

Quality Management System in Blood Services

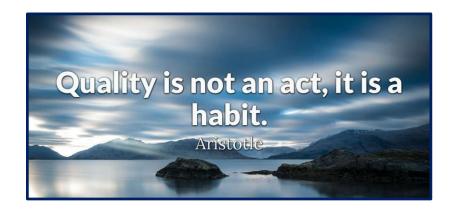


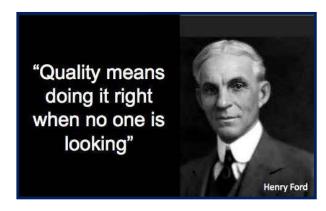
What is Quality?

- Standard of excellence
- Doing it right first time
- Fit for purpose
- Meets customer requirements
- Never having to say sorry to patient or donor
- A culture and way of life!



Opinions on Quality







Quality in a service or product is not what you put into it.

It is what the customer gets out of it

Peter Drucker





Accreditation of AfSBT

- AfSBT working towards accreditation by international organisation
- ISQua International Society for Quality in Healthcare
- Steps required:
 - Updating of AfSBT Standards to incorporate ISQua requirements ✓
 - Use of updated Standards in accreditation/ certification assessments ✓
 - Preparation of history of Standards development since 2009 ✓
 - Revision of all AfSBT quality documentation ✓
 - Training and certification of AfSBT educators and assessors ✓
 - Submission of AfSBT Standards to ISQua ✓



AfSBT Standards

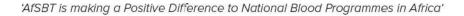
AfSBT Standards originally based on:

- AABB Standards
- WHO requirements
- ISO 9000, 17025, 15189
- Other countries
- Input from team of international experts









AfSBT Standards

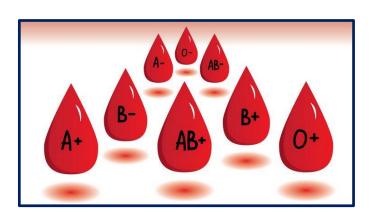
AfSBT Standards consist of three sections:

- Section A: Quality Requirements
- Section B: Technical Requirements
- Section C: Requirements for Plasma for Fractionation

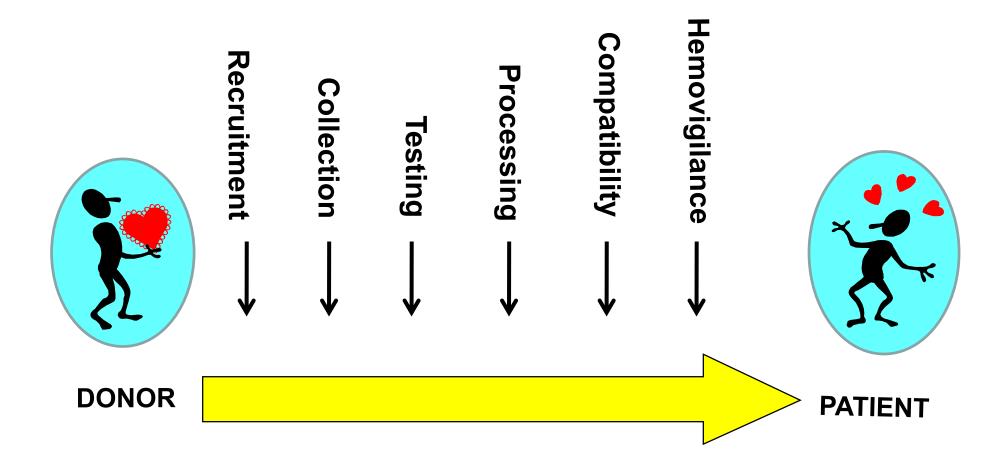


Technical Requirements (Section B)

- 1. Blood donor management
- 2. Collection of blood
- 3. Handling, storage and transport
- 4. Testing of donated blood
- 5. Blood component production
- 6. Receipt, ordering & selection
- 7. Compatibility testing
- 8. Haemovigilance & clinical interface
- 9. Blood administration



Transfusion Chain



Quality Requirements (Section A)

- 1. Organization and Structure
- 2. The Quality Management System
- 3. Resources
- 4. Documents and Records
- 5. Suppliers and Service Providers
- 6. Incoming Receipt, Inspection and Testing
- 7. Equipment
- 8. Safety and Risk management
- 9. Internal and External Audits
- 10. Non-conformances
- 11. Continual Improvement
- 12. Process Control



Section A: Quality

This section of the AfSBT Standards:

- Comprehensive
- Applies to all areas within a blood facility
- Challenging to implement
- Ensures efficient operation of organisation and supply of quality products and services

A 1. Organization and Structure

- Mission statement defining organisation's core purpose and focus
- Code of ethics based on values and ethical standards
- Strategic plan detailing organisation's objectives
- Organisational structure outlining governance and management
- Organogram indicating responsibilities and interrelationships



A 1. Organization and Structure

- Top Management responsible for ensuring operations carried out competently and in accordance with relevant laws, regulations and standards; responsible for quality policy and providing support for QMS implementation
- Medical Director qualified and licenced; responsible for all medical matters and for services relating to care and safety of donors and patients
- Quality Manager with authority and overall responsibility for quality and implementation of QMS



A 2. Quality Management System

- QMS requirements defined and communicated to staff
- Quality policy including quality objectives
- Quality manual covering all 12 sections of QMS
- Management review of quality system annually with improvements



A 3. Resources (Financial)

- Financial resources adequate to perform and manage the organisation's critical activities
- Budget developed to ensure ongoing operation



A 3. Resources (Human)

- Human resources adequate to perform activities
- Personnel trained, competent, registered, work under supervision
- Job descriptions for all personnel; correlate with organogram
- Training policy & programme to meet training needs
- Competency assessment performed every 12 months
- Personnel records maintained



A 4. Documents & Records

- Document control system to address document creation, identification, review, approval, revision, retention, final disposal
- Document requirements defined (current, dated, authorised, legible, uniquely identified, numbered, standardised)
- SOPs for all procedures, reviewed regularly
- Records maintained and retrievable
- Electronic records backed-up



A 4. Documents & Records (Principles)

- Confidentiality maintained
- Traceability of documents and signatures critical
- Changes to documents controlled and recorded
- Confirmation that staff have read and understood policies, SOPs

Do what you document and document what you do!



A 5. Suppliers & Service Providers

- Selection of suppliers before use
- Agreements that define customer and supplier expectations
- Evaluation of suppliers of critical materials, equipment, and services
- Records of supplier performance
- Inventory management system in place



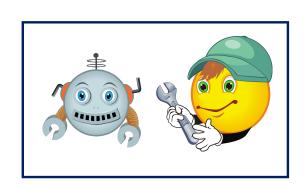
A 6. Incoming Receipt, Inspection & Testing

- Incoming products & critical materials received, inspected and tested, as necessary, before acceptance or use
- Critical materials meet specified requirements and conform to international or national laws, regulations or standards



A 7. Equipment

- Selection criteria for critical equipment
- Identification of all equipment
- Equipment qualified for intended use (installation, operation & performance)
- Calibration performed to ensure accuracy
- Scheduled monitoring of equipment performed
- Preventive maintenance per manufacturer's instructions
- Malfunction procedures defined
- Electronic equipment correctly handled (hardware & software)



A 8. Safety & Risk Management

- Risk management plan and register for potential hazards
- Working environment suitable with orderly flow of work
- Working conditions safe with adequate protective equipment
- Safety programme to mitigate or prevent hazards
- Disaster recovery plan developed
- Protection of environment measures in place



A 9. Internal & External Audits

- Internal audits of operations and quality systems done annually
- Auditors independent of area being audited
- Reports generated; outcomes of all audits reviewed
- Corrective action taken for all non-conformances identified
- External audits performed by independent body



A 10. Non-Conformances

- Non-conformances arise from audits or during routine operations
- Procedures to detect, capture, assess, investigate and monitor NCs
- Root cause analysis done
- Corrective action taken and verified for effectiveness
- Preventive action taken to prevent non-conformances



A 10. Non-Conforming Products

- Authorized use in exceptional circumstances, at discretion of MD
- Recipient's doctor notified that all requirements cannot be met
- Authorisation by medical director & recipient's doctor fully documented
- Label on product indicates which tests have not been performed
- Testing continued after issue
- Non-conforming units recalled immediately and doctor notified

A 10. Non-Conformances

- Discard procedure for non-conforming blood or components defined
- Label indicates units not suitable for therapeutic use
- Units disposed of as biohazardous waste
- Recall procedure outlined for non-conforming blood or blood components determined after release not to meet specified requirements



A 11. Continual Improvement

- Quality improvement plan developed
- Feedback obtained from donors and customers/clinicians including complaints, compliments and suggestions
- Quality indicator data collected and evaluated
- M&E data used to improve operations of facility



A 12. Process Control

 Requirement that activities that affect quality of blood, blood components, and services are carried out under controlled conditions



A 12. Process Control

- Validation of new or changed procedures/ test methods prior to implementation
- Re-validation where changes occur or results indicate the need
- Change control for management of changes so that quality is maintained
- IQA/EQA for ensuring accuracy and reliability of tests
- Quality control testing on random blood components monthly
- QC results reviewed to monitor trends



A 12. Process Control

- Materials (including blood packs, reagents used for testing) stored and used in accordance with the manufacturer's written instructions and meet specified requirements
- Reagents prepared by facility standardized and meet specifications
- Identification at each critical step of who performed task, date and equipment used
- Traceability from source to final issue/disposition of blood, blood components, critical materials, laboratory specimens, donor and patient records



Champions of Quality

- Achieving accreditation is a journey that will not happen by itself
- Process needs to be driven by champions
- Dedicated personnel who are passionate about quality
- Quality Manager and MD/CEO are key champions
- Commitment from all senior management essential
- Personnel throughout the organisation to be aware and involved



Quality Department Functions

- Quality documentation system & document control
- Internal audit system
- Non-conformance system
- Management Review
- Monitoring & Evaluation Coordination
- Coordination of Validations
- Guidance and advice to all other departments
- Lead preparation for accreditation/ certification
- Compliance with legislation, interaction with regulatory bodies



Role of Quality Manager

- Quality Manager cannot achieve accreditation alone
- Must have adequate authority and responsibility
- Should report to highest level and receive support
- Must have training/ experience in quality systems
- Quality department should ideally consist of three people as a minimum:
 - Manager
 - Deputy
 - Clerical officer



Quality Ambassadors

- Aim to develop an ambassador/champion in each department
- Ambassadors to be trained and receive recognition
- Best at hands-on supervisory level
- Supervisors to be responsible for:
 - Writing and timely updating of SOPs and forms
 - Addressing of non-conformances within time limits
 - Completion of validations
 - Mock audits in preparation for internal/ external audits
 - Monitoring of M & E indicators
- Include in Job Descriptions, link to performance appraisals



Strong Foundation

- Quality pervades and influences all departments
- A good Quality Management System provides a strong foundation for the rest of the organisation
- Develop a quality culture for continual improvement
- Quality contributes towards ongoing sustainability of organisation



Good, better, best
Never let it rest
Till your good is better and your better best!









Any questions?

'AfSBT is making a Positive Difference to National Blood Programmes in Africa'