 + 17.5% tax for initial development and then £ 5,520 + 17.5% tax per year thereafter for supervision and external audit.

2(e). Assuring quality of core providers and its benefits in maritime health. Nebojsa Nikolic.
Clinical consultant in travel medicine and maritime health, Croatia. IMHA Vice-president

There is experience of quality assurance and its benefits in the services provided for medical emergencies in travellers that is relevant to QA in maritime health. Travellers require appropriate emergency medical services operating to a good clinical standard and at a fair cost. These are sometimes required in parts of the world where general service standards are low and an ill visitor is seen as a source of considerable income. Exactly the same situation arises with an ill seafarer in a foreign port.

Some traveller health networks are simply directories where those listed pay for an entry, but the best have a quality assured network of providers meeting standards for practice, facilities and languages with supporting systems such as 24 hour assistance, telemedical advice and transport.

Good[4]	Poor
Direct case management	Subcontracted local agents
Air ambulance at cost	Mark up on transport costs
Full service to include family and employer	Assistance to ill/ injured only
Quarterly management reports	No reports
No additional fees	'Intervention' etc fees
Full international claims administration	Not provided – separate bills
No financial interest in providers	Clinics owned/ profit centres
Continuity of management	Rapid turnover
Reliable national base for service	Offshore/unknown ownership

Related criteria are equally relevant to the maritime industry as it needs reliability and high quality of care delivered in an accountable way.

[4] Medex. http://www.medexassist.com/ppcindividualg1.cfm

2(f). Quality objectives of ILO maritime instruments. Dani Appave *International Labour Office*

There is an extensive array of conventions and recommendations from international bodies that are relevant to QA in maritime health. Many of these have recently been consolidated into the new maritime labour convention.[5] There would be major benefits in aligning any IMHA initiative with these instruments and seeking endorsement of QA arrangements in official guidance.

Adoption of any IMHA proposals by ILO would help to ensure that they were seen as being in the interests of all parties, that inconsistencies in approach were reduced. It would also help ensure that ethical aspects concerning the need to have a safe and effective crew and while also preventing unreasonable discrimination against individuals were incorporated and widely recognised as important. The privacy of personal and medical information could be safeguarded as well as the right of appeal and the right to treatment and repatriation at the employers cost in the event of an injury or medical emergency while serving.

The ILO has prepared the way for such an initiative by agreeing a resolution that the 1998 WHO/ILO guidelines on medical examinations be updated. A revised version could encompass both improved fitness standards and quality assured systems for ensuring that they were consistently and fairly applied internationally.

2(g). Implementing quality assurance in maritime health. Suresh Idnani.
Maritime health care provider, India. IMHA Board Member

The major challenge in developing international quality assured standards will be securing recognition that spending on QA now will bring reductions in the costs of ill-health and its consequences for the industry later, rather than being seen as a way for clinics to add costs to their services by a professionally created system which makes the market less open.

The costs and benefits to employers, as the main group who pay for or specify where seafarers must go for assessment and care, differ for different aspects of maritime health and this needs to be addressed separately for fitness assessments, provision on board for medical emergencies, telemedical support, treatment ashore, management of ill-health and accident risks from onboard living and working conditions, and measures to ensure that seafarers stay fit and can remain employable for a full career.

At present, national fitness standards are often formally well founded but they are erratically and sometimes corruptly or unfairly applied. In some countries they are closely tied to social security arrangements and this can be a barrier to free movement and to access to a fitness certificate by a non-national. By contrast supplementary company standards are often irrational and applied with the aim of weeding out applicants without any valid basis. They also rarely have appeal arrangements.

These problems could be largely avoided if there were agreed international standards applied by quality assured clinics and other care providers.

An estimate is needed of how many clinics are likely participants in a QA scheme. Participation will in turn be influenced by the attitude of the industry to working with a 'preferred provider' network of quality assured clinics. Many other aspects of maritime activities already work within ISO standards and these are often a requirement when bidding for contract work. Hence extension to maritime health should be readily accepted.

Funds are needed to develop a QA framework. It is important that several parts of the industry are seen as participants. The following options were proposed:

- Seek funds from a single source e.g. ITF Seafarers' Trust
- Arrange for sponsorship from several parts of the sector. e.g. Employers, unions via ITF, insurers, ship management organisations and service providers (via IMHA)
- Funding by participating clinics on a cost sharing basis, with benefits in the long term costs for those who support the initial development of a QA system.

[5] ILO Maritime labour convention 2006 http://www.ilo.org/public/english/bureau/inf/event/maritime/index.htm

IMHA will need to be a broker of and champion for the fundraising which will be needed.

3. Discussion

A number of controversial points were raised in the initial stages of the discussion. It then moved to the practicalities of developing a QA system for maritime health:

a) Is a maritime health QA system needed, given that some maritime authorities, employers and insurers are already active, while many clinics etc. are already quality assured for other non-maritime aspects of their work?

b) It was pointed out in response that there was a high level of compatibility between different QA systems and participation in one system could often either be accepted as a marker of quality for the aspects audited by that system or at the very least would ensure that all the required approaches and documentation were in place. A maritime health system would assure those using the health care provider for their maritime health services that these were fit for purpose.

c) In addition once QA systems have been established then it is usual for organisations such as insurers who are liable for costs and quality failures to insist on the use of accredited centres.

d) One area needing clarity would be exactly who was being offered assurance. Was it the seafarer, the employer or the maritime authority? This would determine who should be supporting QA and funding it. There were some aspects of QA which were fundamentally ethical and could not be seen as bringing any immediate financial benefit, these include the creation of a level international playing field, respect for confidentiality and a fair trade-off between seafarers' and employers' expectations.

e) The essence of QA is to set standards, review compliance of the entire system to these standards, and thus to achieve accreditation Hence it needs to be applied to the totality of the activities of a maritime health provider. It is clinic rather than just doctor quality which is being evaluated, with the medical contribution as just one aspect of this. This enables other measures of professional performance such as registration or re-validation, CPD and specific competencies to be recognised and also avoids confusion with the statutory arrangements used by national maritime authorities to approve doctors who issue certificates of medical fitness to seafarers.

f) It was suggested that there were two stages in the development of a QA system for maritime health. Acceptable standards are required, and maritime health providers will need to understand these and sign up to them before accreditation can become a reality. Accreditation can only be introduced when this stage has been reached by some providers. A regional focus for piloting the development of standards could have big practical advantages and it may be best to do this in a major crewing region where there are not already highly developed social security and other institutions which could be barriers to change.

g) The languages used for the QA system would have a big influence on uptake. English would be the most widely acceptable and would be most useful in terms of compatibility with current ISO and health care QA systems as well as meeting the needs of the majority of the international maritime industry. Within Europe, South America, parts of the former USSR, China etc. translation of any standards and the use of auditors with appropriate language skills would be needed to increase uptake.

h) A core set of standards, or agreed priorities for which aspects of maritime health should be considered, should be developed. Core standards would need agreement on whether they formed a minimum level acceptable internationally or whether they were seen as absolutes. The latter would probably be unrealistic and could not reflect the wide variation of duties and capability requirements in the maritime industry. An international core with scope for national or job related modification would be appropriate.

i) The general view was that the biggest challenges could be expected with accreditation and linkage to ISO standards and that the strategy for developing a QA system should be a two stage process, with accreditation being considered when there was a critical mass of clinics signed up to the adoption of standards.

j) The development of standards and their endorsement in ILO guidance could be an important stage leading to their adoption as the basis for accreditation. A four to five year timescale was likely. However one side effect of

this would be that IMHA's aspiration for income from the revenue coming from managing an accreditation system would be delayed beyond the timescale of its current guaranteed financial support.

k) To put the costs of standard development in perspective it was suggested that the costs for all those travelling to Mumbai and attending this workshop were probably in excess of the development costs for the QA framework proposed by HQS.

l) The development of standards would, as a paper exercise, require only a few days work as, given agreement from HQS or another similar organisation, much could be derived from existing documentation. The resource and elapsed time needed would in total be much greater because the circulation of draft standards would make recipients consider their operational and political consequences in detail and this might throw a searchlight on areas of less than satisfactory current practice. A defensive response rather than one which recognised current shortcomings could jeopardise the project.

m) Because of ILO's commitment to review the guidelines on medical standards, the known inconsistencies in practice, the involvement of maritime authorities and the high costs of wrong decision taking it was considered that medical fitness examinations would be one of the best topics on which to start work. Even in the absence of accreditation such standards could have an enhanced status by forming part of an ILO document. However maritime authority approval of doctors in clinics following the QA guidelines would be essential for the adoption of those standards which related to the issue of statutory medical certificates of fitness.

n) A particular problem could arise over the standards demanded by states which operated as flags of convenience with minimal statutory regulation. Here the attraction of QA standards would have to be derived from the benefits for employers in having a fit crew and for seafarers in being fairly assessed.

o) More generally it could be expected that some maritime authorities would welcome a QA initiative on maritime health while others, because of concerns about autonomy, deregulation, compatibility with social security or sheer inertia, would be neutral or negative. This would be most clearly seen with standards relating to medical certification or working and living conditions and would be less of an issue for those concerned with emergency care and health promotion.

4. Conclusions and actions

It was agreed that QA standards for maritime health providers were needed and should be developed, but general support for a programme ending in an accreditation process in a single step was not felt to be feasible. Users would need to take a view on the nature of the proposed standards before endorsing accreditation.

Standards would need to be acceptable by maritime health providers as the group whose quality of work stood to be improved by their adoption but they also had to be acceptable to employers and seafarers as a means of improving seafarer health and maritime safety in a cost effective way. Endorsement by ILO, WHO and IMO would greatly enhance this credibility. There was scope for achieving such endorsement over the next few years.

To ensure that the standards developed would be suitable for health care accreditation and would be compatible with ISO they needed to be developed in association with a health care quality organisation. The proposal from HQS, modified in the light of the workshop conclusions, was considered to be a suitable basis for this.

Support for the development of standards would need to include sign-up from IMHA members, the various organisations representing shipping employers, the maritime trade unions, insurers and international organisations. Moral support and funding from several parties would increase the acceptability of standards and later accreditation. It is important for their credibility that standards and later accreditation are seen as a benefit for the whole maritime sector and not an initiative solely meeting the requirements of a single interest group.

Phasing of actions:

1. IMHA development group to be created, led by Suresh Idnani, with Sally Bell advising and providing liaison with HQS.

2. Discussions with HQS about the proposed way forward and financial and other arrangements for the adaptation of their standards and procedures.

3. Preparation of some draft standards based on material available from HQS and their circulation within the IMHA group and more widely for consideration. The standards adopted need to be 'audit friendly' and provide the basis for later HQS or similar accreditation and for adoption as measures compliant with ISO quality standards

4. Priority to be given to standards relating to medical assessment of seafarer fitness and the issue of medical certificates. Other topics also need to be considered in the light of available standards from onshore health care.

5. In parallel with 2-4 discussions with ILO, employer bodies and trade unions about the initiative.

6. Development of budget and business plan for creation of standards by IMHA group. First call for funds to maritime health centres wishing to use standards, supplemented by search for sponsorship from elsewhere in maritime sector.

7. Decisions on geographical area and part of industry to be targeted for piloting and initial use of standards.

8. Drafting of proposed ILO (possible joint with WHO and IMO) guidelines on maritime health QA. This is probably best linked to the revision of the guidelines on medical fitness examinations. For this the parallel IMHA initiative on fitness criteria led by Tim Carter needs to be re-defined to be compatible with provider quality standards. At this stage national maritime authorities will need to be made aware of the benefits of adoption of a common set of quality standards and consider the implications of this for their national arrangements.

9. An informal self-audit pack with arrangements for mutual audit, initially without accreditation would be desirable. This will be simplest if the standards are piloted in defined geographical areas. The aim of this process would be to take some clinics to the position where they would meet accreditation criteria and could be used for formal auditor training and as benchmarks for quality.

10. Subject to satisfactory performance and agreement it would then be necessary to arrange formal auditor training and the external QA support needed in order to secure accreditation and ISO compatibility. ISO linkage may either be by the use of ISO assessors to review those aspects of compliance with are relevant to their standards or by the use of a health care assessment organisation that is ISO approved. It is likely that this stage will take 3-5 years to achieve.

11. While some of the initial costs may be borne by the clinics themselves and eventually a QA and accreditation scheme should become self funding there will be an intermediate period where external funds will be needed. To raise these within the industry it is essential that providers who adopt QA standards are not seen to be using them as means of increasing their personal revenues but are simply gaining a fair return for their outlay and are acting in the interests of seafarers and the whole maritime sector.